

Enacting the Between

*On dis/continuous intra-active becoming of/through an Apparatus of Material Storytelling.
Book 1: Posing (an Apparatus of) Material Storytelling as discontinuous intra-active rework of
organizational practices*

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Anete
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On dis/continuous intra-active becoming of/through an Apparatus of Material Storytelling

ENACTING THE BETWEEN

Anete Mikkala Camille Strand

On dis/continuous intra-active becoming of/through an Apparatus of Material Storytelling

Book 1

Posing (an Apparatus of) Material Storytelling
as discontinuous intra-active rework of organizational practices

Book 2

‘How to build an oasis with a good conscience’ –
organizational becoming through an Apparatus of Material Storytelling

Thesis submitted for the Degree of Doctor of Philosophy

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Denmark 2012

Declaration

I confirm that this thesis and the research it presents has not previously, in part or in its entirety, been submitted for examination at an academic institution of higher education in Denmark or abroad.

Date Anete Mikkala Camille Strand

This dissertation is a posthumanist, performative enactment of a complex living story of the dis/continuous entangled becoming of a research-based methodology named 'Apparatus of Material Storytelling'. Initially, the research interest concerned the embodied anchoring of knowing with fieldwork enacting such embodied modes of anchoring. In the PhD process, the onto-epistemological, theoretical, methodological, and analytical elaborations of these became necessary. Also, and not the least, the researcher has a deeply felt, professional engagement with ten members of the staff at the Youth-home for deaf-blind teenagers at the (former) Deaf-blind Centre, DBC in Aalborg, Denmark; Lone, Pernille, Ulla, Birgit, Annette, Karin, Simon, Lis, Lisbeth, Anita and their manager Annie - all highly devoted to the daily 'touching responsive' practices together with 'their' youngsters and each other.



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... entanglements are not isolated binary co-productions as the example of an author-book pair might suggest. Friends, colleagues, students, and family members, multiple academic institutions, departments, and disciplines, the forest, streams, and beaches of the eastern and western coasts, the awesome peace and clarity of early morning hours, and much more were a part of what helped constitute both this “book” and its “author.” (Karen Barad, 2007, Preface)

In the words of Karen Barad it is clear that many kinds of agencies helped constitute this dissertation as a foundation for my future work. Of the ‘human-kind’ I will especially give my eternal thank you to the following. Without our diffraction ‘I’ could not have done this:

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Anete Mikkala Camille Strand



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1 **Introducing** **Material Storytelling**



1.1 Vignette 1

Enacting entanglements

Late January, 2009 I was standing in front of the sandbox, viewing the result of enacting 'my' version of organizational embodiment - so far. I was looking at what had been made explicit in intraplay with several material figures and a box of sand. It was the apparent result of exploring the subject of organizational (re)embodiment during four months of a total of a six months action research process.

Prior to that, my supervisor had given me the task of "producing an overview of the major theoretical, methodological and analytical developments of the PhD project" during a period where my main role (in my view) was one of being attuned to being one of eleven participants in the action research process among the staff at a Danish care institution. The task had put me in a state of confusion, and I was striving to decipher the significance of my experiences in a clear, articulate way. The truth was that at that point I had no idea what the analytical and theoretical implications were going to be; I was too involved, too deep in the substance. I had a pretty good idea of where I was from a methodological point of view as Action Research was the research frame within which I navigated, and the 'intervention' methods used were invocations inspired by Sand play, Bodydynamic's

body-based -pedagogy and Feng-shui. But together with the ten other human participants, I was experiencing something that let me to believe that progress was being made and that transformation was occurring at significant levels in their everyday work life as well as in my research practice.

On impulse I had reached for the sandbox and had spontaneously started to populate the sand with various little figures. Less than a minute later, I was looking down at a circle of material objects with a cluster of objects in the middle. The outer ring consisted of material figures, each of which was 'facing' the center and an opposite figure that could be understood, as it's complementary, counterbalancing partner:

I seemed to have storied memories and experiences of the organizational (re)embodiment work-in-progress there in the concrete actions with these little figures and the sand (box). 'We' had enacted 'what embodiment was all about', and it was told in a complex material manner without any obvious beginning or end, and without any conscious elaboration behind it. The project took a material (story) turn and I found a new supervisor!



1.2 Vignette 2

Envisioning entanglements at the Youth-home

DBC late fall 2008 *Lone shuts the door behind her and walks towards the parking lot outside the 'Youth-home'. Her evening shift has ended, the usual fifteen minutes late. She has a stack of 'learning plans' in her hands; earlier, she has promised Ulla to look through and sign them before handing them in. She did not manage to get around to it tonight as planned. John has been too noisy and they have been short-staffed this week due to the flu that has laid several of them low for weeks in a row. Oh well, she stuffs them into her backpack knowing that she should probably have left them behind. The deadline was yesterday though, and she would like to get them over with. Perhaps she could look at them tomorrow morning over breakfast? It shouldn't take too long and it will probably be faster than doing them here anyway, having Carrie as 'co-pilot' on the task.*

She adjusts the backpack on her back as she walks, noticing briefly the aching muscles in her shoulders. Half way into the parking lot she realizes she has forgotten to write a note on the intranet about Lars' dentist appointment tomorrow. Will Simon remember? They have swapped shifts and he is due to have the 'home day' with Lars tomorrow. She stops walking, debating for a few seconds whether she should go back and do it now, or whether she should just do it later, breaking her newly established rule about not checking the intranet from home.

She decides on the latter. She does not want to go back in as she knows that another thirty minutes would easily go by in the talk around the table in the kitchen and she would miss out on the opportunity to get the discussion going

at home with her boyfriend about organizing their move to their new house coming up only two weeks from now.

She finds her bike, and as she is swinging up her right leg and lowering herself onto the saddle, she realizes that Christmas is only a month away. As she slowly cycles down the hill from the Youth-home towards the city center she takes a deep breath, and, without letting her hands go, she imagines stretching out her arms as she exhales; 'emptying the box', re-releasing - for a moment - the absorbed and accumulated intensities from this shift, and beyond, into the air while thinking about yesterday's talk with Pernille and Anete about 'breathing spaces' and 'the eye of the hurricane'...she sighs, smiles and take another deep breath of the misty evening air...



1.3 Vignette 3

Entangling with Karen Barad

fall 2009 "To be entangled is not simply to be intertwined with another, as in the joining of separate entities, but to lack an independent, self-contained existence. Existence is not an individual affair. Individuals do not pre-exist their interactions; rather, individuals emerge through and as part of their entangled intra-relating. Which is not to say that emergence happens once and for all, as an event or as a process that takes place according to some external measure of space and of time, but rather that time and space, like matter and meaning, come into existence, are iteratively re-configured through each intra-action, thereby making it impossible to differentiate in any absolute sense between creation and renewal, beginning and returning, continuity and discontinuity, here and there, past and future."

"There is no singular point in time that marks the beginning of this book, nor is there an 'I' who saw the projects through from beginning to end, nor is writing a process that any individual 'I' or even group of 'I's' can claim credit for. In an important sense, it is not so much that I have written this book, as that it has written me. Or rather, "we" have "intra-actively" written each other ("intra-actively" rather than the usual "interactively" since writing is not a unidirectional practice of creation that flows from author to page, but rather the practice of writing is an iterative and mutually constitutive working out, and reworking, of "book" and "author")...not to deny my agency (as it were) but to call into question the nature of agency and its presumed localization within individuals (whether human or nonhuman)."

(Karen Barad, 2007, Preface)



14. A summarizing outline of the content and structure of the dissertation

(The following explication provides an overview of the dissertation as a whole and summarizes the four major sections entailed,¹ and account for how they intra-relate as Book 1 and Book 2².)

1 A more detailed outline of the content of the various sections is provided in the beginning of each one of the sections carrying two-digit numbers. These outlines or summaries are put in parenthesis and italic to indicate them as a different kind of text as part of the 'hybrid writing process' of the techno-scientific practice of this dissertation, cp. Section 1.6.

2 This manner of breaking up the dissertations in two parts or books are inspired by Flyvbjerg (1991 a and b.) Further, the consequences of this 'agential cut' is elaborated in the Introduction to 'Performing an Analysis' in Book 2.

1.4.1 The four major sections of the (two parts of the) dissertation

Book 1

1. Introducing Material Storytelling

The main task of the first section of the dissertation is to introduce the reader to (the notion) Material Storytelling and conjoin the expectations as to what the dissertation as a whole is about. This is done in a subtle manner through the three (preceding) Vignettes and in a (more or less linear) summarizing of the research(er's) story up until the point of coining the notion 'Material Storytelling' in 2010 in a paper presentation at the Sc'Moi conference³. Material Storytelling is then framed more specifically by offering a working definition and by depicting the research approach and motives, as well as posing the central claim regarding Material Storytelling that will be evidentially supported throughout the dissertation. The introduction closes with comments being made on the 'productive machinery' of the dissertation as a material-discursive practice. Thereby the readers are guided towards the paradigmatic shift to follow. Here the techno-scientific practices of the 'productive machinery' of the dissertation are highlighted as an intraplay of meaning-matter modalities in terms of, for instance, language, layout,

³ Sc'Moi conference; Standing Conference for Management and Organization Inquiry founded by (a network of scholars around) David Boje in 1991. See www.scmoi.org

formats and readers' engagement in accomplishing what has traditionally been called learning.

2. Configuring the Apparatus of Material Storytelling

The focus of the large second section of the dissertation is that of *configuring the Apparatus of Material Storytelling* and in doing so building the philosophical, epistemological and theoretical evidentiary support for making space, time and matter *matter* in ongoing processes of becoming in general and specifically as Material Storytelling enacted within processes of organizational development, research and teaching. As a start, a research field of *multimodality and materiality* posited within the material turn to the linguistic turn is briefly presented. Positioned in regard to this research field, the Baradian ontoepistemology of *agential realism* is thoroughly elaborated (from a standpoint of multimodality research). As this fundament for Material Storytelling entails a paradigmatic shift that reconfigures⁴ our traditional notions of time, space, discourse and matter, this is where we start. From here, a 'diffractive methodology' is accomplished that is then put to use in an act of dif-

⁴ Through-out the dissertation, I use notions like configuration, (re) configuration or even (de)configuration instead of the more traditional notion of construction. In doing so I follow Barad who uses the term configuration as a theoretical point to distinguish herself from linguistic constructionism and to emphasize the inherent figuring-aspect of meaning-matter. Barad is, in turn inspired by Haraway (2008) as noted in Section 2.6.6 where configuration in terms of Material Storytelling is elaborated more thoroughly.

fraction⁵ of ‘the between’ of the Baradian onto-epistemology, Bojean storytelling theory, and a Bergsonian approach to memory. Out of this diffraction a concept of *vital intra-actions* emerges. Also, three ontological approaches to storytelling and organizational change are depicted as *interpretative* (narrative being-in-the-world), *resituative* (historical being-in-discourse) and *diffractive* (material-discursive being-of-the-world). Material Storytelling is depicted as a diffractive methodology reworking organizational practices. The section closes Book 1 with presenting both an overall conceptual model of the Apparatus of Material Storytelling as a spacetime-matter (re)configuration and a vocabulary of this apparatus that has been diffracted throughout Part 1, Book 1 to be used in the following Part 2, Book 2.

Book 2

3. Performing an analysis of (the Apparatus of) Material Storytelling

Book 2 opens with the third section of the dissertation, which - from a diffractive approach - performs an analytic report of the action research project that has been the empirical base of coining the diffractive methodology of Material Storytelling. This analytical report is introduced by a summary of Book 1 where the implications for multimodal constituency analysis

5 The notion ‘diffract’ or ‘diffraction’ is a central (methodological) term in the Baradian onto-epistemology and it will be thoroughly elaborated below in Section 2.2

are drawn. Then the apparatus of the ‘data-production’ of the action research project, the ‘data-archive’ as well as the ‘analysis as documentation’ of this project, is accounted for more thoroughly. The subsequent five-part analysis is depicted as an intra-related and non-linear hologrammic whole of a spacetime-matter (re)configuration, where empirical evidentiary support is built for the overall claim that materiality, time and space are vital, agential, and mutually constituent partakers in processes of reworking organizational practices.

As Section 2 and 3 are the ‘heavy’ sections, they are broken up by small *breathing spaces*⁶ that encourage the reader to engage (literally) in ‘embodied learning’ activities aka ‘material story’ practices through various material-discursive practices of body-based intra-active pedagogy. The reader is here invited to follow the same instructions as the participants of the actions research project had been engaged with.

4. Discussing and Concluding Material Storytelling

The last section of Book 2 highlights on the implications of (actively) making space, time and matter matter in ongoing processes of becoming through the Apparatus of Material Storytelling’s manner of enacting complex sets of restorying actions by the three material story modes understood

6 The term ‘breathing spaces’ emerged out of the action research project as a manner of articulating what taking breaks during shifts was about, and as a manner of articulating the re-vitalizing effect of the workshop supervision sessions conducted, cp. Analysis Part 2 and 4, Book 2.

now as intra- active pedagogies or modes of 'enacting the between' as (re)configurations of organizational practices. The research ambition of being of the world and practicing Material Storytelling is discussed from a new understanding on the basis of the careful analysis just performed with a Baradian agential realist take on dis/continuous becoming. As part of this the implications of enacting such an approach to change is highlighted. Also notes are made on the ethical dimensions of using modalities of Virtualizing, Affectualizing and Materializing (inspired by Massumi, 2008 and Staunæs, Juelskjær and Knudsen 2010) as part of organizational reworking apparatuses. The evidentiary support for the overall claim of the PhD project is highlighted and subsequent research issues are stated.

15. A summarizing of the research(er's) story

(In this section vital aspects of the 'entangled genealogy' (Barad, 2007: 388-389) of the becoming of the notion of Material Storytelling is explicated and the fragments laid out in the three vignettes is thereby storied together in a (non)linear fashion. Thereby the reader is provided with the background for understanding how the PhD project came about taking a turn towards (a quantum take on) new materialism. Also, what follows therefore accounts (partially) for my engagement and partaking in bringing about the 'data' from the action research project at DBC.)

Barad's agential realism has been chosen as the onto-epistemological intra-active framework for (coining) Material Storytelling over other alternatives. In doing so I have valued precisely Barad's emphasis on entangled constituent relational agencies, as this happens to be most in line with framing the experiences (as part) of using and reworking three embodied modes of anchoring of knowing in the action research process at the Youth-home at DBC in the fall 2008 through spring 2009. Within Barad's onto-epistemology, knowing is a material practice of being and becoming, and this endeavor is not an individual affair. Rather, it is a material-discursive practice constituted in 'the between' of an intra-play of multiple constituent factors as the quotes in Vignette 3 suggest. The three embodied modes of anchoring of knowing - understood initially as intervention methods - were invocations inspired by the practices of Sand-play, Bodynamic's body-based -pedagogy and Feng-shui. Throughout the dissertation those methods or invocations are (re)configured and understood as various modes of Material Storytelling that as 'affective sites of engagements' enact the intra-play or 'the between' of multiple and multimodal constituent forces. Below, I will in a summarizing fashion point out some of the multiple constituent factors of coining Material Storytelling and their intra-relatedness.

1.5.1 Wau-moments of/and embodiment and psychobiological inspiration

(Spring 2003)

The process of constituting the three material story modes of 'enacting the between' (through engaging with them in extensive training) was more or less my starting point in

the PhD project. I had elaborated and employed them in the action research process driven by an ambition of going beyond the theory/practice divide, the verbal/non-verbal divide, the explicit/implicit divide as heritages of the mind/body divide in western metaphysics.

As mentioned (in Vignette 1) I initially framed this attempt with the term 'Organizational re-embodiment' and the 'intervention methods' as 'embodied learning methods'. This ambition had partly emerged out of my master's thesis back in 1999, where the conclusion had been that 'the body is missing in organizational theory'. It had partly and importantly emerged out of a 'wau-moment' (cp. Boje) in my learning practice as an assistant teacher at AAU, where I had experienced the difference between being a very attentive supervisee, eagerly taking notes on important points to remember from my supervisor's manner of conducting communication training with students, and the 'bigger me' that apparently picked up from 'behind my back' an enormous amount of 'knowing how' (cp. Ryle, 1949, 1974) from the 'mere' participation of witnessing, without me being consciously aware of it. I realized this in a moment of teaching a sequence that I had only learned from a manuscript. To me it was a puzzle and as such an invitation to wonder; 'how could that be?' As it was it rocked the throne of the rational mind of 'the conscious man' and 'his' fall began right there.

The puzzle of embodiment, that is, of how the material and the discursive, matter and meaning, implicit and explicit ways of knowing are integral to each other, were and still are the arch around which the entire process of

the PhD project circles. Based on my embodied experiences of having elaborated various theoretical inspirations I was starting out with the concept of embodiment back in 2003 when I was writing the PhD project application. The driving force of the project was the pursuit of developing a thorough methodology of 'knowing how' to account for the 'wau-moment' mentioned above, and thus to understand and study the embodied aspects of integration and anchoring of the professional development of employees in organizational practices and change processes. In doing so I was also attending to the well-known 'transfer problematic' in the practice of organizational learning and development that I myself had struggled with all too often as an organizational consultant with several years in the area of organizational communication.

In defining Embodiment I (initially) drew on the understanding of the phenomenon stated as; 'the embodied mind', (e.g. Lakoff and Johnson, 1999) or the 'bodymind', (e.g. Dychtwald, 1979), where mind is thought of as fully incorporated - hence embodied - and the human being understood as an indissoluble unit of mind and body; A synthesis-hypothesis (cp. Nielsen, 1999) in contrast to the separatist-hypothesis (cp. Nielsen, 1999), which characterizes the traditional Cartesian dualism.

The Cartesian dualism had the effect of making a split not only between mind and body, but also between mind and the surrounding materiality and sociality (e.g. Barad, 2007: 375 on the postulated gap between 'res cogitans' and 'res extensa'); the synthesis-hypothesis in its original definition by Nielsen (1999) did not include the latter. I therefore extended this synthesis-hypothetical definition

into also containing a surround dimension, which could account for the embodied social and material relations of interacting bodyminds within the material and discursive framework of the organization. In regard to learning processes, this would also account for the relation between the professional development of the employees and the organizational development and change of practice. Further, it would also possibly account for the development and character of the phenomenon generally referred to as 'organizational culture', (cp. Schein (1985, 2010), Schultz (1990), Morgan (1997, 2006) in a new and productive way. I used the following triangular model as means of capturing the extended synthesis-hypothesis:

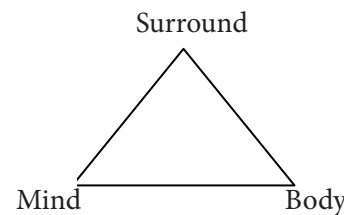


Figure 1.2: Body-mind-surround triangle

The triangular nature of the model might seem contradictory at first to the synthesis statements above regarding non-splits. However the aim of the model is not to induce a split between the body-mind-surround as a whole, but rather to do precisely the opposite; to explicate the close reciprocal relationship - the entanglement - of body-mind-surround, as my attempt to undermine the Cartesian heritage of dualism by changing the hegemony of mind and language over body and materiality in approaching organizational development in the field of or-

...Barad's notion of 'Apparatus' accounts for this embodiment phenomenon, and by using her notion of apparatus I am afforded with a notion that encompasses both this synthesis-hypothesis as well as the 'extended-material-mind' across time and space ...

ganization and communication studies. By placing the surround at one corner of the triangle versus in the usual position of being around as context, I intended the surround to have as equal a status as body and mind. This was done in reference to both the materiality and sociality of the surround, and to imply that both factors are to be considered as agential. Thus up front of the PhD project I challenged the dualistic splits both ways: between mind and body, and between bodymind and surround. To emphasize this point I consistently from the beginning of the PhD project used the term Organizational-body-mind-set and the human-body-mind-set as concepts that inherited the synthesis-hypothesis across the span of consciousness, sociality and materiality. In doing so, I proposed a perspective of an extended material-mind across time and space. There are still important traces of this understanding in the way I frame the material story approach today as will become clear in the dissertations Section 2.6-2.7. Thereby these 'founding differences' are important partakers of the *entangled genealogy* (Barad, 2007: 388-389) of the present configuration of the notion Material Storytelling.

Closely related to these purposes I initially introduced two more hypotheses: 'Organization as both genesis and surround'¹ and 'Body as both genesis and surround'. Here emphasizing the agency of matter. By using the terms 'genesis' and 'surround' together in regard to the sociality and materiality of both the Organizational bodymind-set and the Human bodymind-set, I meant to imply that both bodymind-sets exists and at one and the same time

¹ Inspired by Kristiansen and Block-Poulsen, 1997, who in turn are inspired by the Danish philosopher K.E. Løgstrup (1956)

as both accumulated social and material² heritage passed on across time and space as well as agents of actualizing the present here and now through re-enactment. It was a kind of a both/and relation instead of an either/or relation all too often debated and taken for granted. Thereby I was seeking to overcome the dichotomy of nature/culture and mind/body³.

I was then inspired by recent findings in psychobiology that made the illusions of this dichotomy obvious and stated that nature (heritage) and nurture (surround) was to be viewed as: "*co-operative partners that coordinate gene expression and neurogenesis to create our life experiences*

² According to Rossi (2002), material heritage of the bodymind is passed on from generation to generation in our genes. The body-based-pedagogy of Bodynamic, which is one of the sources of inspiration that I have used to employ the notion of anchoring of knowing, is based on the understanding that our patterns of muscle-tensions are manifestations/materializations of our experiences. Also, 'the formative principle' within Formative Psychology by Stanley Keleman (1981, 1985, 1999) is based on this understanding. Within Mediated Discourse Analysis (Scollon and Scollon, 2004) the term 'historical body' can also be used for denoting that experiences are carried in the body. The material heritage of the organizational bodymind-set is here understood as old buildings' interior decoration, structural layout, artifacts etc. that are passed on from one generation to the next, for example, as paintings of former executives and ringing bells left in hallways.

³ Karen Barad (2007: 88-89) states this binary dichotomy as the perspective in representationalism drawing on a Newtonian and a Cartesian worldview, which is based on a thesis of absolute separation where the researcher is standing outside the world mirroring it, cp. Section 2.2. Those dichotomies are also referred to as 'The Great Divide', (cp. Haraway, 2008: 11).

and continually update our memory in fresh ways, whether we are aware of it or not", (Rossi, 2002, Preface: xvi.). Rossi states further, that: 'every recall is a reframe', breaking the myth about genetic determinism where our genes should lie deeply hidden in our biology far away from our everyday consciousness and actions. To the contrary, on a daily basis our emotions, thoughts, experiences and actions are modulating our genetic expression in ways that changes the structure and development of our brain (Rossi, 2002, Preface xvi). In the moment we recall an important memory, nature opens the possibility for reconstructing it at the molecule-genome level of the brain: *"That is, we are constantly engaged in a process of creating and re-constructing the structure of our brain and body on all levels, from mind to gene"*, (Rossi, 2002, preface: xvi).

The responsiveness of our genes is extensive. In this perspective, processes of materialization are therefore about processes of responses where beginnings and endings are hard to find. I found Rossi's ideas interesting from a materializing perspective of becoming understood as spanning from mind to gene. As I end up with a Baradian notion of material-discursive (re)configurations, I am not so far from Rossi's ideas of a close intra-play – or co-operative partnership - of matter and meaning, nature (genesis), nurture (surround) in the process of creation.

As stated as my own contribution to the notion of embodiment, I developed the two basic concepts: 'Organizational re-embodiment' and 'embodied learning'. Organizational re-embodiment coins the facets of the socio-material aspect of the ongoing process of the becoming of the organization. Embodied learning coins the specific socio-materi-

al facilitative aspects of learning processes in regard to the ongoing process of becoming, as well as the multimodal-perceptual pedagogical consequences of the perspective of bodyminds in regard to facilitating the learning process.

The concept of embodied learning had also drawn on and been further elaborated through my experiences from using three (therapeutical/pedagogical) approaches⁴: Sand-play, Bodydynamic and Feng-shui as each emphasizes or 'foregrounds' either mind, body or surround (thus an angle of the triangular model), while at the same time encompassing aspects of the others; they intra-relate. I attached three intra-relating learning principles: 'learning by active imagination', 'learning by bodily awareness' and 'learning by witnessing'⁵. I explicated these methods and the learning principles governing them in various triangular models and a so-called 'umbrella model'⁶ and those models became my practical

4 The three approaches are the inspirational source of the three material storymodes of Material Storytelling, and their background will be accounted for in Book 2, Section 3.1

5 Witnessing is here understood as participation where 1) you are learning 'behind your back' as in 'seen but unnoticed', which I had encountered myself as being a very surprising and 'effective' way of learning, (cp. Analysis Part 2). This element has evolved to become 'affective sites of engagements', cp. Section 2.6. 2) Witnessing as in being present for collegial support and validation of what is going on and to enable a 'learning buddy' outside the learning setting. This element was enacted in the action research project as subgroups consisting of two colleagues from the group of staff at DBC.

6 The Umbrella model will be explicated in Analysis Part 2, Book 2 as it came to play a particular prominent role in the process of intra-active story rework at DBC

memory-devices for carrying the notions of organizational re-embodiment and embodied learning with me. Those models were at the same time used as memory-devices for the continual re-workings of those notions throughout the action research project at DBC.

1.5.2 Quantum coherence

(Late September 2008)

On this background of embodiment I participated in a lecture by Quantum biologist May-Wan Ho on her framing of the quantum coherent body(mind) as a remarkable coherent, biologically entangled quantum orchestration in the now that she names ‘quantum jazz’:

“What one must imagine is an incredible hive of activity at every level of magnification in the organism, a light and sound extravaganza played out over most, if not all the 73 octaves of the electromagnetic spectrum, locally appearing as though completely chaotic, and yet perfectly coordinated as a whole. This exquisite music is played in endless variations subject to our changes of mood and physiology, each organism and species with its own repertoire. It would be wonderful if we could tune in and discover how some of us are made of Schubert, and others of Beethoven, or Bach, or something entirely different, which I have called Quantum Jazz” (Ho, 2008: 130).

I was introduced to a thinking that in many ways enabled me to combine all of the above sources of inspiration: psychobiology, embodied learning, heritage and here-and-now acting in a surround. This inspired me toward quantum thinking and quantum coherence theory. However I did not act further on this at that particular moment. In my elaboration of Barad’s onto-epistemology in regard to multimodal turn-by-turn emergent action, I do ‘return to’ or rather re-enact the notion of ‘quantum jazz’ as a notion that enables me to rework the understanding of synchronicity and timing within communication and organization studies in light of quantum entangled emergent enactments of ‘the between’ (cp. Section 2.6-2.7).

In an important way the above ‘embodied outset’ for my thinking was influenced along the various intra-actions of which I was engaged and as part of my *duration*⁷ these entangled reworkings of the notion of Organizational embodiment influenced both the manner by which I framed and conducted consulting work in 2008, when I came in contact with DBC (initially as a consultant)⁸ and the manner by which I approached Barad’s theorizing when I fully engaged with that during the fall 2009.

⁷ cp. Section 2.6 in Book 1 on Bergsonism.

⁸ The details concerning this meeting and how it went from a consultant job to an action-research practice is explained in Book 2, Section 3.1.3 ‘(Re)configuring the action research project’.

1.5.3 Entering DBC with ‘a discourse in place’

(Sept. 8th, 2008)

Entering the 1st group workshop supervision September 2008⁹ at DBC I had come to the door with – literally – my sandplay-suitcase full of frames and figures. I introduced ‘my way’ of doing supervision through two triangular models drawn up on blackboard. I later wiped them out in order to take notes highlighting and anchoring key terms of the emerging talk. However I had a hand written sketch in my notebook as my preparation for the day (Figure 1.3).

The two triangular models are themselves (agential) memory-devices for my duration up until this point¹⁰ and I will explicate here how they ‘followed from before’ as a way of explicating the contribution of my duration as participant in the shaping of the action research project and the rework of organizational practices that took place as a consequence of it.

⁹ For a close elaboration on the initial contact with DBC and how they came to be partakers in the action research project, see Section 3.1.3, Book 2.

¹⁰ This is a very concrete example of how theory (formation) is (a form of) practice. (cp. Lemke, 2005)

which later oriented me towards further eastern philosophical notions of Taoism and Feng-shui, which then became the second method I took on alongside the body-based pedagogy of Bodydynamic that originally had inspired me to go to the conference¹³.

The second inspiration to this model 1 was the ‘communication triangle’¹⁴ that I had been trained in using throughout my Master’s studies in interpersonal organizational communication at Department of Communication, Aalborg University.

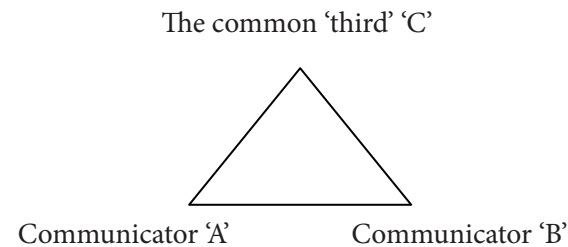


Figure 1.5: The communication triangle

The two models have ‘A’ and ‘B’ in common and ‘the common third’ ‘C’ became the fluent, spontaneity of being ‘*a student*

13 The conclusion of my master-thesis of ‘the missing body’ in organizational theorizing had turned me to explore the approach of the Bodydynamic system that I was introduced to through the interpersonal communication studies at AAU. My first Bodydynamic course was in the spring of 2003, when I was writing up the PhD application.

14 Translated from Danish ‘Kommunikationstrekanten’, a term and a model developed by Professor Benedicte Madsen, Århus University (cp. Madsen in Alrø, 1996)

of the movement of the moment’ and thus following whatever was moving in the here-and-now moment of action; no foreseeing of what would happen – rather ‘just’ deal with what emerges. The spontaneity that is implied in the first triangle model fitted well with the action research principle of ‘*laying the stepping stones as needed*’, that I re-encountered shortly before the action research project started.

1.5.5 The trinity of an action research process

(August 2008)

The Triangle model 2 (bottom model in the photo in figure 1.3 above) was presented to the staff at DBC in the first group workshop supervision was inspired by a model that I had been introduced to only one month before in a CDO seminar¹⁵ describing an action research process. This model enacts the spontaneous aspect of always being in the ‘now’ by using the term: A for: ‘Aktuelle situation’ meaning ‘The actual state of affairs’ as a first step to figuring out where one wanted to go from there, that is: ‘Det forestillede’; the imagined future ‘put before you’. Already here it is clear that change is expected within the enacted approach. So already upfront in presenting ‘my approach’ to being supervisor I implied by the configuration of the two models that I expected them to at least desire to change. This implied expectation was never questioned. It was a presumed practice you could say. By linking the two triangular models through the ‘A’ they both have in common, a linkage was made between attend-

15 Centre for Dialogue and Organization’s summer seminar in August 2008, headed by Professor Helle Alrø, AAU. The model is developed by Professor Ole Skovsmose

ing to the now in a learning setting and creating the future by use of imagination to 'put it before you' ('forestille sig'), which went well with the method of Sandplay based on literally 'putting it before you' by placing small figures in a sandbox as a display of a current problem-complex to be dealt with in the supervision session. It is important to note that when I was using the two triangular models at that point I did not have a vocabulary other than the two hypotheses on body and surround (cp. above) to guide my embodiment-thinking to the direction of materiality. It was only along the action research process at DBC in the explorations of using and reworking the three embodied learning modes (as they were called) that it gradually emerged that embodiment 'turned material'.

1.5.6 The Actual and the Virtual

(February 2009)

The triangular model 2, that I just described was in the end of the fifth month of the action research project fused with the Bergsonian idea of *the actual* and *the virtual* and the return of differentiation's (thus initially through the work of Deleuze). The fusion was 'simple' as the 'Actual situation' and the 'Imagined situation' were fitted with 'the actual' and 'the virtual' and it was a reconfiguring that more directly highlighted the co-creative, continuous and innovative aspects of change processes¹⁶ and through that of-

¹⁶ Inspired by an article that combines the work of Gilles Deleuze with the actions research change process, cp. Drummond and Themessl-Huber (2007). See Section 2.6 for how I have re-elaborated Bergson/Deleuze in framing Material Storytelling

fered me the opportunity to highlight the importance of materiality, as it at that point had become evident for me



Figure 1.6: Photo of the poster of the triangle model presented March 9th 2009 at the last workshop session at DBC

as an outcome of the project how significant those aspects were in an organizational change process vis-à-vis an action research process. A realization that as mentioned in Vignette 1 led me to also change PhD supervisor in February 2009. The reconfigured triangle model was presented in the last group workshop supervision in March 2009 ending the project at DBC.

The above mentioned hypotheses of embodiment, the basic learning principles and various models captured my material-discursive practice (as a Baradian material-discursive apparatus) which both enacted the field of in-

quiry and the research method that I took on as it thereby worked as ‘an enslaving pattern’ in guiding how I framed the problem and what could be done about it. The project description of the actual action research project at DBC from September 2008¹⁷ bears full witness of this.

Also, as mentioned earlier, this material-discursive practice worked as the crucial factor in the present choice of onto-epistemology of this dissertation: Karen Barad’s notion of intra-action of material-discursive apparatuses, which I was introduced to briefly in September 2008 by Pirkko Raudaskoski, (who later became my supervisor) right after the action research project started at DBC, who saw a connection in Barad’s work with the notion of ‘quantum jazz’ I introduced to her. However, I did not pay serious attention to Barad until the spring 2009 when I bought Barad’s book: *Meeting the Universe Halfway – quantum physics and the entanglement of matter and meaning* (2007), where I could engage more deeply with her neologism ‘intra-action’. However, following Barad’s suggestion of intra-action – as opposed to inter-action (or inter-personal) - seemed to be a useful (yet challenging) way to go about capturing the close intra-play of the three intervention modes, the six months duration, the material changes accomplished and us eleven participants, and supported thus how I had come to elaborate the problematic of embodiment in a ‘new’ way.

¹⁷ The project is described more closely in Book 2, Section 3.1.3 ‘(Re)configuring the action research project’.

1.5.7 Speculative design

(Spring 2009)

When Associate Professor Pirkko Raudaskoski came aboard as my new supervisor, she inspired me to the idea of opening up the data material wherever something central happened instead of going chronologically from beginning to end or from the end backward to the beginning as I had first decided to do in a more classical chronological way. The idea of finding ‘a crucial moment’ (Scollon and Scollon, 2004) and using that as an anchoring event for recollecting the ‘relevant rest’ was later elaborated further at a creative workshop as part of a PhD seminar in Gothenburg, Sweden, in May 2009¹⁸, which was run by Professor Elisabeth Ellsworth on doing ‘speculative design’¹⁹ in research. I made a 2D/3D configuration (entailing material artifacts) there of this basic idea that *resemiotized*²⁰ it to material form, showing the

¹⁸ PlaceME network: <http://www.placeme.hum.aau.dk/activities/Workshop6/workshop6.htm>

¹⁹ The notion of speculative design is derived from Ellsworth (2005) and describes a speculative area “...in which to think experimentally about possible and impossible pedagogies” (2005: 9). She argues further that “Creating room for speculation enables an educator to explore her understanding of the places in which people encounter enjoyable learning experiences and the means through which she, as an educator, could imagine making and using such places” (2005: 9).

²⁰ The notion of ‘resemiotization’ by Iedema (2003) coins the process of meaning alterations in changes from for example spoken word to writings on paper, to actual built materials. Resemiotization is as such closely related to the notion ‘transmogrification’ which depicts changes of shape (of meanings) in for example from sound to paper, to build space, Iedema, 2003. The notion of rese-

duration of the project as an entangled whole across many spacetimescales and opening the data-material from a particular crucial moment midway into the (chronological) process. The day before I had held a video data-session displaying that particular crucial moment. Those things came together in the workshop task and through that I was also inspired to create a speculative design (cp. 'productive machinery' in Section 1.6.3) for the dissertation.

1.5.8 Multimodality and Storytelling

(June-Now 2009)

In June 2009 I was given feedback from an important scholar within multimodality analysis, Curtis LeBaron, on the video data of the 'crucial moment' on a PhD course on multimodality²¹. I had at that point begun thinking in terms of multimodality as an alternative to the verbal/non-verbal divide and in terms of storytelling as an alternative to dialogue as ways of making sense of what went on in the practices of the three learning methods employed. During the exercises in the PhD course I was trained in how to do multimodal analysis and how to state claims to which evidentiary support would be built in these analyses. In the feedback I was encouraged by LeBaron to stick to a multimodal story-take in elaborating the multimodal emergent

miotization incl. transmogrification is later elaborated in the dissertation as '(re)configurations' where meaning-mattering is more obviously mutually consistent.

21 PhD-course on multimodality in social interaction, Aarhus, June 17-19, 2009.

actions of the sandbox-based activities of the crucial moment.

Later the same year I met the storytelling scholar David Boje on a PhD course on dialogue and change in organizations²² and was here introduced to his take on organizational communication as the nonlinear dynamic of *living story*. I had the opportunity to discuss and share both my embodiment and storytelling ideas and my quantum physics inspiration with him on this occasion²³. Living story seemed to be a productive way for me to take the Baradian onto-epistemology to the organizational realm, in close intra-play with a multimodal perspective on the particularities of this living emergent action of the crucial moment of a sandbox-based-story activity.

1.5.9 Material Storytelling

(Spring 2010)

I consolidated the turn towards (this multimodal take on) story and materiality shortly after by framing my research actions as 'Material Storytelling'²⁴ in my first paper pres-

22 PhD course on dialogue in organizations at Department of learning and philosophy, Aalborg, November 26th 2009, where Boje did a lecture on: *Complexity and Storytelling: An Antenarrative Perspective on Coaching and Learning Organizations*.

23 Boje acknowledges this himself in Boje (2011: 5).

24 On the background of this paper presentation I was given the opportunity to guest edit a Tamara (journal) special issue on 'Materiality & Storytelling'. (see www.tamarajournal.com). This issue is currently in review as a double special issue.

entation at the Sc'Moi conference 2010 in Alexandria, VA, (Strand, 2010).

During the action research process at DBC as well as in the overall course of the PhD project I have thus restoried my framing of 'what went on' and moved from organizational re-embodiment and embodied learning as a productive framework, to Material Storytelling (re)configurations and material story modes as a manner of highlighting the entangled agency (of becoming) of multimodal meaning-matter constituents across multiple spacetimescales. I found that it was not so much a question of a two-fold of an embodied extended mind (across the organizational-bodymind-set and the human bodymind-set) or rather this question was best answered by/as a complex entanglement (of a story) enacted as a rather complex 'between' of nature, culture, time, space, mind, body, implicit, explicit, materiality and discourse; *a complex material story*. Thereby I myself came to take the radical, posthuman, quantum material turn (cp. Section 2.1).

In the following sections of the dissertation you as the reader will be invited to engage with key concepts and consequences of my (multimodal) embodiment elaborations of the Baradian onto-epistemology, the Bojean storytelling theory as well as the Bergsonian concepts of memory; the major theoretical inspirations that I have taken in as part of the continuous restorying/(re)configuration of the puzzle of the processes of organizational re-embodiment. As a 'start' the 'defining terms' of and for this elaboration of Material Storytelling is explicated.

For your note(configuration)s:



40

16. Defining Material Storytelling

(In this part, the definitions, decisions, aims and motivations for posing Material Storytelling in this particular manner are explicated, and thereby it is also explicated what governs the building of the 'productive machinery' of the dissertation)

The performative move that this dissertation is aiming at is the coining and posing of the notion ‘Material Storytelling’ as a research based methodology for enacting organizational changes generated by reworkings of practices in organizations towards sustainable organizational living based on a Baradian onto-epistemology. The term sustainability is used because the implication of practicing Material Storytelling is a changed relationality of commonly enacted hegemonies among modalities: mind-body, language-materiality, culture-nature etc. For this working purpose Material Storytelling is defined as follows.

Working definition

Material Storytelling is a research based methodology for the (material-discursive) configuration of complex sets of multimodal restorying actions, which enact ‘a between’ of a varied intra-play of material story modes of organizational (re)configuration in a manner that changes the relationality of presently enacted hegemonies of ‘the between’ of mind/body, language/ matter, culture/nature, verbal/ nonverbal communication and implicit/explicit ways of knowing by enacting them as equal, and mutually constituent agencies of (changing) the everyday practices of organizational living.

Material Storytelling is configured as three different intra-playing modes of Material Storytelling: 1) the physical, spatial, material surrounds of the organization in question (also framed as ‘spatial discourse’ and ‘stories of space’), 2) the physical, multimodal presence of the human participants in question (also framed as ‘mattering bodies’ and ‘stories of bodies’), and finally 3) various material objects such as small figures placed in a sandbox as story agents, large posters with models, self made clay objects, etc. (also

framed as ‘mattering bodies’ and ‘stories of artifacts’). The threefold notion is linked to the practices of the three specific inspirational sources for developing the three modes of Material Storytelling in the action research project conducted. Those inspirational sources were as mentioned the Sandplay method, the body-based pedagogy of Bodydynamic and the Feng-shui method of Taoism¹.

Material Storytelling builds on an understanding of *story* (re)configured as a multimodal, constituting practice that emerges out of multiple time- and space scales. Importantly *storytelling* should here be understood as in the English language in saying ‘I couldn’t tell whether...?’ which does not simply imply telling as an oral, vocal voicing but more of a multimodal meaning-making endeavor where doubt and indeterminacy are always also present. Material Storytelling is a material-discursive practice and as such a (re)configuration of mutually constituent agencies; space, time and matter and is seen as a vibrant, complex, multiple and entangled ‘between’ intra-action (Barad, 2007). This will be clearer as the inspirational sources of this (re)configuration have been explained below in Section 2 ‘Configuring the Apparatus of Material Storytelling’.

Material Storytelling thus comprises the complex entanglement of stories of spaces, stories of bodies and stories of artifacts. All in all, the three material story modes, (that are integral to Material Storytelling in regard to rework of organizational practices), are understood as working

¹ The inspirational element from Sandplay, the body-based pedagogy of Bodydynamic and Feng-shui are explained in greater detail as ‘Outings’ in the beginning of Analysis Part 1 in Book 2

as (re)configuring practices that each encompass various constituent modalities of meaning-matter entanglement. The notion of entanglement follows Barad (2007) in implying that the three material story modes are only distinct in a relational sense as: “...*agencies are only distinct in relation to their mutual entanglement; they don’t exist as individual elements*”, (Barad, 2007: 33). You could argue that it is strange to name the above constitutive agencies as ‘stories of x’ as it implies them having an independent existence – and story-outcome –, which is not the case following Barad. They are all intra-active material-discursive practices. However, the three material story modes are (as parts of a larger material arrangement of a methodology of Material Storytelling) reconfiguring agencies that produce a specific foci and motor for intraplay in the workshop setting. At one level they are all active as an unavoidable aspect of every action as: bodies, spaces and artifacts. At another level one of them is foregrounded as the focus of attention in having been chosen as the mode of enactment (of the between) of the particular event; as the specific (affective) site of engagement.

Each of the story practices (re)configure a specific material-discursive practice of intra-acting entailing a certain sequential order and a certain participatory framework; In Sandplay inspired story practice the human participants are standing up, specific roles are distributed, entailing specific actions to be conducted in a specific manner and order for example choosing artifacts as story objects, placing them in a sandbox, prior to any inquiring into ‘their’ story. Bodydynamic inspired story practices reconfigure a participatory framework of the human participant to pay close attention to body-sensations invoked by the move-

ment of the body in a certain manner in intraplay with other human and/or nonhuman participants. Feng-shui inspired story practices reconfigures the focus of attention toward activities concerned with reworking the structural layout and the interior decoration of the workshop setting or the organizational surround, guided by a certain set of Feng-shui principles. So, the three story modes are enacting specific communicative and pedagogical modalities for knowledge practices in regard to story rework.

The following model comprises the three story modes of Material Storytelling:

1.6.1 Research approach and -motives

The elaboration of the methodology of Material Storytelling is as stated drawing extensively on the experiences from the six months action research project together with the staff - and at the site of engagement - of a ‘Youth-home’ of the public Danish care-Institution named DBC (see ‘Short Story’ in the end of this Section 1, Book 1). In the action research development process the above mentioned pedagogical and communicative modalities (inspired by Feng-shui, Bodydynamic, and Sandplay) were used. I took a yearlong study/training in these three practices before introducing and reworking them in the action research/PhD project. The practices related to the three story modes will be elaborated further (as diffractive methodologies) in the Section 2.6 and 2.7 as well as in the elaboration of the workshop setting in the beginning of Analysis Part 1, (Book 2, Section 3.2.1).

Stories of SPACES

- The physical, material space of the organization as 'spatial discourse'
- The interior accommodation/decoration of the organization
- The material structure/layout of the workshopsetting
- Feng-shui as the primary inspirational source

Stories of BODIES

- The physical, multimodal presence of the human participants
- The participatory frameworks and instrumental stance
- The 'historical body' of the human participant as 'mattering bodies'
- Bodynamic as the primary inspirational source

Stories of ARTIFACTS

- The various multimodally material objects as 'mattering bodies'
- The memory devices used in knowledge practices
- Artifacts as part of the participatory frameworks and instrumental stances
- Sandplay as the primary inspirational source

Figure 1.7: The three story modes of Material Storytelling to the model next to each of the three storymode in action: Fengshui: photo from rebuild livingroom Bodynamic: photo from 'sitting in the yarn' exercise, Sandplay: photo from sandbox or standing around sandbox

These experiences from the action research project (and beyond) have since been reworked following a new materialistic, quantum take on understanding the entanglement of (the various modalities of) meaning and matter. I here follow recent theoretical instigations in feminist and

science studies by Karen Barad (2007) that 'matter matters' in emergent actions. Karen Barad's notion of *intra-acting material-discursive practices* is employed as an *onto-epistemology* emphasizing the various modalities (including space and time) of the material and the discursive as mu-

tually constituent parties of ongoing processes of (re)configuration. To elaborate nonlinearity and multiplicity in processes of iterative, emergent actions of organizational becoming, this onto-epistemology is then, as mentioned, read diffractively through Boje and colleagues' approach to organizational living within critical organization studies that frames organizational becoming as *living story* (Boje, 2001, 2008, 2011 a and b; Jørgensen and Boje, 2010), and a Bergsonian notion of time and memory as *lived duration* within process-philosophy. The onto-epistemology of Material Storytelling and its living story-memory implement are only briefly mentioned here, as they are elaborated in great detail in Section 2.4, 2.5, and 2.6 below.

As you as the reader embark on grasping the (re)configurations of organizational living and becoming presented, it might be useful to keep in mind as important

1) the founding premise of the new-materialistic (quantum) paradigmatic take: *multiple forces are at work in what is understood as a dis/continuous becoming of the world*. The world is therefore not a social construction involving only human agents. Non-human agencies are always involved in the constitutive dynamic of becoming, understood as iterative enactments or (re)configurations. Also, 2) as Barad's thinking is informed by quantum physics, she reconfigures *time and space as active parts of this constitutive dynamic* (and therefore her thinking presents the most radical theorizing within new materialism). With Barad, subject, object, body, time and space are not independent entities but components *for* and *of* each other

... I am here joining in with the material feminists, posthumanist researchers, bodypsychotherapists etc. that have already made this claim, (e.g. Taguchi (2010), Alaimo & Hekman (2010), Miller (2008), Fasting (2004)

(Juelskjær, 2011: 18). Barad thus challenges both Newton and Einstein in theorizing an emerging spacetime-matter as localized configuration (cp. Boje and Baskin, 2010). These premises taken together represent a post-human as well as a post-Newtonian and a post-Cartesian approach compared to that of western metaphysics prominent in organization and communication studies. (What these terms entail will be explained more thoroughly below).

The research motives that have governed the development of the methodology of Material Storytelling are the following:

1) how does the meaning and matter (including time and space) entanglement in (the processes of becoming in) organizational living enable us to understand

processes of organizational change (and not least the concept of change itself) rather differently? And

2) how can the recognition and active employment of this intra-play of meaning-matter modalities reconfigure (what is presently mostly talked about as embodied/enacted hegemonies of) habitual (working) life practices in-formed by the Cartesian duality split as well as a Newtonian space-time framework that dominate Western thinking?

When the focus is on reconfiguring embodied/enacted hegemonies towards a more sustainable living through processes of Material Storytelling, we are (also) dealing with issues of sustainability at the bodily level of the participants and the material surround level of the organization in achieving a new and more 'democratic' recognition of 'the between' of body, mind, matter, space and time rendering them as equal, and mutually constituent parties of the world's becoming.

The dissertation is thereby highlighting the potentials of orchestrating processes of reworking organizational practices around this intimate intra-play of the various meaning-mattering modalities of the story modes employed. The study is posing Material Storytelling as the research based framework for it – both when it comes to the co-participatory restorying and (re)configuring work process of (*Intra*)action-research, as well as the multimodal constituent analysis documenting such a process. As the dissertation progresses, a methodological framework comprising both the doing and analyzing aspects will be emerging with the title 'Apparatus of Material Storytelling'.

1.6.2 The central claim posed

Referencing the research motives mentioned above, I am claiming that ongoing processes of becoming in organizational living and change (as well as teaching and research) are material-discursive restorying and (re)configuring actions where matter, space and time *matters* as co-constituent forces. Processes of Material Storytelling are directly configured to 'credit' those constituents and offer as such an understanding of change that is rather

different. Here the question of organizational *change* is reversed and posed as a question of how *stasis* is made possible. In the process of mattering, matter plays a vital role in enabling stasis understood as the reproduction moment-to-moment, day-to-day of the (more or less) same material-discursive practice. Here matter is not a thing, but a doing; a (process of a) *congealing of agency* of a material-discursive practice. The matter of mattering then has to do with (the material-discursive intra-active dynamic of): 1) spacetime-matter's physically structuring force as *congealed agency*, 2) its maneuverable character, 3) its ability to invoke affect(able) memory across timescales, and 4) the ability of larger material arrangements to alter *language* in terms of modalities being used.

The material structuring seems to play a role in the emergent actions by directing attention and governing actions among co-authoring human participants in a certain way; for instance the structure of the room governs the placing of furniture in the workshop setting, which in turn directs the sequence of movement of the human participants, (cp. Analysis Part 1, Book 2). When the interior decoration is reworked (the replacing of furniture, activity artifacts and so on) in an organizational setting the everyday actions change. Here space is not a neutral container in which action is placed, but an active co-constituent that is reworked, too. Further, the maneuverable character of matter provides for a change of scenery in a manner that enhances the restorying of organizational practices as reworked material-discursive practices; for instance the replacing or exchange of a story-figure with another in the sandbox changes the story

work: replacement seems to enhance the reshaping of the everyday work related material-discursive practices, (cp. Analysis Part 5, Book 2).

Matter is affect-*able* as a figurative memory-device that in the appeal of the present is a co-constituent in (re)configuring memories and thus enables each event to span flexibly across multiple times and spaces as when a pink dog house seated tilted to the right side in the sandbox collects memories of off-balancing practices storied earlier in the process (cp. Analysis Part 2 and 3, Book 2). The altering of the languaging as a different material-discursive intra-action or intraplay of communicative modalities of hand gestures, prosody, proxemics and story-figures affords a multimodal re-storying of the problematic that are dealt with, for instance an altered hand gesture in intraplay with placed story-figures in a sandbox configures a different categorization (boundary-making) of the elements of the problematic dealt with in the supervision session of the ‘crucial moment’; ‘to build an oasis with a good conscience’, (cp. Analysis Part 4, Book 2).

While emphasizing that matter matters, the point is clear; material changes as such are not enough to produce the rework of organizational practices as it were, (although any changes of the larger material arrangement will be an enactment of a difference in manner of conducting the practices). It was, however, the accomplished *changed relationality* of the human and nonhuman co-constituents and partakers afforded by the sandbox-based material storytelling in workshop supervision sessions and the intra-related rebuild of the material surround of the organization during the course of the action research project that enabled the changes ac-

complished. The changes were here storied and enacted in intraplay of human and non-human participants and as part of this process the workshop setting and the organizational setting of their everyday practices converged (or rather diffracted) towards the end of the action research project, which literally provided for the integration (diffraction), (cp. ‘Short Story’ in the following Section 1.7).

The ‘productive machinery’ (cp. below) that should help me ‘document’ these changes is established in line with this thinking: 1) changes did happen due to the diffractive interference of the apparatus of the development project and 2) the analysis of the empirical materials collected (and enacted in the ‘analysis as documentation’ cp. Section 3.1, Book 2) should be able to support that these changes happened due to this apparatus. Focus is therefore taken away from the action research approach employed as such into an analysis of the complex events captured in various ‘data’-sources and collected into ‘an archive’ following Tim Rapley (2007). This ‘data’ is mainly on video, but notebooks, photos and posters are also employed in the attempt to ‘document’ the entanglement of the different forces that lead to constituting the rework of organizational practices at DBC. This means also that various discussions, which would otherwise have been undertaken in an action research dissertation, are not included here.

In the following I thus ‘document’ (through both (meta) theoretical, methodological and analytical accounts):

- How the Material Storytelling process can afford restoring of the present (‘old’) practices of the organization material-discursively towards sustainable living

- How the pedagogical practices reshape themselves in crucial moments of intra-action, when the everyday organizational material-discursive practices are re-worked
- How the use of various story-modes enables what I understand as *complex Material Storytelling* to take place in ways that play a significant role in the continuous restoring of practices in the organizational change process
- How the events taking place in the change process go beyond the here and now, in that both the past and the future in a nonlinear fashion are enveloped in the moment of action with the three story modes
- How - by use of the three material-discursive story modes - materiality, space and time as well as implicit forms of knowing more specifically are invited in as equally important constituents of the organizational change process as that of the spoken word and explicit forms of knowing
- How such processes of organizational change provide for a different take on change itself and the manner by which such changes are enabled in 'the between' of a co-operative of human and non-human constituents

1.6.3 The productive machinery of the dissertation as 'documentation'

As stated the purpose of this doctoral dissertation is to pose Material Storytelling as a methodology and a practice of organizational rework through the entangled complexity of constituent agencies. It is vital for meeting this end that I explicate how this notion has itself emerged through the intra-play of circumstances, events, people, inspirational sources, material affordances etc. (e.g. 'Summariz-

ing of Research(er's) story', Section 1.5), as well as what implications it has for approaching organizational change. Lemke (2005: 110-122) discusses doing research as *nexus analysis* (e.g. Scollon and Scollon, 2004) and notes that theory-based inquiry itself is a practice that is made possible by the socio-cultural history of theory formation, by the researcher's educational and work background, and by the concrete setting(s) in which the theory is applied (research group, available tools for empirical analysis, etc.). The action research process out of which Material Storytelling grew is a very important part of that *entangled genealogy* (cp. Barad, 2007: 388-389) and it will be granted a structuring role by coining a *crucial moment* (e.g. Scollon and Scollon, 2004) in the process as a recursive fix point for 'outings' into the past and future of the PhD process. I have also produced a model of this entangled genealogy as a material memory device used by me in doing the analysis, (cp. Book 2, Section 3.1). The model will be used in the dissertation as a memory device in dealing with especially Part 2 and 3 of the Analysis.

The dissertation, as a whole, needs to be constructed appropriately for this performative action of producing 'documentation'. Inspired by Juelskjær (2009), I use the term 'productive machinery' (Juelskjær 2009: 71) when I talk about matters regarding the production of the (documentation through the) dissertation. I use the Baradian term 'apparatus' or 'Apparatus of Material Storytelling' when I talk about the methodology and practice of Material Storytelling that I am posing in the dissertation and the practice that was used in the action research project.

A vital part of the ‘productive machinery’ of the dissertation is the techno-scientific practices explicated in the format and layout of (the different parts of) the dissertation. Those formats and layouts have in this case been deliberately chosen to enable the necessary complexity for the task as well as the tools to navigate it. Various foldout maps were here intended as flexible, easily accessible memory-devices for the ‘reader’ (user) of the dissertation. The idea was to materialize them in this foldout manner as opposed to merely embedding them in the main text or in an appendix to underline the material nature of the discursive practice of our interpretive apparatus as readers (Barad, 2007: 387-388). However this solution proved to be a great deal more costly than the budget of a doctoral dissertation at Aalborg University can elicit. This idea therefore had to be discarded.

When reading the various parts and pages, we engage with the materiality (material-discursive practice) of the dissertation. If we follow Barad, this engagement with the materialized multimodal constitutive *affordances* (Gibson, 1979) of the dissertation matters for the intra-action from which ‘reader’ and ‘dissertation’ emerge and thus constitute the ‘productive machinery’ of the dissertation together with the conceptual framework and the analytical tools. This is not to say that there are any fixed ways of this emergence to happen. For instance, Raudaskoski (1999) shows how difficult it is to design for a certain way of reading.

Matters of appropriate layout and formats are frequently understood as non-academic considerations, (cp. Trafford and Leshem, 2008: 19). Varela (2006: epilogue) explicitly comments on the consequences of such alternate layout practices

in terms of academic performance, yet argues for the need to take the risk of it for the sake of the pedagogical element.

However the paradigm of (radical) *new materialism* (e.g. Højgaard and Søndergaard, 2010: 315) on which this dissertation is founded, specifically insists on meeting *the matter* of the ‘facts’ half way (Barad, 2007: 132). The decision to break with recent standards of academia in this manner and to highlight the materiality of the dissertation is thus consistent with this paradigmatic choice, and is in line with the main contribution of my research as Material Storytelling. Knowledge practices – for instance, when the reader is engaging with this dissertation - takes place right in the middle of things, in our very living and doing.

I suggest the reader (user) to take into account how knowledge practices are enacted in intra-action with the material affordances for the reading, the environment of the action, as well as the specific organization of time, places and spaces, (Taguchi, 2010: 61), while reading this dissertation. In other words, it matters how comfortably you seat yourself when reading, how you provide yourself (or not) with surroundings entailing perhaps a glass of water, a cup of coffee/tea, a snack, or other ingredients to make you feel comfortable, how busy you are at the moment of engaging with the dissertation and whether or not you are taking breaks as you go along. This entails the local ‘enacted between’ of the dissertation.

Also, in regard to material affordances, Højgaard and Søndergaard specifically request the so-called *new-materialists* to take up the challenge of bringing in the agency of materiality as an explicit agent. This includes the strat-

egy for conveying the research data and runs across the research design as a whole. They specifically ask the new materialists to use their imagination including *'physical models, visual shows etc. as prominent parts in the conveyance of research results'*, (2010: 329-330). Material feminist Hillevi Lenz Taguchi (2010: 152) suggests (by reference to Jung, 2005: 4) using various genres in constructing a 'hybrid writing' as a process of 'writing-to-discover' as opposed to 'writing-to-make-clear'. In 'writing-to-discover' diary entries, notes from observations, narratives and newspaper and journal articles are used to overcome notions of abstract coded writing along academic/theoretical texts. Taguchi questions the possibility of connecting and interweaving all these different kinds of texts that are involved in learning - and as such perform an academic writing process from an onto-epistemological perspective. In such a perspective *"being is a state of interdependent becoming, and (...) learning and knowing takes place in-between different agencies making themselves intelligible to each other"* (Taguchi, 2010: 152).

True to the storytelling genre as well as the feminist tradition I buy into, I deliberately also include 'voices' that are often erased in academic writing. These are more personal accounts such as small stories of how I came to be an academic caught up in embodiment issues (cp. Section 3.1, Book 2), how I came across certain theories and methods (cp. 'Summarizing of Research(er's) story' above), how my research practice developed or re-constituted during the process (cp. 'Outing', Section 2.3.8), and so on. Also, I have deliberately chosen a sideway format and spaces for note-making/taking; meta-communicative notes 'from' me as well as your note-taking during reading to afford

you as the reader the possibility of various manners of co-configuring 'knowing' and the motivation to engage (intra-act) very literally with the multimodal larger material arrangement at hand. Also as mentioned above I include breathing-spaces (from the heavy linguistic configuration of Section 2 and 3) inviting the reader to employ 'other ways of knowing' (cp. Heron and Reason, 2006) by doing some of the body-based pedagogy exercises of one of the material story modes. Finally, as a manner of guiding you as the reader through the four major sections across two books, each section carrying a two-digit number is, as mentioned, opened with a brief summary of the content and main points that follows.

You have now been given an overall introduction to the dissertation depicting the structure and content of the dissertation, the research(er's) story and the overall claims of the dissertation, as well as the techno-scientific 'productive machinery' enacting these various aspects. In the following Section 2, we will go into the details of Barad's onto-epistemological framework. Before we do that however, a short story of the action research project is performed to ensure a foothold in the very concrete 'reality' that will help understand Barad's highly theoretical quantum 'queer' points and remind us as to 'where' these radical and perhaps somewhat provocative statements are aimed. Also the 'short story' of the action research project provides the 'short version' of the 'documentation' of the claims just stated.

For your note(configuration)s:



17 Short Story

(The following entails a resume of the action research development project at DBC and its entanglement of various material-discursive practices and agencies in the organizational reworking process evident in the changes that were the outcome of the project.)

1.7.1 The site of engagement¹

The site of the action research project was as stated, the public institution ‘Ungdomshjemmet’; the Youth-home, at the (formerly) Blind and Deaf Centre, DBC (now Centre for Deaf and Hearing impairing CDH) in Aalborg, Denmark. The Youth-home is a youth facility for deaf and blind, multi-handicapped young people. I worked there as (supervisor/action researcher) in a period of six months with 10 members of the staff who were employed in one of the two sections in the Youth-home’s institution’s main building; *House 1*. The initial aim of the action research project was to develop a closer integration and anchoring of the professional competencies that were to be developed during the action research project, in their everyday work practice in the house² and in that sense become ‘embodied’ (cp. Section 1.5 ‘Summarizing of research(er’s) story’). In dealing with this aim, the rather direct agency of matter in relation to this organizational rework emerged as a more obvious constituent of the embodied learning methods than any of us had acknowledged. As the project went on, also the failings of the Youth-home in terms of place, space and framing of their everyday practices became evident; as did other imbalances within the material-discursive practices of the participants in House 1. This brought matter’s ‘mat-tering’ into focus.

...The change of ‘name’ from ‘embodied learning methods’ to ‘Material Storytelling’ is in itself a manner of coining this acknowledgement, as agency here goes from the human domain of learning to agency as a not-only-human phenomena...

¹ Site of engagement’ is a notion used by Scollon and Scollon to depict the nexus of practice of significant semiotic cycles (Scollon and Scollon, 2004) and this notion will be (re)configured in Section 2.6 as ‘affective sites of engagement’.

² For the full ‘project description’ see Section 3.1, Book 2.

Re-balancing counter-storying material-discursive actions were enacted in the workshop setting through practices inspired by Sandplay, the body-based-pedagogy of Body-namic and Feng-shui. A reworking of the embodied everyday material-discursive practices of House 1 became the center of attention in re-building the material surround as a parallel and as an important constituent in the reworking of the organizational practices.

... although, at that point we didn’t talk about ‘it’ as “reworking of organizational practices”, but as ‘anchoring’ of knowing...

The development project was structured partly as group workshop supervisions and partly as individual workshop supervisions (with a collegial ‘witness’) of the professional development of the practices and competencies of the staff group. I assumed the role of supervisor,³ conducting a total of five group workshop supervisions with the entire staff group, and two or three individual workshop supervisions with one staff member and their collegial witness in five sub-groups running in between those group workshop supervisions. A schematic overview is provided below in table 1.1 that shows the total number of events⁴ in

³ A discussion of this participatory framework of being both action researcher and supervisor – and why ‘it’ came to be called ‘supervision’ is taken in Book 2, Section 3.1 under the heading ‘Engaging the nexus’. For the approach to supervision see ‘A summarizing of the research(er’s) story’, Section 1.5, Book 1.

⁴ An extended version of this schematic overview can be found in Appendix including a specification of the intervention methods and data-gathering methods for all events. They serve to convey

Event /month	Sep. 2008	Oct. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Marts 2009
Planning meetings, building-meetings, extra supervision etc.	Intro meeting w. Manager Sept. 5th Planning meeting with entire group Sept. 16th		External supervision of Supervisor/researcher, Nov. 24th		Extra Group W Supervision, Jan. 5th, (note this)	1st re-building meeting Feb. 9th 2nd Re-building meeting Feb. 12th	
Observations of work-place practice			1st Observation of practice, 3 Nov. 2nd Observation, 4 Nov.				
Interviews & questionnaire		Oct. 20th in Group Workshop Supervision				Sandplay based Interview with manager, Feb. 12th	
Group workshop supervisions	1st Group W. Supervision, Sept. 8th 'Beginning'	2nd Group W. Supervision, Oct. 20th			3rd Group W. Supervision, Jan. 12th		4th Group W Supervision, Marts 9th 'Closure'
Individual workshop supervisions with witness Lis & Lisbeth		1st Lis & Lisbeth , Oct. 7th			2nd , Lis & Lisbeth, Jan. 20th	3rd , Lis & Lisbeth, Feb. 24th	
Individual workshop supervisions w/ witness Birgit, Annette & Anita		1st Birgit & Annette, Oct. 24th			2nd Birgit & Anita, Jan. 23rd	3rd Birgit & Anita Feb. 12th	
Individual workshop Supervisions w/ witness Ulla & Lone M.		1st Ulla & Lone M. Oct. 28th		2nd Ulla & Lone M. Dec. 18th			
Individual workshop Supervisions w/ witness, Karin & Simon		1st Karin & Simon, Oct. 30th			2nd Karin & Simon , Jan. 22nd		
Individual workshop Supervisions w/ witness Lone & Pernille			1st Lone & Pernille Nov. 21st	2nd Lone & Pernille Dec. 10th		3rd Lone & Pernille Feb. 25th	

Table 1.1: Overview of events in the action research process

those six months as well as the five pairs of staff members (taking turns as focus person and ‘witness’).

The group workshop supervisions functioned partly as gatherings of ‘fernissages’⁵ of the period that had gone before and partly as platforms for initiating the ‘stepping-stones’ for the immediate following period. The workshop supervisions were supplemented with two participant observations of the daily practices of the workplace House 1: one participant observation was placed during the 3 pm staff shift, and in the other I followed a ‘home day’ involving one of the residents ‘John’ and one of the pedagogues; Lone⁶

‘the totality’ of events in the action research process as well as to demonstrate my overview of the data-material. See also Section 3.1, Book 2 for a discussion on the implications of these ‘cuts’ as well as for further overviews of the empirical material.

- 5 Alrø and Dræby, 2008, inspired this manner of conducting the group workshop supervisions. ‘Fernissage’ here implies that the results of the processes are hung on the wall as large posters to visualize (mirror) the accomplishments of the periods between the group workshop supervisions as to share between the subgroups what has emerged in these sub-group sessions. Also I used these ‘fernissages’ to ‘convey’ conclusions I had drawn and ask if these were recognizable within the group. Throughout the dissertation such ‘gatherings of fernissages’ are reconfigured as ‘material-discursive between intra-actions’, where they are to be understood as agential performances and not ‘mirroring’ of what has taken place elsewhere. This means that it becomes critical to acknowledge the enactments done in these ‘fernissages’. cp. Analysis Part 2, Book 2

- 6 ‘John’ is not the real name of the resident. It is changed to protect his privacy. Lone is however the ‘real’ name of the pedagogue, as the staff group has chosen to not be anonymous. They made this choice after I had held a seminar in September 2010 where I showed them the ‘outcome’ of my subsequent elaborations of the

(cp. Analysis Part 2, Book 2). The project as a whole lasted six months between September 8th 2008 and March 9th 2009.

1.7.2 Reconfigured practices of the Youth-home

Many concrete things changed at the Youth-home, House 1 while the project was running; a complete rebuilding was done of the ‘living room’, which is the main room for activities with the young residents. Room was made for a staff office and a new convention of actually taking breaks on their shifts was established. The home’s staffing expanded with two more full-time employees. The principle by which the staff members divided the tasks among them on the evening shift changed, as well as the manner in which they conducted the 3 pm shift. They developed a practice of saying ‘no’ to demands put upon them from both higher up in the organizational hierarchy, from among themselves as a staff-group and from the outside world (for example residents relatives, medical experts, etc. cp. Analysis Part 2, Book 2).

The purpose of action research is to produce organizational change through learning processes (e.g. Coghlan and Brannick, 2005: 14). Co-operative inquiry, which was the action research approach employed, specifically focuses on transforming practice and changing the participants ‘*way of being and doing and relating*’ (cp. Heron and Reason, 2006: 149) as well as ‘empowering’ participants in various ways (cp. Heron and Reason, 2006: 151). In that

video documentation, photos, notes, logbooks etc.; the concept of Material Storytelling and the manner of opening the analysis from one ‘crucial moment’ from where I could ‘unravel’ the relevant rest of which they were all a part.

sense the action research project fulfilled its purpose. The action research approach of co-operative inquiry and especially the 'extended rationality' that it is founded on, is elaborated more closely in Section 3.1, Book 2.

1.7.3 The material surround as the motor of convergence

The six months development project at the Youth-home seems to have produced a kind of 'make believe world' which in the first part of the project was running parallel to the daily practices of the workplace. The fact that a developmental project runs parallel with daily practice is not unusual; in fact, it is a common thing to do. Here, however it was 'literally' running parallel since the activities (for the most part) took place in a building next to the main building where the daily activities of House 1 took place. So when the participants were to participate in workshops in the action research project, they literally *stepped out of* their usual material surroundings in the main building and *stepped into* a building next door and, therefore, into a different larger material arrangement of the workshop setting. I claim that this possibility was of vital import as it afforded a different practice to emerge and congeal.

What is interesting here is the fact that this parallel world of (what I call) 'the make believe practice'⁷ of 'making-a-practice-believable' produced in the workshop setting - and the world of (what I call) 'their actual work practice' converged (and diffracted) toward the end of the action

research project. A convergence that is likely to be due to the fact that a great deal of the last parts of the activities in the project in fact took place 'inside' the main building during concrete discussions and actions toward rebuilding the main room in the house and other related activities (cp. Analysis Part 5, Book 2). I will argue that it was the material-discursive apparatus of the workshop setting with the three story modes that - in a subtle intra-active manner - diffracted with the actual work setting in the last part of the project. Further, over the course of the action research project, the activities went from material-discursive storying of a 'change wish' - diffracted through the story modes of the apparatus of the workshop setting, which produced the 'make believe world' of a reconfigured organizational practice - into becoming their actual situated practice, physically manifested as congealed agency of different affordances for pedagogical practices, where 'the make believe world' of the workshop setting functioned as a material-discursive 'blueprint' for the rebuilding of the material surround of the organization.⁸ There were three 'rooms' in the workshop setting, each specifically reserved for an intervention method (the mode of enacting 'the between') (see Analysis Part 1), and, subsequently, three rooms emerged in the rebuilding of the main room (see Analysis Part 5, Book 2).

This paralleled the three activity settings of the workshop setting: now those activity settings had just been 'configured' between the residents and the pedagogues, instead

⁷ The notion of 'the make-believe-world' is accounted for theoretically in Section 2.6, Book 1

⁸ The notions of apparatus, diffraction, intra-action, material storying and so forth will be elaborated thoroughly in Section 2 of the dissertation.

(see Analysis Part 5). From the perspective of viewing organizations as material-discursive practices, the re-storying that was enacted through the apparatus of the workshop setting configured a 'new' practice. However, the possibility for an actual rebuilt of the material configuration of the physical surround of the organization played a vital role in the convergence between the 'make believe' practice of an emerging 'new' organizational practice and the 'actual everyday practices' as this provided for the possibility of diffraction of this emerging 'new' practice as an iterative enactment and the everyday work setting which in turn enables the congealing of agency.

The process of the literal configurations of the larger material arrangement of the 'make-believe-able' as the new work-practice in the main room of the house (see Analysis Part 5) comprised of enactments at various levels of what was to come – an act of future memory work (e.g. 'we are going to sit in the sofa here', 'we are going to place Lars in a sound and vibration chair here') where the material storying of the 'now' were anticipations of the work practice to come. In that sense it was a configuration of 'here-now' possibilities for a 'there-then' 'future' material-discursive practice (i.e. 'ante-narrative'⁹ story practice, Boje 2001, 2008). In that sense this process of material storying was a kind of future-now-memory work that was expressed as very concrete localized practices, thus as material-discur-

⁹ Boje uses the term *antenarrative* to denote "...the fragmented, nonlinear, incoherent, collective, unplotted and prenarrative speculation, a bet" (Boje, 2001: 1). As such antenarrative is before narrative closure sets in and at the same time it is bet on the future. This will be elaborated in Section 2.5 and 2.6 of the dissertation.

sive practices in the now. (These multiple spacetime-scalings are elaborated throughout the dissertation).

This process of organizational rework entailed as such the dismantling of the 'old' practices understood also as the breaking down of the 'old' materially configured practices and the establishing or the materializing of the 'new' configuration in a rebuilt surround. Both aspects are part of Material Storytelling's manner of reconfiguring organizational practices, (cp. Section 2.6). I argue this to be a mundane, yet highly important, but often overlooked, point in approaches to organizational rework that do not credit matters agency.

1.7.4 The entangled process of the material surround re-build and the rework of organizational practices

When I first arrived at the Youth-home in September 2008, it was, indeed, a house much like that of a private family home in its interior decoration. Their living room, the main room of the house, looked like an actual living room consisting of various sitting areas with sofas structured around coffee tables and situated conveniently in relation to the TV sets. It was a material surround that *afforded* (cp. Gibson, 1979) a 'nice and cozy' sitting down relaxing atmosphere but which did not particularly 'afford' any pedagogical work.

When I observed the staff members' practices during shifts – and when they performed stories of these practices during the supervision workshops – I noticed actions and a storying of actions that I associated with

a multi-tasking mother accompanied by her children while doing practical everyday tasks; always busy, never really 'off duty'. They did not have a staff room or a room for taking breaks, although they did occasionally talk about how they could manage to 'sit down' after having completed the tasks they had on their (imagined or written) list of daily undertakings.¹⁰ They normally took those 'breaks' with the crowd of young residents around them, where they just sat down for coffee at the kitchen table or 'hung-out' in one of the sitting areas.

When we closed the action research project six months later, a complete rebuilding of the living room had been started but not completely finished. The room no longer merely afforded cozy, seated activities. The affordances now extended, as stated, to a number of possible actions structured in three groups, each located as if in a room within the room.

The new room was even labeled the 'multi-room'. That the material layout of the space thus became the 'multi-tasking' agent, rather than the multi-tasking-staff, is in itself an indication of the 'off-loading' and 'relieving' aspect of the transformative action research process.

Moreover, the material-discursive practices on the afternoon shift had changed from chaotic multitasking to



Figure 1.8: A mix of photos from the old living room showing elements of the three areas that later emerged as three rooms in the room

undisturbed, practices¹¹ that were more clearly structured and the pedagogical aspects of which were taken seriously, both in regard to doing developmental work with the residents and in regard to honoring the level of professional exchange of information between the new-

¹⁰ e.g. Ulla's sandbox story actions during her 1st individual workshop supervision Oct. 28th entailing a TV set as one out of a total of nine activities taking up their time on a regular evening shift. Lis talks about these lists of tasks as never accomplished. Cp. Analysis Part 2, Book 2

¹¹ For instance, task division instead of all of them filling up toilet paper or doing a bit of the laundry or more than one of them being engaged in calling for substitute helpers.



Figure 1.9: A mix of photos from the three rooms in the rebuild main room from March 2010 of the reader into favor the 'after' version. Even though I agree that there is quite a difference between the two sets of photos, it is unintentional. The simple explanation is that the 'after' photos were taken one afternoon in the bright early spring, when the new interior decor of the main room was taking shape. The 'before' photos were taken in late November, one year before the rebuilding was initiated; November is a very dark time of the year in Denmark, even in the afternoon.

comers on the shift and the leaving staff. In reference to this practice, the new space of the multi-room and the new staffroom was used in an undisturbed manner¹².

¹² This was accomplished by re-scheduling the staff's arrival 15 minutes earlier for the afternoon shift and not allowing the residents to come back from school until 3 pm. Leaving them both (undisturbed) time and space to do a proper overlap to exchange important information undisturbed, and time to find afternoon snack for the 'home-comers'.

Now, it could be argued that the rebuilding of the material surround in itself would invite the staff members to change their practices, given the new set of affordances. However, the character of the rebuilding did not just appear by chance. It was storied by somebody and reconfigured in the process.

1.7.5 Timing (of) the changes

The project lasted six months almost to the day. It was an artificial time category/frame, which was not ideal from the viewpoint of the process that took place, but it was chosen primarily to accommodate the timescale of the PhD project as a whole. When I officially ended the project, the re-building of the main room was not yet fully complete. The basic structure of the three rooms in the room was *in place*. These three rooms were: 1) a closed off area as one 'room' designated for the residents' individual sensory experiences¹³ (of vibration, sound, light, touching); 2) an open floor space as a 'room' designated for mutual motor activities (trampolines, basketball games etc.); 3) one 'room' for TV and 'hanging-out'.

However the artifacts in the three rooms were only partly in place when the project officially ended since they involved various forms of creative work and investigations that lasted beyond the timeframe of the project and had been distributed as tasks for groups consisting of members of both 'houses'¹⁴ to get done. Subsequently, completion has proved to be a

¹³ In Danish: 'Sanserummet'.

¹⁴ DBC consists of House 1 and House 2 and they share the living room and the staffroom between them. I also supervised the staff of House 2, however they were not an official partaker of the proj-

challenge due to lack of time and space for meetings and due to the involvement of new staff members in the groups, which has re-opened discussions concerning the choice of specific artifacts and creative solutions. The blueprint for the decoration of the main room, which was one outcome of the project, has been reconfigured yet more. But the basic idea of the three ‘rooms’ – each affording specific yet flexible activities – has been upheld and accomplished.

1.7.6 Materially storied intra-active rework of organizational practices

The sandbox-based story activities that were enacted resulted in a total of ten sandboxes being produced over the course of the six months action research project. Nine of those were produced by the participants during the first three months of the project and as a whole, these sandbox story activities make up an important step in articulating the overall developmental problematic. The crucial moment of the analysis was when Lone configured the sandbox that has been named ‘How to create an oasis with a good conscience’, and which is the fix point that has been chosen to organize the analysis in book 2.

We were three human participants in the workshop setting on that day. Lone engaged in the talk by emphasizing her satisfaction with her newly developed practice of *saying ‘no’* to practices that she would normally have complied to¹⁵ (cp. Analysis Part 4). Pernille emphasized her newly established *calmness inside*. (e.g. Analysis Part 4). As supervisor, I emphasized that I had realized that *place* and *frames* were the keywords of the problematic at the Youth-home. Those three aspects came together as part of the (re)configuration of that particular event, however that is but one of the constituents that produced the transition

ect and they only had the usual amount of group supervisions, (cp. Section 3.1). Regardless of this they were constituent part of the developments and they were also inevitably influenced

15 e.g. saying ‘no’ to the substitute helper’s suggestion for certain activities for Lone, which she did not find appropriate

into the phase of choice (cp. Book 2, Section 3.1 for phases). As an equal, vitally active constituent part was the present state of the material surround of the Youth-home, where the physical rebuild of the main room of the main building had been literally initiated just two days before. The floor had just started being broken down which provided – as we will see in the analysis (Part 4) – a significant constituent mode for the spacetime-mattering of the day. For those intra-related reasons this event is chosen as a *crucial moment*.

The storying of a revised material surround was also the storying of a new practice understood as a new material-discursive practice being afforded. The old story of the organizational practice was that of a mere carer, who was so concerned with ‘being compliant and decent’ and maintaining old routines where ‘fun’ was always put off until there was time. The new story is of a professional pedagogue whose primary concern is the development of the residents without neglecting the necessary caring aspect. Also the new story involves increased concern with taking care of them self without over-working beyond reasonable limits. I view those changes as very concrete manifestations of the change in relationalities that took place in the (re)configuration, which ‘broke’ previously enacted hegemonies and therefore I will argue that it was the Apparatus of Material Storytelling (cp. Section 2 in this dissertation) that produced a re-storying of organizational practice towards a more sustainable development.

As such the argument (also) entail that the workshop supervision sessions did not in themselves transform the staff into doing what they wanted to be doing all along. This perspective is far too narrow. Any situated practice requires certain material affordances, as the analysis will show. For example, no breaks are likely to be taken if there are no legitimized procedures (routines), schedules (timeslots) that enable them, or if no materiality is in place to provide the room for them (cp. Barad’s definition of discourse as a material practice as well as exclusions having agential import, see Section 2.1).

Moreover, as the rebuilding progressed, the character of the physical surround changed and the momentary set-up it provided acted as a force in its own right;

an agential constituent. A certain set of possibilities was given due to the character of the material surround in each phase of re-construction, and each set facilitated its own set of possibilities for action by structuring the situated practice of both house 1 and 2 and of the intra-action that took place in the supervision workshops in the house next-door¹⁶. Not just any interior decoration was possible as the final outcome, either. The house had its limits and constraints; some walls couldn't just be moved as they were vital for the construction of the house. The financial budget was limited, etc.

The point is that meaning and matter, time and space were entangled, intertwined all along. It would be to miss the point if one were to argue that human beings were the only force at work. My claim is that the parallel processes of the material rebuilding of the house, and the changes of procedures for conducting shifts, staff increase, practices of taking breaks, and saying 'no' to demands, together with the storying of a new practice (using the three material story modes) were entangled as mutually working forces. Together, the apparatus of the workshop setting and the revised apparatus of the practices of House 1 were entangled, mutually working forces of an 'Apparatus of Material Storytelling', that produced

¹⁶ The period of the closed off living-room due to the breaking up of the old concrete floors facilitated a new practice of using the residents' individual rooms for pedagogical work, one-on-one. It also meant fewer visitors from the other 'house' (House 2) across in the living-room, enabling a quieter space for 'House 1', see Lone Dec. 10th: "*Now we only have our own [residents] to regard*" (time-code: 00:18:10, my bracket). In the workshop supervisions, this period concretely afforded a breaking of the old-fashioned ways of practicing, and the rebuilding emerged as the main topic in the intra-action.

the rework of organizational practices at DBC. The five parts analysis will seek to establish the detailed evidentiary support for this claim (cp. Section 3, Book 2).

The analysis thus pursues a 'documentation' of these changes to build evidentiary support for the claim that they were (also) the outcome of the diffractive interference of specifically the three story modes employed in the action research project at DBC; Material Storytelling. The spacetime-mattering of the Youth-home reconfigured in this manner at the crucial moment of the fall 2008, where a different material-discursive apparatus than the one diffracting the lived practice at DBC at that time, emerged of a co-working intra-action of forces.

The central claim I state on behalf of the development projects is thus, that a 'between' of an apparatus was materialized as a different larger material arrangement – first in the workshop setting and later in the location of their everyday work-practices as they converged, primarily afforded by the physical rebuild - that in turn enabled a reconfigured organizational living understood as the material-discursive practices of their everyday routines, manner of communicating, manner of co-working, etc. The general claim being posed here is that organizational rework is enacted as particular (material-discursive) practices that a plurality of agencies has a role in shaping and through which we are ourselves (re)shaped.

As a preparation for the next section, let's take a break where we co-shape 'ourselves' together with material artifacts and surround affordances.

For your note(configuration)s:



Breathing space

General instructions for doing the body-based pedagogy exercises⁵⁸

(Always do the exercises in loose fit clothing and without shoes and within calm surroundings. Choose the exercises that you feel comfortable doing and that give you a sense of well-being and enhances your energy level. Listen to your body signals and always refrain from doing exercises that cause you to feel pain or discomfort of any kind. Let it be a guiding principle to always aim at finding 'the right dose'⁵⁹ in terms of both the kind of exercise and the extent of the specific exercise. Note that the 'right dose' varies from time to time depending on the whole situation when you practice the exercise).

Demarcation-exercise 'building your personal space'

- Using a thread of yarn of your pleasing build your own personal space on the floor, while paying specific attention to the size and shape of the space, and the thickness and color of the yarn. After choosing a configuration that suits you best, try to sit/stand within this space for a few minutes
- What do you feel? Where in the body do you feel it? Are you pleased with 'your' space?

⁵⁸ The present and following exercises are a sample of the exercises used in the action research project after a one-year study/training at Bodynamic International as well as several subsequent courses at MOAIKU. The exercises are rendered here in the dissertation with permission from one of the founders of the Bodynamic System Merete Holm Brantbjerg. (who has later founded MOAIKU). For further introduction to the body-based pedagogy as it was used in the action research project, see Section 3.1, Book 2. See also Brantbjerg and Ollars (2006), Brantbjerg, 2010 and www.MOIKU.dk

⁵⁹ The notion of 'the right dose' is specifically developed by Merete Holm Brantbjerg as a key notion in her 'resource-oriented-skill-training' (at MOAIKU), which is a specific refined variant of the body-based-pedagogy principle used and developed through the Bodynamic System



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2 Configuring the Apparatus of Material Storytelling



2¹. The onto-epistemology of Material Storytelling

(*“Grasping” is a material-discursive practice that intra-acts rather than interacts with its object*, (Barad, 2007: 388.)
The following section introduces the meaning-matter entanglement of radical materialism.)

...the peculiar habitual manner of making something central, which the white-board configuration is an example of, is one of Derrida's main points regarding western thinking as always being based on a centre – an origin, that is then to be decentred, unmasked or deconstructed as an authoritative centre, (Boje, 2001: 19). In reconfiguring the Apparatus of Material Storytelling this 'centre' of the apparatus is being 'deconfigured'...

...you, your self have perhaps cp. the previous 'Breathing Space' just 'grasped' - together with yarn how/that 'grasping' is such an intra-active practice useful for 'grasping' space as entailing demarcation ...

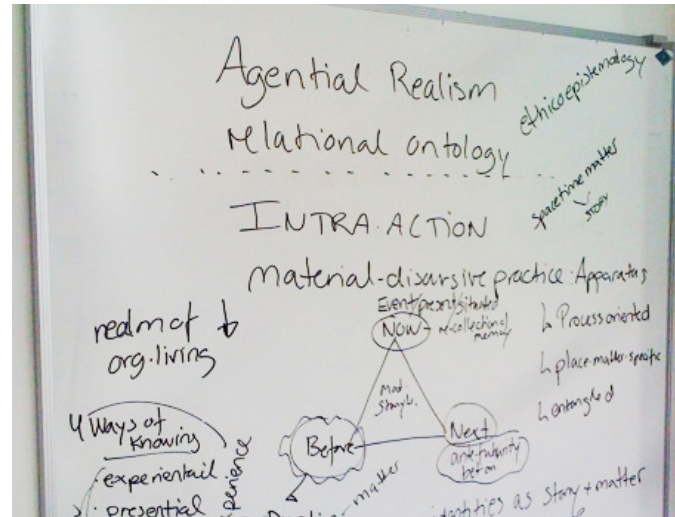


Figure 2.1: Photo of a model of progress of the configuration of the material-discursive apparatus of Material Storytelling

2.1.1 Making matter matter - multimodality and materiality research

The photo above is a snapshot of the work-in-progress on the methodology (the material-discursive apparatus) of Material Storytelling that had to be configured in order to accomplish the purpose of the dissertation, which is to explicate and thereby pose Material Storytelling and the manner by which various material(spacetime) story modalities came to and can *matter* in an organizational restorying process of change (and in doing so reconfigure the notion of change itself). The messiness of this loosely sketched apparatus indicates the emergent 'doing' in the now as close co-work between the materiality at hand (literally) and the various parts of the conceptual framework

discussed, as well as the conventions for 2D framings on a square-shaped whiteboard in place. Thus the framing of the apparatus (itself) is done in a material-discursive manner where the size and shape of the whiteboard, the black whiteboard-marker (as the only color available), the larger letters as the first to be written followed by smaller, and yet smaller letters as the available space was reduced in the process (of writing) and (somehow) guided by the convention of making something more central (and bigger) and other things more peripheral (and smaller) in framing (as placing of) problem complexes. At the center of the whiteboard there is a triangular model that captures a basic 'fractal' or story fragment around which the dynamic of Material Storytelling is framed (or rather configured) as a material-discursive practice of making a crucial moment central to the analysis (cp. Section 3, Book 2).

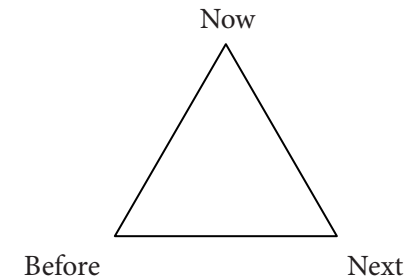


Figure 2.2: BNN basic 'fractal' triangle

This 'fractal' is a set-off that captures both the focus on the 'now-ness' and the 'time-span' out of which such a 'now-ness' is most commonly theorized as emerging. It is basic both in storytelling and narrative theory (e.g. Boje and colleagues, 2004, Boje, 2008) as well as within communication

and interaction studies (e.g. Erickson, 2004a and 2004b, Scollon and Scollon, 2003, 2004, Norris, 2004, Raudaskoski, 2009). The model explicates the sequential mode of present action (e.g. Ericson, 2004: vii). Such a current 'Now' moment of interaction and communication or storytelling is here understood as having an immediate antecedent in the moment just past and as having an immediate consequent in the moment to come. Also within ethnomethodology and CA (Conversation Analysis) this before-now-next timespan concerns sense-making where the claim is that we always contribute to an ongoing situation on the basis of what happened just before and what we do now shapes the possibilities for the next action (i.e. action as context dependent and context shaping, cp. Heritage, 1984: 242). Boje and colleagues has theorized this tripart arrangement as past narrative, living story now-ness and antenarrative futures, (e.g. Boje, 2008, 2011). This horizontal sequential line is therefore also explained as 'following from before' and 'producing a next', (Scollon and Scollon, 2004). It is also commonly understood that each such 'Now' is situated historically (Jørgensen and Boje, 2010).

An element that has previously been less emphasized within organizational storytelling and narrative given its linguistic heritage (from among others Ricouer and Derrida) is that such situatedness or contextuality very literally involves materiality as in body, material objects and space as co-actual constituents. (This point will be more thoroughly elaborated in the Section 2.4 and 2.5).

However among scholars within the multimodal interaction analysis there are examples of scholars who integrate materiality, space, body and material objects as co-constit-

uents of the emergent action. Embodiment has thus been well researched and elaborated over the past decades such that it is uncontroversial now to hold that human social interaction is embodied, situated and involves "*intertwined cooperation of different modalities of equal importance*" (Stivers & Sidnell, 2005:1). Goodwin (1993:1) for instance held that "*talk and activity in such a setting mutually structure each other in ways that require a rethinking of some of the basic frameworks for the analysis of human interaction*". Researchers from several allied fields have now increasingly begun to document the precise ways in which gesture, gaze, talk and aspects of the material surround are brought together to form coherent courses of action.

Over the last two decades there has been a growing interest in resituating the duality of language and materiality and, subsequently the duality of verbal and nonverbal communication. Jones and LeBaron (2002) identify four such different approaches to communication in their endeavor to integrate verbal and nonverbal communication towards a multimodal approach to communication. To mention, but a few examples of scholars in the field: Hutchins (1995) with his 'Cognition in the wild', Jürgen Streeck (1996) with 'How to do things with things', LeBaron & Streeck (1997) with 'Build space and the interactional framing of experience during a murder interrogation'. Further, Goodwin himself (2000) poses an attempt of 'rethinking the basic framework' that he coins 'Contextual analysis'. Scollon & Scollon, (2004) do the same with their 'Nexus Analysis' framework, which is aiming at linking '*the minutiae of everyday life with the underlying historical, cultural and political currents that shape the social action in question*'. (Raudaskoski, 2010:428). In nexus analysis crucial mediated

actions realize a recognizable nexus of practice. In Scollon and Scollon's model of social action the unit of analysis is the so-called 'mediated action' as the Scollon's conceive of any social action in the now taking place by a social actor with mediational means.

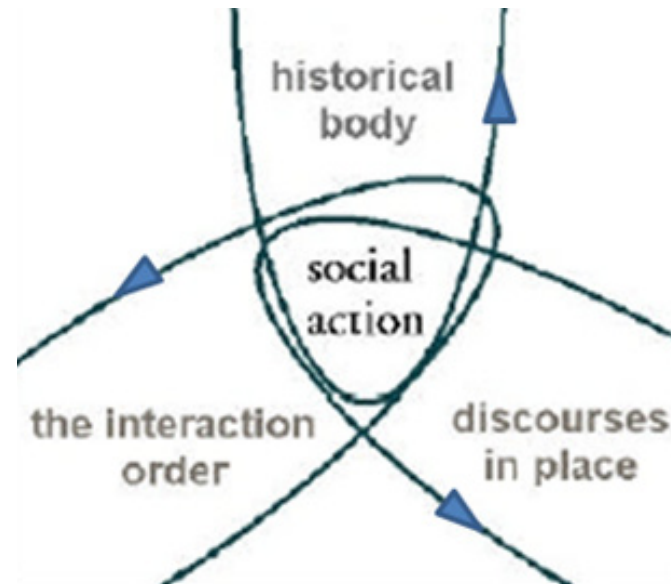


Figure 2.3: The nexus model by Scollon and Scollon (2004, appendix: 3)

In *contextual configuration* by Goodwin (2000a) the situated nature of interaction is also the focus of attention and comprises of different semiotic fields that participants make use of in order to constitute a particular action within a larger set of activities. Raudaskoski (2010: 427-428) compares Scollon's three-dimensional setup with the conceptual framework of Goodwin (2000a),

explicating that there are recognizable mutual interests and perspectives between the two: 1) Participants carrying out courses of action in concert with each other (interaction order), 2) The participants using their bodies as an interactional resource (historical bodies, best instrumental stances), and 3) The social, cultural, material and sequential structure of the environment (Discourse in place, contextual configuration).

The arrows in figure 2.3 indicate the 'semiotic cycles' and in this notion the Scollon's capture the progressive element of 'following before' and 'producing a next'. At first sight this vocabulary renders an understanding of time as linear cause and effect. However the conceptualization of time within multimodal interaction analysis is not straightforward *Kronos* linear causal time, but *Kairos* time, as timing, rhythm and order or 'organizing' are central to the understanding of emergent dis/continuous becoming (Erickson, 2004: 166¹) This element is captured in the above model as an acknowledgement of the embeddedness or situatedness in circumstances of the three semiotic cycles; 'historical bodies', 'discourse in place' and 'interaction order', which are all central to the organizing of emergent social action. Each of the notions renders the past experiences as potentially partakers of the emergent social action of the 'Now'.

¹ Erickson (2004: 166) notes that Kronos refers to time as continuous, as in our modern conception of clock time, while Kairos refers to time as discontinuous, as a moment of opportunity. In this part of the book, he writes about bricolage and a bricoleur, who is one, "who acts opportunistically in effective ways by doing the right thing in the right moment of kairos" (2004: 166). I will return to these kairos moments when framing dis/continuous becoming in Section 2.6-2.7, Book1

Said differently; the now is not without a history and it is itself acting as heritage in a moment to come.

The Scollon's use the term *circumferences* to denote how much you have to know about 'before' and 'next' to be able to make claims about 'now'. In my case, the six months action research project is perhaps a 'natural' circumference, but there might be some things I have to say about before that (the material setting, for instance) and after that (what is going on now) in order to account for the 'now' that I am analyzing. However, in any case it is the local event – the 'now' – that makes certain aspects of the past (and not others) relevant in the present moment.

I will therefore argue that scholars within multimodal interaction analysis (e.g. Scollon and Scollon, 2003, 2004, Goodwin, 2000, 2005, 2007, Ericson, 2004a, 2004b, Iedema, 2003, 2007) are moving away from (a mere Newtonian understanding of spacetime as) linear causal chronology towards more post-Newtonian conceptualizations of spacetime.

However for reasons that I will clarify in more detail later, this movement within multimodal interaction analysis has not been sufficiently consequential at the level of epistemology and terminology. The non-linearity aspect of emergent becoming has not sufficiently 'quantum-leaped' within these approaches. Further, (I will claim) they have not managed to overcome the vocabulary of an entity- or individuality perspective in the continuous use of *inter-action*. Also even though they include materiality (objects and bodies) and space (context) as co-constituents, the human-centeredness

is upheld in their definition of the social actor *as the user of* mediational means. As noted by Raudaskoski

"A central claim is that actions are mediated with help of various situated resources. In that claim about mediation they share one of the basic principles of activity theory, namely that culturally developed artefacts are "fundamental mediators of purposeful human action" (Kaptelinin and Nardi, 2006:71)" (In Raudaskoski 2010: 427).

As these approaches within multimodality and materiality research and analysis do recognize (and specifically intend to highlight) materiality's 'fundamental' role in human action, these approaches would 'belong' to the less radical members of new materialism². Thus, many such attempts within communication studies coincide with the material turn in feminist studies, STS studies, etc. that we will look at in a moment. However, many of these attempts (perhaps as they come from humanities) still have a profound human-centered, entity focus whereby they do not seem to overcome human superiority over matter by speaking of materiality as 'mediational means' and 'cultural tools' for human intentional action. As an exception should be mentioned a special issue of *Mind, Culture and Activity* edited by Charles Goodwin (2000b), where several scholars attempt a high degree of non-entity theorizing on the meaning-matter relationality, for instance Suchman who:

² 'See for example the recent, very substantial body of work from Goodwin, Streeck and LeBaron (edt). 'Embodied Interaction: Language and Body in the Material World' (2011).

“...emphasizes the reflexive relationship between objects, practices, setting, and accounts of what is occurring that are brought together by participants in a “contexture” of mutually constitutive details. Note.... how this notion of reflexivity, in which actions and objects elaborate and are elaborated by the settings and activities in which they are embedded differs, from perspectives on reflexivity that focus exclusively on the self-referential properties of language itself” (Goodwin, 2000b: Introduction).

Iedema (2003) elaborates thoroughly the historical background for this development of multimodality as an important counterbalance to monomodal approaches to meaning making. Iedema argues further for a complementary perspective to that of multimodality by posing ‘re-semiotization’ and ‘transmogrification’ as providing the analytical lens for tracing how semiotics are translated from one to the other as well as answering why some semiotics rather than others are mobilized to do certain things at certain times (Iedema, 2003: 29). Here materiality and the change of material (transmogrification) plays a vital role. By doing this, Iedema pushes the field further towards an agential understanding of materiality and in his 2007 article he takes the turn towards Barad.

As Iedema (2007) points out in his review of the current conceptual ambiguities in the definition of ‘discourse’, there is a need for a reconceptualization of the basic understanding of the relationship between meaning and matter (Iedema, 2007: 936) and he develops an alternative view of discourse as material, multimodal practice based on the following three assumptions/arguments 1)

discourse is not just linguistic, but multimodal, 2) the discursive and the material co-emerge (with reference to Barad, 2003) and 3) discourse is a contingent historical phenomenon. While I agree with these assumptions I find it necessary to point out that where Iedema refers to Barad when it comes to rethinking the co-emergent relationship of discourse and materiality, he - like many others using Barad (see below) - have a tendency to overlook the tight link between Barad’s conception of matter and spacetime nonlinearity (and dis/continuity). The one does not come without the other. Perhaps this is due to nonlinearity being conceived of as lacking or even ruling out history. That is by no means the case. I find it worthwhile as my contribution to offer a more thorough elaboration of how this non-linearity of the Baradian spacetime mattering doesn’t imply ahistoricity.

Barad herself uses, as stated, the terminology ‘entangled genealogy’ to capture this nonlinear-dis/continuous-historicity dynamic of enacting the relevant rest of a past (that never actually was). As mentioned, I find it useful to diffract Boje’s concept of *living story* (entailing among others a Bergsonian understanding of memory as *lived duration*) with a multimodal approach and the Baradian onto-epistemology to configure (what I claim as) a productive methodology named Apparatus of Material Storytelling that affords both the element of entangled genealogy (nonlinearity) and materiality and multimodality as intra-related in regard to doing and analyzing complex re-story actions of organizational change processes.

Therefore throughout the next many pages, the well known linear causal understanding - within western thinking buy-

ing into a Newtonian spacetime continuum - of the present as flowing from the past 'Before', 'Now', 'Next' will be layered with yet more complex understandings of time as a non-linear agency and space as not a (more or less) passive container or a context, but a central, active constituent of the emergent action. What will emerge is an understanding where both non-linearity and historicity/contingency is possible through notions of non-locality/locality, where time, space and matter are understood – not as context and meditational means used by a social actor – but as equalized agencies; local and non-local co-constituencies that intra-acts and (re)configures in the appeal of the present living material storytelling. As stated this occurs in the diffractive meeting of multimodal interaction analysis, living story theory, lived duration and Baradian quantum entanglement as 'the between' complex from which Material Storytelling emerges and this diffractive act will shake the commonness of the above basic 'fractal' and (re)configure it to the extent of the complex notion of the Apparatus of Material Storytelling.

Yet, to keep our bearings and to be able to grasp and put to use these rather 'queer' Baradian quantum notions, we will continue to use the above models as a memory devices that are reconfigured as we go along as an anchor of both the complex theoretical 'quantum' elaborations (Book 1) and the subsequent 'quantum' analysis of the huge body of empirical 'data' of an emergent, crucial 'now' moment of the action research project at DBC. (Book 2)

For *now*, I will continue configuring the meta-theoretical backdrop of the entangled notions of Material Storytelling; the Baradian onto-epistemology of *agential realism*.

The anchor for this elaboration will be the neologism *intra-action*, which is the key action to understand within Baradian theorizing of a practice of material-discursive doings of an emergent now.

However before we go there, I start out by briefly placing Baradian theorizing within the field of research with which it is most commonly associated; new materialism. Here I conjoin the above multimodality approach with new materialism in order to depict the research field of which I am navigating.

2.1.2 Sketching the research field I am navigating

Material Storytelling's notion of the entanglement of meaning and mattering (including time and space) is – as stated above - drawing from recent theoretical instigations in feminist and science studies by the feminist and quantum physicist Karen Barad's (2003, 2007, 2010) onto-epistemology of *agential realism*.

In posing Material Storytelling as a methodology based on *agential realism* I am joining a developing cross-disciplinary research ambition of understanding processes of becoming as complex, ever changing and fluent and as constituted by a number of human and nonhuman forces. This research ambition is as mentioned before referred to as *new materialism* (i.e. Højgaard and Søndergaard, 2010) and is drawing on the so-called *material turn* within the social, humanist and techno-sciences, (Taguchi, 2010: 12).

This research ambition is especially keen on exploring how (a varied form of) materiality is engaging with dis-

course as an equally constituent force. In that sense the material turn is an alternative to (and an extension of) the so-called *linguistic turn* that came to dominate the social and humanistic sciences from the middle of the 20th century and onwards. The linguistic turn is also keen on constituency although characterized by emphasizing language and discourse as the constituting agent through humanly constructed discourse (e.g. Jørgensen, 2007). What we understand as reality is in this framework conditioned by collectively constructed (discursive) meaning in language. Language is here thus granted the power of constituting our practices and realities leaving matter as a merely passive recipient as materializing effect.

The material turn takes this emphasis on construction and constituency of reality further to include materiality. In doing so it follows the same kind of progression that multimodal interaction analysis have done in moving away from monomodal linguistic conversation analysis guided research to multimodal informed research (Iedema, 2003, 2007, Jones and LeBaron, 2002, Ericson, 2004a and 2004b). In the material turn, physical matters become dynamic materials or *trans-materials*, (Taguchi, 2010: 12) with the ability to change their form (e.g. 'resemiotize' & 'transmogrify' Iedema, 2003) and engage with other matters and organisms in processes of transformation (cp. Bennett, 2010). Thereby materiality is invited in as an active agent in constructing discourse and reality. Actor Network Theory (ANT), Science and Technology Studies (STS), poststructuralism as well as the Baradian *agential realism* are regarded as partakers of this research ambition, (Højgaard and Søndergaard, 2010: 316).

The idea that materiality should be included in theoretical accounts of organizing is, however, not new. More than half a century ago, for example, Tavistock researchers introduced the idea of 'socio-technical systems' to indicate that organizing processes entail both people and material technologies and artifacts. The notion 'socio-technical systems' emerged in various guises to become a distinguishing feature of contemporary social studies of technology (STS) (Latour, 1996, Law, 1994, Mol, 1999) and can therefore be said to be part of the 'entangled genealogy' of the material turn. One of the distinctive traits of the STS approach has been to treat human practices as constellations of both intersubjectivity and interobjectivity, (Latour, 1996, Orlikowski, 2007, Sørensen, 2009).

The approaches within the material turn have in common the engagement in encompassing modes of constituency of social, discursive and material kind, as well as (for some poststructuralists) subjective kind. They are thus all attempting at an understanding of how more specifically different phenomena and (their) boundaries become discursively and materially routinized and practiced. They, however, differ in their privileging of the various constitutive modes. Poststructuralists are granting discourse the upper hand and views materiality merely as constituting *effects* (Højgaard and Søndergaard, 2010: 316). Within Actor-Network-Theory (ANT) both discourse and materiality *matters* as *actants*, which is a source of action, as in that which 'has efficacy and can make a difference', (Bennett, 2010: viii Preface). However, importantly ANT upholds a difference between humans and nonhuman and enacts 'them' as pre-existing entities that are 'assembled' (Latour, 1987). Although attempting (and acknowledging the need

for) a 'new settlement' in the relationship between discourse and matter, (cp. Alaimo and Hekman, 2010: 12), Latour doesn't truly convincingly provide it as a truly 'new', as this pre-entity perspective is a well worn understanding within 'The Great Divide' of Western thinking (cp. Haraway, 2008: 9). However, this pre-entity perspective is 'undermined' by the 'subterranean rumblings' (Barad, 2007: 100) of Barad's theorizing and Barad thus provides such a (fresh and thus more) qualified 'new settlement'.

As Juelskjær (2011: 6) points out Karen Barad - as a quantum physics theorist - is a radical version of new materialism. In Barad's framing of how matter matters time and space are also treated as very active transformative agents in the processes of becoming as she offers a rethinking of those as co-constituents as they do in quantum physics. These very important and integral aspects of her work on mattering as well as ideas of change and movement has not been given much attention among the scholars using her work on mattering. Karen Barad was invited as one of the keynote speakers in the 2011 PROS Symposium held in Corfu, Greece and here she continuously emphasized these aspects of quantum dis/continuity and non-entity thinking, as she has also done it in her latest writings (Barad, 2010). In her 2010 article she invites the reader to comprehend the conditions and consequences of thinking along the line of quantum physics by experiencing the world like an electron would do it. This article opens for an understanding of her theorizing as more than materiality-thinking and invites the reader into comprehending the spacetime matter manifold that she articulates from quantum physics. So she is here setting straight the misinterpretation that her work on materiality is independent of her

theorizing on time and space. Crucially, here time, space and matter intra-relate as mutually constituent forces, cp. Vignette 3, Section 1.

Barad has managed to attract and inspire scholars across the spectrum of faculties in higher education. Her ideas are puzzling, intriguing and mind-blowing. She herself coins them as "quantum queerness", (Barad, 2010: 247). Not just to emphasize strangeness, but to emphasize "queer" as the un/doing of practices. She thus places her work in the queer studies paradigm.

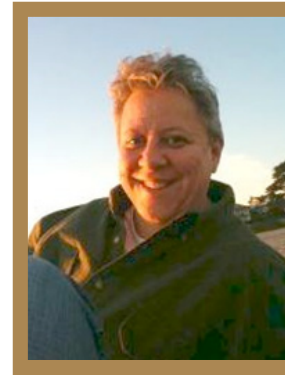
Juelskjær (2011: 6) emphasizes that Barad thereby offers a take on materiality that is fundamentally different than the network thinking of Actor-Network-Theory (ANT, Latour, 2005) and concludes that Barad's thinking contains a specific radicality that is "*enormously interesting to play with, abstract, but very far from being "plug-and-play"(...) but for those reasons the thinking can function as a productive and strange grip.*" (Juelskjær, 2011: 6, my English translation). Juelskjær (2011: 12) reminds us that although Barad's take on spacetime matter bares certain resemblances and shared interests with poststructuralism, ANT as well as Deleuzian takes like Massumi (2002), that understands space as "*dynamical, hybrid and polyshaped, and where 'absolute space' or Cartesian space is but one of many spacial forms*" (Juelskjær, 2011: 12 my English translation). Yet, given the heavy inspiration from Bohrian quantum physics Barad offers a platform with other implications for thinking meaning-mattering as *spacetime mattering*. I get back to this point regarding these dis/similarities in Section 2.6.

The central issue of Barad's onto-epistemology (as will be thoroughly elaborated below) is the solving of the indeterminacy in regard to establishing meaning as a material-discursive intra-action. As such she approaches the issues of dualistic heritage of the dichotomies of nature-culture, mind-body, rational-irrational etc. from a radically different angle. Instead of addressing this much debated issue as, for example, being a question of power where hegemonies (with one dominating the other) that needs to be resituated/deconstructed, she starts out by questioning the very presumption of the dynamic of power as a question of how meaning gets fixed, how stasis is accomplished, how determinacy gets solved in the first place and with the distinct motive of pointing out how this take on power dynamics are closely linked to ethics³. Thus moving from epistemology to onto-epistemology into ethico-onto-epistem-ology, with a distinct moral trait in pointing out the consequentiality of the way we engage locally moment-to-moment in solving the indeterminacy as (re)configurations⁴ of material-discursive intra-acting. Closely linked to this is her notion of *agential cuts*, which will be elaborated more thoroughly below.

Karen Barad thus presents in her groundbreaking work, the masterpiece *Meeting the universe halfway. Quantum physics and the entanglement of matter and meaning* a both more radical and more democratic or *radically democratic* relation between the material (including space and time) and the discursive and she denotes this as *agential realism*.

³ I will come back to this important point regarding ethics of the onto-epistemology of Material Storytelling in the closing section of the dissertation.

⁴ Throughout the dissertation I will use re-working, re-arranging, reorganizing, re-shaping as interchangeable variations on re-configuration and also coin (de)configuration cp. Section 2.6



Karen Barad is Professor of Feminist Studies, Philosophy, and History of Consciousness at the University of California, Santa Cruz, where she is a close colleague of Donna Haraway. Barad has a doctorate in theoretical particle physics and is very influenced by this backdrop in quantum physics in her theorizing. Barad's theorizing of agential realism is powerful and influential and Barad is acknowledged as an important scholar of Alaimo and Hekman (2010: 12) providing the 'new settlement' within feminist studies of a new understanding of the relationship of discourse and matter without privileging either one of them and shows the unique strengths of material feminism.

2.1.3 Introducing Karen Barad's onto-epistemology of agential realism

Barad notes the following on the intimate material-discursive relationship

"The relationship between the material and the discursive is one of mutual entailment. Neither discursive practices nor material phenomena are ontologically or epistemologically prior. Neither can be explained in terms of the other. Neither is reducible to the other. Neither has privileged status determining the other. Neither is articulated or articulable in the absence of the other; matter and meaning are mutually articulated." (Barad, 2007: 152)

As stated above Barad's account seems to be the most radical attempt within new materialism to rethink the relationship between discourse and mat-

ter. She not only emphasizes giving equal emphasis to the various constituting modes (including space and time). She also emphasizes their inseparability. Barad claims that human agency always follows from the constitutive entanglement of materiality and sociality, matter and meaning. This sociomaterial (no dash) framing, in turn, makes it possible for an approach that is quite different from the humanist preoccupation with the individual actor living in a world separate from things. It seems fair to say that Barad attempts at creating - with her neologism *intra-action* - a whole new ball game by this new research ambition within new materialism, which she pushes towards a paradigmatic turn as well. According to Barad, intra-action is about how agencies meet and *touch*; intra-action

“signifies the mutual constitution of entangled agencies. That is, in contrast to the usual “interaction,” which assumes that there are separate individual agencies that precede their interaction, the notion of intra-action recognizes that distinct agencies do not precede, but rather emerge through, their intra-action. It is important to note that the “distinct” agencies are only distinct in a relational, not an absolute, sense, that is, agencies are only distinct in relation to their mutual entanglement; they don’t exist as individual elements.” (Barad, 2007: 33).

Barad thus argues for the radical, ontological notion of *intra-action* as opposed to *inter-action* as means of highlighting the inescapable entanglement of discourse and materiality of meaning and matter within and across all sorts of practices. She therefore consequently refers to these practices as *intra-active material-discursive practices*. En-

tailed in this notion is thus the very important move away from understanding the material world (including people) as preconfigured separate entities, since intra-action treats people, objects, time and space and so on as emergent properties that are not something *as such* but come to exist in the actions of which they are part. *Intra-action* is thus both an onto(epistemo)logical and a performative term.

I am ultimately drawing on this paradigmatic, new-materialistic quantum turn to which these notions belong; the relational ontology of *agential realism*.

1st move) agential realism reframes the notion of individual existence as something that pre-exists interaction

Barad moves away from individual (distinct) entities with clear-cut boundaries and attributes that are placed *in* or *above* the physical world and poses instead entanglement (thus intra-action) and *of-ness* as that 'fundament' from where being and becoming emerges. We are 'of' the flux of the world, and existence is not an individual affair 'in' a container-like world. Distinctness of phenomena is agentially made real and emerges out of agential ontological relations. Hence a pre-individual¹ or pre-entity level of *intra*-action rather than *inter*-action is emphasized.

¹ Barad does not specifically use the term 'pre-individual'. It is an implication that I draw from her theorizing, which will be elaborated more below in Section 2.6.

2nd move) agential realism reframes the notion of agency and its presumed localization within individuals

Barad subsequently moves away from agency as an attribute someone (or something) has and poses agency as a dynamic with various forms of human and nonhuman agencies bringing about the world. She here renders materiality, space and time as equally, and mutually constituent forces to that of human agency and claims all phenomena to be *always already* material-discursively constituted. Phenomena are thus always ontologically entangled, human and non-human agencies, and as such phenomena which emerges out of 'the between' *flux* of time, space, body, artifacts, discourse, language and so on as the interdependent mixture of co-constituent forces, a 'complex mixture' that she then elaborates by the notion of 'apparatus'.

In light of the above brief introduction to Barad's *agential realism* and its key notion of the neologism *intra-action* there are basically *two post-Cartesian and post-Newtonian (re)configurative moves* we need to acknowledge and subsequently keep in mind while attempting to 'grasp' the following more extended elaboration of her work:

2.1.4 (Lacking) techno-scientific practices of making intra-action intelligible

It is these two (re)configurative moves on posing a kind of *pre-individuality* and agency as an enacted '*between*' that will be elaborated to a much fuller extent in the following. These two moves, however, are for very concrete reasons rather difficult to comprehend. This is among others because the syntax of our language makes it hard to understand and describe both the pre-individuality and between-ness of intra-action. The syntax of our (western) languages fundamentally enfold - as a techno-

scientific practice - the old-(Cartesian and Newtonian)-logism of dividing the world into entities and ascribing agency and other attributes (as time-space) to these entities. Sentences must in order for them to be intelligible generally be composed as a combination of the following information: who? (a noun), does what? (a verb), when? (a tense) where? (an adverb of place), to whom? (an object) in what manner? (an adjective). All these fits neatly into a Newtonian coordinate system of discrete entities carrying characteristics stretched out in a container-like space at certain specific points in time.

Let us take an example. The utterance “*The young women went in the afternoon to the large supermarket for a box of delicious fruit*”. This basic syntax-dynamic function – it would seem - as ‘a sorting out dynamic’ dividing the flux into recognizable (and accountable) entities of time and space coordinates and agents. It seems that this very basic ‘syntax fractal dynamic’ reproduces the idea of entities having agency (over others) by sorting out what happened in this manner; someone doing something to someone else at sometime, somewhere in this particular manner. Thus, entities with attributed agencies are *already always* constituted at the syntax level of most (western) languages when attempting to convey phenomena in writing. Written/language reproduces the space-time coordinates (Newtonian thinking, see later) of ‘then’ and ‘there’ and ‘before’ and ‘after’ that also are made explicit in the choice of tense. As we shall see later on in the analysis, this is actually what enables us to place ourselves ‘elsewhere’ while intra-acting with one another. Then the basic narrative format of ‘before-now-next’ in the triangular basic ‘fractal’ above (see Figure 2.2) is a time-space scaling of the emergent

becoming that on one level affords a reading along an old-paradigmatic-Cartesian/Newtonian take on the world as linear progression through space as well as affords an understanding of how coherent action among communicators are (co)constituted, and on another level affords us to deal with other spaces and times in our performing of one here and now, for example, in “*Yesterday I remembered that next week we are having that reunion party that we planned last year*”. Boje’s theorizing on ‘living story’ and the Bergsonian understanding of time and memory as ‘lived duration’ are examples of non-linear thinking on time that I will return to and make use of to meet Karen Barad’s intra-active thinking *halfway*.

...Sfard & Prusak (2005) explicates this entity-making dynamic in language use in regard to discursive identity production as the movement from verbs and doings into nouns and entities in ‘is’ sentences ...

As of now the techno-scientific language practice that we are part of (also when it comes to writing up a theoretical account in a doctoral dissertation) renders us a paradoxical situation when it comes to depict intra-action in a manner that can consistently account for the two implied moves from above and thus in a manner that can be true to the new paradigmatic take Barad poses. By using an entity producing language we must talk about non-entity intra-relating phenomena extended across many space-time-scales. When talking about something as pure flux, something defying entities as a given we inevitably - in a particular manner given by

the techno-scientific practice of syntax in language - produce entities of that flux as *a* flux, thus an entity. And we insert phases of continuity to this flux and in order to do so we pacify space and time coordinates in a 'passive' continuum and use *back then*, *before* and *ahead* as orientation points for our coherent actions. All of which, Barad is attempting with her quantum inspired theorizing to have us comprehend as illusory. I will elaborate more fully the Baradian take on space and time and dis/continuity below.

It is, however, these paradoxes that must be attempted to handle, when the Baradian onto-epistemology is to be 'grasped'.

Barad herself mentions some of these troubles:

"How to represent not merely the limits of representationalism (in the tradition of Velázquez or Magritte, for example) but the agential realist notions of causality and agency that are entailed in entanglements is a question that one simply can't wrap one's minds around (per definition)" (Barad, 2007: 388)

Language use at the syntax level (as well as attempts of visualizations) thus reproduces the representationalist idea of ontologically separate entities with inherent sharp boundaries fixed 'in' time and place. As mentioned, Barad herself - in her 2010 article - has started to play with language, genres and formats to a much greater extent than in her 2007 masterpiece and overtly elaborates consequences and implications of her theorizing for both conveying it and using it in research:

"An experiment. I've attempted to write this paper in a way that disrupts the conventions of historical narrative forms that underlie stories of scientific progress: tales of the continuous accretion and refinement of scientific knowledge over the course of history, sagas of progress from an earlier time period to a later one punctuated with discoveries that lead the way out of ignorance and uncertainty to the bedrock of solid and certain knowledge. In an effort to disrupt this kind of narrative (and not only this), I am to provide the reader with an opportunity to engage in an imaginative journey that is akin to how electrons experience the world:..." (Barad, 2010: 244).

However, following the above logic regarding syntax, I am proposing that the implicit ontological dimension of intra-action - understood as a dynamic constituent process of agency as an enacted-between - necessarily must be 'accomplished' on a (meaning-matter entangled) pre-individual, *sub-level* pre-existing (verbal) languaged interaction (see further below 'ontological inseparability'). As by 'then' these 'entities' have always, already been cut together and apart by syntax as we saw in the above example (see further below 'agential separability'). Language then is both an after-effect of the enactment of the intra-action as it is partaker in the intra-action. Here it is important to note that for Barad discourse is not language as in the spoken word or speech-acts, but discourse is what 'decides' what is meaningful to say. Discourse is

"...not what is said; it is that which constrains and enables what can be said. Discursive practices define what counts as meaningful statements. Statements are not

the mere utterances of an originating consciousness of a unified subject; rather, statements and subjects emerge from a field of possibilities. This field of possibilities is not static or singular but rather it's a dynamic and contingent multiplicity" (Barad, 2007: 146-147).

Thus, discourse is that which precedes choice of word and language expressions of the meaningful. The challenge is how to comprehend this preceding intra-active dynamic at the same time as the language performance is rendered constituting power. It is here important to remember Barad's background in quantum physics. Intra-action has its entangled genealogy in the quantum world of subtle and profound phenomena. Quantum entanglement is quantum 'queer-ness' where both/and is im/possible quantum superposition. My take on this ontological inseparability is then to claim that language and material phenomena emerges from (what I then call) *subterranean subtleties of intra-action*. Here discourse emerges from the flux or - as Barad puts it in the above quote – field of possibilities. Discourse emerges and then 'enslaves' as it becomes a materialized practice that are iteratively enacted on a daily basis as *congealed agency*. The analysis of the crucial moment (Book 2) vividly explicates this 'enslaving' aspect of discourse as materialized practice and powerful dynamic and contingent field of possibilities that are then reworked in the process at DBC at the time of the action research project and continuous to be.

Barad shows, that upon closer examination of the entities of the physical world, the indeterminate nature of boundaries of these apparent 'entities' becomes clear – most vividly in patterns of what Barad calls diffraction and in-

terference (see below), which are other key terms Barad adopts from physics. The manner by which our visual system (re)-produces the entities that we see with apparent clear-cut boundaries, is well described by Barad. We 'cut out' the entities that we see and we then act as if interaction between entities 'is the name of the game'. Our eyes 'articulate' the world perhaps even more than our words in syntax. I will come back to this more vividly below.

When Barad states:

"To think of discourse as mere spoken or written words forming descriptive statements is to enact the mistake of representationalist thinking" (Barad, 2007: 146).

I agree with Barad and yet I find it necessary to point out that when language is understood as an agential technoscientific practice instead of merely descriptive tool - we cannot oversee these agential workings of our languages as one (of several) manner(s) by which we reproduce habitual entity thinking in our daily language practices. So if we consider the movement the other way round our language (use) structures how we comprehend the world as entities as an unavoidable techno-scientific practice of human endeavors. Further, also – and not the least - the material practices of discourse as in fact very much spatial, bodily and artifactual material practices imply this 'placement' of entities. The three story modes of Material Storytelling enact (a (re)configuration of) discourse as material practices.

Having said this it is important to uphold a distinction between the structure of language (or so-called grammatical sentences) and language-in-use. For instance,

conversation analysis has shown how different language-in-use is from fully-fledged grammatical sentences. Upon closer (multimodal) examination on emergent action it does become clear how indeterminate the clear-cut boundaries of (at least) *who* is doing *what* to *whom*, *when* - are. Therefore situated emergent action can also be studied from an intra-actionist perspective. These apparent singular actions and singular participants evidently act in coherent courses of action that have more in common with a flock of birds in the sky than with clear cut entities inter-acting as our habit of syntax in language would have us believe. Erickson (2004a) uses the term *social ecology* to describe this coherent action and he gives vivid examples of the profound level of what he calls ‘interdigitation’ as a musical rhythm and cadence orchestrating a family having dinner, and of a teacher engaging with students in her class. I am able to show that same phenomenon in my data and I will do so later in the analysis (especially Analysis Part 1 and 4, Book 2) where I argue that this coherence has quantum entanglement characteristics.

The pre-individual as a ‘pre-entity’ level of intra-relations, is among others, elaborated by Brian Massumi (2002, 2008) inspired (among others) by Stern (2004) and Deleuze (1991) (who both in turn are inspired by Bergson). In my elaboration of the level of intra-action of material-discursive practices - in regard to communicative action in the empirical data

- as subterranean subtleties of intra-action, I will return to various workings of Bergson and Stern (as a manner of reconfiguring a different difference to the Bojean enactment of the Bergsonian concept of lived duration within living story). However, for now it is important just to recognize that at the level of verbal language, entities have already been determined. Naming in language is per definition an excluding action. Even the recent ideas of, for instance, *linguaging* (Steffensen, 2009) that emphasize the flexible nature of language-in-use cannot escape the fact that language comprises of an entity-syntax that constitutes the world (‘existence’) as existing of entities and reproduces a Newtonian world view.

2.1.5 Research approaches to intra-action

A new research ambition within new materialism, which is still on the rising, is called ‘multimodal constituting processes’ (Højgaard and Søndergaard, 2010: 315), and it encompasses all possible modalities including time, space and material artifacts. Højgaard and Søndergaard attempt at doing intra-action research. However, they merely refer to constitutive issues related to what is often referred to as (e.g. Erickson, 2004a: ix) ‘big D’ or ‘Capital D’, which denotes an interest in how discourses are related to the larger historical, social, economical and other ‘macro’ issues. Further, they analyze mainly interviews and thus base their results on verbal accounts,

whereas I follow a different, ethnomethodological tradition within multimodal analysis where focus is on the constitutive modalities revealed action-by-action, that is, moment-to-moment multimodal intra-action. This interest in the so-called ‘little d’, (e.g. Erickson, 2004a: xi) will be elaborated further below.

I argue that in analyzing the ‘little d’ turn-by-turn/action-by-action intra-action I provide a better method for in fact revealing the entangled dynamic of intra-acting material-discursive practices. Such multimodal constitutive analyses document the *mole-cues of the enacted between* of Material Storytelling intra-actions as in fact material-discursive practices. This equals an interest in what Scollon and Scollon (2003) term ‘micro-ecology’ and what Erickson (2004a: xi) calls ‘microethnography’ or ‘ethnographic micro analysis of social interaction’. Those approaches struggle to analyze how exactly ‘Big D’ is present in ‘little d’:

“1) The conduct of talk in social interaction as it occurs in real time is unique, crafted by local social actors for the specific situation of its use in the moment of its uttering, and 2) the conduct of talk in local social interaction is profoundly influenced by processes that occur beyond the temporal and spatial horizon of the immediate occasion of interaction.”
(Erickson, 2004a: viii).

‘Big D’ and ‘little d’ exist simultaneously as the above two approaches to conduct of interaction

suggests. It is this apparent *paradox* that according to Ericson needs to be lived with by affirming both positions rather than favoring either or reducing one to the other (Ericson, 2004a: viii). I claim Barad's quantum inspired theorizing offers a unique solution for this. The paradox dissolves precisely when we choose to follow the two above-mentioned moves into the subterranean quantum territory. What we struggle with attempting this, though, is *'how to wrap our minds around it'*, (Barad, 2007: 388). Perhaps by accepting them as complementary and/or as partakers of qualitative multiplicity? I will elaborate and develop this qualitative, quantum argument throughout the dissertation, and specifically address this in Section 2.6, where the Baradian, the Bojean and the Bergsonian apparatuses are diffracted to enact 'subterranean subtleties of vital intra-actions'.

I argue though that it is this 'level' of 'the enacted between' of multiple, mutually constituent forces, which we are dealing with when dealing with intra-action in emergent processes of becoming. The three material story modes in Material Storytelling are among other things related to such between-emergent-coordination of intra-dependent relations. It is therefore also at this level of emergence that I am able to document those meaning-matter entanglements of the three material story modes in the data material.

The multimodal material approaches to human interaction such as 'nexus analysis' (Scollon and Scollon, 2004) and 'contextual configuration'

(Goodwin, 2000) are anything but strangers to material, time, space workings as mentioned above. As methodologies they pursue these workings. In fact as I will argue below they are some of the best in the field to 'document' such meaning-matter entanglement. However, while familiar with the 'action' aspect of intra-action, they do not quite capture the 'intra' element of intra-action. Or rather, I claim, they seem to hold onto the entity thinking of 'inter' while they in fact analyze 'intra' understood as 'the between' emergences.

Also the entangled genealogy of these approaches render them biased with a conversation analysis (CA) human-centeredness that does not account for a non-human agency of democratic proportions like the Baradian intra-action. When "*culturally developed artifacts*" are working as "*fundamental mediators of purposeful human action*", (cp. Raudskoski, 2010: 427) this human-take on agency is recognizable. In enveloping these methodologies in the analytical framework of the Apparatus of Material Storytelling I will therefore need to re-tool the vocabulary of these analytical approaches in order to make their multimodality/material take intra-active to be consistent with intra-action analysis. The specific re-tooling of the vocabulary will take place over the entire course of Section 2, so for now we just acknowledge that multimodal interaction *is* multimodal intra-action which means that it is conducted at the pre-entity level as between emergent coordination of interde-

pendent reciprocal relations and therefore that modalities intra-act rather than interact.

Now, after having introduced the two major moves entailed in the onto-epistemology of Material Storytelling and located Barad briefly within a research traditions of multimodality analysis of intra-action, I will go deeper into discussing the above move from Cartesian and Newtonian representationalism and its inherited inter-action and entity thinking towards intra-actions and quantum agential relations.

Before this let's take a break and once more embark on a boundary-making practice afforded by the human bodily configuration.



Breathing space

General instructions for doing the body-based pedagogy exercises¹

(Always do the exercises in loose fit clothing and without shoes and within calm surroundings. Choose the exercises that you feel comfortable doing and that give you a sense of well-being and enhances your energy level. Listen to your body signals and always refrain from doing exercises that cause you to feel pain or discomfort of any kind. Let it be a guiding principle to always aim at finding 'the right dose'² in terms of both the kind of exercise and the extent of the specific exercise. Note that the 'right dose' varies from time to time depending on the whole situation when you practice the exercise).

'Becoming present' exercise

- Tap yourself fast and firmly¹ with your hands all over your body surface and notice your physical boundary becoming present
- What do you feel? Where (literally) in your body do you feel it²?

1 The present and following exercises are a sample of the exercises used in the action research project after a one-year study/training at Bodynamic International as well as several subsequent courses at MOAIKU. The exercises are rendered here in the dissertation with permission from one of the founders of the Bodynamic System Merete Holm Brantbjerg. (who has later founded MOAIKU). For further introduction to the body-based pedagogy as it was used in the action research project, see Section 3.1, Book 2. See also Brantbjerg and Ollars (2006), Brantbjerg, 2010 and www.MOIKU.dk

2 The notion of 'the right dose' is specifically developed by Merete Holm Brantbjerg as a key notion in her 'resource-oriented-skill-training' (at MOAIKU), which is a specific refined variant of the body-based-pedagogy principle used and developed through the Bodynamic System

1 it is important that you find your own 'dose' of firmness, the idea is here to tap enough for increase the blood flow in the outer body surface, not to cause pain.

2 Importantly, there are no 'right' answers. It is highly personal which feelings and sensations arise from these exercises. Again, the same exercise may induce a variety of feelings and sensations from time to time.



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2.2 Back in Baradian quantum territory (– going deeper)

(In this section, I will walk the reader more closely through the steps of the paradigmatic shift discussed briefly above from inter-action to intra-action as an approach to deal with processes of (dis/continuous) becoming in organizational living and the intra-relating of human and nonhuman agencies of this becoming. The first step is the move from the representationalist idea of pre-existing entities to elaborate the intra-active dynamic of producing (boundaries of) entities. The second, subsequent step is the re-framing of action as post-human performativity by re-tooling performative action as intra-action and thus as emerging from enacting 'the between' of material-discursive practices. This includes re-tooling the nature of agency as human and non-human congealings of action into congealing of agency. Thus what follows is a closer elaboration of the two of the Baradian moves from above; (pre)individuality and human and nonhuman agencies as an enacted between.)

When I in the following dwell a bit further on the ontological implications implied in *intra* and then move on to the performative implication in *action*, this is not to imply that *intra* and *action* is about two fused parts. On the contrary, *intra* and *action* are entangled mutually constituent parties just like material-discursive practices. The move from *interaction* to *intra-action* therefore also pulls out the representationalist foothold underneath western metaphysics by dismissing the founding assumption of entities and separability. A foothold that is related to both a Newtonian physics of absolute entities and the Cartesian epistemology and its representationalist triadic structure of words, knowers and things, and which implies a belief in the inherent distinction between subject and object, and knower and known. Barad clarifies:

“the belief in the ontological distinction between representations and that which they purport to represent; in particular that which is represented is held to be independent of all practices of representing. That is, there are assumed to be two distinct and independent kinds of entities – representations and entities to be represented.” (Barad, 2003: 804)

In representationalism focus is thus on correspondence and mirroring between descriptions, representations and reality (Barad, 2007: 135), which is one important reason why language has been brought to the forefront of science studies with the implication that language has been granted more power than it deserves, (Barad, 2007: 133). Barad believes that this characterizes both social constructivist and traditional realist approaches:

“The linguistic turn, the semiotic turn, the interpretative turn, the cultural turn: it seems that at every turn lately every “thing” – even materiality – is turned into a matter of language or some other form of cultural representation. [...] matters of “fact” (so to speak) have been replaced with matters of signification (no scare quotes here). Language matters. Discourse matters. Culture matters. There is an important sense in which the only thing that doesn’t seem to matter anymore is matter.” (Barad, 2007: 132)

In sum, representationalism and its tendency for entity construction, and the subsequent reflections from a distance, is, according to Barad, a discursive construction that is an effect of the Cartesian apparatus of modernity of separating things into entities and of constructing dualities of language (actors, meaning) and materiality (structures, matter). This further produces a human-centeredness; a human orbit where:

“Man is the center around which the world turns. Man is the sun, the nucleus, the fulcrum, the unifying force, the glue that holds it all together. Man is an individual apart from all the rest. And it is this very distinction that bestows on him the inheritance of distance, a place from which to reflect – on the world, his fellow man, and himself. A distinct individual, the unit of all measure, finitude made flesh, his separateness is the key.” (Barad, 2007: 134).

It is the ‘unthroning’ of this anthropologic-narcissism of ‘The Great Divide’, (Haraway, 2008: 9), that posthuman performativity is all about, which we turn to next.

“

Bennett (2010) argues in the presentation of her book “Vibrant matter - A political ecology of things” the need to recognize the active participation of non-human forces in events. Recognizing that agency is distributed this way and is not solely the province of humans, might - she suggests - spur a politic less devoted to blaming and condemning individuals, and more akin to discern the web of forces affecting situations and events, (Bennett, 2010: cover). The Cartesian habit of mind for human centeredness makes the human the only one to blame in most cases. The entity- separability-take - as Bennett notes - blinds us further in regard to recognizing the profound effects of not only techno-scientific practices as Barad is concerned with but of material formations such as landfills, which generate lively streams of chemicals. (Bennett, 2010:cover)

2.2.1 Towards diffractive readings as/and posthumanist performative actions

Barad calls this representationalist divide illusory and contrary to this approach Barad poses a *posthuman performative* perspective and includes nonhuman forms of agencies that are all part of the worlds becoming. As ‘beings’ we are not outside the world (observing and manipulating it from a distance), or in-the-world as if the world were a container.

...108 substances that has been recognized in the universe in the periodic system can all be recognized within the human body (Emoto, 2001:99)

We are *of-the-world*. We are *of* particular historical, geographical, biological and material constitutive circumstances. The humans live and breathe intra-actively as an entanglement of multiple tem-

poralities, multiple spaces, and multiple materialities. We

are as humans made from the same substances as the rest of the world. It is therefore utterly impossible to distinguish in any clear way between the matters of the world and the matters of the human. And it is only the illusory (epistemological) Cartesian habit of mind that ‘cuts’ the world in this way. Barad thereby also calls into question the nature of agency and its presumed localization within individuals. According to Barad, it is a problem when:

“agency belongs only to the human domain, and neither addresses the nature of technoscientific practices and their profoundly productive effects on human bodies, as well as the ways in which these practices are deeply implicated in what constitutes the human, and more generally the workings of power” (Barad, 2007: 145).

As Barad notes, however, for the humanistic audience: *“the question of nonhuman agency may seem a bit queer”* (2007: 214), since agency is generally associated with intentionality and subjectivity. While power and its workings has been much debated by feminist and other poststructuralist scholars in relation to agency, the notion of dynamic has been left un-debated, settled as an unproblematic concept. (Barad, 2007: 233). For Barad power and dynamics becomes two side of a coin and a rethinking of both is integral to her understanding of agency in agential realism.

According to Barad agency is a matter of making iterative changes to particular practices through the dynamics of intra-activity. Reworking the field of possibilities. Barad thus (re)configures agency as a matter of intra-acting, hence, as a matter of enacting; as dynamics by which ‘the between’ is en-

acted. Agency is therefore not a thing or an attribute someone or something has. The agency of matter is congealed action, that becomes congealed agency as materializations of material-discursive intra-active practices. Agency cannot be designated since those entities to which agency would be designated do not pre-exist as such. However, when agency is understood as dynamical enactments of ‘intra-active betweens’ it is both important and appropriate to render forms of both human and nonhuman agencies. This has important implications in (re)conceptualizing dynamics of reworking organizational practices. I will discuss this further in the chapter ‘The Apparatus of Material Storytelling,’ (Section 2.3) where a model is diffracted.

Barad suggests by this posthumanist performative notion of agency an *agential* version of separability that rejects the geometries of pre-existing entities - and the implied therein - absolute exteriority or absolute interiority of such entities. By that move she opens a much larger space understood as a relational, dynamic and ever-changing topology of intra-action involving space, time and matter. A ‘space’ where the world is enfolded into itself as emergences *from within phenomena*, (Barad, 2007: 177) and enacted by what she, as stated, then calls *agential cuts* that produce boundaries and thus cut entities/agencies in this relational manner of cutting together and apart, (Barad, 2007: 148). This important relational ‘cutting’ dynamic in intra-actions is what is meant when Barad states that “agencies are only distinct in relation to their mutual entanglement; they don’t exist as individual elements” (2007: 33).

Intra-action is then about ontological inseparability becoming agential separability. The ontological inseparability

entails, as stated, an indeterminacy that gets solved in the agential dynamic of enacting ‘the between’; thus, agential separability. This ontologically relational take on reality is as mentioned what lays behind her coining of the take as a ‘relational ontology’, and the inspiration for this relational aspect and what it entails more precisely will become clearer in what follows and elaborated in regard to practices of Material Storytelling. For now we need to hold on to acknowledging the apparent ‘transformative passage’ of ontological inseparability to agential separability as precisely this process of emergent becoming that gets enacted as a material-discursive ‘between’, where ‘entity’ as ‘determinacy’ gets settled by an agential cut. It is therefore also the dynamic of this *dawning cut* we need to pay our attention to in understanding processes of organizational rework from a Baradian onto-epistemological perspective.



Comments on the two-slit experiment

“Nothing less than the true ontological nature of light was at stake”, (Barad, 2007: 97). During the first quarter of the twentieth century the two-slit-experiment within quantum mechanics unraveled lights seemingly obscure nature as both wave (momentum) and particle (position). The experiment indicated that light manifests particle-(position)-like characteristics under one set of experimental conditions and wave-(momentum)-like characteristics under other experimental conditions. So is an electron a wave or a particle? Second, to make matters even worse, matter’s ability to exhibit the same duality behavior followed shortly after, (Barad, 2007:100) and these experiments elicited according to Barad “subterranean rumblings” (2007: 100) that eventually surfaced and caused nothing less than a seismic shift in the understanding of the



Niels Henrik David Bohr (7 October 1885 – 18 November 1962) was a Danish physicist who made fundamental contributions to understanding atomic structure and quantum mechanics, for which he received the Nobel Prize in Physics in 1922. Bohr mentored and collaborated with many of the top physicists of the century at his institute in Copenhagen. He was part of a team of physicists working on the Manhattan Project. Bohr has been described as one of the most influential scientists of the 20th century.

Barad expands on what she argues as Bohr's implicit ontological dimension and includes the observer in the measurement apparatus and she has given several lectures on this subject at the Niels Bohr Institute in Copenhagen, Denmark.

nature of scientific knowledge and the nature of the world within the scientific community. Before this crucial point in time everything had been dividable into neat categories where "each bit of nature had a distinct identity", (Barad: 2007: 100); Wave and particles were distinct phenomenon with mutually exclusive characteristics.

2.2.2 Niels Bohr and indeterminacy as a locally solved material endeavor

Importantly however, instead of placing this 'passage' from ontological inseparability to agential separability within the workings "of an originating consciousness of a unified subject" (2007: 146-147), Barad draws on quantum physics understanding of superposition and entanglement and the emphasis on the larger material

arrangement, where the 'place' of the 'transformative passage' is the intra-active material-discursive 'between'. This 'transformative passage' will be elaborated more closely in Section 2.6, when the 'transformative passage' in a diffraction of Baradian, Bojean and Bergsonian apparatuses. Here we look into the quantum queerness of quantum entanglement that Barad reads through Danish physicist Niels Bohr.

In Barad's framing of the relational dynamic of *agential cuts* in intra-actions as ontological inseparability and agential separability, she turns toward Niels Bohr's interpretation of the experimental-theoretical nexus of quantum mechanics elicited by the empirical evidence of light's wave-particle paradoxical behavior and she argues that Bohr's radical solution to this 'paradox' is crucial to understanding how ob-

servation and agencies of observing cannot be independent in any kind of practice. It is within this between-dependency the 'transformative passage' is solved.

Bohr developed his famous *complementarity framework* as an explicit alternative to the prevailing framework by classical physics (see brown comment) and parallel to Heisenberg's development of his famous 'uncertainty principle'. Barad elaborates Bohr's approach on complementarity and suggest it to be a principle *in its own right* and names it 'the indeterminacy principle', (Barad, 2007: 295). The 'uncertainty principle' and the 'indeterminacy principle' are Barad states, competing claims as to how the relations of reciprocity should be understood. Together they are said to form the backbone of what is known as the 'Copenhagen interpretation of quantum mechanics', (Barad, 2007: 295). A central focus for Bohr's account is his 'indeterminacy-take' on objectivity regarding the wave/particle paradox:

"(...) the possibility "for un-ambiguous communication", (...) can only take place in reference to "bodies which define the experimental conditions" and embody particular concepts to the exclusion of others." (Barad, 2007: 199).

At the core of Bohr's notion of complementarity is his claim that theoretical concepts like position, momentum, space, time, energy, causality, observation, particle or wave etc. – that classical physics tend to take for granted – are actually idealizations or abstractions and in the absence of appropriate experimental arrangements the concepts do not have determinate meanings. In that sense their meaning is a *local issue* tied closely to specificities and logics

built into the experimental arrangement. How is time for example determined in the absence of a clock? A clock or a calendar measures time *in a particular way* and thus renders it determinate meanings. The clock and the calendar are material-discursive, techno-scientific practices of onto-semantic proportions. Barad uses this point about how meaning gets determined by showing the entangled material-discursive element of all practices.

Also as a key point, Bohr shows that there is a necessary reciprocal relationship between the finite spatial extend (localizability) of the wave-packets - and therefore of its *definability* as particle – and the finite spread of wavelength – and therefore its *definability* as 'wave'. They are not only mutually exclusive phenomena of light – they are reciprocal relations as a quantitative statement of complementarity¹. Instead of 'contradiction' or 'uncertainty' Bohr therefore offers 'complementarity' as a reciprocity relation to solve the apparent paradoxical behavior of light, (Barad, 2007: 297-300). He thus disagrees with his colleague Heisenberg's interpretation involving uncertainty.

Heisenberg had for his part formulated this paradox of the peculiar reciprocal relations as a matter of the observer disturbing a pre-existing reality of vibrant matter. What becomes uncertain then is how the reality *really is*. As Barad says, Bohr rejects "that what is at issue is a disturbance created in the act of measurement and that this alleged disturbance limits our knowledge of presumably (always already) well defined variables or attributes of the objects being measured", (Barad, 2007: 301-302). Instead for

¹ For a full elaboration of this argument see Barad (2007: 294-302).

Bohr what is at issue “*is the very possibilities for definition of concepts and the determinateness of the properties and boundaries of the “object”, which depend on the specific nature of the experimental arrangement*”, (Barad, 2007: 302).

Bohr thus offers an ontic-semantic understanding of the reciprocity relations where Heisenberg offers an epistemic understanding. Barad here points out that the distinction between the two is of such a great significance that we cannot afford to lose track of it. According to quantum mechanics the context of a measurement matters even when all observables are compatible. This ‘quantum contextualizing’ element is referred to as the so-called BKS theorem (framed independent of the indeterminacy principle by Bohr). Here the values of a particular variable depend on how an experiment may be set up to measure other variables, even when they are not mutually exclusive (complementary) thus even when there is no incompatibility.

“To put it dramatically, the hair color you detect may well depend on whether you are simultaneously measuring shoe size and gender, or whether you are measuring height and weight” (Greenstein and Zajonc, 1997, 115-16 in Barad, 2007: 293).

Thus the values the observable takes on are by no means preexisting, but closely linked to the experimental setup.

“In choosing one triad to measure the experimenter must configure her apparatus in a particular way and not some other... Bohr insisted that one cannot “imagine” a preexisting real world whose observables already possess real values: rather one should ask a

theory to make statements only about those variables for which the apparatus is currently configured.” (Barad, 2007: 294).

The point is that the (contextual) larger material arrangement matters for all measurements. Below I will use this understanding in my framing of the three story modes’ manner of being ‘experimental setups/larger material arrangements’ that are in fact working as ‘interdependent configuring apparatuses’ in *a certain way* and *not some other* and that it was this ‘certain setup’ that enabled the particular organizational rework. I will claim that the conjoint of those particular story modes produces a material-discursive practice (of becoming) suitable for enacting a changed relationality in regard to sustainability as present (Cartesian and Newtonian) hegemonic ‘voices’ are (re) configured by the mode of enactment (of the between) of the three story modes. Constituents are reworked where some excluded modes of enactment are included in a different way within the conjoint three story modes; the larger material arrangement; the Material Storytelling apparatus of enacting ‘the between’. That is as a changed field of possibilities of a dynamic contingent multiplicity. (Barad, 2007: 147). This of course means that the practices of the three story modes of Material Storytelling aren’t likely to produce exactly the same outcome twice. Each scene enacts/diffracts the material-discursive practices of the three story modes differently. Yet the interdependency of the triad of the three story modes is a particular apparatus. I will get back to this point below when elaborating on this multiplicity and inherent field of possibility in the Apparatus of Material Storytelling. This includes using the Bergsonian notion of lived duration and the importance of ‘the

appeal of the present' entailed therein as a manner of coining the 'quantum contextuality' in the nature of the specific experimental arrangement – as the conditions for the possibility for the local cut of the onto-semantic determinacy.

Barad holds that Bohr in his complementarity framework explicitly establishes the 'inside' boundary of this material arrangement as an enactment of the very possibilities for ontic-semantic determinacy in the act of observation, where Bohr insisted that what constitutes such an 'apparatus' emerges within specific observational practices: The apparatuses are therefore not passive observing instruments. On the contrary they are productive of (and part of) the phenomena they produce. However, as Barad notes, Bohr does not explicitly address the question concerning where these apparatuses end. He does not – so to say - establish the 'outside' boundary, (2007: 199). Barad's take (within new materialism) can be said to work with exploring the 'outside' boundary in terms of including the observer and through that the discursive elements of big D issues (cp. above). I for my part analyze specifically how 'little d' issues relate to the apparatus' enactment of 'the between' as rework of organizational practices and how they are therefore also reworking big D issues of reworking these practices.

For Bohr - entanglements of objects and (material arrangements of) agencies of observation - constitute physical reality. *Thus phenomena (not independent objects) are the objective referent of measured properties.* Here is an understanding of entanglement of ontological (and not the more common epistemological) proportions. What is entangled are the 'components'

of phenomena, and those 'components' are onto-semantic or material-discursive, as Barad puts it. On the basis of her agential realist elaboration of Bohr's complementary framework, phenomena do not merely mark the epistemological inseparability of observer and observed (as in traditional phenomenology); *"rather phenomena are the ontological inseparability of agentially intra-acting 'components'"* (Barad, 2007: 309-310).

The five part analysis in Book 2 'documents' in multimodal constituent (intra-action) analysis, the phenomena of the organizational rework at DBC as 'ontological inseparability of intra-acting 'components'. The process of re-determinacy of onto-semantic, material-discursive 'components' in the rework of organizational practices at DBC are here viewed as enactments of 'betweens' of multimodal meaning-matter entanglements aka the entangled components of the dawning organizational (re)configuration; the phenomena. If we reverse this argument we end up with a definition of what rework of organizational practices is when following this Bohrian/Baradian understanding; an onto-semantic, material-discursive determinate phenomena – an enacted between of entangled constituent forces. Rework of organizational practices is as a phenomenon

...thereby any phenomenon is to be understood as "the ontological inseparability of agentially intra-acting 'components'" – thus also phenomena as 'organizations', 'learning' and 'communication' etc., etc. are to be understood as such. This is what Barad's means when she holds that all practices are material-discursive.

not a static or a singular, but rather a dynamic and contingent multiplicity. I return to this framing of reworking of organizational practices in Section 2.3 'The Apparatus of Material Storytelling' where the onto-semantic, material-discursive (possibilities of) (re)determinacy of organizational practices becomes intra-active, multimodal space-timemattering enacted through Material Storytelling.

For now it is important to notice that Bohr's indeterminacy has the implication that the metaphysics of individualism is rejected. Thus what is rejected (also by the BKS theorem) is the assumption that preexisting objects (individually determinately bounded entities) possess inherent properties. This is where Barad finds her argumentation for calling the representationalist's notions of entities 'illusory' (cp. above).

Barad uses this argument to also points out that Heisenberg's uncertainty principle is based on a fundamental error. She also clarifies that this error was pointed out by Bohr, acknowledged and actually accounted for by Heisenberg himself in a postscript to his famous paper on the uncertainty principle (Barad, 2007: 301) - yet it is this principle (and not Bohr's) that continues to be taught to students and spoken of by physicists and non-physicists even today.

Barad finds this circumstance ironic (2007: 301) and in her theorizing she goes to great length to set the record straight - so to say - on those matters. The great significance of the indeterminacy principle - that if acknowledged could/should have caused even greater 'subterranean rumblings' (cp. textbox above) - is perhaps what Barad is un/doing by re-vitalizing Bohr's work in her *agential realism*. Barad (2007: 94) states that her theory agential realism can be

understood as a legitimate interpretation of quantum mechanics that addresses 'crucial issues' that Bohr's framework did not sufficiently resolve. Thus the paradigmatic turn implied in her theory has its roots (entangled genealogy) in theorizing done already one century ago.

The indeterminacy principle is a vital part of Barad's theorizing throughout her book. She elaborates Bohr's philosophy-physics in light of feminist studies and post-structuralism to propose this agential realist account of the indeterminacy principle as material-discursive practices in scientific knowledge centered, around the larger material arrangement coined in the notion *apparatus*. Her goal by rethinking ontology, epistemology and ethics: "*is to build an apparatus that is attentive to the nature of specific entanglements*", (Barad, 2007: 233). 'Apparatus' is the very important notion for her framing of the complexity of this entanglement as the 'enacted between' and for understanding knowledge making as world making. The notion of apparatus it will therefore be more fully elaborated below after the influence from feminist studies has been explicated. Here once again we will see how interference patterns of light waves play a role as an important inspirational source and methodology for Barad and where the term 'seen in light of' get's a whole new meaning.

2.2.3 Diffraction and/ with Haraway

As part of framing in more detail the ontological inseparability of agentially intra-acting 'components', Barad turns to her colleague at UCSC, Donna Haraway. Haraway also attempts to think the world as material-semiotic and populated with material-semiotic actors. Barad

follows Haraway in using the diffractive patterns of physical optics to rethink the reciprocal relationship between the natural and the cultural in ‘illuminating’ ways (Barad, 2007: 135), which also affords a rethinking of the representationalist method of reflection and reflexivity. She takes this further into developing diffraction as an alternate method to reflexivity (cp. Section 2.3, Book 1).

Coming from physics, *diffraction* refers to the ways in which waves (of, for instance, water, sound and light) move and combine and where these movements imply that *differences emerge from within*, (Højgaard and Søndergaard, 2010: 332). Diffraction patterns of light show shadows in ‘light’ regions and bright spots in ‘dark regions’ (Barad, 2007: 93) and this indistinct blurriness affords an alternate understanding to the idea of a static relation of separate entities with clear cut boundaries being mirrored in reflections as a representationalist and social constructionist view would have it. Diffraction patterns are about “*marking differences from within and as part of an entangled state*” (Barad, 2007: 89).

Barad thus argues that when boundaries are indeterminate like in the diffractive patterns, phenomena that are brought about by entangled material-

discursive practices enacting a phenomenon as ‘the between’. The material-discursive practice of boundary-making - for instance between the social and the scientific - is a relation of ‘exteriority within’, (Barad, 2007: 93), and diffractively separating out entities as ‘phenomena’ and are thus to be understood as enactments; doings that entail constitutive exclusions that matter.

As shortly mentioned above, Barad frames this dynamic of marking differences; producing boundaries as *agential cuts*, (Barad, 2007: 132). Agential cuts thus imply that reality is not independent of our explorations of it. Importantly, our explorations are not (epistemic) disturbances of a pre-existing reality, but an ontological diffractive ‘cutting together (and) apart’ and as such not a matter of opinion, but of the material consequences of some cuts and not others made in the fabric of the world. It is this understanding that Barad coins as *agential realism*.

Further, Barad draws the implications of this inseparability in diffractive cutting together and apart by naming it *intra-action* of material-discursive practices. Diffraction and the ‘exteriority within’ agential-cutting-dynamic is thus what account for the *intra* dynamic in *intra-action*.

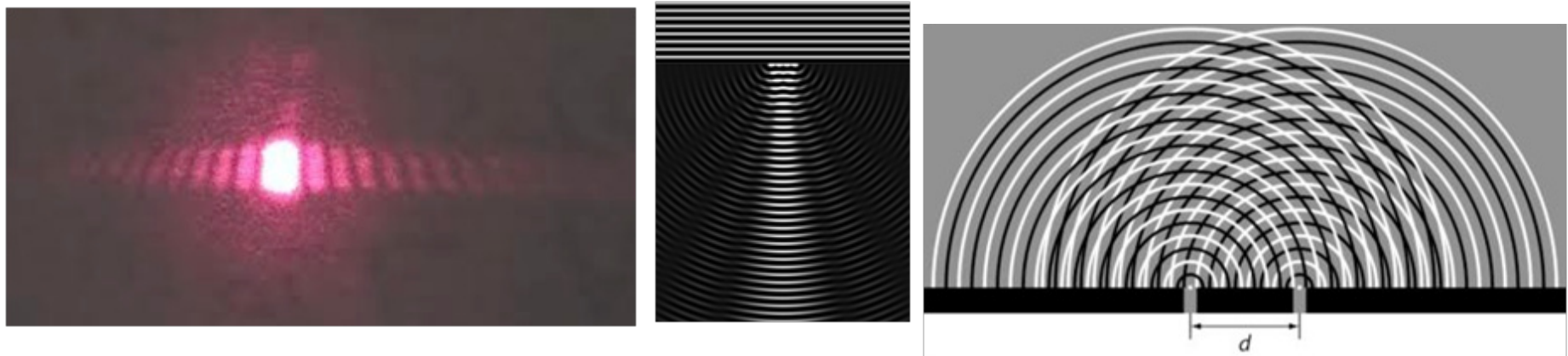


Figure 2.4: Diffraction patterns showing how the world is ‘cut’ differently by interferences (cp. Google Images, ‘Diffraction’)

She then uses the indeterminacy principle from Bohr, illuminated by patterns of diffraction inspired by Haraway to argue that the representationalist and traditional realist assumptions of separability between entities are an illusion and defies thereby another important aspect of entity-paradigmatic ways of thinking; reflections:

“...while social constructivist and traditional realist approaches get caught up in the geometrical focus on optics of reflection, [...] I shift the focus to physical optics of diffraction rather than reflection...” (Barad, 2007: 135).

The phenomenon of diffraction does not merely signify the disruption of representationalism and its metaphors of reflection (and reflexivity) in the endless play of images and anxieties about copy and original and displacements of the same elsewhere. Importantly it provides for a different take on distinction as the marking of difference. We return to this in Section 2.6 and discuss this as ‘relational differentiation’.

A Barad points out (2007: 87-88) feminist science studies scholars have from early on offered a critique of the insufficiency of reflexivity especially on two grounds. 1) Reflexivity is self-referential reflections on one self that reproduces the representationalistic geometry of holding the world (or subject and object) at a distance as the very condition for knowledge’s possibility. 2) Reflexivity fails to appreciate the ‘gender-and-science-in-the-making’ as this notion underestimates the mutual constitution of ‘the social’ and ‘the scientific’. This is ironic as these scholars in arguing for reflexivity insist on the importance of taking science-in-the-making by attend-

ing to specific laboratory practices they tend to treat gender, roles and other social variables as preformed categories of the social instead of constituted through techno-scientific practices, (Barad, 2007: 87). It is also these two main objections that Barad holds against the representationalistic world view and that diffraction can offer an alternative to according to Barad, as diffraction may serve as a productive model for thinking about non-representationalist methodological approaches in a performative mode.

“A performative account insists on understanding thinking, observing and theorizing as practices of engagement with and as part of the world in which we have our being” (Barad, 2007: 133).

This performative account - where we as humans are to be understood as practices of material-discursive engagements that are part of the world, and not separate entities (individuals) with clear-cut boundaries that are *in* the world or *above* it merely reflecting on its *true* nature (or reflexively reflecting on the true nature of those reflections) enables Barad to go from quantum physics experimental situations, via diffractive patterns of light to the more general account of knowledge-production in the processes of becoming.

Barad summarizes contribution of agential realism as an onto-epistemology this way:

“According to agential realism, knowing, thinking, measuring, theorizing and observing are material practices of intra-acting within and as part of the world. What do we learn by engaging in such prac-

tices? We do not uncover pre-existing facts about independently existing things as they exist frozen in time like little statues positioned in the world. Rather, we learn about phenomena – about specific material configurations of the worlds becoming. The point is not simply to put the observer back in the world (as if the world were a container and we needed merely to acknowledge our situatedness in it) but to understand and take account of the fact that we too are part of the world's differential becoming. And furthermore, the point is not merely that knowledge practices have material consequences but that practices of knowing are specific material engagements that participate in (re) configuring the world. Which practices we enact matter – in both senses of the word. Making knowledge is not simply about making facts but about making worlds, or rather, it is about making specific worldly configurations – not in the sense of making them up ex nihilo, or out of language, beliefs, or ideas, but in the sense of materially engaging as part of the world in giving it specific material form” (Barad, 2007: 91)

This interfering dynamic of diffraction is used by Barad on many different levels in her theorizing and in regard to many types of problems. As she defies reflection, she uses the notion of diffraction also to account for what happens when various inspirational sources are read; reading various texts are not done as reflections, but as diffractive readings through each other and what emerges from this reading are phenomena that were cut in ‘the between.’ The dynamic of diffraction is, therefore, central to understand her view on knowledge-production as her method of producing all the key aspects of her theorizing; intra-action,

agential cuts and later the notion of apparatus. I will get back to this notion of diffraction as methodology in Section 2.3 to account for how I diffractively read *living story*, *lived duration* and *multimodal intra-action* through each other to enact the phenomena Apparatus of Material Storytelling.

Barad therefore also uses diffraction as a method in producing her alternative account of *action* in intra-action – by elaborating it into an *intra-action*. This happens through a diffractive reading of the poststructuralist philosophers Judith Butler and Michel Foucault as well as Niels Bohr. By reading important elements of their theoretical contributions through the interfering movements of one another, she ultimately produces what she calls a ‘posthumanist performative account’, (Højgaard and Søndergaard, 2010: 322) through which she explains action as intra-action in her own manner. Barad summarizes her attempt in this manner

“My approach is to diffractively read these important insights from natural and social theories through one another in an effort to produce an account of natural-cultural practices and agencies that attend to the production of objects and subjects, the materialization of human and nonhuman bodies, and the entanglement of material relations (including those that get named social, political, economic, natural, cultural, and scientific, rather than presuming separate factors and domains of operation from the outset)”.(Barad, 2007: 232-233).

Diffraction is thus a material-discursive phenomenon that challenges the presumed inherent separability of subject and object, nature and culture, fact and value, human and nonhuman, organic and inorganic, epistemology and ontology, materiality and discursivity. Diffraction marks the limits of the determinacy and permanency of boundaries.

One of the crucial lessons we have learned so far from Barad is that agential cuts both cut things together and apart. Diffraction is a matter of differential entanglements. Diffraction is not merely about differences - and certainly not differences in any absolute sense, but about the entangled nature of differences that matter. This is the deep significance of a diffraction pattern. Diffraction is a material practice for making a difference, for topologically reconfiguring connections. This take on marking differences is rather *different* from other well-known takes. We will discuss this further below in Section 2.3 and 2.6.

2.2.4 Posthuman performativity

For her diffractive readings Barad takes various elements. From Judith Butler she takes the notion of performativity posed in Butler's famous book "Gender trouble: Feminism and the subversion of Identity" from 1990 and (as part of that) the focus on repetition and citationality (or iteration as Barad calls it) as features that produce the effects of performativity. It is in the moment-to-moment, day-to-day re-doing, repeating that performances come to matter. Here Barad borrows from Butler the theory of the materialization processes of bodies and materialization understood as a process phenomenon (Højgaard and Søndergaard, 2010: 322). The performative understanding challenges the rep-

resentationalist belief in the power of words to represent pre-existing things. According to Barad: "*Performativity is precisely a contestation of the excessive power granted to language to determine what is real.*" (Barad, 2007: 133).

Barad's account of performativity is, however, different from Butler's notion of performativity, (which is derived from Foucault's notion of discursive practices). Barad believes that both Butler and Foucault insufficiently clarify the relationship between discourse and material phenomena. Specifically, she holds that they reproduce the binary and dualistic relationship between nature and culture, (Barad, 2007: 145-146). Both assume, according to Barad, that agency only belongs to the human domain and thus assume materializing as merely effects of discursive performativity, where discourse is rendered the upper hand. It follows that neither Butler nor Foucault address the nature of what Barad (also inspired by Haraway) frame as techno-scientific practices, which have profoundly productive effects on human bodies and on what constitutes the human, (Barad, 2007: 232). Here Haraway's notion of the 'apparatus of bodily production' and Butler's notion 'congealing of action' play a role as an important source of inspiration, (Højgaard and Søndergaard, 2010: 323). Barad then frames the materialization of bodies within a theory of materiality entangled in discourse through Bohr and coins this dynamic as *intra-actions of material-discursive practices*. She concludes '*An agential realist elaboration of performativity allows matter its due as an active participant in the world's becoming, in its ongoing intra-activity*', (Barad, 2007: 136).

As stated, Barad denotes her approach as a *relational ontology*. Relational must here be understood as a twofold implication of 1) the relation of reciprocity of interior/exterior as in 'exteriority within', thus as lack of independent existence of entities, and as 2) the relation between the material-discursive as an entanglement, thus as inseparability of matter and meaning - of ontic and semantic. Barad's contribution is thus to enact *changed relationalities of agencies*, so instead of a poststructuralistic 'resituating of hegemonic relationships' *between* various parties, we have - with Barad - the enactment of a changed relationality of parties; materiality and discourse to create a more equal relation where both are considered as mutually constituent agencies, as agential parts of constituting emergent practices as enactments of 'the between'. She also changes the relationality of the individual and the collective in the same post-Cartesian manner, where existence no longer can be understood as an individual affair (Barad, 2007: xi). Finally her agential realist elaboration is also enacting a changed relationality of culture and nature into a post-humanist perspective, which means that her theorizing is:

"not calibrated to the human; on the contrary it is about taking issue with human exceptionalism while being accountable for the role we play in the differential constitution and differential positioning of the human among creatures (both living and nonliving)" (Barad, 2007: 136).

Barad thus de-centers the human participant - and here the human participant as primarily a linguistic, discursive phenomenon - with the implication that center is 'occupied' instead by 'the between entanglement' or entangled

state of human-non-human constituencies, that enact material-discursive practices with onto-semantic determinate boundaries

"Discursive practices are not speech acts. Rather, discursive practices are specific material configuring of the world through which determinations of boundaries, properties, and meanings are differentially enacted. It is this enactment of ontic-semantic determinacy that is at the core of what discursivity entails. To assume that meaning is a property of individual words or groups of words is to stay within a linguistic frame of meaning making. Discourse is not a synonym for language. Discursive practices are the material conditions for making meaning. In my post-humanist account, meaning is not a human-based notion; rather, meaning is an ongoing performance of the world in its differential intelligibility. Intelligibility is usually framed as a matter of intellection and therefore a specifically human capacity. But in my agential realist account, intelligibility is a matter of differential responsiveness, as performatively articulated and accountable, to what matters." (Barad 2007: 335)

As Juelskjær (2011: 5) is pointing out, Barad's diffractive take on the processes of becoming as entangled materializations is both sympathetic and productive as it does not imply a turning away from or moving beyond the human or discursive practice (as in a linear evolutionary understanding of progress that makes other perspectives less advanced). Instead, a rather different kind of activity is afforded where other issues can be addressed and other

questions asked and the answers to those questions can then be found not only within human relations and in the prevailing 'verbal cure' of changed perspectives, language plays and/or storylines – and importantly without making them the new passive either. A turning away from language would just be another way of implicitly holding on to two entities; the human/discourse and the objects/materiality, that we would now subscribe agency. New materialism (in the Baradian quantum take on it) offers – not a turning away from the human subject and discourse – but a re-orientation; a (re)configuration affording a different (more sustainable) human being and a changed relationality of agencies partaking in the world's ongoing intra-activity. As Barad puts it:

"Believing something is true doesn't make it true. But phenomena – whether lizards, electrons, or humans – exist only as a result of, and as part of, the world's ongoing intra-activity, its dynamic and contingent differentiation into specific relationalities. "We humans" don't make it so, not by dint of our own will, and not on our own. But through our advances, we participate in bringing forth the world in its specificity, including ourselves. We have to meet the universe halfway, to move toward what may come to be in ways that are accountable for our part in the world's differential becoming. All real living is meeting. And each meeting matters." (Barad 2007: 353)

These contributions of the Baradian onto-epistemology will of course have implications for the task I have at hand; the framing of Material Storytelling and for my framing of (the 'analysis as documentation' of) the data from the

action research project, as well as for understanding communication, interaction, change and processes of becoming in general as phenomena.

I will return more to these implications in the section 'The Apparatus of Material Storytelling'. Next we will turn to this notion of 'apparatus' that has briefly been touched upon above, and which is the key term that I will make use of in attempting to handle the complexity of the manifold of constituent, agential 'voices' of Material Storytelling story modes as Apparatus of Material Storytelling. This next section also functions as a summary of the tour through Baradian quantum territory and as part of that elaborating another 'queer' notion of Barad's theorizing; *spacetime-mattering* and thus how Barad makes both matter, space and time active constituents of the dis/continuous and nonlinear process of becoming.

2.2.5 The apparatus and the phenomenon

Haraway, Foucault and Bohr have inspired Barad in re-using the concept 'apparatus'. However, it is through Bohr's notion of phenomenon as apparatus-dependent that Barad re-frames the notion of apparatus as a construct central to agential realism. Barad points out that Bohr's writings were atypical for a physicist in that it included detailed drawings of measuring instruments, (Barad, 2007: 144). Such attentiveness to details of the apparatus is in line with his insistence that the concepts used to describe phenomena are not ideations but specific material arrangements. Stated boldly; if the measuring device for determining light's characteristics could reveal waves – so it did. If the measuring device could reveal particles – so it did. Bohr

claimed that apparatuses (the larger material arrangement used) are particular physical arrangements that enable and constrain knowledge practices. “*They enact a local cut that produces “objects” of particular knowledge practices...*” (Barad 2007: 147). However, according to Barad, Bohr makes the mistake of cutting the apparatus off from all the activities that enable experimental practice to work, and thus for instance reduces the role of the experimenter to a mere recorder of the objective marks displayed by the instrumentation. Within Bohr’s points there is an inherent ontological claim that Barad uses in her re-working of Bohr’s apparatus dependent phenomenon as ‘an agential realist elaboration of apparatuses’ (Barad, 2007: 144) for coining the onto-epistemology. In her agential realist elaboration she manages to frame the apparatus as a diffractive construct, which combines the (above mentioned) theoretical elements she pulled from Haraway, (non-human agency, material-semiotic), Butler (performativity, citationality and iteration, materializing as process of congealing of action) and Foucault (discursive practices) and she end up with:

“Apparatuses are the material conditions of possibility and impossibility of mattering; they enact what matters and what is excluded from mattering. Apparatuses enact agential cuts that produce determinate boundaries and properties of “entities” within phenomena, where “phenomena” are the ontological inseparability of agentially intra-acting components. That is, agential cuts are at once ontic and semantic. It is only through specific agential intra-actions that the boundaries and properties of “components” of phenomena become de-

terminate and that particular articulations become meaningful.” (Barad 2007: 148)

Apparatuses are complex and dynamic, enacting agential cuts that are at once ontic and semantic, hence onto-epistemological. The boundaries and ‘components’ of phenomena become determinate and articulations become meaningful through these agential intra-actions of the apparatus.

Apparatus is thus for Barad a way of framing the very complex and fluid processes of intra-acting constituencies from where the world becomes (re)configured in iterative enfoldedongs of the spacetime-matter manifold. The point she takes from Niels Bohr is that apparatuses are not passive instruments of observation but are productive of and thereby parts of the phenomena produced. By reading Butler and Bohr diffractively, the notion of apparatuses are expanded and seen as agential material-discursive practices that produces phenomena in any setting. They do not just embody human concepts and take measurements. They are far more active and produce differences that *matter*. Said differently; apparatuses are formative of meaning and matter. Apparatuses are then also distinct from discourse as they are specific material arrangements. Discourse is as mentioned above for Barad - not language as such - but that which constrains and enables what can be said (2007: 146). She refers to Foucault who has argued that discursive practices are the socio-historical material conditions that enable and constrain knowledge practices (Barad 2007: 147). Even if Barad acknowledges that materiality plays a major role for Foucault, she argues that for Foucault materiality is still subordinated discourse that

is supposed to condition and govern materiality and not the other way around. Barad finds this to be the difference between Foucault and Bohr. This means also that concepts are not ideational but particular physical arrangements. This underlines the emphasis on the materiality of meaning-making and mattering, which emerge from the practices of apparatuses understood as specific material (re)configurations through which 'objects' and 'subjects' are produced:" *apparatuses are the material conditions of possibility and impossibility of mattering; they enact what matters and what is excluded from mattering*" (Barad 2007: 148).

Apparatuses are considered to be material configurations that reconfigure spatiality and temporality as well as mattering (Barad, 2007: 146). Barad – drawing on quantum physics – includes space and time as active constituents in the phenomenon-producing apparatus.

Barad highlights the entanglement of space, time and matter as the spacetime manifold. They are thus not separate entities but must be seen as intra-acting, thus mutually constituent forces of 'the between' and enacted spacetime mattering. She here uses the notion of apparatus to account for the between-dynamics that reconfigures the spacetime manifold. By doing this, Barad aims to dislocate the container model of space, the spatialization of time and the reification of matter by reframing the notion of space, time and matter using an alternative framework that shakes loose the foundational character of notions such as location and opens for a space of agency in which the dynamic intra-play of indeterminacy and determinacy reconfigures the pos-

sibilities and impossibilities of the worlds becoming such that indeterminacies, contingencies and ambiguities coexist with causality. Crucially these considerations rethink current conceptions of causal dynamic as apparatuses of intra-action, and *spacetime matter (re)configuration* - a phenomenon that denotes the rework of the relationalities of the locally enacted *enfolding* (rather than unfolding) of spacetime matter. So instead of the more usual *unfolding*, Barad enacts an *enfolding* to hint at the agential dynamic of the between intra-act where meaning is not a hidden to be unfolded, rather meaning is a material-discursive making where the agential cut of what is in/excluded from mattering, *matters*.



Classical physics is based on Newton's absolute conception of time and space. Here time is understood as a series of moments evenly spaced along a line that goes to infinity in both directions and space is understood as uniform and unchanging, a container that marks place, but is itself unmarked. An understanding that carries the formula for measuring objects movement as they move continuously through space with a certain pace as in a classical coordinate system with 'time' on the x-axis and 'space' on the y-axis. We can plot our measuring inn and draw a line through the dots; time and space become stable measuring units for noting the objects movement. Both quantum physics and Einstein's theory of relativity profoundly challenge this understanding of absolute time and space, but they do so in a very different way. In claiming time is relative, Einstein points to the impossibility of giving an absolute specification of time independently of the motion of the observer. He withholds the presumption that observer and observed are distinct states with separately determinate boundaries and at-

tributes. Bohr questions this presupposition and argues for the relational nature of the measuring process.

So instead of speaking of meaning as proximity of time, which would be typical, for example, in social constructivist and discursive studies, Barad speaks of *topology* that is an entanglement, which includes the complex intertwining of before, futurity, space and matter in the production of mattering. Instead of living temporality, Barad emphasizes *living spacetime*, where the material and the discursive and time and space are all mutually implicated in the dynamics of intra-activity and in the iterative enfolding, which produce mattering. "*Phenomena cannot be located in space and time; rather, phenomena are material entanglements that "extend" across different spaces and times*", (Barad, 2007: 317).

As stated, thereby Barad not only defies the Cartesian epistemological legacy of entities with pre-existing properties, but also the Newtonian founding premise of continuity of movement. In her understanding of time and space as constituent agencies she is drawing on the *quantum leap*, which designates another aspect of quantum 'queerness'; an electron can move from one lane or energy state to another and it is impossible to foresee how and when the leap will take place. To add further insult to our everyday understanding the electron can be in more than one place at one time (a phenomenon known as superposition). An implication of this unpredictable 'queerness' is that *movement* is not an adequate description as there is no sign of any movement taking place from one locality to the next as the electron appears "*without having been anywhere in between*", (Barad 2010: 246). The quantum leap's unpredictability in regard to time

and space therefore heavily challenges the classical Newtonian physics, where the founding premise regarding continuity of movement and therefore where the energy-state or the movement of the object is set as the constant of measure (see brown comment). In Barad's words:

"This tiny disjuncture, existing in neither space nor time, torques the very nature of the relation between continuity and discontinuity to such a degree that the nature of change changes from a rolling unraveling stasis into a dynamism that operates at an entirely different level of "existence", where "existence" is not simply a manifold of being that evolves in space and time, but an iterative becoming of spacetime mattering [...] space, time, and matter are intra-actively produced in the ongoing differential articulation of the world". (Barad 2007: 234).

Barad argues, that the dichotomy continuity/discontinuity must be rethought and hence our understanding of change and, further also our understanding of time and space as they are closely related to our understanding of change and continuity. In classical physics time is absolute and objective. It consists of similar subsequent individual moments, as units that are constant and 'outside', and objectively measuring change and movement by use of a clock and/or a calendar. Further, spatiality is understood as a preexisting, fixed geometrical room - a 'container' for materiality and meaning measured by a ruler, (Barad, 2007: 437).

In her 2010 article Barad, as stated, goes to great (and very imaginative) length to shake the reader out of a well worn Newtonian framework by letting us participate in a per-

formance of spacetime(re)configuring with an electrons as our 'host', (Barad, 2010: 240) as:

"...a way of thinking with and through dis/continuity – a dis/oriented experience of the dis/jointedness of time and space, entanglements of here and there, now and then, that is, a ghostly sense of dis/continuity, a quantum dis/continuity."

As Juelskjær points out, not just everyday but also theoretical understandings of context are: *"nonetheless (...) still a container for specific sociocultural and institutional codes and meaning-making processes where temporality drowns in the ongoing 'now' of interaction"* (Juelskjær, 2011: 6, my translation). She gives as examples Discourse Psychology (Potter and Wetherell 1987, Davies and Harré, 2000). As mentioned above, the frameworks of nexus analysis (Scollon and Scollon, 2004) and contextual configuration (Goodwin, 2000) are examples of theorizing that regard context to a much larger degree as an active accomplishment.

However, I follow Juelskjær (2011: 7) in highlighting that if we are to go along the Baradian quantum queerness *space-timemattering*, and spacetimematter (re)configuration we need to let go of the everyday idea of the human being as an entity or an effect of social inter-action moving in a passive container called space and progressing in relation to something we would call linear time, as a measurement of our movements. What should come instead would perhaps be a line of thinking that does not discard of our everyday space-time understanding, but, rather, expands our understanding of space-time into several existing different

space-time components where one is how we understand it in everyday life. Following this quantum approach in the analysis of empirical data has implications. Instead of analyzing along a linear narrative approach (BME narrative - Beginning, Middle, End, e.g. Boje and Durant, 2006) and create order in the space-time coordinates in a classical Newtonian physics manner, and thus make time and space disappear as agencies that matter, one should attend to the complexity and multiplicity of the entanglement of also the space-time components in the empirical data and an expanded understanding of the dis/continuous becoming is possible. Boje and colleagues have tried to develop such an understanding under the title *Narrative Temporality* (Cunliffe, Luhman and Boje, 2004). We will look into this approach below in elaborating the Bojean storytelling approach of 'living story'. Also, we will return to elaborate the quantum queer non-movement of the 'transformative passage' from above in Section 2.6. In the 'analysis as documentation' of the 'data' from the action research project (Section 3, Book 2) this entangled dis/continuous multiplicity is shown as *entangled durations* integral to space-timematter (re)configurations.

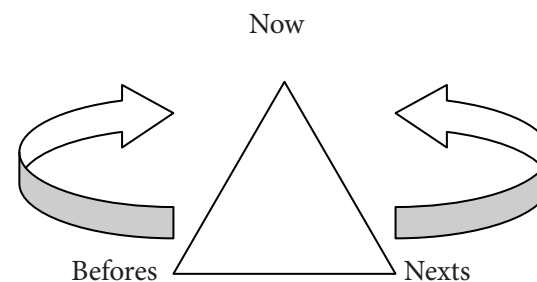


Figure 2.5: basic 'fractal' reconfigured

Let's go back to the triangular 'fractal' model from above and reconfigure it according to spacetime matter dis/continuity:

Already the 'fractal' triangular model replaces 'past' with 'befores' and 'future' with 'nexts' and thereby also the Beginning, Middle, End (BME) narrative linearity (explained below) in Section 2.4 and 2.5). What is needed is then to let 'before' and 'next' partake (as plurals) in the now – both as constituents of the here-and-now 'now' and as other spacetimescales on which the current intra-action extends across. I (re)configure this onto-semantically by adding plural tense and with arrows showing those 'befores' and 'nexts' as partakers of the 'now'.

The plurality or multiplicity of partaking will be elaborated further below where I as stated make use of Boje's 'living story' and the Bergsonian understanding of 'lived duration' to elaborate the Baradian argument of *living spacetime matter* as complexity storytelling of dis/continuous becoming. The complexity evolves precisely around this multiplicity of other space and timescales partaking in the emergent now and the now 'extending' across many spacetime components. What will be the common helpful twist here that will make it all add up, is to go to a take on memory and time as *qualitative* multiplicity instead of *quantitative* multiplicity, to account for a quantum superposition in spacetime mattering. This will be elaborated more below (especially in Section 2.6, Book 1).

Importantly Barad notes that although process-oriented theories of emergence involve nonlinear dynamics it often implies a nonlinear *inter*-action that externalizes time, (2007: 438). I have been very deliberate in choosing the theoretical elements for the diffraction of the apparatus of Material Storytelling through the theoretical concepts of 'living story' and 'lived duration' as they both internalize time as an active partaker in the nonlinearity. In terms of the various analytical frameworks from multimodality research ('interdigitation of social ecology', 'nexus analysis' and 'contextual configuration'), I will need to pay close attention to these terms ac-

cording to intra-action and thus with matter, time and space as entangled, co-constituent agencies. I will 'secure' this to happen through the use of three principal interferes which will be explained below.

The intra-active dynamic of apparatuses of living spacetime matter (re)configuration are summarized below (cp. Barad, 2007: 146):

- apparatuses are material-discursive practices (they are not merely laboratory setups that embody human concepts and take measurements)
- apparatuses produce differences that matter – they are boundary-making practices that are formative of matter and meaning, productive of, and part of, the phenomena produced
- apparatuses are material configurations/dynamic re-configurations of the world
- apparatuses are themselves phenomena (constituted and dynamically re-constituted as part of the ongoing intra-activity of the world)
- apparatuses have no intrinsic boundaries but are open-ended practices; they are not containers
- apparatuses are specific material arrangements - not located *in* the world but are material configurations *of* the world that re(con)figure spatiality and temporality as well as (the traditional notion of) dynamics (i.e. they do not exist as static structures, nor do they merely unfold or evolve in space and time)
- apparatuses are theoretical and analytical onto-epistemological arrangements of quantum dis/continuity basically

Any becoming of a phenomenon implies apparatus' that are reworked in regard to a changed relationality of between constituent intra-actions, that produces phenomena, and therefore (re)configures phenomena.

2.2.6 Notes on the apparatus as a useful stranger

‘Apparatus’ is a thus specific term that captures the complex dynamic of intra-active, material-discursive processes through which phenomena of the world are constituted and configured, whether talking about technoscientific, biological, social, economic or other kinds of phenomena (Højgaard and Søndergaard, 2010: 321). This also means that it is possible to talk about apparatuses of virtually any kind of phenomenon – hence also apparatuses of Material Storytelling reconfiguring organizational practices as spacetime matter (re)configurations.

Højgaard and Søndergaard (2010: 324) note that there is an element of *foreignness* to the notion of apparatus that reminds us to think of the many multimodal constituents, their inherently entangled character and the character of their productivity as immediately entering into the intra-active processes of which the notion of apparatus is an agential lens.

The consequences of following Barad’ onto-epistemology is not only that we cannot avoid apparatuses in ‘comprehending’ the world (epistemological point), but also that the world at the same time is (re)configured by this active – agential – lens through which we ‘configure’ (ontological point) (Juel-skjær, 2011: 12). It is the latter that is most uncommon for us to handle as we are so caught up in a classical Newtonian and Cartesian understanding of the world as exterior to us. When Barad states: “*outside of particular agential intra-actions, ‘words’ and ‘things’ are indeterminate*” (Barad 2003: 820) it needs to be taken very literally in both the ontological and epistemological sense.

I use the notion of apparatus to capture the manifold of multimodal constituents of the processes of the three story modes as entangled modes of enacting ‘the between’ in Material Storytelling. Importantly, here the multimodal constituents captured by the apparatus of Material Storytelling – as mentioned earlier – encompass the multimodalities of (the so-called) little d and capital D. Also, as equally important, multimodalities should be understood as always already entangled. They are not entities

with clear cut boundaries or attributes, they are, as stated, mutually constituent partakers of the dynamic of agential intra-active apparatuses and thus co-constituent, entangled partakers in the dynamic of enacting ‘the between’ that procures spacetime mattering.

In going to little ‘d’ multimodal with Barad, I am drawing on Iedema (2007) - who in turn is drawing on Barad’s notion of intra-action, (Barad, 2003) - in articulating an alternative view on discourse as not just linguistic, but multimodal and discourse as mutually entangled co-work with materiality, (Iedema, 2007: 937). Intelligibility exceeds linguistic capability, which is a central point in understanding how the indeterminacy gets solved through apparatuses:

“the social-organizational becoming does not depend solely on the linguistic in terms of its organization and communication, but on the ongoing negotiation of intelligibility in virtually any domain: gesture, posture, software design, tool manipulation, spatial placing and so forth” (Iedema, 2007: 937).

I will elaborate this multimodal take on discourse further below in my rework on storytelling as intra-active multimodality. Here the Bergsonian notion of ‘qualitative multiplicity’ plays a vital role in how I clarify this intra-active, mutually constituent entanglement of discursive multimodality and materiality more thoroughly as *vital intra-actions*.

Next, it is perhaps time for a pause. You are invited to engage in a breathing space, which will challenge your human onto-semantic apparatus to keep its balance.



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Breathing space

General instructions for doing the body-based pedagogy exercises¹

(Always do the exercises in loose fit clothing and without shoes and within calm surroundings. Choose the exercises that you feel comfortable doing and that give you a sense of well-being and enhances your energy level. Listen to your body signals and always refrain from doing exercises that cause you to feel pain or discomfort of any kind. Let it be a guiding principle to always aim at finding 'the right dose'² in terms of both the kind of exercise and the extent of the specific exercise. Note that the 'right dose' varies from time to time depending on the whole situation when you practice the exercise).

¹ The present and following exercises are a sample of the exercises used in the action research project after a one-year study/training at Bodynamic International as well as several subsequent courses at MOAIKU. The exercises are rendered here in the dissertation with permission from one of the founders of the Bodynamic System Merete Holm Brantbjerg, (who has later founded MOAIKU). For further introduction to the body-based pedagogy as it was used in the action research project, see Section 3.1, Book 2. See also Brantbjerg and Ollars (2006), Brantbjerg, 2010 and www.MOIKU.dk

² The notion of 'the right dose' is specifically developed by Merete Holm Brantbjerg as a key notion in her 'resource-oriented-skill-training' (at MOAIKU), which is a specific refined variant of the body-based-pedagogy principle used and developed through the Bodynamic System

Centering exercise - Slow-flow

- Put on some slow rhythm music of your choice and liking
- Move around for a few minutes in a deliberately slow manner that challenges your balance by, for example, standing on one leg, and by tipping your weight either forward, backward or to the sides
- Keep your eyes open, and move around in a long continual movement that involves all parts of your body
- Find the dose of smaller or larger movements that makes it easiest for you to keep your balance
- The exercise can be performed sitting, standing or even lying on the floor
- What do you feel? Where in the body do you feel it?
- Keeping your balance requires activity in all muscle groups around the center of your body and calls your attention to this area which builds up energy and presence in that area



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2.3 The Apparatus of Material Storytelling

(In this section, Barad's onto-epistemology is reconfigured as an Apparatus of Material Storytelling. With an offset in configuring a diffractive methodology, I thus continue the configuring of the larger material arrangement of producing the notion of Material Storytelling as intra-active story rework. The Apparatus of Material Storytelling is presented as a material-discursive practice enacting organizational story rework through intra-active spacetime-matter (re)configuration and it is grasped in a (re)configuration of a model that is suggested as a memory-device for the(re)configuring of the apparatus throughout the rest of the dissertation and beyond.)

2.3.1 Diffraction as methodology of ‘Configuring the Apparatus of Material Storytelling’

From above we learned that diffraction is *the* key methodology of the Baradian theorizing as it is consistent with agential realism’s very important point about indeterminacy being solved locally by intra-acting agencies. In configuring an Apparatus of Material Storytelling¹ that can account for the Material Storytelling practices in the action research project informed by Barad’s onto-epistemology, diffraction therefore seems to be the most productive and consistent way to go about it. The following quote explains Barad’s problem with the prevailing methodology of reflexivity:

“reflexivity is nothing more than iterative mimesis: even in its attempts to put the investigative subject back into the picture, reflexivity does nothing more than mirror mirroring”. (Barad, 2007: 87-88).

Barad holds that reflexivity is glancing back at oneself from a distance as a self-referential endeavor and a methodological tool of (reproducing) representationalism. We therefore need to discard reflexivity altogether, in order to ‘move beyond’ this metaphysical standpoint.

Where reflexivity is saturated with the idea that representations reflect social or natural reality and thus is based on the presumption that practices of representing have no effects on the objects of investigation, and where reflexivity - like reflection - also fails to afford a way across the social construc-

tivist’s allegedly unbridgeable epistemological gap between knower and known, diffraction affords a solution to both. Diffraction affords to make the effects (consequences) of the multiplex dynamic of agency evident and it avoids the usual framing of a gap altogether by imposing the onto-entailment to epistemology in emphasizing the larger material apparatus of solving indeterminacy in any iterative enactment.

Further, where reflections are set up to look for homologies and analogies between separate entities, diffraction is concerned with and attends to specific material entanglements. Diffraction is “*a material-discursive phenomenon that makes the effects of different differences evident*” (Barad, 2007: 88). Therefore a diffractive reading is a suitable method for configuring an apparatus of Material Storytelling drawing on inspiration from various theoretical fields at the same time as it seeks to be consistent with the onto-epistemological foothold.

Also, very importantly, diffractive methodology affords (and requires) a moving away from the familiar habits and seductions of reflecting on the world from outside, to a way of understanding the world from within and as part of it, a shift that is not an easy one to accomplish. It requires a (re)configuration of human hood itself where humans lose the superiority that the notion of reflections afforded. It takes some effort to ‘give way’ to other ways of knowing and becoming, and other agencies. Also, acknowledging human hood as part of an enactment of a between – as an exteriority from within dynamic –, requires an acceptance of not being a separate, self-contained individual as our first and foremost ‘state’.

¹ Juelskjær (2011) also uses the notion Material Storytelling inspired by Strand, 2010, and also the notion apparatus in that regard. I was inspired by Juelskjær to make use of ‘Apparatus’ as a manner of coining the many constitutive modes of Material Storytelling.

The fact that we make knowledge as part of the world and not from outside of it 'looking in', does not mean that knowledge per se is subjective (Barad 2007: 91) as subjectivity is a notion that already presumes a pre-existing distinction between object and subject. Also objectivity is not about producing undistorted representations (as in free of bias), but rather about being accountable or responsible to the specific materializations of which we are part. This is where Barad's ethical stance becomes evident. She refers to this as 'ethico-epistem-ontology'. I return to this aspect in Section 2.6. Making knowledge from within and as part of an entangled state then: "*requires a methodology that is attentive to, and responsive/responsible to, the specificity of material entanglements in their agential becoming*" (Barad, 2007: 91).

Where this has obvious implications for doing organizational change practices at the level of enacting change processes in organizations, it perhaps has more subtle implications for how we produce research, theories and academic writing. When it comes to reading theoretical elements through one another it is not about reading *against* one another, where one is positioned against the other in a static relation, nor about taking turns at placing one as the wall or foil that the other gets played against and then add the results of the comparing. Using diffraction as a methodology is about placing understandings generated in different (inter)disciplinary practices in intra-action with one another; to engage aspects of each in dynamic relationality to the other, while attending to the iterative marking of differences; the agential cuts enacted.

An example is when I in the following pay close attention how Boje and colleagues iteratively mark the differences of storytelling and narrative, or when I iteratively mark the difference – agentially cut – between Material Storytelling and living storytelling or between Material Storytelling and Boje's most recent Storytelling Materiality. Yet another example of a diffractive reading is when I above noticed how the syntax of language as a scientific practice 'cut' entities. Also as another example of how the diffractive reading is done is when in the case of sandplaying (both in the analysis and in the moment of supervising) I attend to the negotiated marking of difference done in 'the between' of the larger material arrangement of the placing of the material objects in the sand-box in certain groups and the supervisee's holding of a hand over these material artifacts while verbally naming 'them' 'disturbing elements' as a response to supervisor's inquiring of what it is (cp. Analysis Part 4, Book 2) a marking of difference is intra-actively enacted, an agential cut inserted; a diffractive grating imposed and the category of 'disturbing elements' emerged.

In each case the material-discursive nature of boundary drawing practices needs to be carefully examined, as it is in the subtle modifications that the relational differences are marked. Those subtle modifications are precisely why multi-modal analysis can be used as *intra-action* analysis. Importantly, a diffractive reading:

"does not take any of the objects or subjects of these studies for granted but rather investigates the material-discursive boundary-making practices that produce "objects" and "subjects" and other differences out of, and in terms of, a changing relationality." (Barad, 2007:93).

It is in the changing relationality that the indeterminacy is iteratively solved as enacted boundary-making or 'cut'. Diffractive readings attend to and potentially change the dynamic relationality, meaning that all parties of the diffractive reading are affected. For instance, my choosing of agential realism calls for a delicate balance, first of all, because of using onto-epistemology as a foundation for configuring a consistent methodology, Apparatus of Material Storytelling. Furthermore, this fundament cannot stand untouched as the relational dynamic of intra-action is all about being touched; moved, changed from within. When being attentive to the fine details of different disciplinary approaches, what is needed is:

“respectful engagements with different disciplinary practices, not coarsegrained portrayals that make caricatures of another discipline from some position outside of it...[but]...to remain rigorously attentive to important details of specialized arguments within a given field without uncritically endorsing or unconditionally prioritizing one (inter) disciplinary approach over others” (Barad, 2007: 93).

In embarking on doing such a diffractive reading below, I will keep these precautions in mind. While agential realism is the fundament, as stated above, it will not stand untouched – disengaged – but rather itself undergo finely adjusted changes from within as it is changing relationality in engaging with ethnomethodologically inspired multimodal interaction theory, Bojean storytelling theory as well as the Bergsonian notion of memory as 'lived duration', supplemented by theorizing on affect. Thus, the following complex diffractive reading offers not only an Apparatus of Material

Storytelling, but also a rework of the dynamic of intra-action captured in the notion *vital intra-actions and subterranean subtleties of intra-action*. Also I as the researcher and author do not stand untouched, (cp. Outing below in this section).

Diffractions are configurations and as such they entail 'diffractive gratings' that are in-formative; shape giving, as when wave currents are diffracted at a harbor or sound waves and sand diffractions (please see the images of interference patterns in Section 2.2.3 above). Such diffractive gratings are material arrangements; apparatuses. In the analysis it will be evident how the three modes of Material Storytelling operate as such material diffractive arrangements; apparatuses. And how exactly for those reasons Material Storytelling is a different kind of story practice with different possibilities for enacting 'the between' than a more linguistically (language) driven storytelling practice.

2.3.2 Three principal 'interferers' as an agential cutting dynamic in the diffraction to come

However, as stated above, diffraction is not an easy thing to do in its unfamiliarity. Therefore as a first move embarking on the diffractive reading below, I have distinguished what I call 'three principal interferers' or 'diffractors' to help me accomplish the task. These three are what I regard as basic general features of (the above cut of) agential realism's take on material-discursive dis/continuous becoming and they are to play a vital role in doing the 'agential-cutting' of the Material Storytelling apparatus of which my (reconfigured) research-identifying-practices are to emerge below. The three 'features' thus function at two basic levels; A) as a summarizing of

key presumptions of agential realism that the Apparatus of Material Storytelling should enact, B) an entry-point and a practical tool – a memory device - that help ensure ‘consistency’ in the Apparatus of Material Storytelling as the three features provide an ‘alignment’ in the agential cuts of ‘the between’ of the various inspirational sources, so they are enacted true to the paradigmatic shift of the onto-epistemology. Notably, integral to these ‘features’ are the multimodal take on discourse that I have already mentioned in discussing Barad and Iedema’s approach to discourse above.

The following three ‘principal interferers’ are thus working as the *local agential cutting dynamic* that are reworking (re-configuring) the ‘old’ human/discourse-centered-entity paradigmatic take on organizational change within (critical) organization studies and communication studies. Through those the monomodal (hegemonic) relationship of language-discourse over materiality in understanding communicative practices in organizational development studies is (re)configured into one of mutual multimodal constituency in the onto-epistemology of Material Storytelling as intra-active story rework:

The three principal interferers

- nonlinear process orienting
- entangled multimodal intra-acting
- spacetime-mattering

The principal interferer of nonlinear process-orienting accomplishes the task of moving the focus away from entity, products and things towards emergences of (congealing of) actions and doings of the flux of the now. Subsequently, I am moving my focus away from concentrating on entities of past, present and future and different types of phases to the dynamics of diffractive ‘betweens’ of the here-and-now that produce agential cuts and of which we are always already a part. The process interferer thus highlights the in/separability of processes and the impossibility of distinguishing in a clear way between ‘creation and renewal, beginning and returning, continuity and discontinuity, here and there, past and future’, (Barad, 2007: ix). Thus the process orientation is extended in a nonlinear fashion across dis/continuous timescales.

The following sketch might be illustrative of this move to being *of* the flux – here named *the weather world* (from Ingold, 2008). A) is imaging the perspective that we humans are walking *on* planet earth *in* between earth and heaven. B) Images humans as part of a flux of movements *of* ‘the between’ of the ‘weather world’²

² The model, were presented by John Shotter at the PROS Symposium, in Corfu, June 2011. Ingold (2008) does not use the term ‘of’ the world. Ingold uses the term ‘exhabitant’ and ‘inhabitant’. The reconfiguration was done by Barad herself at the symposium as a suggested rephrasing of Shotter’s implied ‘being in the between’ to ‘being of the between’. I get back to this process-philosophical take on the ‘flux’ in Section 2.6 and elaborate it in diffraction with Baradian quantum theorizing.

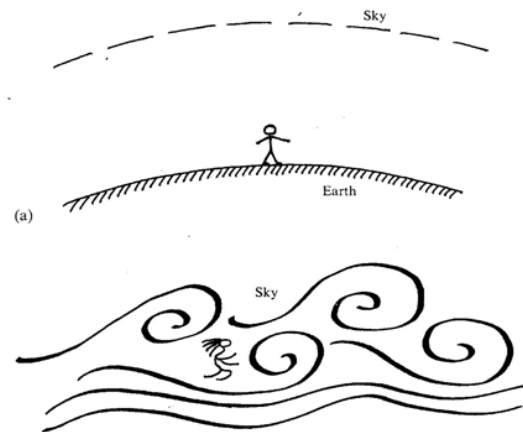


Figure 2.6: Model of being of the flux

The principal interferer of entangled multimodal intra-acting secures that the vital notion of entanglement in 'intra' is not getting lost as a material-discursive phenomenon. The interferer of entangled multimodal intra-acting here extends the process-orienting interferer with a) the complexity of multimodal constituency (across both little d and Capital D modes) and highlight, b) the entangled agential performativity of this enactment in intra-actions of 'the between' of this multiplicity of constituents and avoids that 'it' becomes just another kind of entity as a localized mono-modal-practice only in the now and only within certain time frames.

This leads to the third principal interferer of spacetime-mattering. In using this principal interferer one could be at risk of losing out on the entanglement extended across

time and space by exactly only placing the action as an event only 'there'. The spacetimemattering principal interferer however emphasizes both the 'local' cuts of enacting 'the between' in the materializing of phenomenon by intra-acting meaning-matter-making configuring processes in the now and where time and space are active constituents of this local cut rather than being a fixed axis or a passive container along which the action is merely aligned.

I have found it necessary to cut the onto-epistemology into these three principal interferers or diffractors for the purpose of further diffractions as stated above. Yet it is illusory since cutting them indicates 'them' having an existence as separate movements. This is not the case. 'They' are not independent entities, but entangled intra-acting interferers that as a diffractive grating or apparatus help me agentially cut and thus retool the theoretical inspirations in building the Apparatus of Material Storytelling according to the onto-epistemology of agential realism. The three principal interferers work as a 'ruler of alignment' that secures me to be consistent along the cutting of the five parts analysis of Material Storytelling actions, as well (Book 2). In fact, the three interferes can be taken (to some extent) as a qualifying practice, securing that the Apparatus of Material Storytelling is a consistent framework and in line with the Baradian onto-epistemology of agential realism. However, as mentioned above this latter remark is not the same as saying that there will not be subtle modifications to the Baradian framework, as Apparatus of Material Storytelling in fact enacts such modifications in when diffracting the notion subterranean subtleties of intra-action.

2.3.3 From methodology to apparatus of enacting/analyzing 'the between'

Following Barad it is time to exchange the term the 'methodology of Material Storytelling' with the term the 'Apparatus of Material Storytelling' to mark the shift from an understanding of methods being employed onto an entity (a group or an organization) as intervention, to an understanding of actions as performative enactments of (re) configurations – and in relation to that – to encompass the multitude of constituent parties of (the apparatus of) *enacting 'the between'* of the rework of organizational practices through Material Storytelling. Thus 'Apparatus' denotes the larger material, multimodal arrangement mentioned above; apparatuses are agential cutting mechanisms and as such they produce phenomena, and apparatuses are also phenomena themselves that are then in turn diffracted by an apparatus. So, the larger material arrangement, the apparatus, is inescapable in the onto-epistemological sense. Regardless of whether Material Storytelling focuses on enacting 'the between' in intra-actions of an organizational setting or performing an 'analysis as documentation' of processes of such intra-actions – the 'agential lens' (the diffraction grating) is tuned to the entanglement of meaning-matter intra-actions that work as co-constituent forces in a multitude of modalities spanning materiality, space and time. Co-constituent work that often is 'seen but unnoticed' (as ethnomethodologist would have it) as it goes on beyond the threshold of conscious awareness, and can only be analyzed due to the techno-scientific practice of video recordings, that when played in slow-motion enable us to actually consciously notice the otherwise unnoticed; a point that I will clarify to a greater extent below (in Section 2.6).

Before we begin the diffractive configuration of the apparatus, first some notes on how this phenomenon is to be understood in terms of the well-known theory/practice divide as such and in terms of the theoretical and empirical elaborations of a phenomenon like 'Material Storytelling'.

As we recall, Barad's onto-epistemology is *postrepresentationalism*; it is not discourse as filter for materiality or as producer of the materializing effects of matter. It is inseparability of being and knowing, theory and practice where phenomena always already are material-discursive configurations and 'things' are always already material-discursive congealings of (not only) actions, but *congealings of agency*, (Barad, 2007: 183-184). Therefore Barad's onto-epistemology of agential realism goes beyond both realism and social constructionism and in choosing to follow along this line has consequences for how I can think of qualitative empirical data and how I can think of theory. In short, the usual divide between empirical and theoretical is not in line with Baradian thinking. They are both various kinds of material-discursive enactments and the marks of differences between them are marked as agential cuts and are as such enactments of a certain kind of relationality. Further, an apparatus in the Baradian sense encompasses the range of what is traditionally divided in theory/practice and theoretical/empirical. Therefore the diffraction of the Apparatus of Material Storytelling needs to attend to the entire range. You could argue that the same goes for a methodology. So, why is there the need for a construct like the 'apparatus'? The difference between a methodology and an apparatus is metaphysical: Methodologies are (understood as being) applied (on to a pre-existing entity of practices as for example an organiza-

tion), apparatuses enact these 'entities' and/or are enacted in an agential, non-entity entangled manner.

A vital part of posing Material Storytelling as an apparatus is performing an analysis of the action research process that was a vital part of generating the notion of Material Storytelling and thus also a vital partaker in the configuration of the Apparatus of Material Storytelling. There is as such a twofold focus at work in the enactment of the Apparatus of Material Storytelling; (1) a general 'non-local' focus of configuring a platform (a larger material arrangement) for future work. (2) a 'local' here and now focus on having a platform (a larger material arrangement) for performing an 'analysis as documentation' of the central aspects of the six months action research process at the Youth home of DBC in a manner suitable for posing Material Storytelling's abilities for future use. Therefore, (2) becomes part of enacting (1) and there is consequently (precisely) no clear cut between theoretical and empirical enactment of the apparatus or between local and 'non-local'. Actually, as indeterminacy is always solved locally by the larger material spacetime-matter reconfigurative arrangement, the apparatus, there is really only 'local'. The 'general' non-local platform that is produced in this dissertation is configured in a particular (local) fashion 'now' and the generalization of it becomes local the minute that the apparatus is re-enacted *as* 'a local between' in the appeal of a present whenever and wherever as a spacetime-matter (re)configuration.

Having said this, there is a point in using the notion of 'apparatus' to produce a twofold evidentiary support for the stated claims; theoretical support and empirical support. This evidentiary support is vital for the posing of Material

Storytelling. The scientific practice of producing 'evidentiary support' is related to the representationalist worldview of seeing the world 'as it is outside of oneself', however in my take on producing evidentiary support, it is more a question of accounting for the enactments of Material Storytelling in a manner that is productive in regard to afford others to evaluate the consequentiality of enacting the material-discursive practice of Material Storytelling. By close detailed accounts of the configuring of the apparatus and by close multimodal constituent analysis and an account of what apparatus produced the 'data' (incl. various fold-out-maps with overviews of the process) I meet the demand for a necessary 'evidence' of how I reached my conclusions and notions, to enable the reader to 'look me over the shoulders' so to say, and follow the agential cuts made to perform the 'evidence': It is the apparatus that produced the phenomenon of Material Storytelling. There is therefore a point in naming 'it', 'Apparatus of Material Storytelling' instead of merely Material Storytelling. The point is thereby (also) to highlight that any Material Storytelling always is a phenomenon produced by an apparatus.

2.3.4 Data as apparatus enactments

There are thus certain implications for research based on the Baradian onto-epistemological take on apparatus. In terms of empirical research, the status of 'data' and the possible use of these 'data' need to be rethought (Juelskjær, 2011: 13). This is necessary partly due to the move from the epistemological take on data (prevailing within the linguistic turn) to the onto-epistemological turn towards agential realism. Here data production and data analysis *is a materializing (process of a congealing of agency)* that is made to emerge given the larger material arrangement of the research setting. As

I wrote in the Introduction (Section 1, Book 1), following Iedema (2007), data is Discourse. When I diffract Iedema's and Barad's take on discourse, data is a material-discursive practice and an apparatus produced multimodal phenomenon. 'Analysis as documentation' thus calls for a multimodal archive as a diverse collection of materials that enable the researcher to engage with the specific research problem (Rapey, 2007: 10). As stated, I therefore expand the notion of what counts as 'data' in doing the extensive analysis of video-recordings from workshop-based supervision activities, note-sheets, photos, documents and other materials from the whole action research process and beyond.

The various multimodal 'data' that I have performatively collected (enacted) must be dealt with rather differently, then, than what is the standard within the linguistic turn (i.e. focusing on the verbal accounts), but also differently from what is standard within the material turn; to "*stop listening to the human subjects, just follow the objects*" (Juelskjær, 2011: 13 my translation). Understanding processes of becoming as meaning-matter entanglement inspired by Barad demands a focus on *the enactment of 'the between'*. It is therefore not an option to handle discourse and matter as two separate entities – and just follow one or the other separately. There is neither such thing as merely talking about the world. First of all, languaging is a multimodal affair (e.g. Steffensen, 2009), second of all, languaging is also a mode of constituting given that all practices are always already material-discursive processes of specific agential intra-activities emerging through specific apparatuses. In processes of becoming matter materializes in entangled processes, where the entangled 'parties' such as humans lack an independent existence.

Therefore, an 'analysis' as a performative constituent practice that will 'document' these subtle entangled constituent processes must be tuned to an enactment of the multimodally constituting 'ecology' that produces (orchestrated) those processes³. Importantly, there is no analyzing from a distance. There is only an apparatus of enacting 'the between' (here) called 'analyzing as documentation'. Analyzing as documentation is an intra-active diffraction by the inescapable apparatus of which I am also part. The manner of my partaking I account for in various ways, for example, in 'Outings', one of which follows this part.

2.3.5 Diffracting the apparatus of multimodal constituent analysis as documentation

The Baradian framework is not in itself directly applicable in relation to a close analysis within an empirical setting to study the multimodal constitutive processes of emergent actions in organizational living, (cp. Højgaard and Søndergaard, 2010: 325). Barad's framework is, therefore, not sufficient at the documentary level of supporting the arguments and claims I make regarding the affectability of Material Storytelling towards reworking organizational practices. At the level of close 'analysis as documentation' of the emergent action of organizational transformation, there is thus no precedent 'intra-active' analytical toolbox a.k.a. 'apparatus' available.

3 Regarding methods for doing 'storytelling' empirical analysis /research. David Boje wrote a book (2001) that goes through quite a few of these methods, such as: deconstruction analysis, grand narrative analysis, microstoria analysis, story network analysis, intertextuality analysis, causality analysis, plot analysis and theme analysis. The common denominator for those methods is that they are all discursively oriented.

I therefore need to build this apparatus for the purpose at hand and I have chosen to do so – as stated – through various diffractive readings that will let Barad’s framework interfere with theories and tools from within the field of communication and organization studies. In order for this diffraction to be workable I have as mentioned above the three principal interferers to do the job.

As Højgaard and Søndergaard note, multimodal constituent analysis is not attempting to pass a dogma of including all possible modalities of constituting forces as a ritualized, pre-planned choreography. Rather, the empirical setting should be ‘heard’ in regard to which constituting modes the specific empirical setting ‘invites’ you to take account of (Højgaard and Søndergaard, 2010: 337). The empirical setting of the action research project at DBC enacting Material Storytelling, through ‘the between’ of the three story modes, invites me to encompass a wide range of different constituent modalities in the a multimodal ‘documentation’ of the reworking process at the Youth-home at DBC. The archive listed in Section 3.1 (Book 2) with its wide-ranging kinds of both document-based and video-based ‘data’ constitutes the ‘building blocks’ for this ‘documentation’ to make multimodal account of the three story modes of re-configuring organizational practices; stories of space, stories of bodies and stories of objects. True to the new materialistic (quantum) approach and the Baradian onto-epistemology, this need for ‘multimodal documentation’ is then requiring me to configure an apparatus that – as we recall – is not merely a magnifying lens focusing the readers’ and my attention in a certain way on pre-existing phenomena, but rather

“apparatuses are laborers that help constitute and are integral part of the phenomena being investigated. Furthermore, apparatuses do not merely detect differences that are already in place; rather they contribute to the production and reconfiguring of difference. The failure to take proper account of the role apparatuses play in the production of phenomena seriously compromises the objectivity of the investigation. Accounting for apparatuses means attending to specific practices of differentiating and the marks on bodies they make.” (Barad, 2007: 232).

Thus, I need to attend to the specific practices of – not only the apparatus of the workshop setting at DBC (the material-discursive practice of three story modes) – but the specific practice of the diffractive, agentially cutting, larger material arrangement employed in the ‘multimodal constituent analysis as documentation’ and cutting of both ‘data’ and ‘documentation’. An apparatus which also at the meta-level needs to be consistent with Barad’s conceptual framework of the agential *intra-action* if I am to produce evidentiary support for my claim of the entangled multimodal constituent process of Material Storytelling as intra-active organizational story rework.

Within such a claim the analytical explanatory power lies (as already stated above) in explicating subtle intra-actions of spacetime-mattering and the apparatus must therefore be able to put time, space and matter in play as a ‘quantum-leap-universe’ as a different time-space quality of processes of becoming – as a kind of purely *associative space* (Juelskjær, 2011: 16), that runs next to a Newtonian universe with a chronological timespace coordinate system. Here one would aim for *localization*, as a particular scene that diffracts space-

timemattering of a particular moment in a particular space and at the same time diffracts various temporalities within and across this field of spacetimemattering. Here

“‘beginning’, like all beginnings, is always threaded through with anticipation of where it is going but will never simply reach and of a past that has never come. It is not merely that the future and the past are not ‘there’ and never sit still, but that the present is not simply here-now. Multiple heterogeneous all: past, present and future, not in a relation of linear unfolding, but threaded through one another in a nonlinear enfolding of spacetimemattering, a topology that defies any suggestion of a smooth continuous manifold.” (Barad, 2010: 244)

Such an associative space affords thinking in onto-epistemological apparatuses both theoretically and methodologically and, also, it offers a strategy of analysis, (Juelskjær, 2011: 16). In an empirical analytical ‘report’ of Material Storytelling as well as in the theoretical configuring of this, it calls for a focus on *localization*, as a manner of resolving the perspective of intra-activity in processes of reworking organizational practices. In the specific example concerning the organizational rework at DBC, the localization is given as the physical space of the workshop setting and of the organizational setting of their everyday workplace⁴, the period of time, the mode of story (re)configuration (one of the three story modes), the particular participants, the sequential order of events of workshop based supervisions, and so on. In the case of building theoretical support for the Apparatus of Ma-

terial Storytelling, localization becomes the focus for choice of theories to diffract.

Further, in building (enacting) the evidentiary support that fully accounts for the entanglement of these multimodal intra-actions of spacetimematter re-configurations, I thus must span across not only a localization and here several spacetime components, but also the above mentioned ‘little d’ and ‘Big D’ and handle the paradox associated with the two ‘levels’ of constituent forces also mentioned above with reference to Erickson (2004); How exactly does ‘Big D’ and ‘little d’ intra-relate when two seemingly inconsistent premises stands:

“1) The conduct of talk in social interaction as it occurs in real time is unique, crafted by local social actors for the specific situation of its use in the moment of its uttering, and 2) the conduct of talk in local social interaction is profoundly influenced by processes that occur beyond the temporal and spatial horizon of the immediate occasion of interaction”. (Erickson, 2004: viii).

‘Big D’ and ‘little d’ exist simultaneously as the above two approaches to conduct of interaction suggests. It is this apparent *paradox* that I claim Barad’s quantum inspired theorizing offers a unique ‘solution’ for. The paradox dissolves when approached from the standpoint of the onto-epistemology of agential realism, because they can here be accepted as complementary, mutually constituent parties in the Bohrian/Baradian sense of entangled relationality. As in the quote above with Barad, stating them as threaded through one-another.

⁴ These two localizations converge in the end of the action research project (cp. Analysis Part 5, Book 2).

Francois Cooren (2010) has recently suggested the notion 'Ventriloquism' to handle the task of the paradox of big 'D' and little 'd'. By using the notion of the dynamic of the ventriloquist and his puppet, Cooren manages, I argue, to capture the complex living intra-play of constituent modes in (what he denotes as) *upstream* (Big D) and *downstream* (little d) and thus provides a tool for capturing the entanglement of these varied multimodally constituting forces, and analyze them within a multimodal framework of video recordings of turn-by-turn situated action.

Cooren is inspired by Latourian ANT actor and actant thinking. When this vocabulary is diffracted with the Baradian onto-epistemological take 'the upstream' is defining what can happen 'downstream', as Barad's definition of discourse, as we recall it, is not language as in the spoken word or speech-acts, but discourse is what 'decides' what is meaningful to say. Downstream then accounts for the here-and-now local solving of indeterminacy from the local now's 'field of possibilities' understood as a 'dynamic and contingent multiplicity', (Barad, 2007: 146-147) that needs to be understood as the local spacetime-matter configuration. Thus, the affordances (in the appeal of the present) of this 'now' is the 'between' of constituent forces of this local now.

The specific intra-relation to 'Big D' in this local solving of indeterminacy is then enacted as the intra-relating of the puppet and the ventriloquist; the puppet aka the human participant or individual is seemingly running the show (in a multimodal 'little d' manner), however it is the ventriloquist who is 'really' doing the talking or rather the entire multimodal participatory framework of the puppet. The ventriloquist is thus enacting the 'Big D'

issues on the 'little d' platform of enactment; through the multimodal, material affordances of the material-discursive practice of that enacted 'now'.

As this 'here-and-now' platform is where the indeterminacy gets solved and potentially gets (re)configured as changed relationalities in subterranean subtleties of intra-action, the power-dynamic of this 'between' of the multifold of constitutive modes, *is* 'little d' territory enacting and reconfiguring 'Big D' issues. Barad's notion of entangled genealogy of becoming is thereby (also) to be found in this intra-play of 'Big D' and 'little d' or intraplay of ventriloquist and the puppet. However, in a Baradian understanding and for the purpose of Material Storytelling the notion of the ventriloquist and the puppet reconfigures (as less human-centered) as the entire material-discursive apparatus enacting a 'the between' of the local now.

To account for this enactment of this complex 'between' of the apparatus of the material-discursive practice of 'little d' and 'Big D' intra-relating in the now, I go back to Scollon and Scollon's (2004) model for social action. As stated, Scollon and Scollon (2004) provide a model and a vocabulary for analyzing emergent action. They use, as we recall, the notions *circumference* and *discourse in place, interaction-order* and *historical bodies* (see figure 2.2 in Section 2.1.1) for capturing the entangled genealogy of becoming. I find it useful to diffract the setup of their model with the above elaborations. Diffracting these notions renders me with a model of spacetime-matter (re)configuration.

2.3.6 Intra-active multimodal spacetime-matter (re)configuration

The model below is presented at this point as a memory-device of what is to come in the following (ongoing) theoretical and empirical diffraction. The reconfigured model is thus the outcome of the diffraction between Barad's terminology and Scollon's nexus model (holding implicit Cooren's ventriloquist's intra-play of little 'd' and big 'D') and it encapsulates the full range of an apparatus of the enactment of a configuration of any material-discursive practice. It is itself a diffraction grating; a material arrangement holding diffractive agency of the three principal interferers from above; nonlinear process orientation, entangled, multimodal intra-action and spacetime-mattering.

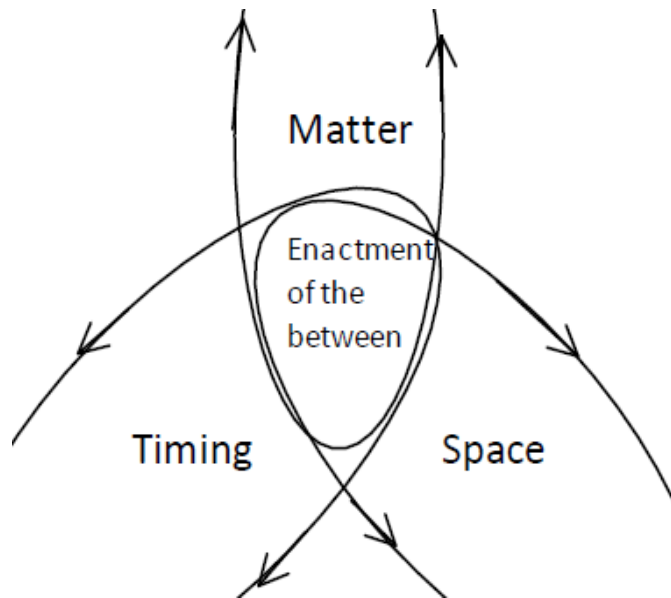


Figure 2.7: Model of spacetime-matter (re)configuration

As mentioned earlier, Scollon's use the notion 'semiotic cycles' to capture what they call the re-semiotizational (cp. Iedema, 2003) element of 'following from before' and 'producing-a-next' depicting that any emergent action holds a 'next'. A next is the iteratively enacted field of possibility in Baradian terms that emerges from the between apparatus of the 'now'. The BNN (Before, Now, Next) notion is then the smallest unit of any iterative configurative action and the possibility of change – for changed relationalities – is integral to the moment-to-moment cuts enacted, as this is where in/exclusions are determined. Semiotic cycles that emerges are in diffraction with Barad (re)configurations of phenomena; slight alterations where differences matter. The phenomenon is the emergent action that has (re)configured out of the diffractive intraplay of the various (kinds of) semiotic cycles that was constituent partakers of 'the between' of solving the indeterminacy. Importantly, as entities do not pre-exist their intra-actions the Scollon's model (configuration) needs to be reconfigured so that (literally) nothing enters into 'the between'. Rather we have 'entities emerging from the between'. Where as this is rather difficult to comprehend, we for the moment need to bear the 'unthinkable' – that, which we cannot 'wrap our minds around'. We will return in Section 2.6 to deal with this 'no-where' and 'no-thing' level, which I coin as *subterranean subtleties* of intra-action. For the working purpose at hand of producing a suitable configurative memory-device for the diffraction to come, that enacts a diffraction of little 'd' and big 'D' multimodal constituents and Barad's notion of intra-action, I have chosen to 're-configure' Scollon's concept and model in the following way:

The semiotic cycle of *Discourse in place* is (re)configured as *spatial discourse* and – depicted in the model as *space* – as my manner of avoiding both the metaphysical standpoint of ‘in’ and the indication of discursive hegemony over matter, as the material-discursive relationality of materiality and discourse is slightly changed.

The notion *Historical bodies* is a very meaningful and ‘concise’ way of coining both the relationality of the continuous entangled genealogy of becoming – the ‘following from before’ aspect, as well as the bodily aspect of carrying the memories and experiences of the past.

The Scollon’s recognizes the human participants as consisting of three separate aspects: sociocultural-psychological knowledge, the social actor or agent, and the physical body in space and time, (Scollon and Scollon, 2003: 15). Whether or not a participant consciously undertakes any particular action, the action will ‘give off’ a personal identity and a position in the social world that is available to others to see and to respond to. In this understanding is not possible to ‘not-act’. Partaking – (being part of the world as Barad would have it) – therefore involves “*indexing our own habitus on the one hand and the socio-political and sociocultural structures among which we act on the other*” (2003: 15).

The Scollon’s see humans in the world as:

”bundles of histories, of language, of discourse, and experiences of social and political performances, as juggling multiple social roles and performances, largely unconsciously, and as being physical bodies which carry

and express genetic, social, and momentary dispositions which are never possible to fully occlude behind those socially constructed performances” (2003:15-16).

For the Scollon’s the semiotic cycle of historical bodies imply ‘living human bodies’. I would however like the notion to imply also nonhuman bodies to *matter*, first of all, and second of all, I would like to avoid placing memory within the objects, as memory when diffracted with Baradian terminology emerges from the enacted between; as a phenomena of diffraction. Therefore I propose the notion *mattering bodies* and in the model enacted as *matter*.

The semiotic cycle of *Interaction order* is (re)configured into *intra-action order* – and in the model enacted as *timing* – to highlight the entangled nonlinear orchestration of ordered (coherent) action.

The middle of the model is depicted as *enactment of ‘the between’* to highlight the complex multimodal dynamic of solving indeterminacy in (the subterranean subtleties of) intra-actions. The material-discursive intra-act aka ‘the between’ is thus captured in the model as the intra-section of agential partakers in the dis/continuous becoming of the process of congealing of action; spacetime-matter configuration. So, ‘the between’ intra-act of space (spatial discourse), time (intra-action order) and matter (mattering bodies) understood as mutually constituent forces, are the here-and-now BNN moment of the local solving of the indeterminacy. The phenomenon (semiotic cycle) that is enacted is in that sense ontological indeterminacy of agential separability.

Also the three story-configuring-modalities are thereby as material-discursive (re)configuring practices related to 'the between' enactment as conjoint material-discursive practices of the diffractive methodology of the Apparatus of Material Storytelling (cp. Section 2.6).

In diffracting this model I am once again confronted with the difficulties and challenges of conveying these intra-act entanglements of non-pre-intra-action-existing-entities as well as between-agencies mentioned above in regard to the two 'de-configurative' moves that one needs to make in order to follow Baradian agential realist thinking. Attempting a model to afford the explanatory power of explicating subtle intra-actions of spacetime-mattering the model of the apparatus must be able to put time, space and matter in play as a 'quantum-leap-universe' as a different time-space quality of processes of becoming – as a kind of purely *associative space* (Juelskjær, 2011: 16) that runs next to a Newtonian universe with a chronological timespace coordinate system.

Further, as mentioned above, one would aim for *localization*, as a particular scene that diffracts spacetime-mattering of a particular moment in a particular space and at the same time diffracts various temporalities within and across this field of spacetime-mattering. The Scollons' model affords this localization as a coming together of three semiotic cycles. However, in a Baradian 'quantum-leap-universe' the semiotic cycles are not to be understood as pre-existing entities, but diffractive waves of 'no-where', as mentioned above. But once 'they' are attempted drawn as parts of and placed 'within' a model, 'they' appear as separate entities. These constraints or liabilities aside, I find it useful to have this configuration as a

reworking agential memory device to bear in our 'mind's eye' throughout the discussions and diffraction to follow.

The notion of (quantum) entanglement implies that the three material story modes are only distinct in a relational sense as: "*agencies are only distinct in relation to their mutual entanglement; they don't exist as individual elements*" (Barad, 2007: 33). You could argue that it is strange to name the above constitutive agencies as 'stories of x' as it implies them having an independent existence - and story-outcome - which is not the case following Barad. They are all intra-active material-discursive practices. However, the three material story modes are (as parts of a larger material arrangement of a methodology of Material Storytelling) themselves reconfiguring agencies; diffractive methodologies, that produce a specific focus and motor for intraplay in the workshop setting. At one level they are all active as an unavoidable aspect of every action as bodies, spaces and artifacts in the spacetime-mattering. At another level one of them is foregrounded as the focus of attention in having been chosen as the mode of enactment of the day. As the specific site or motor of engagement as either a Sandplay, Bodynamic or Fengshui-inspired material-discursive practice.

So, although it would be tempting to try to place the three configurative story modes of Material Storytelling within the framework of the model, it would be misleading to do so as any of the three modes of story configuration is a material-discursive practice. For example 'Stories of Space'⁵

⁵ Stories of is intended as a hint to the Baradian being of the world. In Material Storytelling stories emerge of three aspects of the world as

one would be tempted to place within ‘Spatial discourse’. But this story mode, inspired by the practice of Feng

Shui is, when enacted as configurative agency of a given local event, a material-discursive practice involving all the agential aspects of ‘mattering bodies’, ‘spatial discourse’ and ‘intra-action order’. I will return to the (more specific) material-discursive practices of the three story modes of Material Storytelling in more detail in Section 3.2, Book 2.

2.3.7 Configuring an Apparatus in two parts

As mentioned above, the configuring of the Apparatus of Material Storytelling is in this dissertation enacted in two parts, one ‘general’, and one ‘local-here-and-now-for-the-specific-purpose-at-hand’, as mentioned above. They are related in the sense that the first part will always need to be specifically enacted for the purpose at hand and as such be locally determined aka enacted.

Part 1

In this part (Section 2, Book 1), I continue with the construction of the larger material arrangement of the ‘Apparatus of Material Storytelling’ that constitutes the ‘general’ phenomenon of reworking organizational practices. As such I continue the work embarked upon in the chapter on Barad’s onto-epistemology above. I do so by diffracting the Baradian onto-epistemology with Boje’s (2008, 2010, 2011a and b) and colleagues’ work on living storytelling, which implies mutual negotiation, emergence, plurality, flux, and so on. I thereby frame the material-discursive intra-actions as complex storytelling events. Further, a subsequent diffraction of Barad and Boje’s theorizing with the Bergsonian process philosophical multiplicity take on memory and time as ‘lived duration’, which I emphasize to specifically entail the more

subtle pre-individual, pre-entity and pre-verbal (in/determinacy) dynamics of reworking organizational practices in material-discursive intra-actions. Emphasizing a (qualitative multiplicity take in the) Bergsonian notion of memory thus enables me a ‘turn-to-affect’, that helps me explicate an ‘affect-dimension’ inherent in the intra-active dynamic of ‘entangled becoming’ that – when diffracted with the multimodality approach to living, dis/continuous becoming - affords me to coin the notion *vital intra-actions*. Part 1, Book 1 concludes with (re-)defining Material Storytelling and the three material story modes (mentioned in the introduction). In the end of this section I thus reach a general theoretical, methodological and analytical (-strategical) account of the Apparatus of Material Storytelling and how this apparatus reworks organizational practices as spacetime-matter (re)configurations. These diffractive elaborations are as a whole captured in a model of Material Storytelling as spacetime-matter (re)configuration that then serves as a general memory-device for the Apparatus of Material Storytelling. What is accomplished in Section 2, thus qualify ‘the between’ intra-actions and the ‘no-where’/‘no-thing’ aspect of emergent becoming. In that sense the contribution of configuring the Apparatus of Material Storytelling is that of thinking through one another the subtleties of dis/continuous ‘between intra-action’ with the subtleties acknowledged within communications studies as the orchestration of ongoing coherent actions and the complexity of the nonlinearity of organizational living story practices.

Part 2

In this part (Section 3, Book 2), an analysis is performed specifically aimed at documenting Material Storytelling enacted as a specific organizational change process in the action research project conducted at DBC. Thus Section 3 provides a specific analytical framework for ‘documenting’ central aspects of the process of reworking organizational practices that took place at DBC, based on the model ‘Apparatus of Material Storytelling’ as ‘space-time-matter (re)configuration’ from Section 2. This two-part apparatus might incline an understanding of a two-folded apparatus; one theoretical and one

larger material arrangement of configuration; space, (living) bodies and artifacts.

empirical. This is true as one level. However it is not so much about a two-fold apparatus – as in a theoretical and analytical – rather, Book 2 it is about drawing the implications for analytical documentation of the phenomena of Material Storytelling produced by an apparatus. It is a reversed process, and yet not while constituting this ‘documentation’ is enacting ‘the between’ and the ‘data’ emerging from this ‘enacted between’ are concrete examples of how such an enactment of ‘the between’ in particular/local circumstances can produce organizational change. Part 2 then ‘enact *a* between’ as documentation in light of the aim of posing Material Storytelling as a research-based methodology.

This production of the two-fold apparatus as two books of theoretical and empirical evidentiary support for stated claims, will then explicate the crucial point made by Barad that apparatuses produce the phenomenon they claim to ‘only’ describe. In my ‘documentation’ I recollect a story (in the appeal of the present), in a manner that supports the posing of Material Storytelling. These two parts thus entail two ‘towards-turning-actions’ that *agentially cut* the analytical apparatus or ‘agential lens’, towards a framework focusing on ‘analyzing as documentation’ on the intra-active organizational living story dynamics of material (artifactual, bodily, and spatial) story practices in relation to understanding and dealing with processes of organizational change as spacetime-matter (re)configuration. This is the main act that produces the *phenomenon* in question; organizational practice rework brought on by (and diffracted through) the material-discursive practice of Material Storytelling. *Posing* is thus *producing* through an agential cutting of the process in a certain way with the inevitable exclusion of other ways entailed in it as *exteriority within*. The outside is working its agency as the complementary, excluded ‘partner’ within the phenomenon (see above ‘exteriority within phenomena’). This means that the agential cuts enacted affords me to account for certain ‘things’ and not for others. As Barad states:

“discursive practices are specific material (re)configuring’s of the world through which the determination of boundaries, properties, and mean-

ings is differentially enacted. That is, discursive practices are ongoing agential intra-actions of the world through which specific determinacies (along with complementary indeterminacies) are enacted within the phenomena produced” (Barad, 2007: 148-149).

As stated, also the following part will be broken up by ‘breathing spaces’; of the intra-acting parts of configuring the Apparatus of Material Storytelling. Those breathing spaces are then ‘counterbalancing’ or ‘complementary’ parts of the hybrid writing process of this production. (cp. Section 1). The next one of these breathing spaces is an ‘Outing’ with a short story of the dis/continuous reworking of my research practice during the process of the PhD project and it is given below. This short story is not to be understood as a reflexive endeavor but rather as a diffractive one of acknowledging my own partaking of the world from within (cp. ‘Diffraction as methodology’ above).

...Note that socialconstructionism and ethnomethodology make a similar claim about the research objects being produced by the research methodology. However Barad’s onto-epistemological, material-discursive take on phenomena differs substantially as it claims that the iterative, enfolding of the material world literally emerges in intra-action and phenomena are always already onto-semantic enactments of agential separability.

Notes on the reworking of my research practices

Instead of continuing the (process of) framing the process that I was engaged in at DBC as action research (which would require me to reflect or to take a reflexive stance on the endeavor), I am here performing a different, diffractive move in choosing Barad's agential realism. A move that is consequential for how I 'cut' the apparatus and this move is thus having agency by working back at me as the 'cutter' - leaving it questionable who is actually doing the cutting? Much like Barad states in vignette 3 on author and book as writing and rewriting each other. My research practice is being re-written in this very act of re-configuring the (now agential) lens to look at the process. 'What' was happening 'back then' and what 'it' was and 'what' 'I' and 'they' were 'back then' all changes in the act of (re)configuring the theoretical and analytical framework (- not just when I am looking through the agential lens of a finished apparatus). The apparatus-re-configuring-process has

never stopped and it continues to work its agency as constituent.

As an example, my research practice has gradually changed from being an action researcher towards being a material storyteller; from identifying with being 'one who studies interpersonal communication' towards 'one who enacts processes of meaning-matter-intra-action' - 'one who enacts the between'. It has come on gradually. However, I am able to trace this process of reworking my research practice by various instances of actions of changes 'from-to' of the material-discursive practices conducted at DBC.

Thus, that 'matter matters' gradually dawned on me and by the end of the second month of the action research process at DBC I changed the 'data-collection' (configuring) method (and thus my material-discursive practice) by adding a third camera to the setting; a camera facing and recording the actions going on down in the sandbox between participant's hands, the sand and the little figures. I had by then realized that something interesting was going in the entangled actions of the human participants' bodily configuration and the materiality of the participat-

ing method of Sandplay. Before that I had mainly focused on the three 'intervention methods' as 1) means of producing a verbal dialogue in a different manner and with a different content, 2) means to embody - to remember - in a different, more profound way than by words alone. (cp. embodied-learning-methods) Here the actions in the sandbox between hands, figures, sandbox and words were more than vital means, rather, they were constituent actions with change potential; agency to transform; trans-materials, (Cp. Taguchi, 2010).

From the 24th of November until the 'crucial moment' of December 10th - a period of two weeks in the Fall 2008, my 'lens' deconfigured from focusing on what was said and realized verbally and consciously and the layering and integration of these realisations bodily by use of various 'embodied-learning-methods' to focusing on the practicalities of materialization as process, that is, framing and procedural ways of doing as the way to reform, transform and change what was done on an everyday basis to the process of (re)configuration. The following remark I made within the crucial moment December

10th explicates this 'turn': "This is the reason for why I have really come to notice the importance of how we adjust" (Appendix x, Transcript 1 line: 205-208)

Likewise, attempting to configure the analytical apparatus by use of tools generated within one paradigmatic take (that my paradigm-of-choice agential realism is struggling its way out of) is not so much a production as it is the act of de-configuring the toolbox of my research practice. I am attempting to bridge across a split in my dawning research practice of who I am and what I want to do and what I am used to do. I am doing the risky business of building a bridge across two inconsistent paradigms. Transformation is in progress in the dis/continuing process of becoming – also for me. Fragments of the old practice are living side by side with the new practice in formation. Like it was the case at DBC. In the old practice this would in a habit of thought be storied this as a bridging endeavor of making the pieces fit together and also making continuity in lack of an acceptance of dis/continuity.

In the new practice this is storied differently; as disruptive dis/joint processes of moving and becoming that attain from the concept of 'bridge' altogether. There is no real bridge as in the connecting of two entities; two paradigms. The act of bridging itself is not a 'connecting' act, but a transforming, deconstructive, deconfigurative act 'from within'. A diffractive marking of differences, an act of different interference; the onto-epistemological 'wave' movement interfering with the (tool) practices of multimodality and materiality research and in doing so changing these practices from within. As such it is

a process of re-tooling the apparatus – not building a new one from 'the beginning'. Taguchi uses the term "hybrid writing" to point out (Taguchi, 2010: 139) that the traces of the old writing practices are noticeable in the text. For every time I read the texts it changes once more. Every little editing, I – or my supervisors – are doing, changes the writing and me from within this entangled state. The revised text works back at me, rewriting me. This multiplex of various 'voices' is what makes the writing living. Paradoxically, the ideal of academic writing for a solid 'consistent' narrative without any 'queer' inconsistent fragments is as such a 'dead' text, a non-becoming. It is a neatly ordered, 'disentangled' text or rather ideal, just as illusory as the scientifically representationalist foothold it is drawing on. There would not be a process of dis/continuous becoming if the enactment constructing this 'becoming' was not itself becoming; as in 'on the way', fluent, emerging, fragmented – without any clear beginning or end – that is, a material-discursive, dis/continuous practice. This is what Material Storytelling in itself attempts to pose. At a meta-level an onto-epistemological take on Material Storytelling becomes consistent in letting various voices live side by side. Yet, I struggle for consistency and continuity; an old habit of mind...

After having at this point engaged with the diffractive methodology and agentially cut three principal interferers as diffractive gratings, and let them diffract a model of multimodal, intra-active spacetime-mattering in a diffractive reading with ethnomethodologically inspired multimodal interaction analytical methods, I am now ready to link the notion of agential multimodal intra-actions of material-discursive practices to the realm of organizational living by further rounds of diffractive reading. Here the above model will serve as memory-device for diffracting material-discursive practices as material-story practice and through that account for organizational change and becoming as reworking organizational practices.

This renders me with three intra-related concepts: organization, memory, and change. These will be elaborated below in a diffractive, nonlinear manner as part of diffracting the terminology of (the Apparatus of) Material Storytelling as multimodally intra-actively storied re-configurations of spacetime-matter.

In short, what will follow is a diffractively enacted (re) configuration, of the Bojean take on storytelling as *the preferred sensemaking currency of organizations*, where stories are living, never whole and a very localized 'battlegrounds' for linguistically carried power struggles. This story take becomes in diffraction material-discursive practices of a larger material arrangement of spacetime-matter configuration, where the battleground is (re)configured as 'the between' of intra-related material-discursive agential forces that enacts a changed relationality between language and matter, verbal and non-verbal, implicit and explicit ways of knowing rendering

the matters of the worlds its due as agential partaker in organizational story practices. The notion of practices as storied memories is withheld from the Bojean framework as the parameter for talking about processes of becoming, however 'practice' is here diffractively de-configured from the Baradian posthuman performativity standpoint (see Barad chapters above, Sections 2.1 and 2.2.) and becomes a material-story practice that as an apparatus produced phenomenon is the enactment of the complex local 'between' of spacetime-mattering.

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Next – with the above considerations in mind we will embark on elaborating the domain of storytelling within (critical) organization studies as the manner of diffracting the notion ‘Material Storytelling’ and frame an Apparatus of Material Storytelling based on Baradian onto-epistemology.

Below is a summary of the three approaches to the rework of organizational practices that will be touched upon in the following diffraction of Material Storytelling over the next two sections 2.4 and 2.5:

Narrative rework of organizational practices	Story rework of organizational practices	Material Story rework of organizational practices
Being-in-the-world	Being-in-discourse	Being-of-the-world
Interpretive	Resituative	Deconfigurative
Reflective	Reflexive	Diffractive
Ethics of Otherness	Ethics of inquiring	Ethics of mattering
Humanist	Posthuman humanist	Posthuman

Table 2.1: Three approaches to organizational practice rework

What these notions entail will be clearer as we work through the (re)configuring of Apparatus of Material Storytelling.

However, to prepare our human-apparatus for this endeavor, let’s take a break where we reconnect to the worldly matters of the world of organizing.



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Breathing space

General instructions for doing the body-based pedagogy exercises¹

(Always do the exercises in loose fit clothing and without shoes and within calm surroundings. Choose the exercises that you feel comfortable doing and that give you a sense of well-being and enhances your energy level. Listen to your body signals and always refrain from doing exercises that cause you to feel pain or discomfort of any kind. Let it be a guiding principle to always aim at finding 'the right dose'², in terms of both the kind of exercise and the extent of the specific exercise. Note that the 'right dose' varies from time to time depending on the whole situation when you practice the exercise).

¹ The present and following exercises are a sample of the exercises used in the action research project after a one-year study/training at Bodynamic International as well as several subsequent courses at MOAIKU. The exercises are rendered here in the dissertation with permission from one of the founders of the Bodynamic System Merete Holm Brantbjerg. (who has later founded MOAIKU). For further introduction to the body-based pedagogy as it was used in the action research project, see Section 3.1, Book 2. See also Brantbjerg and Ollars (2006), Brantbjerg, 2010 and www.MOIKU.dk

² The notion of 'the right dose' is specifically developed by Merete Holm Brantbjerg as a key notion in her 'resource-oriented-skill-training' (at MOAIKU), which is a specific refined variant of the body-based-pedagogy principle used and developed through the Bodynamic System

Coherence and mobility exercise

- Make circular movements all the way up through all the joints of the body from your ankles and your knees to your hips, neck and jaws
- Take a moment where all joints are moving at the same time
- Visualize how your joints are being 'oiled' through the movement to increase their mobility
- Notice how the whole body is a unit and how the joints are connected
- What do you feel¹? Where do you feel it?

¹ Importantly, there are no 'right' answers. It is highly personal which feelings and sensations arise from these exercises. Again, the same exercise may induce a variety of feelings and sensations from time to time.



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Diffracting a 24 Material Storytelling approach to organizational living (and) change

(In this section the notion of Material Storytelling is going to be accomplished by a diffractive reading of the take on multimodal, intra-active spacetime-mattering based on Karen Barad's posthumanist performative account of an onto-epistemology of intra-action and David Boje's storytelling theory of living story which in turn is a diffraction of the Bergsonian notion lived duration (entailed in Sartre's Temporal multiplicity), and which enacts a poststructural performative take on narration based on qualitative multiplicity. As a setoff for this diffraction I will present the basics of David Boje's storytelling theory in order to clarify the notion of storytelling and its implied multimodality in regard to Material Storytelling. The locally cut (in)determinacy, producing the multimodally intra-active spacetime-mattering (cp. model in figure 2.7, Section 2.3.6) is then determined as a material-discursive story practice rendering discursive meaning-making a material implement as well as an intra-active dynamic of an 'enacted between'. Further, the dynamic of local moment-to-moment solving of the indeterminacy is rendered a multimodal storying order in solving indeterminacy as subterranean subtleties of vital intra-actions.)



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2.4.1 From narrative to storytelling

David M. Boje's (1991, 2001, 2004, 2008, 2011a og b) major contribution has been to invent a new way of enacting a *storytelling approach* in organization and communication studies that differs from the prevailing *narrative approach*. Two of the most significant inventions are caught in the terms *antenarrative* and *living story*. These terms challenge the (traditional) concept of narrative, which according to Boje and colleagues dominates the organization and management literature on narrative and storytelling and further dominates the prevailing approaches to organizational development and management strategies (Boje, 2008; Jørgensen and Boje, 2010). In Boje's most recent work (forthcoming: 2-4) he positions himself in respect to three

other scholars within the so-called *domain of Storytelling*. He refers here to Czarniawska (1997, 1999, 2004), Weick (1995), and Gabriel (2000, 2004, 2008, 2011). What all four of them (including himself), according to Boje, are concerned with are the crucial differences between narrative and story. The primary difference between the scholars' theorizing on these two concepts is in fact how narrative is defined (cut) in relationship to story (and for Boje also in regard to antenarrative). I shall later return to the consequences of this relationality of the determining practice for the Bojean story framework or apparatus in more detail (see also brown comment below). Boje gives the following resume of what he denotes as the domain of storytelling and the various cuttings of narrative/story it entails:

“For Czarniawska and Weick, narrative-emplotment controls the fabula of story-content, in ways consonant with Aristotle (350 BCE) and Russian Formalism. For Gabriel, who has some definite Aristotelian notions, the relationship is reverse: story is something more than narrative-plot; it is performatively-expressive, and yet must be whole communicative performance. This is why Gabriel (2000) raises the anemic objection to my work on ‘terse’ fragments storytelling. My own work looks at storytelling holographically as a dance between retrospective-narrative-sensemaking, the immediate presentness of living-story-relationality, and the prospective-antenarrative-sense-shaping ‘storytelling organizations’ (Boje, 1991a, b, 1994, 1995, 2001, 2008a, 2008b, 2011a, b, c, d)” (Boje, forthcoming: 2).

The model below is a configuration of the tripart arrangement that Boje operates with in his story framework up until 2011. It is this model and his subsequent conceptualization of dynamics between narrative, antenarrative and living story, which will be diffracted with Barad’s work to accomplish the Apparatus of Material Storytelling.

“

It is noteworthy that whether being narrative or story, 1) ‘they’ are both ‘cut’ as practices concerned with manners of discursive linguistic making sense of experiences and thus ‘cut’ as an epistemological endeavour. And 2) story and narrative in this cutting-together-apart-dynamic are entangled as mutual constituent (complementary) parties rendering (living) story specific characteristics that are im/possible only due to the counterpart in narrative. Below I will seek to point out that as this relationship of mutual consistency as well as the epistemic take, is upheld throughout Boje’s work he ends up having troubles, when he tries to take a Baradian ‘quantum leap’ with his theoretical framework. I claim that Boje fails to take the consequences of the Baradian onto-implement and the implication therein to discard of mere epistemic approaches to practices of knowing as being and becoming. Troubles that I both ways seek to avoid by cutting Material Storytelling differently.



Figure 2.8: Configuration of Boje’s tripart storytelling framework

As the above quote by Boje implies, narrative has its roots in both Aristotle's (350 BCE) classical Greek model of a linear narrative entailing emplotment (Boje, 2011: 13) and Russian Formalism and has been mainly concerned with presenting events (in organizations) as following a linear logic of beginning, middle and end; in short BME-narratives (Boje, 2008: 9). Narrative is thereby often understood as a backward-looking practice as a retrospective sense-making or interpretation of what happened (narrative is thus an interpretive approach, cp. below) Boje's early work also focused on storytelling as retrospective *sensemaking*. However, while he acknowledged this aspect, his empirical-findings let him to claim that stories were tersely told, never whole and being told differently across contexts (Boje, 1991). This was based on empirical studies of real-life-story practices in an office-supply-firm. He thus started challenging the standard take on how narrative and storytelling was being practiced. He coined storytelling as the "*preferred sensemaking currency*" of organizational living (Boje, 1991: 106) and developed a vocabulary up against the dominant take on sensemaking (the BME narrative), as the tripart arrangement depicted in the model above (figure 2.8). Boje here, in co-work with various colleagues, (e.g. Cunliffe, Luhman and Boje, 2004, Boje and Durant, 2006, Jørgensen and Boje, 2010) thus developed a different take on narrative research that would 'free' storytelling practices from being 'stuck' in a such a general narrative of BME linearity (Boje and Durant, 2006) in a manner that would at the same time enhance the complexity of the story practice and - from a reflexivity standpoint - include the storytelling research practice as part of that complexity, (as ethics of answerability, e.g. Jørgensen and Boje, 2010). The main inspirational sources for this (re)configuration of narrative research were Sartre (Temporal multiplicity), Derrida (Deconstruction) and Bakhtin (Heteroglossia). (What these notions mean will be elaborated below).

Entailed in this (re)configuration of narrative research is (a poststructural critical approach of) an enactment of story as memory or memory collectives of organizations, where memory is conceptualized in regard to time as temporal multiplicity, and in regard to processes of becoming as language driven story rework, and where resituating of hegemonies play an important liberating role in the reworking of organizational practices. The inter-relational link between memory, change and organization is then related to this tripart story arrangement, which makes the linguistically driven meaning-making practices agential and accountable for the process of becoming, and the heritage to the linguistic turn is thus evident. Over the course of this section this inter-relationality of memory, change, and organization is reconfigured as onto-semantically driven intra-relational agential material-discursive practices accountable for the reworking of organizational practices and coined as Material Storytelling.

2.4.2 Narrative temporality

One of the Bojean attempts on reworking narrative research practice was Cunliffe, Luhman and Boje (2004), who coined the new take *Narrative Temporality (NT)*. I will go in to depth with this 'determining act' since it is suitable for explicating the presumptions (founding differences according to Barad) on which the tripart story arrangement of narrative past, living story presentness and antenarrative futurity has been cut. As mentioned earlier, it is at this 'level' of presuppositions that the diffractive reading is best conducted. The ontological indeterminacy of agential separability/determinacy is revealed in the boundary-making practices of the enacted differences. In the words of the authors NT was pursuing:

“how alternative presuppositions about time can lead to different narrative ways of researching and theorizing organizational life. Based on two amendments to Paul Ricoeur’s work in Time and Narrative, we re-story narrative research in organizations as Narrative Temporality (NT). Our amendments draw upon the temporality perspective of Jean-Paul Sartre in order to reframe narrative research in organizations as a fluid, dynamic, yet rigorous process open to the interpretations (negotiated) of its many participants (polyphonic) and situated in the context and point of enactment (synchronic). We believe an approach to narrative organizational research grounded in NT can open up new ways of thinking about experience and sense-making, and help us take reflexive responsibility for our research.” (Cunliffe, Luhman and Boje, 2004: 261)

Thus what they offer is an alternative way of cutting narrative research situated in specific assumptions about the lived experience of time. A ‘timemattering’ you could say and they here at one and the same time pay respect to Ricoeur’s circle of the conjoint of time and narrative as well as they reconfigures it to encompass a larger degree of complexity of the storytelling act. As stated above, they call this new way of thinking about narrative research ‘Narrative Temporality’. The name itself gives a hint to the complex heritage of the notion from both Ricoeur and Sartre. We get back to this entangled genealogy below.

The two amendments, which NT contributed to in taking a *story turn* in narrative research, are amendments that, as stated, more specifically retool (reconfigures) Ricoeur’s *mimetic circle* that has come to heavily influence contemporary work on narrative, since Ricoeur’s book ‘Time and Narrative’ in 1984. As mentioned in the quote above the amendments emphasize 1) synchronic, performative enactments in the processes of 2) negotiated polyphonic participation. The idea is to take ‘reflexive responsibility’ of research and

theorizing (on) new ways of ‘thinking about’ experiences and sensemaking. The idea is epistemologically driven and in line with the linguistic turn as already stated. It is also an ‘at a distance’ endeavor, which enacts a cut between thinking and doing; between meaning-making and world-making. In the words of Barad reflexivity is glancing back at oneself from a distance as a self-referential endeavor – a ‘mirroring of mirroring’ and a methodological tool of (reproducing) representationalism, (Barad, 2007: 87-88). In the following re-tooling or (re)configuration of storytelling to enact Material Storytelling, it is already clear that this reflexive element needs to be rethought.

However, this ‘quest’ of narrative temporality (NT) is, as I see it, part of the entangled genealogy of the two main concepts of Boje’s theorizing (living story and antenarrative) that I will use. I will therefore dwell a bit more on the amendments to the work on Ricoeur in Boje and colleagues’ work on re-storying (as in re-configuring) narrative research, because these amendments clarify both the agential cuts of this (re)configuration of narrative research and (thereby) some of the important presumptions of Boje’s significant theoretical contributions. Presumptions, that I ‘activate’ in the diffraction of Material Storytelling in the following three ways: 1) the presumptions enact a performativity, nonlinearity, multiplicity and synchronicity that diffracts ‘smoothly’ with the Baradian onto-epistemology; 2) the presumptions of polyphonic participation implicitly point to the apparently discarded (due to the linguistic turn) standpoint between storytelling theory and multimodal interaction research regarding the synchronicity and multimodality (in the ‘little d’ sense) of living (diegetic) story performance in emergent action; and 3) these presumptions (thus) enable me to diffract a Bojean storytelling approach with an intra-active multimodal analytical approach (with the three principal interferers) and the model for multimodally intra-active spacetimemattering from above (see Section 2.3.6, figure 2.7).

Next we will look a bit closer on the take on the narrative approach that Boje and colleagues expand on.

2.4.3 The circle of mimesis

In formulating his circle of mimesis, Ricoeur relies on Aristotle’s theories of emplotment and mimetic activity. From this Ricoeur creates his thesis that narratives must be understood through a perceived temporal plot (beginning, middle, and end; BME narrative). Aristotle held the notion that narratives had two functions: 1) *Emplotment*, which denotes the activity of organizing actions and events around plots or themes in trying to make sense of our experiences. Emplotment is then the ‘active sense of organizing the events into a system’ (Ricoeur 1984: 33 in Cunliffe, Luhman and

Boje, 2004: 270); 2) *Mimesis*, which is the active process of *imitating* or *representing* something. The way humans shape the stories and plots are understood as engaging in mimetic activity, which dramatizes our experiences. Ricoeur (1984: 54–71) then incorporates Augustine’s phenomenology of time as a threefold present with this Aristotelian theory of emplotment and mimetic activity to create a *threefold mimesis* named: Mimesis1 (M1), Mimesis2 (M2), and Mimesis3 (M3). Cunliffe, Luhman and Boje (2004) summarize the threefold mimesis as follows:

Mimesis1 (M1)

Narratives are embedded with an implicit ‘pre-understanding’ of a society’s meaningful structures, symbolic systems, and temporal nature. Narratives presuppose a familiarity and understanding on the part of the reader or listener with:

- 1 Terms such as agent, goals, means, conflict, co-operation, success, failure, and so on
- 2 A symbolic system of rules, or norms, for the understanding of meaningful action, and
- 3 The rules of composition that govern the diachronic order of a story (Ricoeur 1984: 56).

In other words, there are basic, taken-for-granted cultural plots, themes, characters, values, and sequencing of events within narratives. For example, we easily recognize which characters represent the divide between good and evil, and the temporal acts of flashforwarding and back-shadowing

Mimesis2 (M2)

Narratives mediate between a ‘pre-understanding’ of M1 and a ‘post-understanding’ of M3, which is accomplished as:

- 1. Individual events combine into a whole story that
- 2. Provides an endpoint from which the story can be understood as a whole, and
- 3. In providing a beginning, middle and end, the whole story is understood as flowing from the past toward the future.

Mimesis3 (M3)

Narratives are the intersection of the world of the reader or listener and the world of action. They involve the re-creation of ‘pre-understanding’ to a ‘post-understanding’ of a society’s meaningful structures, symbolic systems, and temporal character.

Table 2.1: Ricoeur’s threefold mimesis summarized by Cunliffe, Luhman and Boje (2004: 270)

In this (cut of the) threefold mimesis, narrative is held as an *intersection* of two or more (apparently individual or separate and preexisting) worlds; the world of the listener or reader (receiver) of the narrative and 'the world of action'. Narratives are here understood as having a mediating function in the representationalistic and imitating, hence mimetic re-creative act of revising pre-understandings into post-understandings. Thus narratives could be understood as the manner by which we humans reconfigure our views and understandings by means of mediation not through language as such but through mimetic activity and the narrative sequential structure of emplotment in

a linear diachronic temporality; a narrative apparatus. The basic idea of Ricoeur's mimetic circle seems to bear resemblances with the hermeneutic circle of Gadamer and Ricoeur acknowledges that himself (Ricoeur, 1984: 72). Mimesis 2's mediating part-whole dynamic of making of 'whole story' with a BME structure out of individual events seems to base itself on an *interpretive endeavor* like that of the part-whole forward movement towards greater understanding on the behalf of the interpreter in regard to the text as in the hermeneutic circle. The following model captures this dynamic of the hermeneutic circle.

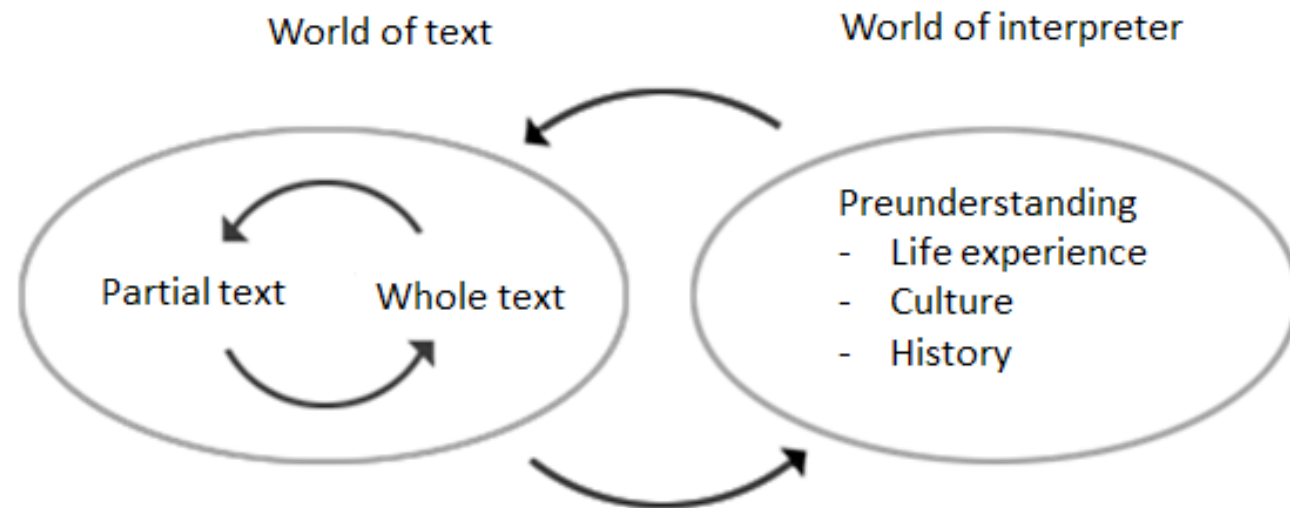


Figure 2.9: configuration of Gadamer's hermeneutic circle

‘World of text’ entails the meaning of a ‘whole text’. The ‘World of interpreter’ entails the pre- and post-understanding. This is within hermeneutic thinking understood also as a back-and-forward movement between two universes or worlds; that of the text and that of the interpreter. Ideally the two ‘melt together’ through the re-creation of ‘pre-understanding’ to a ‘post-understanding’. This is where I note the resemblance with Ricoeur’s threefold mimesis and conclude on the latter as an interpretive framework and approach to storytelling and story rework of organizational practices. Such an interpretative framework would be what Barad note as a representationalist take on meaning making, where narrative functions as ‘knowledge’ that mediates between knower and known:

“The system of representation is sometimes explicitly theorized in terms of a tripartite arrangement. For example, in addition to knowledge (i.e., representations), on the one hand, and the known (i.e. that which is purportedly represented), on the other, the existence of a knower (i.e., someone who does the representing) is sometimes made explicit. When this happens it becomes clear that representations serve a mediating function between independently existing entities”, (Barad, 2003: 804).

So in this sense, the narrative interpretive approach relies on another tripart arrangement: knower, known and knowledge. It should be noted though that where the beginning M1 (pre-understanding) and the end M3 (post understanding) are rather simplistic ‘carry-ons’, the middle phase M2 is ‘the intersection’ where the trouble gets solved and therefore also where all the complexity lays. As we will see below (in Section 2.5) the Bojean storytelling approach upholds this three-way in which there is a complex middle section as living-story-relationality webs. A BME structure to the extent that ‘middle’ is halfway through the troubles of a linear journey. However, it is exactly Boje’s new complex way of theorizing this ‘middle act’ that is interesting as he claimed this act to be 1) fragmented and terse, never whole, 2) told differently across contexts, and therefore Boje (and colleagues) criticized the illusion of the threefold BME; i.e. the threefold mimesis as 1) a linear flowing from past to future and as 2) a framework that is build on the world as facts (time in Ricoeur’s word). Let’s however, summarize the above interpretive approach in regard to reworking organizational practices. Next an ‘Outing’ where the above is noted on as an approach to organizational rework, (table 2.1 in Section 2.3).

2.4.4 A Narrative being-in-the-world approach to rework of organizational practices (an interpretive approach)

Within the field of narrative inquiry the interpretive narrative approach follows, as stated, from Ricoeur's work on narrative and time. Subsequently being is considered as narrative being-in-the-world. The basic idea is to focus on how we create ourselves through narratives of ourselves (selfunderstanding as patterns of thinking, feeling and doing) and in relation to a world of other beings, animals, nature and objects. This is what you could call a basic condition for being-in-the-world.

To use the notion of being-in-the-world is by no means incidental since Ricoeur had his inspiration from Heidegger. Being is in this take a unified narrative, interpretive whole. The approach is human-centered in its attempt to describe human time as the center of memory, identity and intentionality. Also the human is viewed as being 'in' the world in terms of being situated, yet separated from the world. The out-side world is acknowledged, yet only reachable or accountable through interpretations. Here the inherent indeterminacy is 'solved' by an interpretative description of phenomena in the traditional phenomenological understanding.

There is a variety of ways in which this approach has been used to rework organizational practices. But common for them are that they are human-centered with the implication of an inherent ethics of Otherness. Levinas uses the term Other instead of other to emphasize the importance of recognizing the other as somebody who is radically different from 'my self'. An ethics of Otherness thus requires an opening up of the subject and a willingness to allow oneself to be changed by experiencing this difference (Jones, Parker and Ten Bos, 2005: 76).

Also Buber's founding terminology of I and Thou, is recognizable as another manner of dealing with the development of the 'I' in relation to the human-other and this relation is the center of attention, although regarded as situated within specific circumstances. This is the approach within which I was trained during my master within the IPOK program (InterPersonal Organizational Communication) at Aalborg University. This inter-personal take on organizational development you could say is founded on the premise of being-in-the-world where the uniqueness of the human-being as motor of development through re-interpretations/re-narrations is emphasized. Part of this human-centered take is the embodied self, which acknowledges the multimodality of communication and turns those many modalities to become cues of inquiry for learning and development.

Often this approach is fed by the idea that the human Other holds the answers 'within' and through a dialogue partner's feedback on key-phrases of language, body language, para-linguaged cues configured as questions, etc. such answers or stories can in fact be told (as more or less whole stories) and a new interpretation (post-interpretation) be drawn. The narrator or storyteller is the focus of attention reflected in the responses the person is given from his/her 'audience' of listeners, which are trained to follow a set of dialogue premises beneficiary for the learning both ways around.

Such human-centered approaches to organizational practice-rework are thereby characterized by using an interpretive methodology for organizing dialogues in organizations to open up different understandings and allow the participants to be changed in this process. In this way we may say that the 'I' and the 'Other' are distinct human beings where the difference among them as individuals are acknowledged and respected.

Next, we will turn to how Boje and colleagues - using the two amendments - attempt to construct a more performative, deconstructive or *historical being-in-discourse approach* to storytelling (Narrative temporality) compared to that of Ricoeur's mimetic (the threefold mimesis), that I above has denoted as the *interpretive or narrative being-in-the-world approach*.

We start with a diffractive elaboration of Cunliffe, Luhman and Boje's (2004) two amendments (and the arguments carrying them) that they offer to Ricoeur's work on narrative. After this follows a diffractive reading of the implications of the two amendments in regard to diffracting them with the three principal interferers as part of the ongoing configuration of Material Storytelling.

Two amendments to Ricoeur's mimetic circle

First Amendment

"An Emphasis on Performance: Be it resolved that Ricoeur's position on narrative and time needs to be expanded to consider the context or space of narrative performances. We are not studying already constructed narratives, rather, narratives are performances in the moment," (Cunliffe, Luhmann and Boje, 2004: 272).

The need for the first amendment is argued by claiming, that Ricoeur does not sufficiently emphasize a diegetic aspect of narratives, but only a mimetic aspect in his threefold circle of mimesis. Thus, the amendment expands Ricoeur's hermeneutic stance toward one that includes a poststruc-

turalist performative stance where stories are constructed in the moment of enactment. Admitting to Ricoeur that narrative knowledge is about meaningful time, the authors hold that the performative construction of narratives takes place in practical circumstances (contexts and spaces) and in particular moments (time) in which meanings may vary.

Here, the diegetic aspect of narrating emphasizes two important closely related aspects: 'diegetic performative enactment' and 'localization'. First of all they regard as crucial to the storytelling the specificities of the co-enactment in the moment of storytelling: "*what I say, how I say it, what the listener hears, how she or he feels, and how she or he reacts or responds*", (Cunliffe, Luhman and Boje, 2004: 273). Clearly storytelling is here recognized as a joint diegetic effort of meaning construction.

Further, they extend this argument and suggest "*that space and time are not necessarily separate dimensions because the unique circumstances of each moment, the context of performance and interpretation, and the specific interrelationships and connections that occur in the moment, all interweave to create a unique discursive time-space*", (Cunliffe, Luhman and Boje, 2004: 273 my bold). For now I just notice that the narrating act - or storytelling is reconfigured as a nonlinear, synchronic negotiated polyphonic process where meaning: "*occurs in the interplay between people's spontaneously responsive relations (Bakhtin 1986) to each other and the otherness of their surroundings*". (Cunliffe, Luhmann and Boje, 2004: 274). This Bakhtinian distinction on 'other' and 'otherness of their surrounding' that is brought to bear here also co-account for the 'unique timespace', I will get back to this

below, when diffracting the three principal interferers with the two amendments.

Second Amendment

An Emphasis on Multiplicity: Be it resolved that perpetual referring within the threefold mimesis occurs across past, present, and future time and contexts, resulting in multiple threads of earlier narratives (M1) weaving together into multiple present emplotments (M2), and continually recreating multiple futures (M3).

(Cunliffe, Luhmann and Boje, 2004: 273-274).

The need for the second amendment reflects their view that Ricoeur does not sufficiently discuss **the dynamics of perpetual referring** across time within the narrative process — a dynamic that creates a polyphonic, negotiated narrative. Here, the authors incorporate the **reflective consciousness of temporality** from Sartre's *Being and Nothingness* (1956, 1963). Within this notion Sartre distinguishes between 1) a static linear temporality, where time is irreversible and narrators narrate order in terms of chronology, of before and after. 2) a temporal multiplicity, which incorporates: “a dynamic temporality in which time does not separate into discrete units located before or after other events, but is experienced as an infinite dispersion of multiple afters (pasts) and befores (futures)”. (Cunliffe, Luhmann and Boje, 2004: 274).

Note how the dynamics of time is reversed here where ‘afters’ become ‘pasts’ and ‘futures’ become ‘befores’. Whether deliberate or not, this point is not discussed further in the article, which also means that there seems to be an unfinished discussion on the multiplicity of time as either quan-

titative multiplicity or qualitative multiplicity. Their take on time thus remains a little bit unclear. I deal with this below.

Sartre is drawing heavily on Bergson's theory (1938) of time as memory – as *lived duration*. Cunliffe, Luhmann and Boje argue that, inspired by Bergson, Sartre (1956: 135) suggests that the past and future cling to the present and even penetrate it. This interpenetrating of present, past, and future is then experienced through a unity of perpetual referring, which is: “... a process of reflection-reflecting. As we reflect on past events, our reflection is influenced by both our currently experienced moments in time and the future moments we may be anticipating”. (Cunliffe, Luhmann and Boje, 2004: 274). This ‘perpetual referring’ is a discursive-epistemic act that bears resemblances with Butler's performative notion of ‘iterative citationality’. In Barad's agential realist approach to performativity this becomes ‘iterative intra-activity’, (Barad, 2007: 184).

2.4.5 Two takes on time in Narrative Temporality

Cunliffe, Luhman and Boje clarify:

“NT specifically builds on the work of Ricoeur (1984, 1988) and Sartre (1956, 1963). Both authors, **while taking differing positions**, reflect upon the nature of time. Ricoeur's reflections have particular relevance for narrative researchers because he claims that ‘speculation on time is an inconclusive rumination to which narrative activity alone can respond’.

With ‘inconclusive rumination’, they refer to Ricoeur claiming that objective time and subjective experienced time

were in a reciprocal relation where one per necessity presumed the existence of the other and that as such there is no clear cut between the two. However the threefold mimesis of a threefold present does imply a forward linear movement from 'pre' – to – 'post'. The threefold mimesis then for Ricoeur incorporates this 'narrative activity' as the solution. Also Sartre as we saw enacts a double-ness of time; static chronology and a temporal multiplicity. It is in regard to the latter that he is drawing on Bergson's 'lived duration'.

I would like to dwell a bit more thoroughly on this double-sensed time aspect of the *entangled genealogy* (cp. Barad, 2007: 389) of the new take on story that Boje and colleagues enacted, because it seems to try to span across two rather different takes on time. On the one hand it holds a Bergsonian view on the concept of multiplicity of phenomena; a *qualitative* take on multiplicity rather different than the BME linearity of the three-fold mimesis that holds a *quantitative* take on multiplicity where units are one after the other – as a linear causality that as we remember is defied in Barad's framework.

These two rather different cuts of multiplicity, *Bergsonism* and *Phenomenology*, are in fact the two fates that multiplicity has had in the Twentieth Century according to the Stanford Encyclopedia of Philosophy (their reference is Deleuze, 1991). It goes on to say that in phenomenology, the multiplicity of phenomena is always related to a unified consciousness and thus an episodic memory. This enacts a sequential order of one phenomenon after the other. In Bergsonism, 'the immediate data of consciousness' (les données immédiates de la conscience) are in contrast a multiplicity. The two prepositions, 'to' and 'of,' is used here to indicate the most basic difference between Bergsonism and phenomenology. In Bergsonism phenomena are being seen as immediates of consciousness, as enactments of non-unified consciousness. For example, Tues-

day makes Monday different than Monday did Monday. In phenomenology phenomena are being related to a unified consciousness that holds many variations of phenomena. According to the Stanford Encyclopedia of Philosophy, it was probably this text that attracted Sartre to philosophy. And it was this nonlinear qualitative take on multiplicity that in turn attracted Cunliffe, Luhman and Boje to Sartre.

Boje has elsewhere clarified Sartre's (and also his own) cut of Bergsonism, (Boje, 2001¹) this way:

"Bergson, for example' posited the act of duration, in which organization is melodic, involving a multiplicity of interpretations. Anyone who has been in meetings, knows there are always competing perspectives and interpretations of events. Sartre, however, points out that if we talk of "temporality" then duration, as a multiplicity of interpretations, must presuppose "an organizing act" (Sartre, 1956: 135). Kant, in contrast to Bergson, did not see a synthesis in a multiplicity and the organizing act. At issue, for organization theory, is the terrain of "collective memory. For Bergson, the past interpretations cling to those of the present, penetrating the present in the form of memory, which is "ecstatically in the Past."

Notably the 'organizing act' is related to multiplicity of interpretations (polyphony) – and instead of a unity of consciousness, as in phenomenology, we have with Narrative temporality 'an organizing act' of narrative activity of the threefold mimesis. The question is whether there is a 'slip'

1 http://business.nmsu.edu/~dboje/teaching/503/sartre_links.htm

happening here from the Bergsonian qualitative multiplicity of to a quantitative multiplicity of interpretations? From the Bergsonian qualitative multiplicity of consciousness, to multiplicity of memory of a unifying narrative act, to multiple interpretations. Here memory as qualitative multiplicity seems to become quantitative multiple interpretation. Also the 'immediate data of consciousness' in Bergsonism is accounted for by intuition or *elan vital* (cp. section 2.6) and the dynamic between a non-psychological unconscious construct; 'the virtual' (non-local) and 'the actual' (local). Where as duration in Sartre's reworking is depicted as 'multiple interpretations' and related to a 'reflection reflecting act' of perpetual referral. Intuition and reflection are not (necessarily) one and the same thing.

By apparently continuing the threefold narrative and the implied before (pre) and after (post) and diffracting this with a Bergsonian notion of lived duration implicit in Sartre's take on temporal multiplicity, Boje and colleagues thus seem to combine a process-philosophical (qualitative) take on multiplicity with a phenomenological (quantitative) take. They are thus conjoining - in Deleuze's words - 'the two fates', which seems paradoxical and the question is whether this can be done in a consistent manner?

Below I will clarify how Material Storytelling seeks to avoid this paradoxical situation. Here the two amendments of Narrative Temporality (NT) is diffracted with intra-active multimodal spacetime-mattering and thus a quantum 'amendment' to the work of Boje and colleagues is enacted with the three principal interferers as diffractive grating.

2.4.6 A quantum amendment to Narrative temporality

In my reading of Boje and colleagues' work it was these 'alternative presuppositions about time' as a diffraction of these two takes on time; Ricoeur's composit temporality-take and Sartre's Temporal multiplicity (via Bergson's lived duration), that lead to different storytelling ways of researching and theorizing organizational life. From a diffractive methodology perspective you would say that by enacting a different 'cut' on time as nonlinear fluid performativity within a threefold framework of the present a field of new possibilities for research and theorizing emerged. By turning to Barad's presuppositions about time as entangled spacetime-mattering, - I enact a quantum material turn on the story turn - and new possibilities for organizational research emerges as well - and I then coin this 'take' as 'Material Storytelling'.

It is this tight link between time, space and matter(ing) that is the Baradian driven 'quantum amendment' that I make to the Bojean take on storytelling as living story, and in doing so there is a changed relationality of meaning-matter modalities where storytelling's linguistics is reconfigured as always already material-discursive practice. Stories are always already onto-semantic figurations of multimodal 'data' or 'mole-cues of the flux of the subterranean subtleties of intra-action of non-psychological virtual/actual un/consciousness. This I elaborate much further below as part of the diffraction of Barad, Boje and Bergson (see Section 2.6 below).

2.4.7 Nonlinear process orientation - From diachron to synchron

Together the two amendments are stated to

“espouse a move from a diachronic (singular cause-and effect understanding occurring across contexts and time) interpretation of organizational life to a more synchronic interpretation of organizational life as multiple interpretations occurring at multiple points in time and in multiple contexts — a temporality of social experience”. (Cunliffe, Luhman and Boje, 2004: 271)

This 'synchronic performative take' on stories as opposed to a diachronic take reads well with the principal interferer of nonlinear process-orienting which emphasizes

“...moving the focus away from entity, products and things towards emergences of (congealing of) actions and doings of the flux of the now. Thus moving focus away from concentrating on entities of past, present and future and different types of phases to the dynamics of diffractive 'betweens' of the here-and-now that produce agential cuts and of which we are always already a part. The process interferer thus highlights the in/separability of processes and the impossibility of distinguishing in a clear way between 'creation and renewal, beginning and returning, continuity and discontinuity, here and there, past and future', (Barad, 2007: ix).

Thus the process orientation is extended in a nonlinear fashion across dis/continuous timescales.” (see principal interferers above in Section 2.2.2).

As such NT diffracts smoothly with the first principal interferer with the modification that narrative act is reconfigured as a non/linear (dis/continuous) organizing act of solving the indeterminacy. Thus going from an interpretative or epistemic to an onto-epistemic endeavor. The temporality of social experience becomes the temporality of material-discursive agential realization of spacetime-mattering. Here the performative nonlinearity is agential realism and integral to the manner by which the iterative enfolding of the world is accomplished. I later reconfigure this as *spacetime*d mattering to emphasize that for Barad there is only 'one kind' of time (the spacetime mattering diffracted in each moment, where time is an onto-semantic phenomenon, not a quantitative entity) and not two kinds of time, e.g. the above discussion of the objective and subjective time, which enacts a divide between ontology and epistemology thereby differing from NT.

2.4.8 Entangled multimodal intra-action - from pure facticity to linguistics to multimodality and entanglement

In the two amendments are stated

"...to incorporate notions that knowledge is a social, historical, and linguistic process in which the pure facticity of social reality is replaced by intersubjective and emerging realities and identities. In other words, we do not deny that there were past narrations or that there are things we call 'facts', but suggest that we interpret the past through the present and see those facts through acts of interpretation and social construction". (Cunliffe, Luhman and Boje, 2004: 272).

Very clearly here the agency is rendered to the linguistic performances. Matters of the world here depicted as 'pure facticity' is left behind. The human interpreter is a post-modern maneuverer holding the world at a distance and constructs those 'facts' or 'pasts' in the moment of intersubjective action, which results in emergent realities and identities as such social constructs.

As we recall from above the principal interferer of entangled, multimodal intra-actions emphasized,

"the vital notion of entanglement in 'intra' is not getting lost when configuring material-discursive phenomenon. The interferer of entangled multimodal intra-acting here extends the process-orienting interferer with a) the complexity of multimodal constituency (across both little d and Capital D modes) and highlight, b) the entangled agential performativity of this enactment in intra-actions of 'the between' of this multiplicity of constituents and avoids that 'it' becomes just another kind of entity as a localized mono-modal-practice only in the now and only within certain time frames." (see 'Three principal interferers' above in Section 2.3.2)

NT thus cuts narratives as ongoing **linguistic formulations**, composed in the moment, and responsive to the circumstances of a particular time and context. They are not complete prior to telling, they do not have a pre-established internal coherence, but are ways of connecting and creating meaning in the moment of telling. Thus, storytelling is cut as a **negotiated synchronic process**

because narrative performance and understanding are situated in many moments of time and context.

However the above statement of the many circumstantial aspects of the performative enactment, that constructs the narrative ‘*all interweave to create a unique discursive time-space*’ (Cunliffe Luhman and Boje, 2004: 273) in the moment, is noteworthy in regard to the manner by which the authors reconfigure Ricoeur’s mimetic circle – and - how and why I can diffract a notion of Material Storytelling building on the Bojean story framework of living story. The potential of these two amendments is, that in recognizing *the diegetic of storytelling practice* and in acknowledging *the unique timespace*, it can be reconfigured as not a verbal, monomodal linguistic endeavor alone, but a multimodal material-discursive endeavor and I here further see the possibility of reclaiming the domain of storytelling as a multimodal, material-discursive domain. I do this in respect to one of the great writers on storytelling in the 20th century; Walter Benjamin, who is claiming “*the art of storytelling is coming to an end.*” (Benjamin, 1999: 83). The ‘death’ of storytelling also lies in reducing the practice to be a job of lingua alone. As this is not at all what genuine storytelling as a practice is about according to Benjamin:

“With these words, soul, eye, and hand are brought into connection. Interacting with one

another, they determine a practice...After all, storytelling, in its sensory aspect, is by no means a job for the voice alone. Rather, in genuine storytelling the hand plays a part which supports what is expressed in a hundred ways with its gestures trained by work”, (Benjamin, 1999: 105-106).

It is noticeable also that he talks about a ‘sensory aspect’ of the practice of storytelling. I follow Benjamin in claiming such a sensory aspect to the material-discursive practice of Material Storytelling and I elaborate this as the vitality of ‘the between’ intra-actions below as these subterranean subtleties. However, for now there is a rather important point to make: by taking a material turn from within storytelling’s linguistic turn, a renewed field of possibility has emerged for both reclaiming the ‘lost territory’ of the storytelling practice; its multimodality. Storytelling as an art and practice with modalities belonging to the ‘realm of living speech’ yet reconfiguring this realm as ‘the between’. Benjamin regards the loss within storytelling:

“It is, rather, only a concomitant symptom of the secular productive forces of history, a concomitant that has quite gradually removed narrative from the realm of living speech and at the same time is making it possible to see a new beauty in what is vanishing”. (Benjamin, 1999: 86).

The “*new beauty in what is vanishing*”, says Benjamin. From a posthuman qualitative take on performance as enactments of ‘the between’, such ‘a new beauty’ lies in acknowledging the many constituent modalities of the

material-discursive practice of storytelling. The beauty of Material Storytelling is perhaps exactly this; that the material story modes enacts (and thus acknowledges) these many almost vanished modalities and yet more as there is with the quantum material turn an important decentering of the subject, which means that the ‘storyteller’ depicted as ‘merely a man who tells stories ‘with his hand soul and eye’, needs be reconfigured as well.

As we recall from above I chose to configure the multimodality little ‘d’ and big ‘D’ intra-relation (inspired by Cooren, 2010) through the dynamic of the ventriloquist and the puppet as modalities of the spacetime matter (re) configuration. The important point of the ventriloquist and the puppet was the implied intriguing question of ‘who is making the actor act?’ and the potential of configuring the relationality of the puppet and the ventriloquist as the relation of the larger material arrangement; the apparatus and the phenomena – as ‘the between’ enacting a specific material-discursive practice aka the puppet. By doing so the Benjamin ‘storyteller’ understood as the human figure doing the talking ‘is’ the puppet, and what makes him or she do this talking is the ventriloquist-complex-of-constituent-modalities. What can be depicted as apparently the puppet’s actions, are then mere enactments of the intra-activity of ventriloquist-complexity and puppet (the enacted onto-semantic phenomena), as it is not a uni-directional endeavor, but a reciprocal endeavor where the puppet, next turn around, becomes the phenomenon-producing-apparatus. The Benjamin-realm-of-living-speech is thereby configured as this dynamic. This relates to the next principal interferer.

2.4.9 Spacetime mattering - from discursive timespace to include mattering spaces, - bodies and - artifacts

The claim of the two amendments that narratives are not preconstructed, but instead are performatively negotiated and localized diegetically interwoven enactments in a unique timespace, points in a way to this multimodality of the constituency taking place locally as a now moment of a between. As we saw above in NT this synchronic negotiated polyphonic process is where meaning:

“occurs in the interplay between people’s spontaneously responsive relations (Bakhtin 1986) to each other and the otherness of their surroundings”. (Cunliffe, Luhmann and Boje, 2004: 274).

The spacetime mattering principal interferer emphasizes as we recall from above:

“both the ‘local’ cuts of enacting ‘the between’ in the materializing of phenomenon by intra-acting meaning-matter-making configuring processes in the now and where time and space are active constituents of this local cut rather than being a fixed axis or a passive container along which the action is merely aligned.” (see principal interferers above in Section 2.2.2).

All that is needed to complete a diffraction with the Baradian onto-epistemology at this point is then basically 1) to reconfigure the ‘inter-weave’ to ‘intra-weave’ to emphasize the ontological inseparability of this localized intra-active ‘between’ which then by performative enactments renders the agential separability of phenomena,

and related to this 2) to rework the other/otherness cut as it implies an anthropocentric view (cp. 'The Great Divide,' Haraway, 2008: 11) where it is the relation between the 'I' and other as a re-enactment of the self as an pre-existing entity apart from the rest. This is important, while the Baradian onto-epistemology implies that entities/agencies do not pre-exist whether human or nonhuman. Further, not only people, but, all onto-semantic phenomena are 'responsive' (This point will be further elaborated in Section 2.4).

At this point it is important to notice, that the reflexive endeavor central to NT based on the 'perpetual referring' from Sartre as a process of 'reflection-reflecting' - in Material Storytelling based on Barad's take on timespace-mattering - leaves it's human (epistemic) orbit and re-configures as posthuman, agential performative *iterative enactments* of (the intra-actions of) 'the between.' With Barad, as we recall, there is not reflection, but diffraction, which implies a changed relationality of enacting a different *difference* in (re)configuring the spacetime-matter manifold. The act of change based on taking a reflexive learning stand is thus (re)configured as acts of ongoing diffraction. I will get back to these different takes on the motor of organizational change and rework more thoroughly below in Section 2.5.

Before we go there, an 'Outing' is inserted revealing thoughts of concern by a doctoral student, who is making an attempt at reworking theorizing by a prominent international scholar - before we embark on this, however, we perhaps should pause and take a 'grounding' break.



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Breathing space

General instructions for doing the body-based pedagogy exercises¹

(Always do the exercises in loose fit clothing and without shoes and within calm surroundings. Choose the exercises that you feel comfortable doing and that give you a sense of well-being and enhances your energy level. Listen to your body signals and always refrain from doing exercises that cause you to feel pain or discomfort of any kind. Let it be a guiding principle to always aim at finding 'the right dose'² in terms of both the kind of exercise and the extent of the specific exercise. Note that the 'right dose' varies from time to time depending on the whole situation when you practice the exercise).

1 The present and following exercises are a sample of the exercises used in the action research project after a one-year study/training at Bodynamic International as well as several subsequent courses at MOAIKU. The exercises are rendered here in the dissertation with permission from one of the founders of the Bodynamic System Merete Holm Brantbjerg. (who has later founded MOAIKU). For further introduction to the body-based pedagogy as it was used in the action research project, see Section 3.1, Book 2. See also Brantbjerg and Ollars (2006), Brantbjerg, 2011 and www.MOIKU.dk

2 The notion of 'the right dose' is specifically developed by Merete Holm Brantbjerg as a key notion in her 'resource-oriented-skill-training' (at MOAIKU), which is a specific refined variant of the body-based-pedagogy principle used and developed through the Bodynamic System

Grounding exercise

- Stand-up straight with a hip-wide distance between your feet
- Notice the contact of your feet with the surface underneath
- Make small bouncing movements in your knees and notice the 'heaviness' towards the floor
- Make various crab-claw-movements in turn with your feet; forward, backward and sideways
- What do you feel¹? Where do you feel it in your body?

1 Importantly, there are no 'right' answers. It is highly personal which feelings and sensations arise from these exercises. Again, the same exercise may induce a variety of feelings and sensations from time to time.

For your note(configuration)s:

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2.4.10

(Pre)thoughts of concern for attempts at disentangling and reworking genealogies of living story

The *diffractive* methodology that I've chosen requires me to attend to the 'subtle details' of how the various theories 'cut' their conceptual framework. This has turned me towards various parts of the entangled genealogy of Boje's story framework; the two amendments to Ricoeur's threefold mimesis.

I found out that Living Story is about multiple temporalities (nonlinearity, synchronicity) and the performance of stories, futures and identities (all plural) and this take seems to be drawing on a mix of Sartre's temporal multiplicity, building on Bergsonian duration (- but translated as 'multiple interpretations' of which 'an organizing act' is required according to Sartre or is it Boje?, who translates Sartre this way). However the organizing act is apparently a 'reflecting reflection' that then becomes a linguistically negotiated narration of before, now(s?) and nexts - by Boje and colleagues - as they are mixing Sartre's take on time with Ricoeur's threefold mimesis. Will that do or is there an inconsistency here?

However story then gets further caught up in a poststructural linguistic drama of power struggles - inspired by Bakhtinian heteroglossia and Derridian difference, and those two seems to have liberation and freedom as a discursive act in common(?) Or?

The diffraction of this story framework with Barad is both simple and complex. Simple as it basically 'just' requires the story framework to follow the second of the Baradian moves; the turn towards 'intra' entangled states and acknowledge story practices as material-story practices, as the living story framework is already build on a nonlinear performative deconstructive framework entailing multiplicity/duration, which is basically the first move of Barad. Or so it seemed to begin with.

It becomes a complex diffraction while there seems to be lots of kinds of 'times' in Boje's tripart story framework (and even in the amendments). Potentially therefore many inconsistencies, for example, in the many takes on time; Sartre's: temporal

multiplicity, Bergson's: duration as qualitative multiplicity, Ricoeur's threefold mimesis, that he, Boje seems to uphold - somehow - so, at the moment I have trouble seeing straight or rather thinking straight or enacting straight - through all these 'times'. Thus I am having trouble following the diffractive reading/methodology through....

The question is; where do I insert my 'cut' of the entangled genealogy of living story, as it seems to be a project in it self to 'untangle'? Can I diffractively read 'living story' if flawed with inconsistencies with the Baradian material-discursive framework regardless of that? If so what kind of diffractive reading can I claim to have done? Also isn't it just too stupid to lay out all these 'flaws' or rather indeterminacies, that I (perhaps?) can see in Boje's framework because 'who am I' to claim this? Also as he is 1) a prominent scholar in storytelling, that I respect 2) on my defence board, 3) a vital international contact for my present/future? Also - I turned away from Boje's Quantum take for those very same reasons as it (as far as I read

it) couldn't seem to get past the epistemic divide and the discourse-matter divide! Probably there is a link (?) Where do I turn now? :-Z

What would be a workable pragmatic solution?

The beauty aka appeal of 'living story' is in a way it's very paradoxical 'character', as the beauty is in the 'ability of free storying', which seems somehow to be tied to this both/and time-mix of emplotment/threefold mimetic and co-enactment/diegetic performance.....and I don't have time left to take all these discussions of whether the narrative BME format is there or not as this potentially will open to all the other takes on storytelling within the domain of storytelling, and even beyond....

In Bojes story take, BME narrative is 'there' in a certain stigmatized way that I find to be a bit hard to diffract with Barad, because it seems inconsistent with the whole concept of being a 'living' story - Living story should in it self be able to account for the 'stuckness' aka freezing aka congealing that - as a holding pattern - 'limits' the ever changing flux. But Barad would say that it is in the 'between' solving of indeterminacy - in the agential cuts - that being and becoming 'is' being determined - but the very notion captured in living story is 'the ever living' as something in 'ever flux', so 'Living story' cannot itself account for the congealing, and to make matters worse it cannot itself free itself of the congealing/getting

stuck by the dominating narrative. It is dependent on a third 'figure' the 'antenarrative' to do the job. Living story is in that sense itself without agency to become - it is a 'victim' in need of help. Or am I wrong here?

Maybe I should 'come to the rescue' and liberate living story by the emancipation of rendering a 'mattering agency' to living story:) ...the little mermaid couldn't get by in the human world without legs... nor can living story, because without the agential power of boundary-making - of having the ability to insert agential cuts - and 'actualize' in the world, living story is lost in pure flux, pure memory; virtualized beyond the threshold of conscious awareness.....in the subterranean subtleties of intra-action? WAU - perhaps Boje is right after all?

....It occurs to me as if Bojes tripart story framework is itself an enactment of the minority struggle against the grand narrative of the majority of scholars within narrative research. Boje is - it seems - re-enacting his own professional rebellion drama of struggling with cutting himself loose to a free scholarly life of having his own domain of narrative research freed from the big Narrative of Academy of Management....however by this tri-part-story apparatus, he un/fortunately keeps re-enacting by iterative enactments the same plot over and over again, - and in that sense he or his theorizing is 'stuck' in a Narrative stuckness :) He however thereby upholds 'his' (?) identity as the

rebellion. The 'improper' as the 'proper'?

The sc'MOI network (Standing Conference for Management and Organization Inquiries), that in April 2011 held it's 20th anniversary together with Bojes 20th anniversary for coining his take on nonlinear living story - is in its self-understanding 'living proof' :) of this living-with-stuckness-elsewhere-and-therefore-also-here storied identity.

How is this helpful for me? - for Material Storytelling?

Should I - and if so - how do I - say this out loud?

The 2012 theme for sc'Moi is 'Storytelling Scholarship: Beyond sensemaking and social constructionist-narrative'. The answer is 'yes' - It's time to move beyond.

2.5 Boje's story framework as enactments of the two amendments and yet more

(In this part I return to Boje's story framework of a tripart 'larger material arrangement' and pay diffractive attention to the relation between the above amendments and Boje's configuration of a story by summarizing what seems to be the line of thought of the Bojean configuration of 'story'.

Material Storytelling is then depicted as a diffractive approach to the story reworking of organizational practices coined as being-of-the-world and opposed to what is depicted as a narrative being-in-the-world approach and a historical being-in-discourse approach from above.)

2.5.1 The Bojean line of thought

It is not an easy task to attempt an overview of Boje's extensive production. Boje has continuously reworked the minutiae of his story framework over the course of the last 20 years. He has published widely and productively on the topic of storytelling in organizations since his renowned 1991 article in *Administrative Science Quarterly*, (Boje, 1991). Already 20 years ago Boje was on to the nonlinearity – the dis/continuity – of meaning making practices of organizational living and becoming. I find that pioneering work remarkable. The 'quantum amendment' made to Bojean storytelling here should (in all modesty) be seen in line with Barad's expansion on Bohr's work (cp. Section 2.2.) in a manner that I hope will be (regarded as) constructive for making a material turn on the concepts of *living story* and *antenarrative*.

True to Boje's own assertions of story there is an "*unfinished storying going on in dialogized interpenetration with linear narrative*" (Boje, 2006: 20) – throughout his own work. His main argument (and driving force) throughout his extensive work thus seems to be that; if folklore/narrativist story prison (story must have plot; coherence of beginning, middle and end) is set aside *the complexity of story behavior is astonishing*" (Boje, 2006: 7) and it is precisely this complexity storytelling activity that Boje's theorizing is all about and which has attracted me to his work.

Within the domain of storytelling there seems to be a struggle going on regarding what counts as 'story'; what it takes to be defined as story. In regard to this struggle Boje acknowledges the existence of the 'proper-narrative'; the coherent narrative, and he asserts the need to study

them both "*and how they dance together if we are to escape narrative's prison*". (Boje, 2006: 1). I will tend to argue that this complexity of meaning making practices of organizations that Boje has 'captured' has a right of its own to be studied in itself (which implies leaving the notion of 'narrative prison' altogether and I get back to this point below in Section 2.6). In coming from the field of interpersonal communication myself, I regard it however to be a both refreshing and slightly disturbing combination to study written and spoken and whole and fragmented story practicing together 'as a dance', which is what Boje sets out to do. An endeavor that is relevant when it comes to understanding rework of organizational practices as far as this rework implies letting go of something 'old-fashioned' to become anew, renewed. But nonetheless it is not without complications however challenging and refreshing it might be to study Bojean storytelling.

In order to grasp that complexity of Bojean storytelling - from a diffractive methodology standpoint - it is the particularities of Boje's manner of cutting 'story' aka enact the framework that is important to attend to. In 2006 for example he (re)asserted:

"narrative is just too deadening; story is active; the story unfolds in fragments, as people contribute their two cents worth of experience or speculation; so the Storytelling organization systemicity has a very different dynamic than one would expect if one confined inquiry to collecting "proper story" performances". (Boje, 2006: 8). And "...improper" story-types are critical to understand emergence and complexity processes of story

production, distribution and consumption in organizations and society.” (Boje, 2006: 19)

Here we have the Bojean take on story; the ongoing, non-linear, unfinished, fragmented - as the ‘improper’, and the other ‘whole story’ as the ‘proper story’. It seems to be a special ‘signature’ of Bojean storytelling to cut the unfinished and non-linear story aspects as ‘improper’ and emphasize the complexity that this renders to the narrative activity and how it emerges.

Thereby he (directly as well as indirectly) continuously writes up against established, traditional narrative research practice defined as ‘the proper’. As he puts it, he is “*so brazen to unthroned folkloric narrative*” (Boje, 2006: 5). There, Boje has an ongoing debate with other authors within this narrative tradition as I mentioned before. Two organization and folklore narrativists, Yannis Gabriel (2000) and Barbara Czarniawska (1997, 1999) - assert narrative-plot-linearity and wholeness-cohesion as the ‘proper’, which, therefore, “*discounts the terse, fragmenting and polyphonic complex manner of story*” (Boje, 2006: 2). I argue that Boje is in risk of reasserting himself this same (or rather their) ‘discount’ of the complexity that he has coined, by cutting his framework up against and in relation to their ‘discount’. What counts from an ethnomethodological point of view is the ‘What’ of any practice. I would suggest that living story complexity has its own right to be studied and thereby should be counted and valued as a proper different kind of story practice and that is how I use and cut ‘living storytelling’, which I reconfigure into Material Storytelling. Having said this, I acknowledge that Boje may very well have his good reasons for cutting story and narrative together/

apart this way, as it suits the agenda of critical organization inquiry from a postmodern/poststructural perspective to incorporate an identity of being ‘improper’ rather than ‘proper’ and to rebel against the established. This will be elaborated further below.

However, as stated Boje refers to this demand for a story to be the whole BME as ‘the prison of narrative’ (Boje, 2006: 1). And he puts the ‘charges’ in this boldly manner:

“Traditional folklore and narratology in the main, since Aristotle (250 BCE) define story too narrowly as cohesive telling linear-plot, complete with beginning, middle, and end. Narrative requires story to be a proper “imitation of an action that is complete in itself, as a whole of some magnitude...Now a whole is that which has beginning, middle and an end” the definition of coherent narrative (Aristotle, 350 BCE: 1450b: 25, p.233)” (Boje, 2006: 1)

Improper stories are found when studying the *systemicity complexity* of story behaviors. I ‘find’ (or rather enact) material stories as ‘between enactments’ and the ‘systemicity complexity’ of Boje is, I claim, entailed in what Barad coins as the apparatus that configures spacetime-mattering. Boje notes that the above rather narrow definition of the proper whole story “put blinders on researchers” so they are unable to notice the improper ones (Boje, 2006: 5). While narrative researchers look at whole story performances, Bojean storytelling follows ‘fragmented’ and ‘terse’ stories beyond the one local storytelling. The story in that sense has its ‘own life’, an ontological status of being able to ‘behave’. It is a postmodern enactment of the world as a dis-

cursive construction. What is in focus is the story as discursive construction instead of the storytellers.

Boje's 'Tamara' method is renowned in its attempt to show the multiplicity of stories by affording many storylines to evolve and the following quote explicates the enactment of complex systemicity of story in this method:

"Tamara is a postmodern play, taking place in a mansion, a landscape of story co-production, distributed across simultaneous performance sites, where chasing storylines means networking with actors and spectators; most important, people in the same time and place can experience story differently because they arrive from different tellings in other places, and no one is everywhere at once; therefore the systemicity contextualizes story meaning", (Boje, 2006: 9).

However, from the quote, it seems that there is some confusion in regard to the ontological status of story. Boje's 'systemicity complexity' regards – on the one hand - each of the different takes on the story being experienced or reconfigured in the Tamara play as a human interpretative endeavor (in relation to a unified consciousness) as in: 'people can experience story differently'. The story can be experienced in multiple ways. There are multiple interpretations aka storylines 'to chase'. Here story exists ontologically and can be experienced and interpreted differently. This pays reference to the entangled genealogy with Ricoeur's mimetic (interpretive) circle (cp. Section 2.4). Here in 'Tamara land' the 'unique timespace' from the first amendment is enacted as a localized story landscape – a background - for different sequencing of passing through

the rooms and having encounters with other people. The storylines are in focus and thus the multiplicity of interpretations; the multiple threads from the second amendment "resulting in multiple threads of earlier narratives (M1) weaving together into multiple present emplotments (M2), and continually recreating multiple futures (M3)" (Cunliffe, Luhman and Boje, 2004: 274). The point is here that there are many stories to be told, not just one story, and this opens for a plurality of 'futures' as in possible actions. On the other hand, story is poly-voiced co-production, where there is no one story to chase or interpreted, but where different stories are constructed. Here we are back on having story – on the other hand – as co-productions of story-fragments and thus as having an ontological status as constructed. Necessarily interpretation and construction is not one and the same thing as each buy into a different founding difference; a different ontological status of story. In the diffractive reading that I perform here there seems to be grounds for implying an ontological inconsistency in Bojean storytelling apparatus in reenacting a Ricoeurian interpretive approach to story (above coined as 'narrative being-in-the-world') and a poststructural/postmodern philosophical approach (later coined as historical being-in-discourse) at one and the same time.

Having said this, it is very likely that the 'trouble-maker' here (also) is the techno-scientific language-practice of our everyday manner of framing according to a Newtonian/Cartesian worldview. I seek to avoid this in the Apparatus of Material Storytelling by paying detailed attention to the founding differences that is enacted in the ongoing (re)configuration. Although, I constantly seem to find 'my'

writing ‘slipping back into’ representationalistic informed manners of articulation, (cp. Section 2.1.4).

These things set aside ‘Tamara land’ is creative enactment of the Bojean ‘systemicity complexity’ that supports the point that he is trying to make. However, discourse has the upper hand in ‘Tamara land’ – and it seems that Boje at that oversees the point of the constituent agency of the structural layout of the many rooms in proving his point; sequence matters. In short, space is still merely a silent (although unique) background or ‘performance site’ for the diegetic, synchronic story performances of the now. He does – true to Narrative Temporality and the first amendment – here enact the sequencing aspect of the emergence of different storylines as a temporal point of synchronicity due to being in the same timespace.

In his recent work he, as stated, depicts the take on story-research this way:

“holographically as a dance between the retrospective-narrative-sense-making, the immediate presentness of living-story-relationality and the prospective-antenarrative-sense-shaping”, (Boje, forthcoming b: 2).

As we saw the two amendments of Narrative Temporality are reconfiguring the threefold mimetic framing of narrative by Ricoeur, and in that sense the ‘proper story’ is in the threefold and thereby also partaking in the tripart understanding of storytelling genres in Boje’s theorizing. The ‘improper’ story gets its identity from within the relationality with ‘proper narrative’. Boje thereby enacts, literally, both the acknowledgment of narrative and the aim to study them ‘both’ and the dance between them.

As mentioned above the role-setting within Bojes framework of the temporal partakers of past, present and future is a fusion of Ricoeur’s mimetic circle and poststructuralism. This ‘fusion’ seems to be enacted at two ‘levels’.

At *one level* we have the enactment of three partakers: 1) Ricoeur’s Mimetic 1 ‘preconfiguration’¹ and Boje’s ‘Narrative’ as retrospective sensemaking as the *past*. 2) Ricoeur’s Mimetic 2 ‘figuration’ and Boje’s ‘living story immediate presentness’ as *present*; and 3) Ricoeur’s ‘reconfiguration’ and Boje’s ‘antenarrative future’ as *future*. Here the three temporal ‘figures’ are equal, separate parties of the threefold present of the mimetic circle.

On a *different level* we seem to have a poststructural take on narrative enacted as the ‘proper’ authoritarian center that living story is opposed to as ‘improper’, and where living story’s agency lies in the antenarrative as a dynamic.

I argue here that from within this Bojean cutting together/apart of narrative and story, the threefold present of the mimetic circle is also partaking and slightly changed in light of the resituative power-struggles entailed in the poststructuralistic approach he is drawing on from Derrida and Bakhtin. However the three-way of the mimetic is also somehow upheld as elements ‘clinging to the present’ and each having a specific ‘role’ to play, as narrative here becomes the embodiment of the hegemonic party that holds the living story as prisoner. Antenarratives are as ‘the dawn of things’; the hopes for a better future incorporated as potential new storylines and continual new openings that if seized before the prison door of narrative closes again, will enable the ever living (story) to be set free.

In the configuration of story as something that needs to be cut loose from Grand-narratives, and opposed to those, Boje and colleagues draw (as mentioned above) also to a great extent on Derrida’s notion that “*stories are self-deconstructing of its own*” (Boje, 2001: 18). Even though definitions of decon-

1 Ricoeur’s use of configuration is not to be understood as synonymous with how Barad and Haraway use the word configuration. Instead configuration should be understood in a hermeneutical sense as interpretation.

struction are avoided due to the spirit of Derrida's writing, Boje does offer some:

"Deconstruction is able to reveal ideological assumptions in a way that is particularly sensitive to the suppressed interests of members of disempowered marginalized groups." (Martin, 1990: 340 in Boje, 2001: 19) and "For me deconstruction is poststructuralist epistemology" (Boje, 2001: 19).

Deconstruction is on this background taken by Boje as an analytical strategy well aware that he also thereby differs from Derrida as the latter defies that deconstruction (first) happens when the analyst comes into the picture. This is important as Boje thereby lays the agency in the hands of the analyst aka the human actor. Boje claims: *"Deconstruction is antenarrative in action"* (2001: 18). Every story excludes and legitimates a centered point of view: *"According to Derrida all western thought is based on the idea of a center – an origin, a Truth, an Ideal Form, a fixed Point, an Immovable Mover, an Essence, a God, a Presence, which is usually capitalized, and guarantees all meaning"* (Powell, 1997: 21 in Boje, 2001: 19). Deconstruction often implies ways of reading that decenter or otherwise unmask narratives that posit authoritative centers (2001: 19). So here we find a part of the entangled genealogy of the driving force mentioned above on proper narratives that he is *"so brazen to unthrone"*. Thereby it also becomes clear that Boje by coining *antenarrative* follows Derrida in pointing to the deconstructive forces of story as always already there to begin with. Antenarratives show that each center is in a constant state of change and disintegration. So within Bojea tripart framework we have antenarratives as

the 'underground' deconstructive movement and we have living story 'improperness' opposed to narrative properness. There seems to be a slip happening where two kinds of narrative merge; 1) Grand narratives as authoritative centers in the Derridian sense, and 2) narrative as the 'proper' kind of storytelling within the domain of storytelling. By (re)enacting (cutting) terse and fragmented living story as 'improper' to the 'proper' whole-narrative, Boje manages to integrate in a very creative manner the post-structuralistic 'plot' of his storytelling theory in his tripart configuration.

Material Storytelling is also 'brazen to unthrone'. However, at a different level. Following Barad, the Derridian point on decentering is implied (literally) in having the focus on 'the between'. Also the sensitivity to difference, yet in the shape of (reconfigured as) agential cuts of changed relationalities is upheld. However since there is no outside position from which to take a critical deconstructive stance, as there is only 'being of the between of the world' – there is no resituating of hegemonies through deconstruction – or rather they are only 'resituated' from within and only as co-partaker of the act, and therefore as changed relationality. What Barad, Derrida and Boje seem to have in common though are the decentering and the unmasking. However, and importantly, this is with Barad taken to a whole new level of agential enfolding (of the world) where matter *matters* and where every cut matters.

From Bakhtin's notions of stories' dialogicality; the *heteroglossia*, Boje further expands on this deconstructive dynamic 'from within' aspect of the story center and the 'overthrowing' agenda. With coining 'heteroglossia,'

Bakhtin argues for the polyvoiced ‘nature’ of language. The argument is that there are two fundamentally different forces of language; the *centripetal* and the *centrifugal forces of language* (Bakhtin 1981: 270). The centripetal forces are forces that seek to overcome heteroglossia by seeking to unite and bring order, but they operate in the midst of heteroglossia (Bakhtin 1981: 271-272) that works in a centrifugal disunifying manner. Order and disorder are in other words countervailing forces of language, which always exist side by side in any discursive activity (Jørgensen, 2011: 288).

Heteroglossia then depicts the condition that the word uttered in one particular place and that time will have a different meaning than under other conditions (Jørgensen, 2011: 288). It emphasizes the multiplicity of languages of social groups, professional languages, dialects, and so on that are present in the here-and-now. Heteroglossia thereby depicts an instrument for resistance to authoritarian discourse as heteroglossia depicts the phenomenon that ensures the deconstructive dynamics of language denoted by the claim that there are always centrifugal forces that ensure processes of decentralization, deconstruction and dismantling. In sum Bojean storytelling frames the above mentioned ‘systemicity complexity’ from this notion of heteroglossia and enacts it as the tripart story arrangement configured in the model (see figure 2.8).

Next we will pay diffractive attention to how this tripart dynamic is depicted more specifically – first in terms of his 2008 configuration and second in terms of his most recent configuration in his work-in-progress on taking a quantum leap in his storytelling framework.

2.5.2 Antenarratives and living story

But first I will go through the concepts of ‘antenarratives’ and ‘living story’ in Boje’s model and how those two are (re)configurations of the threefold mimesis and how this enacted ‘changed relationality’ is noticeable in the tripart arrangement of narratives, living story relationality webs and antenarratives.

Based on the above amendments Boje coins *antenarratives* where he is concerned with framing what happens before narrative closure sets in (2001: 1) and antenarratives are (contrary to narratives) prospective (forward-looking) bets on the future (Boje, 2008: 13). It is easy to see how this work on antenarratives has developed out of the ideas of narrative temporality and the interest in other presuppositions about time based on a fundamental notion of non-linearity in regard to story. The nonlinearity is present in his 2008 configuration of the tripart arrangement; the spiral model. The nonlinearity is perhaps Boje’s most important contribution. The coining of antenarratives is based on *ante*, which is derived from Latin and is to be understood as 1) ‘before’ and 2) ‘bet’. This means that antenarrative can be translated as ‘before-narrative’ and as a ‘bet-narrative’.

The last major concept in his storytelling model is the concept of living story, which is neither being nor non-being; instead:

“it is a form of haunting. Living story is in-between dead and alive, between forgotten fragments and revitalizing those into one’s own life. Living story is a collective, ongoing, simultaneous, fragmented, and distributive storytelling and restoring by all the storytellers

reshaping, rehistoricizing and contemporalizing” (Boje, 2008: 239).



Hauntological relations....

In her recent article Barad (2010: 240) states that quantum entanglement is about hauntological relations that are “more akin to how electrons experience the world than any journey narrated through rhetorical forms that presume actors move along trajectories across a stage of spacetime (often called history) (...) There is no overarching sense of temporality, of continuity, in place. Each scene diffracts various temporalities within and across the field of spacetime-mattering. Scenes never rest, but are reconfigured within, dispersed across, and threaded through one another (...) this ‘beginning’ like all beginnings, is always already threaded through with anticipations of where it is going but will never simply reach and of a past that has yet to come. It is not merely that the future and the past are not ‘there’ and never sit still, but that the present is not simply here-now. Multiple heterogeneous iterations all: past, present, and future, not in a relation of linear unfolding, but threaded through one another in a nonlinear enfolding of spacetime-mattering, a topology that defies any suggestion of a smooth continuous manifold.

Jørgensen and Boje note that story is living in the sense that it is becoming. It is morphing and it can therefore morph into narrative. It shapes our identity, whether individual, organizational or communal, and it shapes our imagined future. *“It is not finished, not whole, and is still alive in the “now and here”*, (Jørgensen and Boje, 2010: 255).

This understanding of living storying in the now clearly builds on the two above amendments of storying being a unique *performance* in the now negotiated by multi-

ple, polyphonic parties. Such an understanding diffracts ‘smoothly’ with Barad’s understanding of spacetime-matter intra-action (see brown comment besides). The here-and-now-story-web-relationalities that Boje talks about are the multiplicity through which the here-and-now storying is *threaded through*. The story-relationality-webs are thereby one manner of speaking about the apparatus of constituent forces shaping the spacetime-mattering of the now. From a Baradian perspective you might wonder what Boje gains from distinguishing further the constituent in a three-way of living story, narrative and antenarrative. I elaborate this argument further below.

However, it is the dynamics between narrative, antenarrative and living story performative multiplicity that made up Boje’s 2008

storytelling theory of organizations illustrated in the spiral model (see figure 2.8) as mentioned above, which in my view is a triadic Storytelling Model based on the enactment of the amendments of Ricoeur’s threefold mimesis. Importantly this model breaks in its configuration with the linearity of the present as flowing from the past in the threefold present of the mimetic circle. Also the ‘spiraled’ configuration affords a reading of the center as ‘the between’ iterative intra-activity from which phenomena emerges. For those reasons I will return to use this model in the diffractive (re)configuration of the model of The Apparatus of Material Storytelling in Section 2.6, below.

Next we will briefly dwell on Boje's most recent (re)configuration of his storytelling tripart arrangement. The new quantum story model (Boje, 2011b: 105)

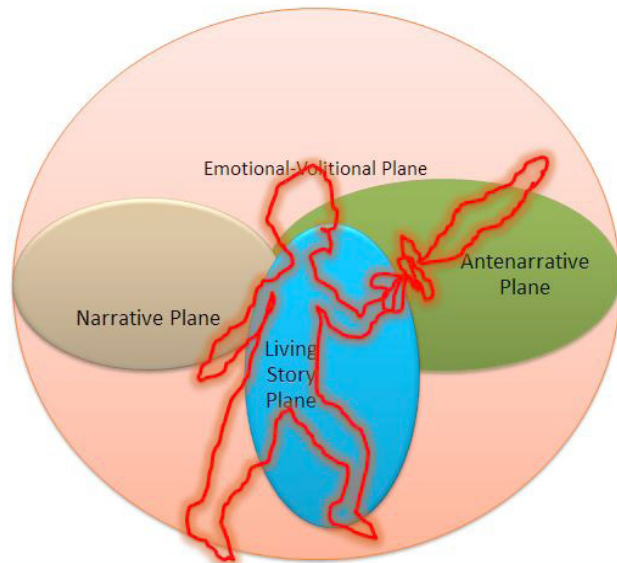


Figure 2.10: Boje new quantum story model

“‘The Heart Sword of Compassion’ in this Storytelling Hologram shows a person with a storytelling standpoint that has one hand stuck in the narrative-past, one foot in the plane of emotional-volition, and the other foot in the living story webs in the Now, while the ‘heart-sword of compassion’ cuts through any stuckness in futures potentialities that limit other futures from emerging. There is an ‘ought-to-actualize’ in the intra-penetration of quantum physics of storytelling with the concrete manifestations of space-timemattering.” (Boje, 2011b: 106).

From this model it seems that Boje continues with the somewhat dramatic dynamic of the tripart arrangement of his three storytelling genres from

his earlier work inspired by Bakhtin and Derrida, (as we learned above). A dynamic, which is configured as power struggles and resituative moves of dominating (narrative) hegemonic relationships to living story. However in this model the storyteller is more obviously the human actor that embodies the power struggle and the antenarrative sword is upheld as the liberator. The storyteller's noticing of antenarratives here hold the key to the future of difference – the antenarrative is thereby again the essential in the battle as a story-noticing of antenarratives done by the storyteller, which thereby becomes the liberator of the continuous living story; a liberator of ‘freedom’ perhaps? Although here (it seems) as an embodied human(non-human) actor with gestures and artifacts.

Boje states, again with reference to Bakhtin, that in the act-performance of storytelling consulting:

“there is an “emotion-volition tonality” and an “emotional-volitional thinking, a thinking that intonates, and this intonation permeates in an essential manner all moments of thought content” (Bakhtin, 1993: 34)”, (Boje, 2011: 101).

Here the acts of “emotional-volitional thinking and attitude-tonality” are **established** in narratives of what was (following from), **enacted** in living stories of what is (living immediate present), and **shaped** in antenarratives of what-is-yet-to-be, not-yet-achieved, ought-to-be, and yet-to-be-determined (antenarrated next)”, (Boje, 2011: 101, my bold and inserted parenthesis). Again we have this three way of equal parties of narrative, living story and antenarratives, and here it becomes clear how the three way construct happens as the three partakers are cut along and placed in regard to the time categories of past, present and future. That way I claim, past/narrative, present/living story and future/antenarrative are cut in a relationality that imprisons them, to use Boje's own wording. By diffracting story with Baradian thinking in coining Material Storytelling as ‘between enactments’ I seek to avoid this

imprisonment and rework the founding difference by a changed relationality of this tripart arrangement, (cp. Section 2.6).

The act of emotive-volition is depicted as ‘a thinking that intonates ...all moments of thought content’. Clearly this addresses an affect dimension. However, when this is diffracted with the figuration of the human actor with the sword there seems to be a reference to how NT (Narrative Temporality) counts on the ‘reflexive reflecting’ human, and thus the counting on the critical stance to ‘do the job’.

So although I follow Boje in acknowledging such an ‘affective plane’ in the storytelling practice, I depict this differently as a dynamic integral to the intra-active dynamic and thus as an aspect of ‘the between’ of human-non-human mutually constituent agencies. As noted later, this implies introducing what I call an *affective dynamic* that diffracts the phenomenon that Boje’s emotive-volitional plane is ‘getting at’, slightly different as *subterranean subtleties of intra-action*. Thereby there also is a differing of how affect is involved in ‘establishing’, ‘enacting’ and ‘shaping’ as those are not depicted as separate activities of different time/story categories. This is where I go in a different direction than Boje, to account for an affect dynamic integral to material-discursive story-practices of *Material Storytelling deconfigurations*.

For now, I will return to highlight that there also in this most recent take on Bojean storytelling seems to be this somewhat reversed linearity dynamic at play, which we saw above in reference to the Second amendment and which

seems to be in conflict with the nonlinearity of the hologram depicted in the spiral model from 2008 (see figure 2.8 above).

So importantly for the entangled genealogy of Bojean storytelling – thus also in his most recent work - I claim that there is a continual emplotment of the suppressor/suppressed from the poststructuralist rebellions against Modernity (Derridian influence) and against Russian Formalism (Bakhtinian influence). Further, Boje on this background sympathizes with writings within the critique of industrialism/capitalism found in for example Walter Benjamin’s claim of the capitalistic *deadening of the art of storytelling* (e.g. Benjamin, 1999). These aspects of the genealogy of living story could account for how story in his take is pulled towards the overthrowing (as in ‘unthroning’) of power as a linguistic practice happening or at least with the potential for happening in any moment of storying.

I will get back to diffractively elaborate this further below (in Section 2.6). For now I would just hold on to the point that within the (re)configuration of narrative activity, Boje enacts a power-struggle of the three timemattering aspects or partakers of meaning-making parties of his story framework. I thus claim that this particular (em)plot(ment) is enacted in the tripart story-framework of Boje’s theorizing.

Next, we turn to an ‘Outing’ where the above discussion of story is depicted as an approach to reworking organizational practices, (cp. table 2.1 in Section 2.3).

2.5.3 A historical being-in-discourse approach to rework of organizational practices (a resituative approach)

A story approach to rework of organizational practices differs from the narrative, interpretive approach as it is grounded in an idea of historical being-in-discourse instead of narrative being-in-the-world. Subsequently a story approach uses history in its approach to practice rework in organizations but it uses it in a much more critical sense where it seeks to question and change the narratives of existence in organizations. Central to this approach to rework of organizational practices is that power or relations of power are very closely linked to the construction of narrative, interpretive practices. There is no independent narrative 'I'. Rather, we are historical products of dominant relations of power that creates being. It is not the other way around. The living story webs of relationships are thus created through genealogies of self (e.g. Jørgensen, 2007: 72-73) or through deconstruction (e.g. Jørgensen and Boje, 2010). As such, a storyteller is not interested in reducing stories to a plot or wringing out the essence of a text as there is no whole or essential story to be told. Jørgensen and Strand (2012: 5) note that a storyteller is much more interested in contextualizing the text in a specific time-space and by clarifying the socio-political circumstances of the text. They note further that stories are produced in complex political circumstances where multiple voices are present (Jørgensen and Strand, 2012: 5).

As such the understanding of organizational practices is accomplished by getting a sense of who people are, including their interests, intentions and motivations, by a description of what they do together with other people in specific time-spaces. Narratives must in this way be understood as a simplistic or naïve image of self, a telling that must be understood in its socio-historical context and produced by voices in particular positions and with particular intentions and interests. Genealogy and deconstruction are always systematically suspicious of narrative self, which calls for the 'unmasking'. The purpose is therefore to create the conditions for a more *reflexive* position on our own ways of thinking and acting and thus to create the condition for fundamentally rethinking our narratives and futures.

Rework of organizational practices is thus accomplished through a creative oscillation between the dominant narrative and the living story and it is the attempt to create this oscillation that is central to this approach, no matter if this is directed towards personal development or organizational development.

In that sense the 'given' is challenged. This is accomplished through a deconstruction of a genealogy of for example personal narratives (for instance leaders' narratives) or through the deconstruction or genealogies of our narratives of organizational problems and/or solutions (e.g. Jørgensen, Strand and Thomassen, 2012).

The important problem highlighted through this approach is that organizations and people as historical-discursive products come to see realities and their problems and solutions in a particular way where some phenomena are illuminated while others are disregarded.

This means that the approach remains trapped in a humanist orbit in that reality is seen as an intersubjective construction created by people and in emphasizing the importance of discourse, language and culture in the construction of being.

Subsequently the two approaches to rework of organizational practices captured through narrative and living story are characterized by a certain excess in its emphasis on language and history for both understanding and reworking organizational practices. It is here that Karen Barad's posthuman agential realist approach offers an alternative.

2.5.4 Apparatus of Material Storytelling

In the (re)configuration of the Bojean story framework that is done in this dissertation to enact Material Storytelling, it is not so much that the past holds the living in capture and the future as the hope of liberation and thus past and future as partakers of a struggle between enslaving structures and freedom-fighters and living story as the victim. It is more a question of recognizing the multimodal constituency of the enactment of the living material-discursive practices of the now; the spacetime-mattering, where power and dynamic are reconceptualised or rather reconfigured. Here past is not a partaker in the sense of a 'past that was'. Past is present as a collection of a 'past that never was'. Future is present in much the same manner as a future that 'will never just come'. This aspect of dis/continuous time will be elaborated below when diffracting the Baradian and the Bergsonian concept of time and living story to enact Material Storytelling spacetime-mattering, (cp. Section 2.6, Book 1).

From a Material Storytelling standpoint we have 'the between' as 'the heat of the action'; however 'the between' as a larger material arrangement; the apparatus encompassing 'little d' and 'big D' issues of agency. 'Within' this battlefield of 'the between' the bad guys are not easily recognized as those entities are phenomena of the diffractions of 'the between'. They do not enter as always already suppressing and overthrowing parties. Also, with Barad's spacetime-matter configuration the 'real' power lays in the agential cuts enacting at one and the same time the ontological indeterminacy/inseparability of agential separability of components of phenomena (this process is elaborated further below in diffraction with Bergson as an ongoing dynamic of virtualizing/affectualizing in the appeal of the present).

This is not to say that there are no holding patterns or parties, (or to say that hegemony cannot be enacted) but to say that those holding patterns or parties (or hegemonies) are not to be thought merely as linguistically driven discourses keeping people imprisoned as in the 'systemicity complex-

ity' that Boje is geared to 'capture' and deconstruct. This is what I would call a *resituative approach* to organizational practice rework (see above). Rather I claim that holding patterns – and the practice of changing them – come to exist as the re-enactment of material-discursive practices where material, spatial and bodily agencies are important agential parties of these 'enslaving structures' of agential determinacy/separation of the material-discursive apparatus of the moment. From such a *diffractive approach* (see below) where organizational practice rework is about other cuts being enacted, the agency is the intra-act of 'the between'. I therefore reconfigure the Bojean 'living-story-relationality-webs' as the larger material-discursive-apparatuses intra-acting or diffracting the spacetime-matter manifold; *the organizational material-discursive practices*. The world – the organizational practices – is

enfolded by iterative enactments, and change in any of those practices due to other cuts being enacted - due to and resulting in a changed relationality of constituents - is what constitutes change as a changed material-discursive practice. As we shall see below I argue that those enslaving patterns are *subterranean subtleties of intra-action* that set 'the story drama' quite differently and that render affect a 'determining' role. Here we will return to discuss and reconfigure the Bojean living-story apparatus and story-time aspect of Material Storytelling spacetime-mattering.

Next, we will in the same manner as above – although in an extended version - depict the diffractive approach to reworking organizational practices, (cp. table 2.1 in Section 2.3).

2.5.5 A material-discursive being-of-the-world approach to rework of organizational practices (a diffractive approach)

A material-discursive approach to rework of organizational practices is innovative in going beyond presumptions of interconnectedness and interaction inherent in the two other approaches. Instead with Baradian agential performativity emphasis lies on the entangled state of spacetime-matter configuration, which means that terms like intentionality, memory and identity need to be reconsidered (cp. Barad, 2007: 22) as something that do not belong to individuals but rather to the complex network of mutual constituent human and non-human forces including sets of historical and material conditions. This means as noted that phenomena like learning, narrating, storytelling, performing, meaning – that traditionally have been viewed as a human subjective interpretive construction (the narrative approach), or an intersubjective social construction (the story approach) – need to be reconsidered as spacetime-mattering and as such those phenomena are always already 'material-timed-and spaced'. Thinking, grasping and languaging are not the effects of discourse, (or an interpretive, phenomenal mind) in the important sense that discourse and mind is always already material; and the material is in same sense always already discursive or mindful.

In that sense we are neither in-the-world nor in-discourse. Rather we are *material-discursive beings-of-the-world*. We live in particular historical, geographical and material circumstances in which the human body-mind lives and breathes intra-actively through an entanglement of multiple temporalities, spaces and materialities. As such, 'we' cannot produce knowledge and learn about the world without being totally dependent on it (Taguchi, 2010: 42). Stories understood as agential performances in the moment emerge from within this 'between' as an enactment of always already temporal, spatial and material (re)configuration; the enfolded spacetime-matter manifold. Here storytelling as material practice of speaking, thinking, acting, grasping, doing and so on that must be conceptualized as the enactment of material-discursive 'between' intra-action (Jørgensen, Strand and Thomassen, 2012: 18). This approach to reworking of organizational practices is therefore best conceived as localized iterative intra-

actions. It implies doing particular things with particular people, in particular places, with particular things and in particular situations. Rework of organizational practice does not rely on narrative, nor storytelling (discourse) but is instead a material-discursive reconfiguration of 'the between'. Practices are the phenomena that emerge from diffractive mutually constituent relationships of history, bodies, spaces and artifacts, and they are continuously (re)configured in the moment. They thus also imply a certain dis/continuity as no scene or moment diffracts in the same manner. Practices are multimodally configured and relationally constituted. Organizations are configured by and are material-discursive practices that are enfolded as the spacetiementtering of the organizations in question. The configuration of practice relies on the apparatus inherent of any moment of action. This is the material-discursive apparatus of organizational practices and here the organization get's depicted as an *Apparatus of Material Storytelling*; the larger material arrangement of modes of 'enacting the between' of the material-discursive configuration; the spacetiementtering. In Barad's words apparatuses "...enact a local cut that produces "objects" of particular knowledge practices..." (Barad, 2007: 147). In other words, stories are configured from the apparatuses that make up the organization in the here-and-now moment of becoming.

More specifically the apparatus enables and constrains what stories can be told in the sense that specific inclinations for story performance are embedded in the material-discursive configuration. It is thus a question of the apparatus giving different opportunities and limitations for agential cuts; to stimulate, make easy or difficult, to enhance or delimit, to make more or less probable etc. As such, multiple intra-acting forces are always in play in material-discursive configurations. This calls for a multimodal approach to dealing with organizational rework, (e.g. Raudaskoski, 2009 for a multimodal analyzing of an identity-changing phone call). Neither narrative nor historical-discursive analysis will do in this respect because there is an excess of history and language in these approaches. As noted I will instead argue for a detailed exploration of crucial now-moments in organizations that allows for the application of multimodal constituent analysis of the configuration of story performances in organizations.

Barad notes that she will argue for a diffractive mode of analysis where we learn to tune our analytical instruments (the diffraction apparatus as she calls it) in a way that is sufficiently attentive to the details of the phenomenon, we want to understand (Barad, 2007: 73). In relation to rework of organizational practices, this calls for detailed explorations of those moments in which this rework takes place because it is the only way that we can get a sense of the diffractive interferences and entanglements of human and non-human forces that configure new story performances. So while the analysis in the narrative approach relies on narrative and in the living approach relies on deconstruction and history, we can say that Material Storytelling relies on the detailed exploration of moments including their temporal, spatial and material aspects and their intra-relations.

Further we do not learn to become otherwise through reflection or reflexivity but through diffractive participation in the situation where we engage with other people, spaces and artifacts. Change emerges from reconfigurings of the apparatuses of material storytelling, which entails professional knowledge(s), bodies, artifacts, technologies and spaces, etc. The pedagogical modes of enacting the between that are brought to bear matter in this respect and they need to be enacting a variety of modes and not be restricted to the use of language but include space, bodies and artifacts for the (re)configuration of practices. Rework of organizational practices in a diffractive approach thus relies on the continuous experiments with the totality of apparatuses of storytelling of the organization. What is required is the active participation and an attention to detail. In relation to pedagogy, Taguchi (2010: 61) notes that learning "... *takes place right in the middle of things, in our very living and doing pedagogical practices*". Similarly rework of organizational practices takes place right in the middle of organizations. To facilitate rework of organizational practices requires not only the use of strategies and tools that take into account the multi-modal configuration of these practices but also a close attention to the movement of the moment. Subsequently it requires improvisational and spontaneous capabilities and an openness to this movement of the moment (cp. Jørgensen, Strand and Thomassen, 2012).

I now return to the discussion about the emotive-volitional plane in Boje's latest reconfiguring of the Bojean storytelling apparatus, i.e. his quantum storytelling theory (Boje, 2011b). This relates to the introduction of the previously mentioned subterranean affective 'plane' or rather the affect dynamic integral to the dynamic of the intra-act as a manner of attending to the dynamic of the intra-act more closely. It constitutes the last 'diffraction grating' to read through in the configuring of the Apparatus of Material Storytelling and affords me to diffractively read the three story modes of enacting 'the between' with what has been configured up until this point. This involves the introduction of writings that build upon the French philosopher Henri Bergson and (as part of the diffractive reading of Bergson's notion of the virtual hypnotic image)

also a visit of one of Barad's great sources of inspiration, Donna Haraway, and her take on 'the figure' as 'chimerical vision' as a manner of 'eye-fingering' or 'grappling' with - rather than generalizing from - the ordinary and mundane matters of the world to coin becoming through 'being of the world' as *(de)configuration* in Material Storytelling practices.

But first, we should perhaps take a break and once again bodily enact an agential cut of demarcation.



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Breathing space

General instructions for doing the body-based pedagogy exercises¹:

(Always do the exercises in loose fit clothing and without shoes and within calm surroundings. Choose the exercises that you feel comfortable doing and that give you a sense of well-being and enhances your energy level. Listen to your body signals and always refrain from doing exercises that cause you to feel pain or discomfort of any kind. Let it be a guiding principle to always aim at finding 'the right dose'² in terms of both the kind of exercise and the extent of the specific exercise. Note that the 'right dose' varies from time to time depending on the whole situation when you practice the exercise).

1 The present and following exercises are a sample of the exercises used in the action research project after a one-year study/training at Bodynamic International as well as several subsequent courses at MOAIKU. The exercises are rendered here in the dissertation with permission from one of the founders of the Bodynamic System Merete Holm Brantbjerg. (who has later founded MOAIKU). For further introduction to the body-based pedagogy as it was used in the action research project, see Section 3.1, Book 2. See also Brantbjerg and Ollars (2006), Brantbjerg, 2010 and www.MOAIKU.dk

2 The notion of 'the right dose' is specifically developed by Merete Holm Brantbjerg as a key notion in her 'resource-oriented-skill-training' (at MOAIKU), which is a specific refined variant of the body-based-pedagogy principle used and developed through the Bodynamic System

Demarcation and building of the space of the upperbody

- Stand with a hip-wide distance between your feet
- Tighten³ the muscles in your upper arms, while pressing your hands against each other in front of your chest
- Notice the sense of a space in the upper body
- How does it feel⁴? Where do you feel it in the body?

3 It is important that you find your own 'dose' of tightening and pressure

4 Importantly, there are no 'right' answers. It is highly personal which feelings and sensations arise from these exercises. Again, the same exercise may induce a variety of feelings and sensations from time to time.



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**26. Diffractions of the
Bergsonian, Bojean
and Baradian apparatus
in Material Storytelling**

(In the following section the 'affect argument' of an affect turn being integral to the material turn is developed and through that the 'vitality' of intra-action is being addressed more thoroughly as an animating 'figurative' actualization of the intra-active touch/ touching, which also accounts for how 'locally' enacted phenomena extends across spacetimescales. In doing so I enact a slightly different take on a quantum turn in storytelling than the Bojean one, which is depicted in the apparatus of the model with the human-actor with the sword that Boje has developed as a manner of incorporating an emotive-volitional plane in the (upheld) tripart story model. In a diffractive reading of the Baradian, Bojean and Bergsonian apparatuses, I thus elaborate the dynamic of spacetimematter (re)configuration in Material Storytelling intra-actions more specifically and coin the notions 'vital intra-actions' and 'deconfiguration' as vital parts of accounting for the agency of Material Storytelling practices. This is done by turning towards the 'realm' of the subterranean subtleties of a local-non-local reciprocal dynamic of indeterminate unconscious virtualization and actualization of memory recollection coined by 19th century Bergso-

nian process philosophy, and where affect is being claimed as 'the name of the game' of (the animative 'touching responsiveness' of) solving indeterminacy as a 'between' phenomenon in the Baradian framework. Thus instead of configuring the constitutive agency of the intra-act as a human-actor with the sword, a subtle onto-semantic entangled construct of 'the between' is configured and coined as 'vital intra-actions'. Here power (and) dynamic are the iterative aliveness of the (mutually constituent agencies of the onto-semantic cutting of the) between enactments that extends across spacetiemscales. The power dynamic of this intra-act is the 'touching responsiveness'. Coining this new sense of aliveness reconfigures at the same time the Bojean apparatus of 'living story' by enacting a changed rationality of the temporal partakers of past, present and future that renders 'living story' the agential 'living' dynamic (agential power) it was always 'itself' supposed to 'have'. Finally, vital intra-action ties to the 'figure' of 'figuring out' in material re-story practices cut as spacetimematter manifold deconfigurations (apparatus) that enact reconfigurations (the phenomena))

2.6.1 Going deeper ‘into’ subterranean ‘territory’

Below I elaborate in my own manner how the Baradian quantum material turn could meet storytelling theory and diffract an Apparatus of Material Storytelling. The purpose of this part is therefore to pose Material Storytelling by further clarifying Material Storytelling’s take on storytelling as founded on a *different difference* than Bojean storytelling or rather a reworking (from within the entangled state) of that difference to enact a different relationality. This last part of Part 1 of the Apparatus of Material Storytelling (Book 1) will therefore account for “*what difference (...) differences in production make for the production of different differences*”, (Barad, 2007: 227). To this purpose, I bring in various elaborations of the central aspects of the process philosophy of Henri Bergson. In doing so, I follow contemporary work of Massumi (2008) within philosophy, Stern (2004) and Middleton and Brown (2005) within (social-) psychology and Taguchi (2010) and Ellsworth (2006) within pedagogy who are all examples of scholars turning toward a Bergsonian-inspired ontology of immanence to account for ‘affect’ as the vital part of processes of emergence.

The diffraction of Bergsonism with the relational ontology of agential realism is different than the process philosophical takes that indirectly follow Bergson via a Deleuzian diffraction; e.g. Taguchi, (2010: 56-60), who combines the Deleuzian ontology of immanence with the onto-epistemology of agential realism. As I diffract the Bergsonian apparatus more directly with the Baradian (onto-epistemological) relational ontology, I take the (more) radical material turn in emphasizing the relationality of being and becoming (and thus the lack of individuality as a pre-

given) one step further than Deleuze. He describes *immanence* as a life - one life - and a way of living, where all substances are situated on ‘a common plane of immanence’; a plane of ‘univocal being’, but with pluralism and multiplicity of becoming; named ‘univocity’, (Deleuze, 2001: 26 in Taguchi, 2010: 56).

*“All bodies need to be understood in **their living individuality**, not as form, but as complex relation of particles that communicate, transform and **become different from themselves** at higher or lesser speed – infinitely”, (1988: 123 in Taguchi, 2010: 56, my bold).*

Here the founding notions of ‘becoming different from themselves’ and ‘understood in their living individuality’ still somehow renders the individual selves as central in a way that ‘the exteriority-from-within-dynamic’ of agential realism (cp. Section 2.2) avoids and defies. Yet, as immanence operates on a pre-human level, where it is emphasized that the world is not dependent on only human-discursive thinking and a transcendent ontology, (Taguchi, 2010: 57) there is common ground between Barad and Deleuze. I am therefore also acknowledging this pre-human, ‘common plane’. For the purpose of accounting for the agential dynamic of Material Storytelling I however regard this plane as the apparatus of the ‘seen but unnoticed’ phenomenon depicted within ethnomethodology. I here (following Barad) reconfigure it (the plane) as ‘the between’ intra-action of ‘being of the world’ as a spacetime-matter manifold and I thereby enact (a different founding) *difference* to the ontology of immanence; the inevitable entanglement or ‘entangled states’, which as we recall defies such a common plane ‘within’ or ‘on’ which we are situated

together and/or intertwined with another as in joining of separate entities, as existence in agential realism is “to lack an independent self-contained existence”, and thus is not an individual affair (cp. Section 1, Vignette 1 or Barad, 2007: Preface). Here each scene diffracts differently due to the spacetime-matter entanglement.

The Deleuzian ontology of immanence tries to enact a marking of difference that does not entail or rely on a negation. Instead he enacts a difference that is different *in itself* and not as an opposite or negative to something and not in comparison to something else. Thus, becoming is to differentiate from itself - to become anew - in its (own) transformative process, (cp. Taguchi, 2010: 58). This ‘positive differentiation’ is the Deleuzian opposition to the dominating ontology of transcendence in Western thinking. This is a positivity that moves beyond the transcendent binary thinking, which is always constituted by a negation as in thinking something is because it is not something else, (Taguchi, 2010: 58).

“

An example of this negation that is of importance in regard to discarding Material Storytelling as identity rework is embedded in our language as our habit of saying ‘I’ and thereby enacting the self ‘I’ apart from other selves and things. Thus inserting ‘The Great Divide’ (cp. Haraway, 2008: 9). It is thereby according to Deleuze presumed “that everyone knows, independently of concepts, what is meant by self, thinking, and being” (Deleuze, 1994:129 in Taguchi, 2010: 57). The ‘I am’ who is ‘thinking about’ and ‘empirically observing’ the matters of the world; the other and the otherness of the world from a position outside of and apart from it. This renders matter as dead and made out of pre-existing other materials.

Further, the self of ‘I think’ appears as the beginning of the act – as the actor because the stated ‘I’ has embedded all the presupposition back to the empirical self (Deleuze, 1994: 129 in Taguchi, 2010: 57) and what is not ‘I’ is different - in place of the identical - it is the negative, the contrary to, the opposite, the negation. “Difference is difference in relation to an identity” (Taguchi, 2010: 57), as a difference to something other in transcendent thinking. What this means in respect to the errand at hand is that by putting ourselves apart from and above the rest of the world as a human superior, exceptional ‘I’, we make it difficult to comprehend the intra-relatedness of who ‘we’ are. Hence Material Storytelling defies the notion of identity

Taguchi compares this (becoming different ‘in itself’) to be “like the waves of diffraction”, (Taguchi, 2010: 58). However, this Deleuzian becoming through ‘positive differentiation’ is in my diffractive reading not quite the same as the complementarity of agential realism’s mutual constituency by the principle of indeterminacy. If we notice the particularities of this ‘becoming different in itself’ as a transformation ‘from within’, the crucial difference between the ontology of immanence and the Baradian onto-epistemology is captured by asking ‘from within where?’

As we recall, the entangled states of material-discursive apparatuses of ‘the between’ are always already given as ontological inseparability, which sets the discussion of ‘from within’ a bit *differently*. Here the objective referent is the phenomenon, which is apparatus produced (material-discursively constituted) and therefore always already onto-semantic. However by saying something ‘is’ because it ‘is’, (so to say) is an enactment of a relation ‘only’ to oneself in becoming different (in regard to ‘a previous’ version),

which seems to be enacting existence as a self-contained and individual affair with some unfortunate traits of 'primary narcissism', (cp. Haraway, 2008: 11). Haraway states about this sense of a subtle, but crucial dis/similarity in her reading of Deleuze and Quattari on the quest of framing her 'becoming with species':

"I want to explain why writing in which I had hoped to find an ally for the task of companion species instead made me come as close as I get to announcing, "Ladies and Gentlemen, behold the enemy!"...because it (the writing of D and G) works so hard to get beyond the Great Divide between humans and other critters to find the rich multiplicities and topologies of a heterogeneously and non-teleologically connected world. I want to understand why Deleuze and Quattari here leave me so angry when what we want seems so similar." (Haraway: 2008: 27).

Below, I will suggest the possibility for a *quantum cut* of the Bergsonian 'qualitative multiplicity' (equaling the quantum amendment to Bojean storytelling, cp. Section 2.4) that in diffraction with the Baradian relational ontology affords a *relational differentiation* that is neither mere negation nor Deleuzian positivity of 'adding to', but first and foremost an entangled differentiation.

2.6.2 Diffracting 'a new sense of aliveness'

A Bergsonian process philosophical qualitative cut of multiplicity is useful here because it entails an understanding of (time as) memory as recollectives; as actualizations in the now: *"the memory, laden with the whole of the past,*

responds to the appeal of the present state" (Bergson, 1991: 168-169 in Middleton and Brown, 2005: 76). This section will produce evidentiary support for the claim that this take on memory, as a qualitative multiplicity (cp. above in Section 2.4), responding to the appeal of the present state – in diffraction with Barad - provides the ground for a different cut of the phenomenon that Boje incorporates in his most recent (re)configuration of the tripart story arrangement; the (Bakhtinian inspired) emotive-volitional plane (cp. figure 2.10 in Section 2.5). The support links memory as qualitative multiplicity with affect, imaging and figuration understood as 'deconfiguration', which in turn links discontinuity across spacetimescales with restorying of organizational practices aka (re)configuration of organizational practices. This in turn affords a (re)configuration of the intra-act of iterative enfolding of spacetime-mattering in Material Story practices that is consistent with the above diffraction of Baradian and Bojean apparatuses, where the power struggle of post-structuralism was left behind or rather (re)configured in light of the mutual constituency of the relational ontology of Material Storytelling. It is this mutual constituency of ontological relations of phenomena (intra-action) that I claim has an affective 'dynamic' inherent in - and central to - the agential cut of material-discursive-affective practices (relational differentiation through intra-action). This then accounts for the agential cutting together/apart of ontological indeterminacy/inseparability of agential separability of inseparability of components of phenomena. It is this manner of 'cutting together and apart' intra-active material-discursive storytelling practices that we will now take to a new level of detailed elaboration.

The phenomenon's ontological indeterminacy/inseparability (of 'observed object' and 'agencies of observation') - was - as we recall - *the* vital (Bohrian inspired) element for Barad's framing of the onto-epistemology of intra-actions and phenomena as always already onto-semantic, where meaning and matter are mutual constituents and where phenomena are only distinct in a relational sense; 'lacking' self-sufficiency and independency. The phenomenon as dependent of the larger material arrangement - apparatus - that enacts it; agentially cuts it and diffracts it in material-discursive intra-actions; that is the ontological (always-already) inseparability of agentially intra-acting 'components'. Said differently; phenomena are produced through agential intra-actions of multiple apparatuses of bodily production. Further:

"Phenomena are constitutive of reality. Reality is not composed of things-in-themselves, or things-behind-phenomena, but of "things"-in-phenomena", (Barad, 2008: 135).

The primary ontological units are not 'things' but phenomena, and the primary semantic unit is not 'words' but material-discursive practices through which boundaries are constituted. The three material story modes are such material-discursive practices through which a different relationality is constituted by different boundaries being drawn due to a different field of possibilities of the dynamic contingent multiplicity. Here agency is not an attribute to the rooms, things or people, but *the* dynamism of ongoing reconfigurings of the organization/world, which means that the organization/world is 'just' an ongoing intra-activity in its differential mattering. Therefore it is

also through specific intra-actions that phenomena come to matter - in both senses of the word; meaning and materializing. The organization/world is thereby an ongoing open process of mattering through which 'mattering' itself acquires meaning and form in the realization of different agential possibilities. In this processual historicity temporality and spatiality emerge, and are reworked as well when relations of exteriority, connectivity and exclusions are reconfigured. This processual historicity is the process of organizational becoming and change. I get back to this below and diffract the notions 'entangled durations' and 'deconfigurations'.

This differential becoming of phenomena from within ontological entanglement is accounted for in diffraction patterns that, as we recall, are about "*marking differences from within and as part of an entangled state*", (Barad, 2007: 89).

Affect then is about the marking of differences as a manner of accounting for the dynamic by which differences are marked in Material Storytelling practices of 'the between'. Barad is, as we recall, concerned with differences as marked from within a posthuman quantum-queer-cut entangled state governed by dis/continuous causality.

Below, I relate the Bergsonian notion of 'virtual' to this entangled indeterminate state of discontinuity - as:

"Bergson's notion of the 'virtual' offers a powerful tool for thinking about the production of difference", (Middleton and Brown, 2005: 58).

‘Life’ or ‘vitality’ for Bergson is the production of difference, and the responsive and dynamic relation among differences (Colebrook, 2008: 54), whereby life produces change as well as maintains a relative stability for the sake of further evolving. As an example; if we are to understand the ‘life’ of the eye, we do so best by considering it “*as a response to the problem of light*”, (Colebrook, 2008:55). Bergson’s account of differential becoming is an affective responsive becoming that also accounts for how memory (temporality as qualitative multiplicity) through the diffraction of the appeal of the present ‘extends’ across various space-time scales – and partakes as co-constituent in the ‘deconfiguration’ of the intra-act that enacts spacetime-mattering. Affect is here rendering particularities to the agential dynamic of this entangled state from within which differences are marked in Material Storytelling practices.

By arguing for an inherent affect dynamic in the intra-active dynamic of material-discursive intra-actions, I am able to relate the three material story modes to these intra-actions and account for Material Storytelling as a diffractive approach to reworking organizational practices (cp. Section 2.5) in more detail. I further account for this diffractive dynamic of ‘vital intra-actions’ as *material-discursive practices of affective sites of engagements*. Thereby ‘the (apparatus of the) between’ - aka the larger material arrangement – is configured as such ‘affective sites of engagements’ that are *affecting* aka *diffracting* phenomena of/from a pre-human and posthuman ‘touching responsiveness’ ‘within’ the entangled state, so that it is not a question of entities inter-acting and responding to each other, but a question of mutual responsiveness or touch. Responsiveness or touching understood in terms of affect (and not human emotion or emotive) is then what (the three modes of) Material Storytelling intra-actions are all about. What this means for the conceptualization of story rework will be elaborated more thoroughly below in this section (Section 2.6.8).

It should be noted that this turn to affect in accomplishing the quantum, material turn towards Material Storytelling is *not* about re-installing the

usual human intentionality or motive, as this would contradict the Baradian ‘post-human’ approach. On the contrary this is to elaborate the agential onto-semantic engagement in intra-actions as a pre-entity, pre-conscious virtualizing/actualizing engagement (relation) that explicates the apparatus of meaning-matter, material-discursive configuration more vividly in the realm of ‘the seen but unnoticed’ ongoing actions of ‘the between’. Thereby the notion of the ‘phenomenal mind’¹ (cp. Norris, 2004: 93) within multimodal interaction analysis is reconfigured in light of the Bergsonian qualitative multiplicity. The act of ‘seeing but unnoticed’ here becomes de-configurative ‘affective animation’ as a manner of the workings of ‘touching responsiveness’ of the intra-act of cutting together/apart. Here ‘qualities’ are not characteristics belonging to entities as a pre-given, but of the entangled state as mutually constituted by the intra-acting agencies (apparatus) enacting the agential cut that ‘deconfigures’ the spacetime-mattering (the diffracted meaning-making, world-making). If we recall the BKS theorem where the values of a particular variable depend on how an experiment may be set up to measure other variables, even when they are not mutually exclusive (complementary) thus even when there is no incompatibility:

“To put it dramatically, the hair color you detect may well depend on whether you are simultaneously measuring shoe size and gender, or whether you are measuring height and weight” (Greenstein and Zajonc, 1997, 115-16 in Barad, 2007: 293).

“Bohr insisted that one cannot “imagine” a preexisting real world whose observables already possess real values: rather one should ask a theory to make statements only about those variables for which the apparatus is currently configured.” (Barad, 2007: 294).

¹ The phenomenal mind is a description of how “... participants in interaction react to the expressions of perceptions, thoughts, and feelings of others, constantly interpreting others lower-level and higher-level actions” (Norris, 2004: 93).

It is in this indeterminate play of intra-dependent, mutually constitutive ‘values’ or ‘qualities’ that constitute the aliveness of intra-action and agential realism and affords the diffraction of Bergsonian and Baradian thinking. Barad herself addresses this implied vitality of intra-actions this way:

“There is a vitality to intra-activity, a liveliness, not in the sense of a new form of vitalism, but rather in terms of a new sense of aliveness” (2007: 235). In Corfu at the PROS Symposium in June 2011 Barad agreed, “there definitely is affect in it” and “intra-action is basically about how we touch and are being touched” (Karen Barad, in face-to-face communication, June 19th, 2011).

By diffracting intra-action with living story and lived duration’s qualitative multiplicity, I thus end up with coining this new sense of aliveness² as ‘vital intra-actions’.

The turn to affect is – I will argue – integral to the quantum, material turn, as stated. On one level this is so in terms of the mutual post-Cartesian endeavor acknowledging the inadequacy of the mind – body, language – matter, individual – world dualities (cp. the ‘Great Divide’, Section 2.1 or cp. Haraway, 2008: 9) when it comes to account for processes of becoming. On another level it is so due to the mutual attentiveness to matter and mattering and the intra-relating of matter and discourse; the turn to affect is “*motivated by a desire to address intimate aspects of life through attending to an enfleshed understanding of action and thought*” (Papoulias and Callard, 2010: 34). “*Affect (...) names an inherent dynamism of the body, a biological productivity that undoes the mind-body distinction*”, (Papoulias and Callard, 2010: 34). In diffraction with Barad, these ‘intimate’ aspects of life by attending to an en-

fleshed understanding and an inherent dynamism of the body of a biological productivity, is extended to meaning-making as world-making from an onto-epistemological standpoint of ‘being of the world’.

So while Barad in her theorizing makes explicit the diffraction pattern resulting from material-discursive intra-action’s agential cutting of the space-timematter manifold (hence the phenomenon) and thereby makes explicit the illusions of a Cartesian/Newtonian heritage (of the ‘Great Divide’), the theorizing within the affective turn complements this Baradian notion of ‘intra-action’ by making explicit how more specifically this ontologically inherent indeterminacy is agentially cut in the agential engagements of Material Storytelling. I thus end up with a reconfigured terminology specific for Material Storytelling, diffracted through Baradian, Bojean and Bergsonian apparatuses. What is meant more specifically with this ‘affect vitality’ as ‘a new sense of aliveness’ will be clearer in what follows.

The Baradian, Bojean and Bergsonian apparatuses are engaged with different concerns. The Baradian concern is the entanglement of meaning and matter and granting space, time and matter a rightful credit as active mutually (entangled) constituents in the processes of becoming. Boje is/was concerned with organizational meaning-making practices, and how they are produced as stories in a dance between the retrospective meaning-making, the living immediateness of storying in the now and antenarrative prospective possibilities of the future (cp. Sections 2.4 and 2.5 above). This equals what Barad talks about as the field of possibilities.

Bergson’s concern in explicating the dynamic entailed in duration, was a rethinking of the relationship of meaning and matter, and he did so by substituting meaning or mind with memory (Campbell, 2009: 33). So in that sense Bergsonism is about memory-matter dynamics. About the ‘imaginative’ relationship we humans have to the fluid continuity of the real where qualitative multiplicity is the ‘motor’ – and an onto-semantic concern in that sense. Bergson was (like Barad is now) concerned with a ‘properly philosophi-

2 There are other examples of attempts to coin a new sense of aliveness. For example Bennett (2010) drawing on Deleuze and Guattari and Latour. Another example is Colebrook (Alaimo & Hekman, 2008: 52-84), who however discards the use of Bergsonism in this regard. I argue that Bergsonism in diffraction with Baradian theorizing on the intra-act affords such an aliveness, without being just another form of vitalism.

cal' understanding of time, that he opposes to the way in which time is theorized within modern physics, especially Einstein's theory of relativity, to open a dialogue between metaphysics and science, (Middleton and Brown, 2005: 57). This aim was however ruled out by Einstein himself,

"...who dismissed the possibility of asserting a meta-physical bridge between the multiple times of relativity theory and the subjective time of individual consciousness", (Middleton and Brown, 2005: 57).

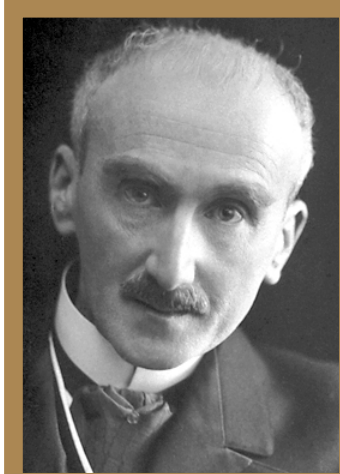
You can say that the attempt made by Bergson is carried on by both Boje and Barad but framed differently. There are, however, important similarities in how the three scholars (Barad, Boje and Bergson) conceptualize how the past, present, and future *"...are not in a relation of linear unfolding ...but threaded through one another in a non-linear enfolding"* (cp. Barad, 2010: 240). What Barad frames as material-discursive intra-actions of enacting spacetime-mattering; what Boje frames as ante-narrated prospective possibilities in living story; what Bergson frames as the dynamic of actualizing recollection memory, are all attempts to depict the threaded-through-dynamic of processes of becoming. All three of them are thereby also concerned with the marking of differences. However, only Bergson and Boje entail an explicit focus on memory as part of this marking, or rather memory as a phenomenon. They contribute in a complementary fashion to the diffractive configuration of (the Apparatus of) Material Storytelling.

Configuring meaning as memory in the lived duration sense affords, I claim, in its own way both dis/continuous spacetime-mattering (due to qualitative multiplicity) and

that agency no longer belong solely to the human domain. Bergsonism can due to that act of decentering the (conscious and rational) mind be regarded as an early form of (or at least an attempt towards) post-humanism.

As we saw above also Bojean storytelling is conceptualized as (individual and organizational) memory work as the 'preferred meaning-making currency' of organizations. Memory-work in the Baradian thinking must be regarded as an onto-semantic phenomenon enacted as material-discursive configuration. Diffracting these three requires me too 'keep my tongue straight' as I thereby need to hold the complexity of the above sections (2.1, 2.2, 2.3, 2.4, 2.5) in my 'mind's eye'. To manage the complexity of this diffraction we take our offset with the Bergsonian apparatus of the dynamic of virtualizing and the actualizing and as we go along we diffract this dynamic with the dynamics of the other two apparatuses.

2.6.3 The Bergsonian apparatus; Duration and the dynamic of the Virtual and the Actual



Henri Bergson (1859-1941) was one of the most famous and influential French philosophers of the late 19th century-early 20th century. Although his international fame reached cult-like heights during his lifetime, as for example both John Dewey and William James saw their respective versions of pragmatism as being in dialogue with Bergson, his influence decreased notably after the Second World War. While such French thinkers as Merleau-Ponty, Sartre, and Lévinas explicitly acknowledged his influence on their thought, it is generally agreed that it was Gilles Deleuze's 1966 *Bergsonism* that marked the reawakening of a wide and growing interest in Bergson's work. Deleuze realized that Bergson's most enduring contribution to philosophical thinking is his concept of qualitative multiplicity (cp. Middleton and Brown, 2005: 57).

Bergson understands the relation of memory and matter as a relation of a multiplicity of durations or vitalities in the appeal of the present that move from virtual memory to active perception.

"As Bergson describes, we move from virtual to actual in a series of stages from pure memory, to memory image, to perception. Virtual fantasies and sensations become real by stimulating the body into action impressing 'upon it those movements and attitudes of which they are the natural antecedent' (Bergson, 2004, p.168.) Consciousness is an active present and as such it is fleeting" (Campbell, 2009: 33).

These 'series of stages' of 'virtual fantasies and sensations' are, I argue, animations of 'the between' as the 'affective site of engagement' where configura-

tion 'takes place' and thereby 'the between' becomes the 'natural antecedent' for actions of movement and attitudes. Importantly though, understanding 'the between' as antecedent of should not be thought of as a pre/post relation as in a linear causality. Rather 'the between' (apparatus) and the enacted phe-

...The terrain of late nineteenth-century subliminal psychology and philosophy was sketched by important figures like Henri Bergson, who was a member of Society for Psychical Research (SPR) together with Freud, Pierre Janet, Carl G. Jung, William James, and Frederick Myers...

nomena are quantum causality where the effect (phenomena) constitutes its cause and both enacted at the same time. I will get back to clarify this further below. Also consciousness in Bergsonism is 'active fleeting present', which is related to a glimpse of intuition (not reflection reflecting) where a (hypnotic) memory image plays a vital role of the series of stages mentioned in the quote above. We will get back to this below where I – as stated – diffract this hypnotic memory image and intuitive glimpse, that brings 'it' about, with the 'figuring' of configuration from Haraway's take on the figure. However, when these 'series of stages' of an 'active fleeting present' are diffractively read with the Baradian (phenomena producing) configuring apparatus, these 'stages' afford a much closer elaboration of the process of deconfiguration of spacetime-mattering in the now, "*where past and future are iteratively reconfigured and enfolded through one another*" (Barad, 2007: 316) than Barad herself offers.

The Baradian cut of this spacetime-matter manifold configuration is thereby supplemented or *qualified* in accounting for how phenomena (for example Material Storytelling) cannot 'just' be located 'in' space and time but "*are material entanglements that "extend" cross different spaces and times*" (Barad, 2007: 317). I call this configurative act 'deconfiguring'. This extension across different spaces and times, is what Barad means by the 'entangled genealogy' of phenomena or the 'inherited relationalities' that we are, and in diffraction with Bergson this term is reconfigured as what I choose to coin as *entangled durations* of the Material Storytelling practices. 'Entangled durations' then depict the durational qualitative multiplicity take on entangled genealogies of phenomena that happens through the deconfiguring (vital) intra-act. What 'entangled durations' are will be clearer in what follows, and the term is an important part of the apparatus of the five parts analysis (cp. Section 3.1, Book 2).

Here we will continue the elaboration of this durational take on memory, which is presented by Middleton and Brown, as follows:

*"If all our past experiences are, by definition, part of our unfolding duration, and if duration is organised in a qualitative, undifferentiated 'virtual' fashion, then we simply do not possess clear, episodic memories. Our memory of events, then, **involves reconstruction** – we artificially extract or dissociate past events from otherwise **interconnected tissue of duration** in order that they can be reinserted into the demands of current circumstances (this is what Bergson means by 'actualisation'). So technically, what we recollect is not exactly what we experienced in the time. Moreover, as **duration is the condition of any sort of experience whatsoever**, it is simply impossible that we could ever bring these conditions as such directly to consciousness – this would be rather like attempting to lift ourselves up by our own shoelaces. So again we must necessarily say that what we recollect is a past 'that never was'" (Middleton and Brown, 2005: 141, my bold)*

Duration is interconnected tissue and the condition for any sort of experience, I turn this 'interconnected condition' to be a constituent of 'any sort of configuration'. I thus turn duration to be a co-constituent of the phenomena producing apparatus aka 'the between' and to be another manner of depicting the entangled state of ontological indeterminacy.

For process philosophers, all 'things' are actually part of a process of becoming – that is changing, moving and transforming. Such an approach differs from traditional Western philosophy where activities as laughing and joking, people's relationships, events as becoming a student, etc. are secondary to and explained by an account of the 'real essential nature' of the persons involved (cp. narrative being-in-the-world). Western thought including the kind of psychology it gives rise to is thereby characterized "*as classically concerned with things rather than actions and events, or to put it more simply with nouns instead of verbs*" (Middleton and Brown, 2005: 59). This is also what Barad refers to when talking about representationalism as being about making entities with characteristics or qualities, (cp. Section 2.2).

So in a process philosophical take, what is real is change itself – or the “...continual change of form: form is only a snapshot view of transition” (Bergson 1998: 302 in Middleton and Brown, 2005: 61). This is the view of the real that Bergsonism poses. Here change is a given much like how Bojean nonlinear living story (drawing on ‘heteroglossia’s centrifugal forces’ and ‘deconstruction’, cp. Section 2.5) implies change as a given. The ‘continual change of form’ is the ‘that’ out of which our worlds are continually re-formed, re-configured – an undivided flux or fluid continuity that becomes – with Barad – quantum discontinuity. For Bergsonism it seems likely that there should be an influence from quantum mechanics science studies, as this undivided flux bares resemblance with the quantum void. This ‘quantum inspiration’ of Bergson becomes more obvious when ‘snapshot views of transitions’ is explained (Bergson, 1998: 300-302 in Middleton and Brown, 2005: 61, my inserted square brackets):

”From our first glance at the world, before we even make out bodies in it, we distinguish qualities. Colour succeeds colour, sound to sound, resistance to resistance, etc. Each of these qualities, taken separately, is a state that seems to persist as such, immovable until other replaces it. Yet each of these qualities resolves itself, on analysis, into an enormous number of elementary movements. Whether we see in it vibrations or whether we represent it [diffract it] in any other way, one fact is certain, it is that every quality is change. In vain, moreover shall we seek beneath change the thing which changes: it is always provisionally, and in order to satisfy our imagination, that we attach movement to

a mobile...In short, the qualities of matter are so many stable views that we take of its instability.”

It should be noted that Bergson regards his own take ‘frankly dualistic’ however not in a Cartesian dualistic way and he refuses both idealistic and materialistic reduction. This means that with ‘snapshot view of transition’ we are not ‘just’ dealing with an epistemic take of traditional phenomenology. Bergsonism is *different*. For Bergson, fundamentally we exist in this ‘fluid continuity of the real’, from within which we are able to actively ‘cut out’ or ‘isolate’ discrete forms; ‘stable views’ that are ‘taken’. I argue that the crucial point here is that these forms are products or outcomes relative to our particular ‘glances’. I turn this to account for the apparatus’ enactment of phenomena, and I thus turn ‘glancing’ to be a diffractive grating in the Baradian sense (e.g. see also Haraway’s, 2008: 4 use of ‘chimerical vision’ in Section 2.6.7). Also – with Barad – ‘a snapshot view of transitions’ is to be understood as markings of (agentially cut) differences, and ‘transitional stages’ are to be understood as ‘diffractive gratings’ or apparatuses diffracting each scene differently. When Bergson states for certain ‘that every quality is change’, we should – when diffractively read with Barad – note this as the agential cutting of change as a changed relationality (cp. BKS theorem mentioned above). Bergson and Barad are on similar ground in defying that ‘beneath change there is the thing that changes’. This is why Bergson insists that the virtual is nonlocal, and why Barad (drawing on Bohr) insists that the smallest unit of reference is the phenomenon as already onto-semantic. This is where I find the grounds for diffracting Barad’s phenomena producing apparatus with the Bergsonian ‘glances that isolate’. Thereby I address the

human apparatus of the bodymind that is integral to the affect turn on/in the material turn. I get back to this below, where it will be clear that this human apparatus is co-constituent and co-constituted of ‘the between,’ which takes us from ‘being-in-the-world’ and/or ‘being-in-discourse’ to ‘being of the world’. It requires a diffractive reading of qualitative multiplicity as quantum multiplicity.

What Bergson is explaining in the above quote relates to the Bergsonian take on multiplicity as ‘qualitative multiplicity’. Memories are not perceptions in a (traditional) phenomenological sense; also they are not associations in a metaphorical sense between events. There is no direct link either, no foreseeable trajectory, and this is what provides the ground for the non-locality and the discontinuity of becoming. Memories are basically a play of similarities and differences at a subtle level. It is a recollection of a set of qualities, an array of colors, sense of temperatures, smells, shapes (see Middleton and Brown, 2005: 141). Actualizing memory is an act of recollection that is ‘dislocated’ – different in kind to either past or present, which means that the ‘present’ actualizing is not simply ‘the present’. What this means will be clearer in what follows.

Bergsonism holds that what seems real to us are qualities; sounds, colors, the feel and weight of objects – however these are themselves condensations or ‘snapshots’ – (or as Barad would say; congealed agency of onto-semantic phenomena) – that ‘satisfy our imagination’. However instead of following Middleton and Brown in the diffractive reading they are doing of Bergson and claim these ‘snapshots’ as “*produced by our intellect*” (Middleton and Brown, 2005: 61), I – as stated – suggest that what Bergson is getting at is better understood with the Baradian diffractive grating of the material-discursive apparatus. Important here is the hypnotic memory image that is closely related to the Bergsonian notion of intuition as a practical faculty. We get back to this once the virtualizing and the actualizing have been explained. Importantly though we need to hold on to that we are not ‘just’ talking about human perceptual apparatus. We are talking about ‘figuration’ as a process

‘sorted out’ in the mutual constituency of ‘the between,’ of which the durations of the human-non-human apparatus’ are (mutually constituted) co-constituents.

The relationality of the dynamic of duration is as stated the virtualizing and the actualizing, depicted (cp. Middleton and Brown, 2005: 74-77) as the relationality of the passive, non-animated ‘virtual’ and the active, animated ‘actual’; in diffraction with Barad thus the relationality of what is in/excluded from mattering given the appeal of the present, where duration:

“laden with the whole of the past, respond to the appeal of the present state by two simultaneous movements, one of translation, by which it moves in its entirety to meet experiences, thus contracting more or less, though without dividing, with a view to action; and the other of rotation upon itself, by which it turns toward the situation of the moment, presenting to it that side of itself which may be most useful” (Bergson, 1991: 168-169 in Middleton and Brown 2005: 77).

The two simultaneous movements are much like the two simultaneous actions of the apparatus and the phenomena. Virtualizing ‘is’ pure process of flow, and importantly thereby not implying a thing that flows. In this respect virtualizing is not a thing or a place (‘the virtual’) but an activity related to nonlocal preservation of experience aka configuring. What we need to comprehend here is this ‘no-where’ and ‘every-where’ state of the act of virtualizing. The virtualization preserves differences in a qualitative manner that becomes ‘virtual multiplicity’; which is interpenetrating singularities that differ qualitatively. Which then in diffraction with Barad becomes intra-acting singularities that differ qualitatively as exteriority from within this entangled state of constituents of ‘the between’:

“The key point is that ‘virtual’ memories are not clearly defined. It is only by means of ‘actualisation’ that they gain definition.” (Middleton and Brown, 2005: 77).

Virtual multiplicity is ‘no-where’ and ‘every-where’ – in quantum language; superpositioned. What this means I get back to below.

Virtual multiplicity of memories ‘gain definition’ through the process of actualizing, which is localized as the appeal of the present – what I coin as ‘the affective site of engagement’ - where actualizing when diffractively read through the Baradian apparatus - is the process of cutting agential separability of ontological indeterminacy (virtual multiplicity). Actualizing is thereby the process of recollection memory and an activity concerned with present action; what Barad calls the iterative enfolding of the spacetime-matter manifold in the now - or - iterative congealing of agency.

2.6.4 Quantum leap on/and qualitative multiplicity and entangled durations

When this relational (virtualizing/actualizing) dynamic of duration is diffracted with the Baradian apparatus the intra-related process of virtualizing/actualizing becomes the quantum act of the quantum leap in solving indeterminacy of spacetime-matter. The virtualizing/actualizing intra-act ‘is’ as such quantum dis/continuity and agential partaker of all that matters.

“Consciousness leaps or jumps’ the interval of time that separates the actual situation from a former one (Bergson, 1991: 146) to find it self directly in that region of our past that best fits present circumstances. Having made this link – memory in its indistinct virtual state – becomes actualized. ... Memory becomes progressively defined in terms of those aspects that appear to best inform action”, (Middleton and Brown, 2005: 77).

Now this is Middleton and Browns social-psychological reading which enact this ‘act’ as an associative link between *separated* ‘regions of the past’ and the present moment. I do not think this manner of cutting the actualizing act gives enough credit to the non-locality of the virtual multiplicity of Bergsonism. I would rather diffract this actualizing (recollection memory) act inte-

gral to the intra-act as an act of deconfiguring virtual multiplicity, where it is not about separation between past and present and making links between those as separate entities. Rather it is about deconfiguring the multiplicity of heterogeneity of qualities in the iterative, mutual constituency of the entangled ontology of components of phenomena – in the appeal of the present ‘affective site of engagement’ aka ‘the between’. Thus, about a Baradian quantum diffraction, where recollection memory is deconfigured integral to the ‘touching responsiveness’ of the co-constituency of ‘the between’ enactment of spacetime-matter reconfiguration. Thereby I cut the intra-act of configuration as a simultaneity of deconfiguring/(re)configuring. ‘De’-configuring depicts the manner by which virtual memory is an always already partaker of the vital intra-act of ‘touching responsiveness’ of ‘the between’ apparatus. (“Re’-configuration depicts the manner by which the (apparatus produced) phenomenon is always already inherited relations. So, where Barad merely uses parenthesis around ‘re’ in (re)configuration to imply this re/newing aspect of dis/continuity and thus the inherited relationality (entangled genealogy) of any phenomenon, I find it helpful for the purpose of accounting for Material Storytelling practices as ‘vital intra-actions’ to distinguish the particularity of the dis/continuity of memory story rework of the intra-act (by naming ‘it’ ‘deconfiguring’ of ‘entangled durations’). I thus use (re)configuration as a term ‘belonging’ to or depicting the phenomenon as always already onto-semantic configuration of inherited entangled relations. This manner of cutting affords a vocabulary of a slightly different relationality that I can put to use to account for a different take on the tripart arrangement of the Bojean apparatus. From above it follows that what is actualized aka (re)configured is always already imbued with other spacetimescales of virtually preserved memories that is deconfigured in the ‘Now’, which means that the ‘Now’ is never really ‘just’ of the ‘here and now’. Also as the actualizing/deconfiguring act is *of* the present ‘laden with the memory of a past that never was’ (qualitative multiplicity), we never either enact anything, as ‘it was’. The implication is that there is no ‘point’ that we can call definitely ‘the present’, ‘the past’ or ‘the future’. This has implications for the (re)configuration of the tripart story arrangement of Boje in order for it to be a suitable

memory device for the Apparatus of Material Storytelling. I get back to accomplish this (literal) reconfiguration of the story tripart models below.

In Bergson's account of memory, the virtualized memory is also depicted as potential. However Barad discards such a non-active potentiality and speaks only of the apparatus of 'the between' as the field of the mutual constituency of possibility (Barad, 2007: 183). Thereby Barad is concerned with (merely) the *actualizing aspect* of material-discursive 'figuring', as an act that gets solved or cut due to the presently enacted field of possibilities of dynamic contingent multiplicity. That is where it becomes obvious that each 'cut' matters as an agential cut, as it enacts the possibility for the 'next' enfolding next turn over; differential spacetime-matterings of the world. I will argue that by this process of deconfiguration of a mutually constituted 'between' field of possibility the virtualizing/actualizing act renders the quantum discontinuity 'possible'. Virtualizing is not an abstraction. It is a virtual preservation for further reference. Outside figuration – nowhere – like the quant dissolving as void. So if there is potential in virtualized memory it is quantum leap potential of superposition:

"But as we have seen the disruption of continuity in the form of a "quantum discontinuity" (a very tiny one indeed) is the source of the disruption of many of the foundational notions of space, time, matter, causality, and agency, and epistemology, ontology, and ethics. ... Quantum leaps aren't jumps (large or small) through space and time. An electron that "leaps" from one orbital to another does not travel along some continuous trajectory from here-now to there-then. Indeed, at no

time does the electron occupy any spatial point in between the two orbitals. But this is not what makes this event really queer. What makes a quantum leap unlike any other is that there is no determinate answer to the question of where and when they happen. The point is that it is the intra-play of continuity and discontinuity. Determinacy and indeterminacy, possibility and impossibility that constitutes the differential spacetime-matterings of the world. Or to put it another way, if the indeterminate nature of existence by its nature teeters on the cusp of stability and instability, of determinacy and indeterminacy, of possibility and impossibility, then the dynamic relationality between continuity and discontinuity is crucial to the open-ended becoming of the world which resists a causality as much as determinism." (Barad, 2007: 182)

The crucial 'dynamic relationality' between continuity and discontinuity is what the virtualizing/actualizing dynamic can account for in terms of memory rework as partaker of intra-actions. It accounts for the open-endedness of the iterative enfolding of spacetime-mattering. It accounts for how human-non-human co-constituted and co-constituent agencies intra-act in a quantum queer way across spacetimescales. Further, it accounts for how affect as qualitative differentiability intraplay in the 'touching-responsiveness' of this intra-act. I get back to this affect aspect of the deconfiguration below.

As we recall diffraction patterns are evidence of superposition; a phenomenon which as we also recall is related to the 'wave-particle

duality paradox’ of quantum theory that tells us that light can manifest both wave and particle behavior, and matter (particle) can manifest wave behavior – in all cases due to specific experimental circumstances (cp. Section 2.2 or Barad, 2007: 83). Superposition is with Barad the ontological indeterminacy that always only gets solved locally through an agential cut of separability; the enacted phenomenon.

Understanding this surprising superpositional behavior involves a crucial rethinking of Western epistemology and ontology, which is accomplished in Barad’s agential realism. The nature of superposition and its relation to the entangled states that lies at the heart of quantum phenomena play a major role in quantum weirdness of quantum diffraction. Barad cautions that complexity and profundity of diffraction should be kept in mind whenever this notion is invoked either figuratively, methodologically, or in reference to physical phenomena. (cp. Barad, 2007: 83).

In diffracting this quantum superposition of a quantum void with the act of virtualizing/actualizing it is important to notice Bergson’s point that many philosophers confuse time with its spatial representation. In reality duration is un-extended, yet heterogeneous, it is qualitative multiplicity and so its parts cannot be juxtaposed as a succession of distinct parts, with one causing the other. An example of qualitative multiplicity is how the days of the week are qualitatively ‘diffracted’ (configured) Tuesday following Monday renders (the memorizing of) Monday ‘qualitatively different’ when Tuesday has ‘arrived’. Not as adding 1 more to a string of experiences, as parts that can be juxtaposed, but as qualitatively different because it is now ‘seen in the light of’ (diffracted by) Tuesdays passing. With Barad this would be understood as a spacetime matter reconfiguration of a past that never was. This necessarily makes determinism an impossibility and free will pure mobility, hence the *duration*. The following table summarizes the important distinction between the two ‘fates’ of multiplicity that was elaborated briefly in Section 2.4:

Quantitative multiplicity are homogeneous and spatial	Qualitative multiplicity are heterogeneous and temporal
Example: A flock of sheep	Example: a spool, the color spectrum, elastic band
All look alike – homogeneity	Non are alike – heterogeneous
Can be enumerated and represented with a number	Differ qualitatively cannot be enumerated
Spatial separation/-location	Temporal progress
Can be juxtaposed	Can only be juxtaposed retrospectively

Table 2.2: A summarized overview of quantitative and qualitative multiplicity

So the iterative heterogeneity, the temporality and non-locality of the qualitative multiplicity of the virtualizing/actualizing dynamic of duration are, what accounts for the dis/continuity in Material Storytelling. Barad notes the following about nonlinearity and multiple heterogeneous iterations:

“Each scene diffracts various temporalities within and across the field of spacetime-mattering. Scenes never rest, but are reconfigured within, dispersed across, and threaded through one another....Multiple heterogeneous iterations all: past, present, and future, not in a relation of linear unfolding, but threaded through one another in a nonlinear enfolding of spacetime-mattering, a topology that defies any suggestion of a smooth continuous manifold” (Barad, 2010: 240).

I suggest that the Bergsonian duration with its virtualizing/actualizing dynamic when diffracted with Barad meets the requirement of defying ‘a smooth continuous manifold’.

Barad (with reference to Hans-Jörg Rheinberger, 1997: 199) points out the following about the new in light of nonlinear enfolding of spacetime-mattering:

“

Hauntological relations....

In her recent article Barad (2010: 240) states that quantum entanglement is about hauntological relations that are “more akin to how electrons experience the world than any journey narrated through rhetorical forms that presume actors move along trajectories across a stage of spacetime (often called history) (....)

There is no overarching sense of temporality, of continuity, in place. Each scene diffracts various temporalities within and across the field of spacetime-mattering. Scenes never rest, but are reconfigured within, dispersed across, and threaded through one another (...) this ‘beginning’ like all beginnings, is always already threaded through with anticipations of where it is going but will never simply reach and of a past that has yet to come. It is not merely that the future and the past are not ‘there’ and never sit still, but that the present is not simply here-now. Multiple heterogeneous iterations all: past, present, and future, not in a relation of linear unfolding, but threaded through one another in a nonlinear enfolding of spacetime-mattering, a topology that defies any suggestion of a smooth continuous manifold.

“The new isn’t the new until it is already not new – for the new “becomes a novelty only in transformation which makes it a trace of something to which it gives rise” (Barad, 2007: 383)

The new is a trace of something to which it gives rise enacted through transformation. A transformation in the sense of a reconfiguration with/of inherited relationalities. The new is in terms of what it gives rise to, which at first seems a bit odd or ‘backward’ to that of a Newtonian world order. Let’s read this quote in light of Bergson’s statement from above where virtual memory:

“become real by stimulating the body into action impressing ‘upon it those movements and attitudes of which they are the natural antecedent’ (Bergson, 2004, p.168.) “ (Campbell, 2009: 33)

Virtual memory here *becomes* ‘the natural antecedent’ of movements and attitudes through the enacted ‘actualized’ spacetime-mattering (movements and attitudes of the body). What we need to understand here is how the effect created its cause. How the enacted (movements and attitudes) created its cause; the virtualized – yet as – actualized recollection memory. What was actualized did not ‘exist’ prior to its actualizing in the appeal of the present dynamic contingent multiplicity of a field of possibility, (Barad, 2007: 147). It ‘was’ not until its effect caused ‘it’ as trace aka entangled genealogy aka entangled durations.

As a result of the iterative, generative nature of intra-active practices that constitute phenomena, the ‘past’ and the ‘future’ are iteratively reconfigured and enfolded through one another. The past and the future are therefore never closed and:

“It is not that the new is generated in time; rather, what is at issue is the intra-active generation of new temporalities, new possibilities, where the “new” is the trace of what is yet to come”, (Barad, 2007: 383).

Boje’s term ‘antenarrative’ tries to grasp – as we recall (cp. Section 2.5) – ‘this trace of what is yet to come’. Emergent actions are, as we recall, what Boje talks about as before narrative closure sets in – (thus before *de-finition* or *determinacy*) – and *ante* as a bet on the ‘next’ as the enacted field of possibility of dynamic contingent multiplicity due to the agential cut. Antenarratives then, traces the dynamic contingent multiplicity as the trace of what is yet to come; ‘the dawning next cut’, when diffracted with Barad. The Bergsonian *ante*-cedent as ‘the traces of which it gives rise’ (cp. above).

Thereby antenarrative (noticing) becomes the tracing of the *deconfigurative* intra-active memory reworking aspect of the entangled durations of ‘the between’ (the apparatus) from which the (re)configuration aka the reworked material-discursive practices (the phenomenon) emerges as a ‘new’ dynamic

contingent multiplicity of spacetime-mattering where ‘the generated new possibilities are integral to the generation of new temporalities.

Boje’s term living story relationality webs (complexity systemicity) here re-configures as well and become the ‘entangled between’ of ‘the affective site of engagement’ where antenarratives are integral to the agential cutting dynamic of the ‘renewal’ of the ‘figurative’ action: the deconfiguration of the material-discursive practices. As we recall antenarratives are deconstructive (cp. Section 2.5) and therefore performative. There is no performative descriptive (noticing of) tracing in the onto-epistemology of Material Storytelling. There is agential cutting of changed relationalities where (memory) ‘deconfiguration’ accounts for the generation of new temporalities integral to the enfolding of spacetime-matter (re)configurations in the now from the presently enacted field of possibilities of dynamic contingent multiplicity; the act of cutting/together apart.

2.6.5 Reconfiguring a model for Material Storytelling

Deconfiguration, (*deconfiguring* or *deconfigurative*) is thus used in the Apparatus of Material Storytelling to emphasize the qualitative multiplicity take on memory story rework as a quantum-leap ‘figuring’, the Material Storytelling Apparatus of enacting ‘the between’ as “a field of possibilities of a dynamic contingent multiplicity”. (Barad, 2007: 147). Thereby a posthuman take on restorying is enacted, which implies:

“If time itself is constituted through the dynamics of intra-activity and the past remains open to material reconfiguring, pre-existence as such becomes impossible and mimesis cannot be the reproduction of what came ‘before’.” (Barad, 2007: 383, my bold)

It is noteworthy how Barad here makes quite explicit her take on storytelling in the quote as she mentions and rejects both ‘mimesis as a reproduction of what came before’ and (thereby) ‘retrospective narration’.

If we recall the Bojean tripart story apparatus of a 'separate' categorization of past/narrative, present/living story relationality webs and future/antenarratives, it becomes clear that there is no need for – or rather it is misleading with – those three temporal partakers cut as equal, separate categories as this manner of cutting is reenacting a Newtonian/Cartesian worldview of linear unfolding. Neither is there a need for living story and antenarrative as equal categories, as the present diffraction of living story, lived duration and intra-action provides for antenarrative as a deconfigurative dynamic integral to the intra-action of living story relationality webs – reconfigured as 'the between'. There is thus a need for configuring the locally enacted 'between' as constituent of 'time-mattering' as well as and integral with spacemattering; as a scene – a between – for/of this intra-active diffraction of spacetime-mattering.

Here the 'before' is a recollection of 'a past that never was'. The 'next' is in the same manner the 'anticipations of where this is going but will never simply reach' – the traces of what is yet to come. The 'now' is never just here-now, either. The temporal partakers are 'threaded through' each other as entangled 'figurings' that never sit still, but are iteratively reworked and reworking of one another through 'the field of possibilities of a dynamic contingent multiplicity' – a mutually constituted field of possibility of in/exclusions that matter, which is integral to the living complex material reconfiguring, the dis/continuous configuration of the spacetime-matter manifold of the world.

Now this constituting of 'time' is however for the most part cut as a material-discursive practice of the threefold: 'before', 'now' and 'next' as we recall from the basic fractal model (figure 2.1). Where such a threefold is argued as the smallest unit of awareness or orientation for purposeful, coherent social action. Below is a reconfigured model of the basic 'fractal' model (figure 2.x) as well as Boje's spiral model from his 2008 tripart apparatus, (cp. figure 2.7). Through the appeal of the present between enactment 'befores' 'nows' and 'nexts' emerge as timed intra-action Boje's spiral model from his 2008 tripart

apparatus, (cp. figure 2.7). Through the appeal of the present between enactment 'befores' 'nows' and 'nexts' emerge as timed intra-action.



Figure 2.11: Model of the timed intra-action

The always local spacetime-mattering diffractively deconfigures – as an enacted between – a 'past that never was', a 'now' that is not simply 'here-now' and 'a future that will never simply be reached'. Those three are all deconfigured in the appeal of the present between intra-act. Thereby the Baradian 'entangled genealogy' of apparatuses becomes 'entangled durations' that are recollected (constituted) in a particular manner of the dynamic contingent qualitative multiplicity of this between. An argument I use to cut living story loose from 'retrospective sensemaking', and by a differently enacted between, I change the relationality so the retro-spect and pro-spect are not (any longer) 'the name of the game' of story practices as far as Material Storytelling

practices are concerned. The 'name of the game' is reconfigured as spacetime mattering.

I thereby suggest that this temporal threefold is understood as related to the diffractive grating aka apparatus of the intra-act of not only the human apparatus' but the apparatus of the whole situation as part of the intra-action order of 'the suggestive, unconscious rhythm of 'the between'. As such, the mimetic and diegetic aspects of the intra-act of restorying is about affective figuration where being touched and touching – being animated and animating as mutually constituent phenomena – are of the entangled between of a suggestive rhythm of the spacetime mattering of any scene. This is where the threefold of temporalities are generated - in the synchrony of the intra-act.

Here 'touching responsiveness' is a between phenomena; instead of entities affecting one another or entities being affected by the 'situation' we have emerging mutually constituted co-constituents of restorying actions that generate temporalities and possibilities cut-by-cut, fold-by-fold. The multiple temporalities that Bojean storytelling (Narrative Temporality) speaks of, is thus here diffracted as an enactment of the between.

Thus, we have ontological indeterminacy of agential separated temporalities and (other) human-non-human entities, which in the Apparatus of Material Storytelling is coined as 'mattering bodies' and 'spatial discourse' and 'intra-action order. However, and importantly – they are deconfigured within and emerge from this affective site as 'somebody' or 'something' or 'sometime' - as congealed action and congealed agency. 'They' do not pre-exist intra-

action but are recollections or actualizing of superpositionality of virtuality.

The model below is a reconfiguration of three models; the basic fractal model (figure 2.2), the spiral model from the 2008 configuration of the Bojean apparatus (figure 2.8) and the model of the configuration of the Apparatus of Material Storytelling (figure 2.7) from Section 2.3.6:

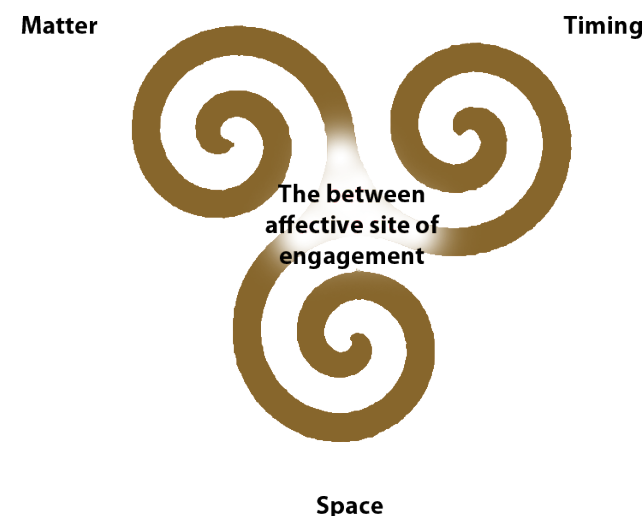


Figure 2.12 A reconfigured model of the Apparatus of Material Storytelling

In order to elaborate this 'affective site of engagement' as a suggestive rhythm of an intra-action order from which various congealed agencies emerge, we will now need to diffractively address another key concept in Bergsonism;

the nonpsychological unconscious and diffract it with ‘the between apparatus’ and ‘configuration’. We here briefly need to return to the virtualizing/actualizing aspect of the subterranean subtleties of intra-action and thereby to the virtual unconscious as an act of virtualizing/actualizing in order to pay proper attention to the memory image and Èlan Vital (glimpse of intuition), that partake in the suggestive rhythm of the actualizing act of recollection memory by intuition, however and importantly here those are diffracted as ‘between phenomena’ that accounts for the *affective touching responsiveness* and the timing of the intra-action order as *quantum jazzing*. This then affords me in diffraction with Haraway’s take on ‘figure’ to finally account for the ‘configuration’ of spacetime-mattering of the three material storymodes, which follows.

2.6.6 Virtual unconscious (and intuition) as partaker of the apparatus of the enacted between

According to Campbell, Bergson enables us to see the unconscious in terms of questions of affect, temporality and embodiment. We are then with Bergson returned “to a world before linguistic signification” (Campbell, 2009: 33).

“The virtual unconscious is the non-psychological world. This is the world as virtual memory; one that surrounds us and runs through us, as an unconscious of rhythm and suggestion. We don’t then have to look for psychoanalysis to explain how we get into the world, because we are always already there and the world constitutes our unconscious other.” (Campbell, 2009: 35)

As Janet Campbell notes the historical difference between psychoanalysis and subliminal psychology was carved out in different readings of what the unconscious meant. Where Freud saw the mind as a unitary phenomenon divided between the conscious and a repressed inaccessible unconscious, the subliminal psychologists (Campbell, 2009: 30), instead, posited an existence of a secondary consciousness and multiple self-states organized through dis-

sociation, which refers back to qualitative multiplicity from above. Rereading *marking of differences* through a Bergsonian understanding of qualitative multiplicity of lived duration opens a larger space of reframing the mutually constituency of human and non-human intra-active dis/continuous becoming.

Reading the notion of the subliminal unconscious through the concept of lived duration in Bergson’s work affords a model of unconscious subliminal emergences as virtual and non-psychological phenomena and account for memory as the social, historical and the material nature of the unconscious; the unconscious as a historical force, not simply a private container of repressed personal memories (Campbell, 2009: 31). So the virtual unconscious (or the unconscious virtualizing) is our non-human relation to the physical and historical world. An unconscious - that has never been consciously known, and a creative dynamic that can be brought to bear, when we are able to lose our more intentional egos and selves; the ‘I’ as its ‘workings’ are of ‘the seen but unnoticed’ kind. I get back to this implication below to discuss the ethicality of this creative non-human unconscious.

Lived durations virtual unconscious is ‘located’ outside the realm of (what is commonly known as) the intellect in relation to the material objects of our everyday life and is accessible through intuitive glimpse - what Bergson calls Èlan Vital. Since duration is about unity (as in the quantum void) as well as multiplicity, heterogeneity and mobility, it cannot be grasped through immobile concepts. The only way to grasp duration is according to Bergson by intuition, which bears some resemblance to Boje’s term antenarratives in the sense that antenarratives are geared to capture the mobility of the mutual constituency of solving indeterminacy; the act of recollection memory through actualizing.

To account for the sense of aliveness in actualizing Bergson’s solution was the notion of an original impulse, Èlan Vital; the inspiring glimpse of intuition. This also relates to the previous mentioned potentiality of the virtual. Ac-

cording to Bergson it is impossible to plan the future, as time itself unravels unforeseen possibilities (cp. Barad's 'field of possibilities of dynamic contingent multiplicity' from above). His notion is that the effect created its cause, and that historical events can always be explained retrospectively by their conditions of possibility. However, he explains that such an event created retrospectively its causes. This relates to Boje's critique of retrospective sense-making, which Boje believes characterizes the literature on narratives in the organizational and management literature, (cp. Section 2.5). Intelligence for Bergson is a practical faculty, more than a pure speculative faculty, a product of evolution in order to survive (and thereby not limited to humans). Actualizing is renewal in the appeal of the present. This is different than the Bojean 'perpetual referral' – which was depicted as a 'speculative faculty' (cp. Section 2.4). When antenarrative tracing is diffracted with Bergson's 'practical faculty' of grasping mobility as intuitive glimpse it gets depicted as something that is integral to the 'deconfiguring' of between intra-action. Thereby also diffracted with the dynamic of Barad's iterative enactment, or iterative intra-activity. We get back to this below.

The world as a virtual unconscious merges through the hypnotic image (Campbell, 2009: 33) and it is primarily through the hypnotic dissociation in relation to the image that we move between the virtual imaginary of fantasy and the reality principle of active perception; the actualizing. It is this dynamic that I claim, as stated, elaborates the Baradian point of the phenomenon producing apparatus. The world materializes through the image – here reconfigured as 'the figure' – and suggests itself to us in the appeal of the present. Bergson claims that all we sense are images and this claim links to his method of intuition. He is re-stating the problem of perception (configuring) in terms of images because it seems to be an intermediate position between realism and idealism (Matter and Memory: 26). Bergson is employing the concept of image to dispel the false belief — central to realism and materialism — that matter is a thing that possesses a hidden power able to produce representations in us. Here it becomes clear that Bergsonism is not representationalism. We need to address the particularity of matters hidden

power below when we diffract Haraway's notion of the figure, but for now we just hold on to that Bergsonism also is concerned with the material-discursive between in terms of 'an intermediate'.

For Bergson, the image is less than a thing but more than a representation. The 'more' and the 'less' indicates that representation differs from the image. It also indicates that actualizing is continuous with images of matter; with figuration. I thus see a fruitful resonance between Barad's *configuration* and Bergson's hypnotic virtual image, that affords me to account for the manner by which the intra-act of story objects and human partakers in Material Storytelling practices recollect – (from a past that never was, entailing a future that will not simply come and a now that is not only here-now) – memories that account for the entangled genealogy of becoming; entangled durations. Here it is not about material objects having a hidden power, it is about intra-acts that deconfigure this 'intermediate entangled state'. We will get back to this below.

Through the hypothesis of the (intermediate) image, Bergson is re-attaching perception to the real. In his later work in the book "Creative Evolution" he extends the concept of duration to entail matter in a more profound way and he argues: "*duration defines living existence of all non-human beings*" (Campbell, 2009: 33). As stated, in diffraction with Barad's notion 'the apparatus', the larger material arrangement accounts for the durational act of virtualizing/actualizing. Further, the onto-semantic construct of the recollected memories are then to be understood as 'diffraction devices' that as part of 'the appeal of the present' material-discursive between-enactment of memories suited for current now actions, where the recollected memories *are* enacted congealing of agency as the act of 'making snapshots out of the flux' and cut 'something' and/or 'somebody' and/or 'sometime'.

The following passage from Bergson's *Creative Evolution* resonates remarkably well with Barad's understanding of enfolding of spacetime-mattering and things as congealing of agency.

“Like eddies of dust raised by the wind as it passes, the living turn upon themselves, borne by the great blast of life. They are therefore relatively stable, and counterfeited immobility so well that we treat each of them as a thing rather than as a progress, forgetting that the very permanence of their form is only the outline of a movement” (Bergson, 1911: 134-135).

We treat the living as things rather than progress. When things are ‘really’ progress where permanence of form is only the outline of movement, we have ‘congealed action’ and ‘congealed agency’ in the Baradian sense and we have mobility. As vague contours of matter – the hypnotic image – we have qualitative multiplicity, which resonates well with Haraway’s accounts of the relation between figures, figuring and stories that we will deal with below. It is this subtle living or aliveness of qualitative multiplicity that – as the vital (deconfigurative) aspect of intra-actions enacting congealing of agency, by the ‘touching responsiveness’ of (at one and the same time) being co-constituent of and co-constituted by ‘affective sites of engagements’ – calls on an approach of ‘being of the world’ as embodied entangled beings.

The body in affect theory is addressed through its biological specificity, and in its “*subindividual (...) capacities*”, (Clough, 2004: 3). Affects (as ‘touching responsiveness’) are related to these subindividual capacities for intra-action at the pre-linguistic ‘level’ between a stimulus and reaction, and between reaction and consciousness. The turn to affect is thereby (also) a turn to that ‘non-reflective’ bodily space before thoughts and cognition – a space of visceral processing. Importantly, this non-reflective space

is not without intelligence; although it is characterized by a certain kind of automaticity, this does not equal the ‘dumbness’ that from a Cartesian standpoint most often would be ascribed to the body, but is understood to be a ‘*different kind of intelligence about the world*’ (Thrift, 2004: 60).

To that effect, affect theory draws upon various propositions from the composite discipline of neuroscience, not the least the claim that the Cartesian distinction between body and mind is inadequate in the face of findings concerning the origins of perception, thinking and behavior in general. Coleman (2006) with reference to much of this research names the human being as ‘*created for connecting*’ (2006: preface). I will rephrase this claim into ‘*created to intra-act*’ as part of the world’s becoming – as part of the practical faculty of survival, which in that sense is nothing but partaking in the ongoing enfolding of the spacetimed-mattering of the world of which we are always already part. Coleman’s claim rests on a theorizing of a so-called ‘back road’ and ‘main road’ active in all kinds of interaction (2006: 46). The main road is “*about rationality, words, and meanings*” (2006:46). The back road takes place on a subtle level in an ongoing silent communication and is “*vitality in a free form that runs beneath the words and keeps the interaction together through an immediate sense of contact*” (2006: 46, my bold). I argue that this ‘immediate sense of contact’ is integral to what Barad talks about as the intra-active ‘touching responsiveness’ and as we will see below integral to what Haraway talks about as *contact-zones*. This immediate sense of contact is further what Bergson accounts for through intuitive glimpse of the vague contours of hypnotic images. Further, this immediate sense of contact is by Coleman recognized as communicated through a

multiplicity of cues of spontaneous facial expressions, hand gestures, gaze, and so on. Coleman here addresses (what I choose to call) *mole-cues* as a kind of ‘thinking aloud’ that informs others, what is to be understood between the lines, so interlocutors can know moment to moment how we feel. Coleman denotes it ‘an emotional minuet unfolding in a dance’ (2006: 46) of multiple simultaneous, synchronous communicative cues. I argue that those cues are not just ‘telling’ others how ‘we’ feel, as this is still enacting a founding difference of separation. I argue that this minuet of cues are intra-active phenomena of ‘touching responsiveness’ and thus of ‘the between’ as an ‘affective site of engagement’. The minuet of cues is by Stern (2004), theorized as an analogue phrase of action with *temporal structures* and *vitality affects* (Stern, 2004: 80). Actions as a smile, a sounded phrase or a human-non-human bodily movement all have temporal structures with specific vitality affects; temporal contours of stimulation. These ‘vague contours’ I suggest is partaking in the deconfiguring of recollection memory. The (intra)act of for example the engagement of ‘seeing’ consists of scanning eye movements, adjustments of head positions etc. to follow scanning-roads with timing ‘build in to them’ due to the material composition of contrast and/or complementary colors, delineaments etc. that is; visual-motoric-affective cognitive phases of contours of time, which are seen, but most often unnoticed vitalities through which synchronized actions are possible and therefore integral to the manner by which temporality is intra-actively enacted as spacetime-matter-ing, as stated above.

Further, this ‘emotional minuet’ is within psychobiology (Rossi, 2002) theorized all the way to the molecule-genome

level of the human brain functions – and to onto-material aspects of memory recollection. Rossi (2002) argues that on a daily basis our emotions, thoughts, experiences and actions are modulating human genetic expression in ways that changes the structure and development of the brain (Rossi, 2002, Preface xvi). In the moment of recall of an important memory, nature is stated to open the possibility for reconstructing it at the molecule-genome level of the brain. Here nature and nurture is viewed as:

“co-operative partners that coordinate gene expression and neurogenesis to create our life experiences and continually update our memory in fresh ways, whether we are aware of it or not”, (Rossi, 2002, Preface: xvi.).

As such ‘every recall is a reframe’, which quite literally supports the argument of recollection memory as a deconfigurative onto-semantic intra-act, and brake the myth about genetic determinism where our genes should lie deeply hidden in our biology far away from our everyday consciousness and actions in line with the baradian point regarding dis/continuous becoming as resisting a causality as much as determinism (cp. above). The ‘responsiveness’ of genes is extensive:

”That is, we are constantly engaged in a process of creating and re-constructing the structure of our brain and body on all levels, from mind to gene”, (Rossi, 2002, preface: xvi).

Following this line of thought and to further clarify the implications of affect as vital intra-action of between as ‘affective sites of engagements’, I would like to refer to ex-

periments at HeartMath Institute of London¹. They conducted a series of experiments in the 1990's of subjecting human DNA to various emotional-affect influences through (professional actors) heart directed intentionality, with the implication, that the emotional environment seems to be able to affect the human genome to a much greater extent than previously thought. The strings of human DNA here reacted emotional stimuli by either pulling together or stretching out depending on which emotionally driven affect 'they' were intentionally subjected to². In this context the findings from these experiments is merely to explicate and back up my statement that 'the between' is an 'affective site of engagement'.

In this perspective, processes of materialization are therefore about processes of responses where beginnings and endings are hard to find. So the material-discursive reworkings of memory/temporality through intra-actions is supported also in this psychobiological way around.

With a material, quantum turn this synchronous dance – all the way to the genome level - becomes the entangled 'mole-cues' of the intra-act of human-non-human co-constituents and with the help of the notion 'quantum jazz' (cp. Section 1.5 'Research(er's) story' or Ho, 2008: 130) this subtle dance of the subterranean intra-act becomes the quantum jazzing of 'vital intra-actions':

"What one must imagine is an incredible hive of activity at every level of magnification in the organism, a light and sound extravaganza played out over most, if not all the 73 octaves of the electromagnetic spectrum,

locally appearing as though completely chaotic, and yet perfectly coordinated as a whole. This exquisite music is played in endless variations subject to our changes of mood and physiology, each organism and species with its own repertoire. It would be wonderful if we could tune in and discover how some of us are made of Schubert, and others of Beethoven, or Bach, or something entirely different, which I have called Quantum Jazz" (Ho, 2008: 130).

Here the mutually constitutive 'dance parties' are quantum entangled 'mole-cues' and therefore "lack an independent, self-contained existence" (cp. Section 1.3 'Vignette 1' or Barad, 2007: Preface). It is thus in this 'dissolving' of the (multimodally) inter-acting human-non-human parties 'into' intra-acting (entangled) qualitative multiplicity of 'mole-cues' that the subtlety of the ontological indeterminacy/inseparability becomes a phenomena to be video-documented and analyzed in multimodal constituent analysis, which then documents the enacted relationalities of differences that configures the agential separability. Further, it is through such an analysis that Material Storytelling can be evidentially supported and posed as (an apparatus for) intra-active, dis/continuous rework of organizational practices.

Next, an 'Outing' depicting the renewal of vitalism as an affective turn central to feminist studies

1 www.heartmath.org

2 Jf. Glen Rein, PhD; "Conformational changes in human DNA ,were chosen as the biological target since previous research indicated that heart-directed intentionality caused bidirectional changes in the conformation of DNA". For further information; Rein G, McCraty R., 1993. "Modulation of DNA by coherent heart frequencies", Proc 3rd Ann Conf Internat Soc for Study Subtle Energies & Energy Medicine, Monterey, CA, pp. 58-62.

2.6.7 Vitalism renewed

‘Why would feminism turn to vitalism and matter?’

Clair Colebrook begins her inquiry into the (re)new(al) (of) vitalism by stating this question and she immediately provides the following answer: the exhaustion and limits of the linguistic paradigm that merely repeats a centuries-old privilege of the formal and logical over the material.

“A turn to life, and materialism is (...) a turn away from the ways in which matter (as the bearer of properties) and the vital (as the spirit that infuses matter) have been defined” (Colebrook, 2008: 53)

She embarks on depicting how the/a subtle criticism of vitalism that defined poststructuralism, also has enabled some of the best work in feminist philosophy in taking a form of vitalism by refusing the idea that matter needs to be granted meaning by thought, Karen Barad is an example of such work:

“As long as ‘life’ of vital matter is deemed to be creative, productive, and intensive, then we remain caught in an age-old moral resistance to those aspects of life that remain without relation, thereby repeating the gender binary that privileges act and production over inertia and passivity”, (Colebrook, 2008: 56).

It is through understanding the early and traditional forms of vitalism as an opposition to Cartesian Philosophy (that depicts the material (world) as ‘extended matter’ or ‘res extensa’ that could be mapped and mastered geometrically and thus as having predictable causal relations)

“that we can understand how and why radical material feminism must retrieve the vitalist criticism of the world as mere matter, while at the same time also resisting traditional vitalists appeals to an expressive an creative life force” (Colebrook, 2008: 56).

Cartesian materialism’s manner of cutting ‘matter’ leaves matter as passive recipient with no intrinsic form or identity and in need of an active dynamic as it cannot itself ‘strive’, ‘have purpose’, ‘expression’ or ‘meaning’. Therefore matter is to be accompanied by the mental substance of mind. Vitalism was in that regard an attempt at endowing matter with its own properties of movement by a divine or spiritual force.

The renewed vitalism turns to or reconfigures as affect two ways around (Bennett, 2010:xii); the first is affect where human capacities for agency are strengthened. Here the body has returned to philosophy with the argument that the body should not ‘just’ be seen as *“the vehicle through which mind or activity makes its way in the world”*

(Colebrook, 2008: 52), on the contrary it was to be regarded as an agency of its own kind. In the light of this theorizing emerged on 'the embodied mind' (cp. Section 1.5 'A summarizing of Research(er's) story').

The second way around affect is concerned with affect in terms of the agency of the things that produce effects on bodies, and makes bodies. Here more radical impersonal 'posthuman' vital processes are depicted as agential. Both takes on affect is (I argue) about what I following Barad call 'touching responsiveness' but the latter is an impersonal, pre or posthuman 'version' that is not concerned with the human actor as such, thus not in it self concerned with what makes a human actor act (cp. the ventriloquist and the puppet, Section 2.3.6). However, those implications can be drawn as this prehuman 'level' conditions the human relational capacities as in the example above with Stern's theorizing on vitality affects and temporal contours.

It seems fair to say, that as I embarked on the PhD project with 'organizational re-embodiment' and 'embodied learning' (cp. A Summarizing of the Research(er's) Story', Section 1.5), I was led by the 'let's get the body back' feminist movement mentioned above as the first way around affect. To a certain extent this first turn to affect as embodiment has become part of my entangled duration through the apparatus of IPOK (InterPersonal Organizational Communication) at AAU through which I took my master degree and wrote my thesis. Using the body as 'source of knowing' is a special signature of IPOK at AAU with roots in a human-centered dialogical approach especially informed by Buber and Rogers (cp. Alrø og Kristiansen, 2006), and pedagogically also informed by the resource-oriented-skill-training of the body-based pedagogy of Bodynamic, (cp. Analysis Part 1, Book 2)

As I have turned towards Barad's work and diffractively read the vitalism of Bergsonism through the quantum queer 'lens', I have embarked on the second more radical version of the turn to affect, where embodiment is reconfigured as a prehuman or rather posthuman approach to affect. The radical take on affect is concerned with

"the colliding of particle-forces delineating the impact of one body on another; this could also be explained as the capacity to feel force before (or without) subjective emotion....Affects create a field of forces that do not tend to congeal into subjectivity" (David Cole in Bennett, 2010: xiii)

Thus affect here is an affect not specific to human bodies, although entailing human bodies. Following Bennett it is affect with less focus on the enhancement of human relational capacities that follows from affective catalyst, (Bennett, 2010: xii) - what I call the 'affective animation' - and more on the catalyst itself. Here agency is not transpersonal or intersubjective but impersonal;

"an affect intrinsic to forms that cannot be imagined (even ideally) as persons" (2010: xii).

So this posthuman radical way around affect deals with 'a field of forces' aka 'an affective catalyst' aka 'the between' in the Baradian sense aka 'affective site of engagement' in Material Storytelling sense.

For Bennett this renewed take on vitalism is vibrant matter where affect is equated with materiality

“to theorize a vitality intrinsic to materiality as such and to detach materiality from the figures of passive, mechanistic, or divinely infused substance” (Bennett, 2010: xiii).

With Barad affect is equated with both materiality and discourse in the intra-active ‘touch’ of enacting phenomena as always already onto-semantic. For Haraway affect is equated with materiality and meaning in ‘contact-zones’ of material-semiotic nodes that in a complex manner coshape one another.

As noted above within Material Storytelling the notion of ‘quantum jazz’ depicts this play of becoming in symphony – a quantum coherent synchronicity - of all the relationalities that ‘we’ are and continuously become ‘with’ through iterative enactments of ‘touching responsiveness’ of vital intra-actions. For Material Storytelling affect is therefore equated with materiality in the between intra-act as the ‘affective site of engagement’ in which material-discursive practices affects and are affected aka constitutes and are constituted as they partake in the agential cutting together/apart of phenomena.

On this ground I chose to add ‘affective’ to practices; material-discursive-affective practices - as to highlight the presumption by Barad that material-discursive practices are “the primary semantic units through which boundaries are constituted”, (Barad, 2008: 135) and as such they are generative of becoming when becoming is understood as changed relationalities and (re)configurations. The three material story modes of Material Storytelling are such material-discursive-affective modes of enacting ‘the between’ and reconfiguring phenomena.

Material Storytelling thereby also enacts both ways around of the affective turn, mentioned above. The ‘subterranean subtleties of vital intra-actions’ of the material story modes enacts the ‘becoming with many’ as a synchronicity of the between intra-act as quantum coherent action; the emerging ‘intra-action order’ with temporal structures and vitality affects, and where spatial discourse and (human-non-human) mattering bodies become as/through ‘touching responsiveness’ enacted as dynamic contingent multiplicity for agential cuts.

This enactment is the affective catalyst condition for enhancing human relational capacities - (like the ventriloquist and puppet dynamic, cp. Section 2.3) - for agential cuts of changed relationalities and response-abilities toward sustainable organizational living.

Thus, Material Storytelling’s material-discursive-affective practices invokes an ethics of knowing, because drawing boundaries has different implications where our agential cutting together/apart of changed relationalities produce knowledge with real material consequences. I get back to this ethical aspect of/and sustainable living in the closing section of the dissertation.

2.6.8 The (con)figurations of/by Material Storytelling

As the final stage, we will delve a little more on the notion of configuration and especially how the notion of figure and storying come together in the Apparatus of Material Storytelling. From above (Section 2.6.4) we have established that this apparatus works like a diffraction grating that may have two complementary purposes (Barad, 2007:182). Either the goal of the diffraction experiment is to learn about the nature of substance that is being passed through a diffraction grating (in my case the events and situations in the action research project at DBC), or it is to learn about the diffraction grating itself, where the diffraction grating itself becomes the phenomena under study (how is the Apparatus of Material Storytelling configured, from where does it come, what are the key concepts, methods, technologies, practices etc.).

This simple/complexity is the fundament of Barad's notion of the apparatus, which means that a phenomena producing apparatus is a diffraction grating, however small that might be. On this backdrop the figure (hypnotic intermediate image) is a diffraction grating. This means that the actualizing process (from virtual memory to hypnotic image to what is 'cut' as congealed agency) is a 'passage' to the extent that virtual memory is enacted (recollected) as it 'passes through' the diffraction grating of the figure. Different figures invoke different memories differently to the extent that the different object becomes a *different difference*, a figure of a changed relationality of spacetime-mattering. The *configuration* of the spacetime-matter manifold entails the traces of the apparatus' figuring of the phenomenon due to being a particular (onto-semantic

kind of) diffraction grating. We will look into this next by revisiting one of Barad's main inspirational sources, Donna Haraway, by which we link diffraction grating to configuration of stories and to entangled durations of virtual multiplicity.

So a configuring apparatus is a diffraction grating. Any apparatus configures. The little material object *configures*, the human apparatus of the bodymind *configures*. The larger material arrangement of a workshop setting *configures*. Matter *matters* (all the way to the genome level of molecular quantum jazzing). Not just giving shape as surface as if content were the same regardless of shape. That is the lesson of the wave-particle-duality paradox, with import to communication and organization studies. In Material Storytelling little objects, human bodies and the larger material surround are conceptualized as diffractive gratings that *configures* (enfolds) phenomena as spacetime-matter manifold – phenomena that in turn are themselves diffractive gratings, apparatuses, for enacting phenomena one (dis/continuous) turn over. However, what we need to recall here is that an apparatus is a material-discursive construct or onto-semantic configuration. This means that there is a certain complexity to the act of 'becoming' an apparatus – to becoming a *figure* of *configuring*. A complexity, which exactly prevents us from 'placing' a hidden power (agency) within matter itself, as both Barad and Bergson would caution us to do. The apparatus is the material-discursive, onto-semantic 'between'. To elaborate this 'apparatus complexity' of the various material story modes in Material Storytelling – for 'them' to become figures of configuring (diffractive gratings) of 'mattering

bodies,' 'spatial discourse' or 'intra-action order', we now turn to Haraway's (2008) take on the figure.

The notion of 'figure' is central to Haraway's (2008) attempt to rethink the relationship of human-non-human in her book 'becoming with species'. Haraway literally emphasizes that she is of-the-world in a Baradian sense:

"I am a creature of the mud - not the sky", (Haraway, 2008: 3). She notes how she loves the fact that only in 10 per cent of what she calls her body can be found human genomes. The other 90 per cent are filled with the genomes of bacteria, fungi, protists, and such, "some of them play in symphony necessary to my being alive, at all, and some of which are hitching a ride and doing the rest of me" (2008: 3-4). She concludes: "To be one is always to become with many" (2008: 4).

To become with many is what vital intra-action is about.

In relation to arguing for this 'becoming with many' Haraway uses the notion of figure, and figuring of story to account for what she calls 'mortal world making entanglements'. It is interesting and highly useful for the purpose at hand to note how she relates figures and stories to her playing with toys in her childhood. She notes *"I loved the play of scales in time and space that children's toys and stories made patent for me"* (2008: 4) and she elaborates:

"Figures help me grabble inside the flesh of mortal world-making entanglements that I call contact zones. The Oxford English Dictionary records the meaning of "chimerical vision" for figuration in an eighteenth-century source, and that meaning is still implicit in my sense of figure. Figures collect the people through their invitation to inhabit the corporeal story told in their lineaments. Figures are not representations or didactic illustrations, but rather material-semiotic nodes or knots in which diverse bodies and meanings coshape one another. For me figures have always been where the

biological and literary or artistic comes together with all the force of lived reality. My body itself is such a figure, literally". (Haraway, 2008: 4.).

These 'contact zones' of world-making entanglements is what Barad calls 'the between' and what I call 'affective sites of engagement' for reworking organizational practices. Haraway talks about knotted beings as figures. Meaning-making figures or material-semiotic nodes – what Barad calls onto-semantic phenomena, where bodies and meaning coshape one another and as such 'grabble' inside the iterative (re)configurations of the world-making entanglements; the spacetime-matterings. By diffracting Haraway's manner of cutting 'mortal world-making entanglements', the Baradian notion of spacetime-matter configuration and the Bergsonian qualitative multiplicity of entangled durations, I depict the three modes of Material Storytelling as particular dynamic apparatus' for enacting (contact zones) of spacetime-matter deconfigurations. In Material Storytelling practices, these enacted between (contact zones) of material-discursive, mutually constituent agencies affect aka recollect aka diffract - as affective sites of engagements – configurations as 'corporeal stories told in their lineaments'. With 'lineaments' we are back with the vague contours of the hypnotic virtual image and the qualitative multiplicity of the 'touching responsiveness' of figuring – not figure with hidden power to affect – but affective animation of the intra-act of the apparatus of the between; the diffractive grating of figuring. The 'chimerical vision' mentioned in the quote is the diffractive act of figuring, where the past, future and present are enacted as new temporalities and new possibilities.

As such (con)figurings are onto-semantic phenomena holding virtual memories as virtual qualitative multiplicity told in their lineaments (and diffracted through the appeal of the present entangled state of 'the affective site of engagement') in its entangled material-discursive enfoldings of spacetime-matter; (con)figurings are in that sense 'memory-devices':

"The historicity of phenomena is written into their materialization, their bodily materiality hold the memories of the traces of its enfoldings; space

and time (like matter) are phenomenal, that is, they are intra-actively produced in the making of phenomena, neither space nor time exists as determinate givens outside of phenomena". (Barad, 2007: 383).

‘The bodily materiality holds the memories of the traces of the enfoldings of phenomena.’ Therefore the materialization of phenomena – the configurings - are spacetime-matterings, which means that each configuring is of a particular scene’s diffractive grating or apparatus and phenomena cannot be located ‘in’ space and/or ‘in’ time as those constituents are integral to the phenomena. As we recall the smallest unit of reference is the onto-semantic phenomenon, with its ontological indeterminacy. When Barad holds that: “*Phenomena are material entanglements that “extend” across different spaces and times*”, (Barad, 2007: 383), she addresses the process of materializing phenomena as the here-now diffraction and at the same time as an extended yet discontinuous process; the superpositional quantum leap state of each diffraction. Each scene diffracts in a quantum queer manner ‘relational differentiations’ where marks of agential cuts leaves traces of this enfolding as dynamic contingent multiplicity. What Bergson calls (unconscious) virtualizing or preservation of memory.

Memories of these traces are written or marked into the materialization of phenomena – and here the entangled duration of phenomena is recollected in the touching encounter of human-non-human. What we need to acknowledge here is the both/and superpositional aspect of phenomena; being both uniquely tied to a local apparatus and extended at one and the same time (non-local). (Also known as ‘little ‘d’ and big ‘D’, (cp. Section 2.3), where big ‘D’ is the virtual multiplicity of memory becoming actualized). Apparatuses are ontological indeterminate in their open-endedness, which means that the productive aspect ‘of the traces of what is new’ involves an unclear entanglement of apparatuses that can never fully be accounted for. Also there is no way to account for ‘where they have been’ before actualizing – where they have come from, but there are traces of the historicity of phenomena.

Deconfiguration comes ‘into’ the Apparatus of Material Storytelling to account for the traces of historicity in materialization of phenomena – and deconstructive memory restory work. With the notion deconfiguration the deconstructive memory work of storying and the historicity (entangled genealogy) of phenomena is diffracted through lived duration and enacts the notions of ‘entangled durations’ (cp. Table 2.3 with summarizing overview below). Another way to say this is that deconfiguration depicts and accounts for the discontinuity and entanglements of (re)configurations and by this diffractive act the Bojean discursive, deconstructive memory restory work is reconfigured as ‘material-discursive’; as modes of enacting the between in Material Storytelling practices are material arrangements (apparatuses) of deconfiguring (re)configurations. As stated, Bojean antenarratives also account for restory work as memory rework. In Analysis Part 2 and 5, Book 2 we follow the traces of the materializing of the reworking of the organizational practices at DBC as iterative deconfigurings and (re)configurings across space and timescales of the action research project. Here each scene discontinuously rework as subtle changed relationalities the make-believable change wish as actualized believe-able practice through iterative material-discursive reworkings of the configuration of this change wish. The *con*-figuring honors the material practice of grasping and material objects are thereby intra-actively becoming ‘mattering objects’ and ‘spatial discourse’ as onto-semantic configurations telling stories in their lineaments.

The following quote by Barad indicate how this subtlety of the reworking aka reconfiguring involves the affective animation of the material engagement of intra-active ‘sensing’ of grasping of phenomena:

“The illustration (...) wholly inadequate, impressionistic at best, but hopefully to some use for the reader who shares my yearning and struggles to see, feel, touch, taste, smell, hear, and otherwise sense phenomena with the mind’s eye (and it’s not only the last word in this sentence that strives to give some sense of this material practice of grasping phenomena that ought to be

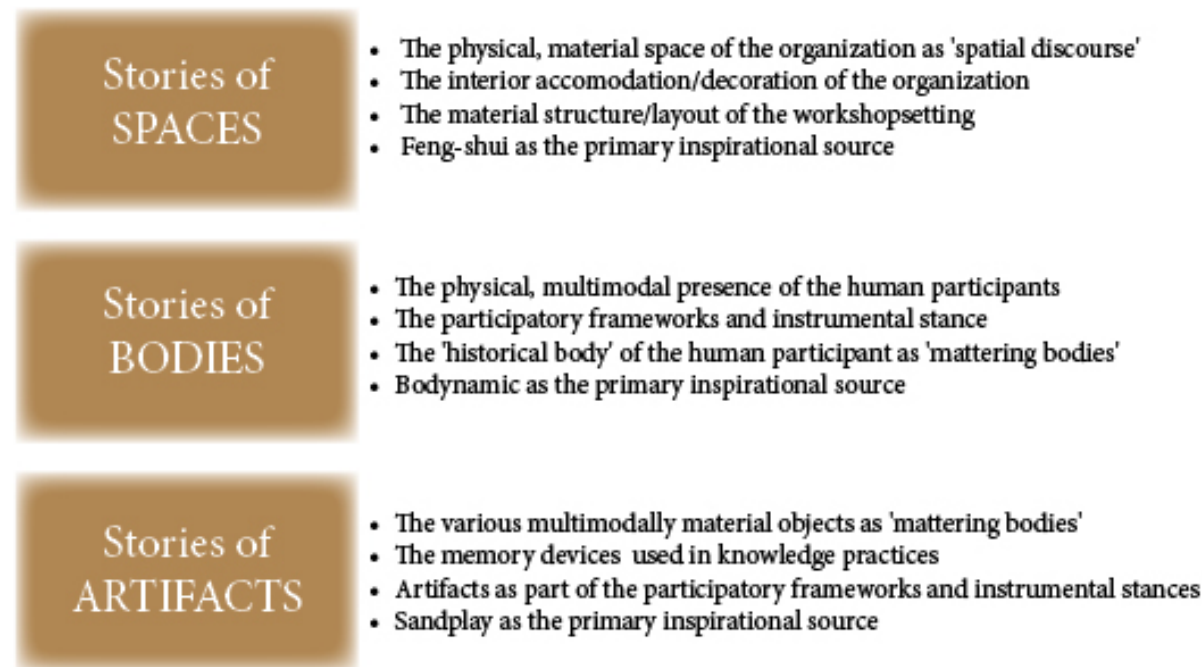
put in scare quotes; of course, “grasping” is a material-discursive practice that intra-acts rather than interacts with its objects” (Barad, 2007: 388)

Thus, figures help ‘us’ grabble and grasp phenomena in an intra-active space-timemattering way. Our human configuring as embodied beings of a specific range of postures given this corporality affords a very literal offset for intra-actions, and for comprehending all actions as being ‘of the world’. The human upright figure, of eyes in front, having two arms and legs, affords a particular apparatus for enacting the world as ‘before us’, in front of us. The ‘minds eye’ that Barad mentions in the quote above, is such an onto-semantic, material-discursive embodied construct which renders ‘sensing’ of phenomena as a particular onto-semantic grasping practice. A practice that is involving memory work across multiple spacetimescales. When it comes to the human

figure, the relational entangled state of the ‘between’ of meaning-matter that ‘we’ are, is thereby in itself a documentation of how

“Figures collect the people through their invitation to inhabit the corporeal story told in their lineaments”. (Haraway, 2008: 4).

The three story modes of enacting ‘the between’ as a spacetime-matter configurations thus inhabit corporeal stories told in their lineaments. If we re-insert the model of the three story modes of Material Storytelling (cp. figure 1.7), stories of space are in that sense spatial configurations, stories of bodies are bodily configurations and stories of artifacts are material configurations.



Reinserted Figure 1.7: The three story modes of Material Storytelling

These ‘figures’ or ‘configurings’ are as Haraway puts it, at the same time creatures of *imagined possibility* and *creatures of fierce and ordinary reality*; the dimensions tangle and require response as an always already subtle ‘touching responsiveness’ of this vital intra-act that in the diffractive approach of the Apparatus of Material Storytelling is ‘the affective site of engagement’ for reworking organizational practices. And it is precisely this entangled ‘doubleness’ within the reworking process that affords make-believable imagined possibility to be corporally configured and reconfigured in iterative enactments of congealed agency. The materially written configurings in the sandbox becomes congealed agency as it co-shapes the field of possibilities of dynamic contingent multiplicity for action in the rebuild of the organizational surround. But it is neither determined nor fully free – it defies a causality as much as determinacy. What is materially actualized as (a reworked) material-discursive practice of the organization continually has a complexity of fierce and ordinary reality and imagined possibility, that next turn over as a complex ‘next between’ affords an unforeseen dynamic contingent qualitative multiplicity of deconfigurations that reconfigure phenomena in question as a(re)configured spacetimed-matter manifold.

As Haraway notes it is about ‘the cats cradle games’ in which those who come to be in the world are constituted in intra-action, where partners do not precede the meeting - that which is there are not individual partners: species of all kinds, living and not, are consequent on “*a subject- and object-shaping dance of encounters*” (Haraway, 2008: 4).

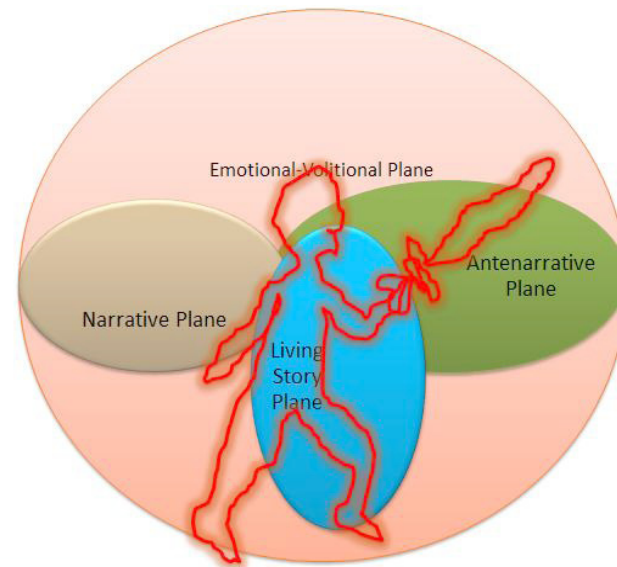
Haraway attempts to coin what ordinary being-in-encounter is about and she notes that:

“As ordinary knotted beings, they are always meaning-making figures that gather up those who respond to them into unpredictable kinds of “we”” (Haraway, 2008: 5).

As argued above, affect understood as ‘touching responsiveness’ is the name of this game. Material Storytelling practices are thereby not about mimetic of diegetic human (or) discursive performances of a ‘before’ as of a past that was. They are agential performances of meaning-making figures’ affective animation of between intra-actions of ‘touching responsiveness’ that has been gathered up as an unpredictable (and ontological indeterminate) way. Here this affective animation is the quantum jazzing that *in-forms* action. This *in-forma-tion* is relying on (a rethinking of) intuition as a practical onto-semantic skill of hypnotic figuring or imaging where attunement and timing is integral as the suggestive, unconscious rhythm of the between intra-act. The intra-action order of the enacted between of stories of space, bodies and artifacts – are the space-timedmatter happening ‘behind our back’ or through the ‘back-road’ of ‘seen but unnoticed’ actions – the subterranean subtleties of vital intra-actions of quantum jazzing – of quantum synchronized coherence.

On this backdrop, let's recall the Bojean quantum storytelling model; the human actor with the sword (figure 2.10) to depict the difference that a different *difference* produce in regard to configuring storytelling as approach to reworking organizational practices. In other words depict what

is the difference between Bojean quantum storytelling and the 'quantum amendment' made by (coining) Material Storytelling.



Reinserted Figure 2.10: Boje new quantum story model (Boje, 2011b: 105)

'The Heart Sword of Compassion' in this Storytelling Hologram shows a person with a storytelling standpoint that has one hand stuck in the narrative-past, one foot in the plane of emotional-volition, and the other foot in the living story webs in the Now, while the 'heart-sword of compassion' cuts through any stuckness in futures potentialities that limit other futures from emerging. There is an 'ought-to-actualize' in the intra-penetration of quantum physics of storytelling with the

concrete manifestations of spacetime mattering." (Boje, 2011b: 106).

As we recall from Section 2.5 the act of emotive-volition is depicted as 'a thinking that intonates ...all moments of thought content'. Clearly this addresses an affect dimension. However, when this is diffracted with the figuration of the human actor with the sword there seems to be a reference to how NT (Narrative Temporality) counts on the 'reflexive reflecting' human being, and thus the counting on a critical stance to 'do the job'.

So as stated earlier, although I follow Boje in acknowledging such an 'affective plane' in the storytelling practice, I depict this differently as an affective dynamic of subterranean subtleties integral to the intra-active dynamic and thus as of 'the between' of human-non-human mutual constituency – 'becoming with many' which enacts a field of possibilities of dynamic contingent multiplicity turn-by-turn, cut-by-cut, fold-by-fold. This affective dynamic diffracts the phenomenon that Boje's emotive-volitional plane is 'getting at', slightly different as the subterranean subtleties of vital intra-actions of 'touching responsiveness'. Further, Boje cuts the three temporal partakers along with three story categories or genres (narrative, living story and antenarrative) as equal parties with separate activities of the power struggle, and the affective emotive-volitional plane is involved in 'establishing', 'enacting' and 'shaping' story. This is where I go in a different direction than Boje, as stated above, to account for an affect dynamic integral to material-discursive story-practices of Material Storytelling, where the temporal partakers of past, present and future are enacted as new temporalities integral to the

enactment of new possibilities ‘within’ the dynamic contingent multiplicity of the field of possibilities emerging from ‘each’ agential cut of spacetime-matter manifold.

Thus, Material Storytelling’s three story modes enacts a between of spacetime-matter configuration. Integral to this affective intra-active dynamic of enacting (re)configurations of material-discursive-affective practices is de-configuration of virtual memory which accounts for how the enacted phenomena ‘are material entanglements that extends across different times and spaces’. Because this configuration is relational - constituted in intra-action of the corporality of stories of space, stories of bodies and stories of artifacts, partners and materiality do not precede the meeting. They are constituted intra-relationally - species of all kinds, living and not - are consequent on a subject- and object-shaping dance of encounters in Material Storytelling practices in the subterranean subtleties of quantum jazzing. The ‘seen but unnoticed’ ‘back-road’ activity of intra-active multimodal enfolding of spacetime-mattering.

So while acknowledging that Boje’s 2011 model of storytelling could be taken as a configuring of the ventriloquist/puppet dynamic, I - in order to consistently configure the Apparatus of Material Storytelling as posthuman agential performativity - prefer to shed the model of this configuration from all implication of human centeredness or humanist orbiting and thus leave out the human actor or puppet when I once again enact a configuration of a model of the Apparatus of Material Storytelling, as the ‘final’ configuration in a series of this ongoing dis/continuous diffraction of configuring The Apparatus of Material Storytelling, which has been going on throughout Section 2 of this dissertation.

In terms of diffracting a model of the enactment of the between in the now from the above models – and in light of duration as qualitative multiplicity - it is important to 1) stick with the plural form of ‘befores’ and ‘nexts’ and to 2) configure the now as a spacetime-matter manifold (localization), 3)

indicate the between as enacted as onto-semantic mole-cues. I thus re-tooled the basic fractal model once more according to this element of synchronicity and qualitative multiplicity (timed, co-worked sequentiality) actualized in the appeal of the present (figure 2.11 and 2.12 above). I did this as ‘from within’ the spacetime-matter model figure 2.7 (cp. Section 2.3.6). As of now, I thus recapture on the previously diffracted models of intra-active multimodal spacetime-mattering enacted during the above diffraction of Baradian, Bergsonian and Bojean apparatuses, to enact a - for now – ‘final’ model that diffracts material-discursive-affective practices as material story practices (the three story modes) enacted through subterranean subtleties of vital intra-actions and thus coin the Apparatus of Material Storytelling.

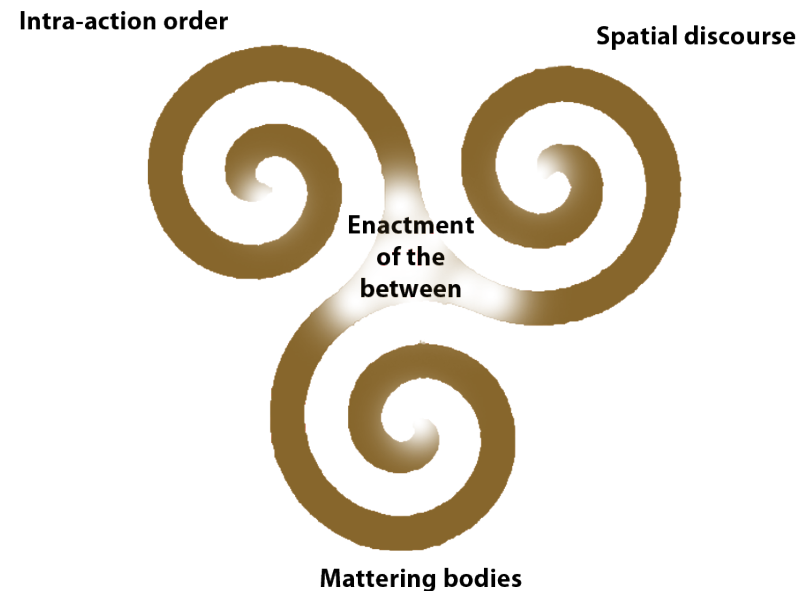


Figure 2.13 Model of the configured Apparatus of Material Storytelling

‘The between’ was already above reconfigured as ‘affective sites of engagements’ where the subterranean subtleties of intra-action ‘solves’ the ontological indeterminacy/inseparability by agential separability enacted through the agential cut as the enactment of a difference; and constituting a field of possibilities understood as a dynamic contingent multiplicity of ‘the between’ apparatus of the ‘now’. On behalf of this model I pose Material Storytelling as a diffractive methodology for organizational rework/reconfiguration – and I state the three material story modes as intra-active pedagogies for knowledge practices, where knowledge equals being and becoming.

By arguing for an inherent affect dynamic in the intra-active dynamic of material-discursive intra-actions, I am able to relate the three material story modes to these intra-actions and account for Material Storytelling as a diffractive approach to organizational practices rework in more detail. I further account for this diffractive dynamic of ‘vital intra-actions’ as material-discursive practices of affective sites of engagements. Thereby ‘the (apparatus of the) between’ - aka the larger material arrangement – is configured as such ‘affective sites of engagements’ that are *affecting* aka *diffracting* phenomena of a pre-human and posthuman ‘touching responsiveness’ emerging from the entangled state. Thereby it is not a question of entities inter-acting and responding to each other, but a question of mutual ‘touching responsiveness’ thus ‘touch’ understood in terms of affect (and not as psychological human emotion or emotive), which then is what (the three modes of) Material Storytelling intra-actions are all about.

As noted this turn to affect in accomplishing the quantum, material turn towards Material Storytelling is not to re-install the usual human intentionality or motive, as this would contradict the ‘post-human performative’ approach. On the contrary this is to elaborate the agential onto-semantic engagement in intra-actions as a pre-entity, pre-verbal, pre-conscious virtualizing/actualizing engagement (relation) that explicates the apparatus of meaning-matter, material-discursive configuration more vividly in the realm of ‘the seen but unnoticed’ ongoing actions of ‘the between’. Thereby the notion of the ‘phenomenal mind’ (cp. Norris, 2004: 93) within multimodal interaction analysis is reconfigured in light of the Bergsonian qualitative multiplicity. The act of ‘seeing but unnoticed’ here becomes ‘(con)figuring animation’ or ‘affective animation’ as a manner of the workings of ‘touching responsiveness’ of the intra-act of cutting together/apart. Here ‘qualities’ are not characteristics belonging to entities as a pre-given, but *of* the entangled state as mutually constituted by the intra-acting agencies (apparatus) enacting the agential cut that (re)configures the *spacetime* mattering (the meaning-making, knowledge-making, world-making). Boundary-making practices from within the entangled onto-semantic state of the bodymind of the human apparatus as mutually constituted co-enactor of ‘the between’ of the apparatus of the whole situation; the larger material arrangements; the affective site of engagement in subterranean subtleties of vital intra-actions. The boundary-making practices that dis/continuously enfold, cut-by-cut, the changed relationalities that constitutes the reworking of organizational practices; a subject matter to be dealt with, in a performative manner, in Book 2 of this dissertation.

Next, a summarizing overview of the above diffraction of the Apparatus of Material Storytelling

The level of diffraction	The apparatus' of the between diffraction (The three apparatus' that were diffracted above)	The enacted onto-semantic phenomena (The configured Apparatus of Material Storytelling is here depicted as a phenomenon enacted through the diffraction of Baradian, Bojean and Bergsonian theoretical apparatus'. The Apparatus of Material Storytelling is - as an onto-semantic phenomenon - the agential separability of the ontological inseparability of components of this phenomenon; the entangled genealogy or entangled durations are part of the phenomenon and the attempt below to depict these inherited relationalities is far from adequate and are only provided as an overview. The vocabulary that has been diffractively configured relates to The Apparatus of Material Storytelling as a research based methodology for reworking organizational practices)
ontology:	relational ontology of Agential Realism. posthuman performativity	relational ontology of Agential Realism' posthuman performativity
epistemology:	onto-epistemology - apparatus/onto-semantic phenomena - diffractive methodology	onto-epistemology - apparatus/onto-semantic phenomena - diffractive methodology
theoretical vocabulary:	intra-action, the apparatus of the between entangled genealogy, historicity of phenomena agential cut, changed relationality, (re)configuration, dis/continuity, dynamic contingent multiplicity,	material storytelling, subterranean subtleties of vital intra-action, the apparatus of the between as affective sites of engagement entangled durations, deconfigurations agential cuts, changed relationality, (re)configurations, dis/continuity, dynamic contingent qualitative multiplicity
method:	material-discursive practices, responsible, response-able,	material-discursive-affective practices, 'touching responsiveness'

analysis:	<p>congealing of agency, enfolding spacetime matter</p> <p>diffraction, iterative enactments, enactment of the between</p> <p>diffraction, agential cutting together/apart grasping as intra-active response</p>	<p>congealing of agency, enfolding spacetime matter</p> <p>diffraction, iterative enactments, material story modes of enacting the between</p> <p>diffractive multimodal constituent analysis, grasping as configuring, touching responsiveness</p>
theoretical vocabulary:	<p>Bojean Apparatus</p> <p>living story relationality webs as (dialogical) systemicity of story complexity</p> <p>antenarrative before/bet (tracing of next)</p> <p>antenarrative causality patterns; linear, cyclical, spiral, rhizomatic</p> <p>narrative</p> <p>quantum storytelling materiality</p> <p>three temporal entities</p> <p>emotive-volitional</p> <p>grasping as story noticing, storying</p>	<p>Apparatus of Material Storytelling</p> <p>subterranean subtleties of vital intra-actions the apparatus of the between as affective site of engagement, quantum jazzing</p> <p>deconfigurative dynamic of vital intra-action</p> <p>dis/continuity, quantum superposition, configuration</p> <p>congealing of agency, durability</p> <p>apparatus of material storytelling</p> <p>various entangled temporalities; entangled durations</p> <p>affective figuration, touching responsiveness</p> <p>grasping as configuring, touching responsiveness</p>

theoretical vocabulary:	Bergsonian Apparatus	Apparatus of Material Storytelling
	duration	entangled duration
	qualitative multiplicity	dynamic contingent qualitative multiplicity
	virtual unconscious	quantum void, superposition
	virtualizing	touching responsiveness
	actualizing (recollection memory) in the appeal of the present	deconfigurative dynamic of vital intra-action of the between as the affective site of engagement
	hypnotic virtual image	affective figuration, deconfiguration
	intuitive glimpse as a practical faculty of grasping mobility	diffraction, chimerical vision, grasping as configuring, touching responsiveness

Table 2.3 Schematic overview of the diffractive configuring of the Apparatus of Material Storytelling

The Apparatus of Material Storytelling has reached a configuration suitable for analyzing (as documentation) the rework of organizational practices, during the action research project at DBC. It is therefore 'time' to summarize the outcome of this diffractive endeavor as a steppingstone for Section 3, Book 2. Before we summarize, let's have one last breathing space of this Book 1 that in its own manner summarizes the outcome of enacting the material story mode of stories of bodies in Material Storytelling practices.

In this 'Breathing space' you are invited to become consciously aware of the onto-semantic co-configuring of a phenomenon called the 'physical balance point'. In this intra-active body-based pedagogy exercise the human-non-human intra-act of the 'touching-responsiveness' is a muscle tissue animation that are brought to the focus of attention (where 'attention' is integral to the mind's eye's corporal configuring) as such an intra-active material-discursive phenomenon. Here the complex of imagined possibilities and the fierce corporal reality of configuration is vividly enacted as the location of this phenomenon of the 'physical balance point' is both established in relation to the surface you are presently standing on and up against, and the corporal 'sensed' imaging of balance, which also relates to a sense of self, a sense of 'coming home', a sense that is the opposite of 'being besides your-self'. I use this as argumentation for the diffractive approach of 'being-of-the-world', where the body not only partake at the surface level as 'marks on bodies' or as an essence or core 'within', but in its entire material-discursive embodiment or corporal figuring as a diffractive apparatus of spacetime-mattering of congealed agency (of action).

All these intra-active pedagogy exercises imply a resource oriented training of onto-semantic corporally configured agency, where mastering is literally congealed agency as agential resources within muscle tissue that are understood as various material-discursive resources configured for action. We get back to elaborate this onto-semantic corporal configured agency and its entangled genealogy in the beginning of Analysis Part 1, Book 2.

For your note(configuration)s:



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Breathing space

General instructions for doing the body-based pedagogy exercises¹:

(Always do the exercises in loose fit clothing and without shoes and within calm surroundings. Choose the exercises that you feel comfortable doing and that give you a sense of well-being and enhances your energy level. Listen to your body signals and always refrain from doing exercises that cause you to feel pain or discomfort of any kind. Let it be a guiding principle to always aim at finding 'the right dose'² in terms of both the kind of exercise and the extent of the specific exercise. Note that the 'right dose' varies from time to time depending on the whole situation when you practice the exercise).

1 The present and following exercises are a sample of the exercises used in the action research project after a one-year study/training at Bodynamic International as well as several subsequent courses at MOAIKU. The exercises are rendered here in the dissertation with permission from one of the founders of the Bodynamic System Merete Holm Brantbjerg. (who has later founded MOAIKU). For further introduction to the body-based pedagogy as it was used in the action research project, see Section 3.1, Book 2. See also Brantbjerg and Ollars (2006), Brantbjerg, 2010 and www.MOIKU.dk

2 The notion of 'the right dose' is specifically developed by Merete Holm Brantbjerg as a key notion in her 'resource-oriented-skill-training' (at MOAIKU), which is a specific refined variant of the body-based-pedagogy principle used and developed through the Bodynamic System

Centering exercise and building lower body's space

- Stand with a hip-wide distance between your feet up against a wall and press each hip at a time against the wall
- Notice how this perhaps increases your contact with the area of your lower body and specifically the point of power placed underneath your navel, in front of your spine
- Close your eyes and hold one hand on that area of your body
- Sway from side to side (shifting your weight from one foot to the other) while sensing this physical balance point of your body
- Attribute a color, a shape or an image to the balance point and try to maintain the contact to this place

Imagine that there are two strings connecting your balance point along the front side of your spine with your eyes

What do you feel? Where do you feel it in the body?



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2.7 Summarizing of the Apparatus of Material Storytelling

(*This section summarizes the diffractions performed throughout Section 2 by 'returning' to elaborate the working definition of Material Storytelling from Section1*)

Material Storytelling was for the working purpose of this dissertation defined as:

Material Storytelling is a research based methodology for the (material-discursive) configuration of complex sets of multimodal restorying actions, which enact 'a between' of a varied intra-play of material story modes of organizational (re)configuration in a manner that changes the relationality of presently enacted hegemonies of 'the between' of mind/body, language/ matter, culture/nature, verbal/ nonverbal communication and implicit/explicit ways of knowing by enacting them as equal, and mutually constituent agencies of (changing) the everyday practices of organizational living.

This definition is elaborated below:

1. Material Storytelling is a research-based methodology for (material-discursive) configuration of complex sets of multimodal re-storying actions....

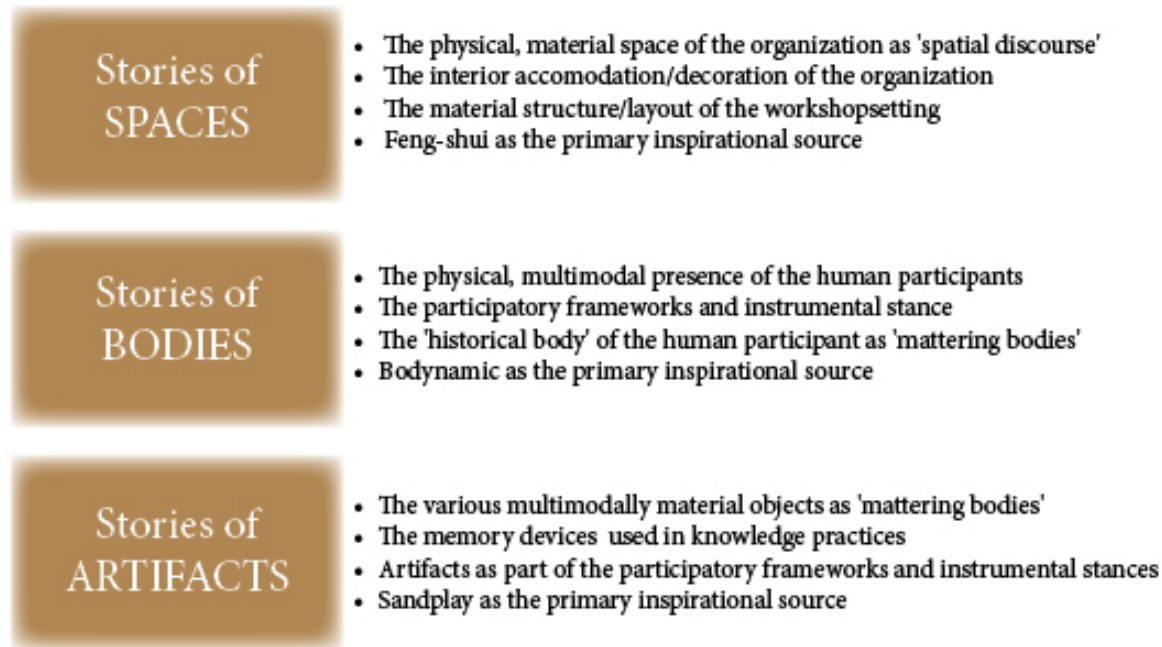
Complex sets of multimodal restorying actions are in this PhD. project the actions entailed in the six months action research project that was briefly summarized in Section 1.7 'Short Story'. They are the research-based empirical (mortal world-making) 'foothold' for coining Material Storytelling. Book 2 performs a multimodal turn-by-turn constituent analysis of these complex sets of multimodal restorying actions. The Apparatus of Material Storytelling will here function as a material-discursive 'diffractive grating' that reconfigures these actions through an apparatus of 'analysis as documentation', where results and conclusions are building evidentiary support for Material Storytelling. The argument is that the Apparatus of Material Storytelling in

any case will configure complex sets of multimodal restorying actions, and thereby be a methodology for future use.

2. ...which enact 'a between' of a varied intra-play of material story modes...

These multimodal re-storying actions (for example in the action research project) are seen as enactments of a complex 'between' of the intra-play of three entangled material story modes that enacts stories of space, stories of bodies and stories of artifacts (see model on next page).

The Apparatus of Material Storytelling are thereby the intra-active, material-discursively enacted complexity of mutually constituted relationalities of peoples' entangled durations, bodies, participatory frameworks and material artifacts, workshop spaces and organizational surround and interior décor and the historicity of those spaces and artifacts including traditions and conventions for conduct



Reinserted Figure 1.7: The three story modes of Material Storytelling

of practices through these spaces, artifacts and bodies. Integral to the 'between' enacted by the Apparatus of Material Storytelling is thus the material-discursive apparatuses of the organizational practices in question, which means that they are reworked as co-constituents from within the entangled state of this enacted between. The apparatus of Material Storytelling does not come from 'outside' to 'intervene' in the organization. Rather, the apparatus is enacted as co-constituent of 'the between'. Which is to say that the Apparatus of Material Storytelling becomes in

intra-action with the organization in question. Here for instance, concepts, strategies and models of the organization, the spaces, technologies and the artifacts of the organization in question, its history, its values, skills and competencies of leaders, managers and employees, the surroundings (whether local, or global) and the environmental conditions, research concepts, methods and tools as well as the researchers' values, skills and competencies all come together in a particular configured spacetime-matter manifold. To that extend there is always an Appa-

ratus of Material Storytelling at work as 'the between' from which stories of space, stories of artifacts and stories of bodies emerge in any organizational, educational or other setting involving human-non-human agencies.

3. ...of organizational (re)configuration....

Organizations are iterative reconfigurations of spacetime-matter – moment-to-moment, turn-by-turn, cut-by-cut that affords changed relationalities, affords a different difference to be enacted. As an ongoing dis/continuous process of becoming through the iterative enactments of enfolding of the spacetime-matter manifold. In that sense change is a given, which means that change do not 'just' happen when there is an action researcher or a consultant present. Change does not require human interference, but will always require or entail material-discursive interference. Change requires a changed relationality to be enacted. Such a changed relationality can be enacted – and are – enacted by subtle or profound changes in space, time, mattering agential components. For example changes of computational-technology in a bank with impact on practices of all sorts (cp. Jørgensen, 2008), and climate changes due to a volcano on Iceland that went active in the spring of 2010 with impact on air traffic over Denmark due to the 'touching responsiveness' of the intra-act of flight motors and volcano ashes and air traffic regulations, with impact on teaching at Aalborg University campus in Copenhagen because of impact to the teachers parents being caught on a trip to Ireland unable to return home to Denmark (as flights were cancelled) to babysit the teachers children, while this

teacher needed to go to Copenhagen from Aalborg on an airplane that was cancelled as well. However, having made this point clear, I argue that the three material storymodes are particular in the manner of enacting the between and thus intra-acting in this ongoing dis/continuous becoming. This is because the three material storymodes afford apparatuses for building a 'make-believe-able world' through between intra-actions in a workshop setting that enables a (re)configuring of the intra-act of the physical, material surround of the organization and the material-discursive everyday practices of the organization. In this understanding of organizations it does not make sense to speak of individuals, collectives, technologies, strategies and environment as if they were independent entities because it would violate the principle of intra-action. This approach to organizations therefore also calls for a multimodal approach both in terms of doing organizational rework and in terms of researching organizational rework. Neither narrative nor historical-discursive analysis will do in this respect because there is an excess of history and language in these approaches. As noted I will instead argue for a detailed exploration of crucial now-moments in organizations that allows for the application of multimodal analysis (e.g. Iedema, 2003) of the configuration of story performances in organizations. Further we do not learn to become or act otherwise through reflection or reflexivity but through diffractive participation in the situation where we engage with other people, spaces and artifacts. Learning emerges from apparatuses of storytelling. This contains professional knowledge(s), bodies, artifacts, technologies and spaces. Working with the apparatus of storytelling of the organization is the key to rework organizational practices. The pedagogical instruments and tools that are used

matter in this respect and they are not restricted to the use of language but include using space, bodies and artifacts. Rework of organizations relies on the continuous experiments with the totality of apparatuses of storytelling.

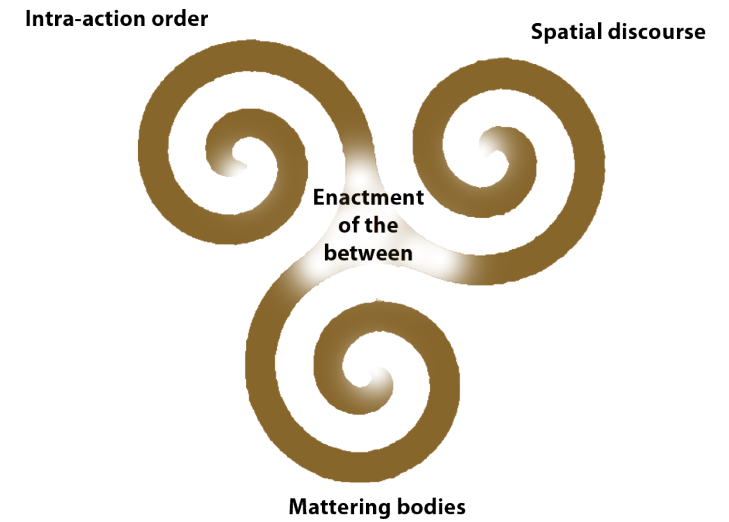
4. ...in a manner that changes the relationality of presently enacted hegemonies of the between of mind/body, language/matter, culture/nature, verbal/nonverbal communication and implicit/explicit ways of knowing by enacting them as equal, and mutually constituent agencies of (changing) the everyday practices of organizational living...

Organizational rework is thus conceived as enacted from mutually constituent human and non-human agencies intra-acting at a subterranean subtle 'level' of 'touching responsiveness' as an alternative to narrative being-in-the-world approaches and historical being-in-discourse approaches that are characterized by language being hegemonic to matter and implicit ways of knowing. The posthuman performative take on organizational rework in this dissertation coined as Material Storytelling implies instead a balancing act of crediting agency to bodies, materiality, nature, non-verbal communication and implicit ways of knowing. This (counter)balancing act effect – I claim – a more holistic, healthy and sustainable way of living and becoming with species of all kinds (human-non-human) both in general and in terms of doing organizational rework, education and research within humanities, because it acknowledges the gathered 'we' that 'we' humans are and enable us to unthroner our own sense of superiority integral to the humanist orbit and ap-

proach of being-in-the-world. Subsequently, I have – following Barad – argued for a diffractive mode of analysis where the analytical 'lens' (as a diffraction apparatus) is tuned in a way that is sufficiently attentive and sensitive to the details of this subtle phenomenon of the intra-act from where material-discursive phenomena emerges, which we need to acknowledge and understand if we are to leave the humanist orbit (cp. Barad, 2007: 73). The intra-active pedagogies of Material Storytelling can and are presently conducted at Aalborg University as *Material Story Labs*, where participants are training 'from within' the intra-act of configuring meaning-matter modalities both the unthroning and the crediting of the material-discursive gathered figures that 'we' are and through which 'we' become.

In relation to researching processes of organizational rework, this calls for detailed explorations of those moments in which organizational (re)configuration takes place because it is the only way that we can get a sense of the diffractive interferences and entanglements of human and non-human forces that configure the agential iterative performances of (re)configurings of spacetime/matter. So while the analysis of organizational becoming in the narrative approach relies on narrative interpretation and in the living story approach relies on deconstruction and history, we can say that the Material Storytelling approach relies on the detailed exploration of moments including their temporal, spatial and material aspects and their intra-relations. The action-by-action or fold-by-fold analysis is carried through by means of the model below that works as a memory-device for the diffraction of evidentiary support in Book 2 through multimodal constituency analysis. As was pointed out, the model itself has been ac-

complished through a diffraction of Baradian, Bojean and Bergsonian apparatuses with an offshoot in multimodality analysis by Scollon and Scollon's (2004) nexus model that holds implicit Cooren's (2010) ventriloquist's intra-play of little 'd' and big 'D') and it thus encapsulates the full range of an apparatus of the enactment of a configuration of any material-discursive practice.



Reinserted Figure 2.13

List of References for Book 1 & 2

A

- Alaimo, S & Hekman, S. (Eds) (2008).** *Material Feminism*. Bloomington: Indiana University Press,
- Alrø, H. & Dræby, I. (2008).** *Dilemmaer i Aktionsforskning*. In Alrø, H. & Frimann, S. (ed) (2008) *Kommunikation og organisationsforandring. Interpersonel Kommunikation i Organisationer nr. 10*. Aalborg: Aalborg Universitetsforlag
- Alrø, H. & Kristiansen, M. (2006).** *Et dialogisk perspektiv*. I: M. S. Nielsen & G. Rom (red.). *Perspektiver på kommunikation i sundhedsfaglige professioner*. København: Munksgaard Danmark.
- Alrø, H. & Kristiansen (1997).** *Mediet er ikke budskabet*. In Alrø og Dirckinck-Holmfeld (red.)(1997). *Videoobservation*. Aalborg: Aalborg Universitets Forlag.
- Alrø, H. & Kristiansen, M. (1993).** *Personlig kommunikation og formidling*. Aalborg: Aalborg Universitets Forlag
- Arendt, H. (1998).** *The Human Condition*. The University of Chicago Press, Second edition

B

- Bakka, J. W. & Bean, C.J. (2006).** *The Materiality of Sensemaking*. Tamara Journal of critical Organization Inquiry. 5. 3/4. 51-69
- Barad, K. (2011).** *Connecting Materiality to Imagination and Memory*. Key note presentation at the Third International Symposium on Process Organization Studies - Theme: How Matter Matters: Objects, Artifacts and Materiality in Organization Studies. Corfu, Greece, 2011.
- Barad, K. (2011)** *Erasers and Erasures: Pinch's unfortunate 'uncertainty principle'*. Social Studies of Science 1-12 © The Author(s) 2011 Reprints and permission: sagepub. co.uk/journalsPermissions.nav DOI: 10.1177/0306312711406317 sss.sagepub.com

- Barad, K. (2010).** *Quantum Entanglements and Hauntological Relations of Inheritance: Discontinuities, SpaceTime Enfoldings, and Justice-to-come.* In *Derrida Today*, 3.2. (2010): 240-268 Edinburg University Press
- Barad, K. (2008).** *Posthumanist performativity. Toward an understanding of how matter comes to matter.* In Alaimo, S and Hekman S. (Edt) (2008). *Material feminism.* IBloomington: Indiana University Press
- Barad, K. (2007).** *Meeting the Universe Halfway – quantum physics and the entanglement of matter and meaning.* Durham & London: Duke University Press.
- Barad, K. (2003).** *Posthumanist Performativity: Toward and Understanding of How Matter Comes to Matter.* Signs: Journal of Women in Culture and Society. Vol. 28 No. 3. pp. 801-831.
- Bellak, L., Hurvich, M. & Gediman H. K. (1973).** *Ego Functions in Schizophrenics, Neurotics, and Normals: A systematic Study of Conceptual, Diagnostic, and Therapeutic Aspects.* Wiley Series on Personality Processes, pp 180-192 (chapter 12: Adaptive Regression in the Service of the Ego)
- Benjamin, W. (1999).** *The Storyteller - Reflections on the Work of Nikolai Leskov.* In H. Arendt (Ed.), *Illuminations*: 83-107. London: Pimlico.
- Bennett, J. (2010).** *Vibrant Matter – a political ecology of things.* Durham, NC: Duke University Press.
- Bentzen, M., Jarlmaes, E. & Levine, P. (1998).** *The Body Self in Psychotherapy.* In Macnaughton, I. (1998) (Ed). *Embodying the Mind & Minding the Body A collection of articles on family systems, Bodydynamics somatic development psychology, shock trauma, and spirituality.* Vancouver: Integral Press. pp. 36-47
- Bergson, H. (1998, 1911).** *Creative Evolution.* Arthur Mitchell, New York: Dover
- Bernhart, P. (1998)** *The Art of Following Structure. Exploring the Roots of the Bodydynamic System.* An Interview with Lisbeth Marcher. In Macnaughton, I. (Ed). *Embodying the Mind & Minding the Body A collection of articles on family systems, Bodydynamics somatic development psychology, shock trauma, and spirituality.* Vancouver: Integral Press. pp. 80-93
- Boje, D.M. (forthcoming)** Paper draft for special issue of Tamara Journal 'Materiality & Storytelling'.
- Boje, D. M. (2011a) (Ed.).** *Storytelling and the Future of Organizations: An Antenarrative Handbook.* New York: Routledge.
- Boje, D.M. (2011b)** *Quantum physics of Storytelling.* Online-work-in-progress, February 21st, 2011.

Boje, D. M. & K. Baskin (2010). *When Storytelling Dances with Complexity*. In D. M. Boje & K. Baskin (Eds.). *Dance to the Music of Story – Understanding Human Behavior through the Integration of Storytelling and Complexity Thinking*: 21-37. Litchfield Park, AZ: Emergent Publications.

Boje, D. M. (2008). *Storytelling Organization*. London: Sage Publications

Boje, D. M. & Durant, R. (2006). *Free Stories!* Tamara Journal (5(3): 19-37.

Boje, D. M. (2001). *Narrative Methods for Organizational & Communication Research*. London: Sage Publications

Boje, D. M. (1991). *The Storytelling Organization: A Study of Storytelling Performance in an Office-Supply Firm*. Administrative Science Quarterly, 36, 106-126.

Brantbjerg, M. (1998). *Caring for Yourself while Caring for Others*. In Macnaughton, I. (1998) (Ed). *Embodying the Mind & Minding the Body A collection of articles on family systems, Bodydynamics somatic development psychology, shock trauma, and spirituality*. Vancouver: Integral Press. pp: 138-145

Brantbjerg, M. H. (2010) *Nærværs færdigheder. Ressource Orienteret færdighedstræning ROF. Øvelsesmanual* (unpublished paper)

Brantbjerg, M. H. & Ollars, L. (2006). *Musklernes Intelligens. Om 11 Bodydynamic Jeg-funktioner*. Forlaget Kreatik. København

Brown, S. (2005). *The Feng Shui Bible*. New York and London: Sterling Publishing

Brown, S. (1997). *Practical Feng Shui*. Cassell illustrated. London

Bryner, A. & Markova, D. (1996). *An Unused Intelligence – physical thinking for the 21st century leadership*. Berkeley. Conari Press.

C

Campbell, J. (2009). *Rhythms of the suggestive unconscious*. In Subjectivity a Palgrave Macmillan journal 1755-6341 Vol. 26, 29-50

Clough, P. T. (2008). *The Affective Turn: Political Economy, Biomedica and Bodies*. In Theory Culture Society, 25,1 Sage Publication

Coghlan, D. & Brannick, T. (2005). *Doing Action Research in Your Own Organization*. London, Thousand Oaks, New Delhi. Sage Publications

Cunliffe, A. L., Luhmann, J.T. & Boje, D.M. (2004). *Narrative Temporality: Implications for Organizational Research*. *Organization Studies*, 25(2): 261-286.

D

Drummond, J.S. & Themessl-Huber, M. (2007). *The cyclical process of action research: The contribution of Gilles Deleuze* in *Action Research* 2007; 5; 430

Dychtwald, K. (1979). *Kropbevidsthed*. København: Borgens Forlag

E

Ekmann & Friesen (1972). *The repertoire of Nonverbal Behaviour: Categories, Origins, Usage, and Coding*. In *Semiotica* no. 1, eds. Thomas A Sebeok, Mouton – The Hague, 1969.

Ellsworth, E. (2005). *Place of Learning. Media, Architecture, Pedagogy*. New York. Routledge

Erickson, F. (2004a). *Talk and Social Theory*. Cambridge: Polity Press.

Erickson, F. (2004b) *Origins: A brief intellectual and technological history of the emergence of Multimodal Discourse Analysis*. In LeVine, Philip & Scollon, Ron (eds.) *Discourse and technology: Multimodal Discourse Analysis*. Washington: Georgetown University Press, 196-207

Erskine, R. G., Moursund, J. P. & Trautmann, R. L. (1999). *Beyond Empathy*. New York: Routledge

F

Fasting, N. (2004). *Et sprog for det kvindelige*. København: Borgen

Favrholdt, D. (2010). *Lidt om Niels Bohrs filosofi*. *KVANT Tidsskrift for fysik og Astronomi* 21 årgang, juni 2010, p. 11-14

Flyvbjerg, B. (1991a). *Rationalitet og magt – Det konkrete videnskab*. København: Akademisk Forlag

Flyvbjerg, B. (1991b). *Rationalitet og magt – Et casebaseret studie af planlægning, politik og modernitet.* København: Akademisk Forlag

G

Gallway, W. T. (1997). *The Inner Game of Tennis.* New York: Random House

Gallway, W. T. (2000). *The Inner Game of Work.* New York: Random House Trade Paperbacks

Gibson, J.J. (1979). *Theory of Affordances. The Ecological Approach to Visual Perception.* New York: Oxford University Press

Goffman, E. (1963). *Behaviour in a Public Places - Notes on the Social Organization of Gatherings.* New York: Free Press

Goodwin, C., Streeck, J. & LeBaron, C. Eds. (2011). *Embodied Interaction: Language and Body in the Material World.* Cambridge: Cambridge University Press.

Goodwin, C. (2007). *Participation, stance and affect in the organization of activities.* Discourse and Society, Sage Publications, Vol. 18(1) 53-73

Goodwin, C. & Goodwin, M.H. (2005). *Participation. A Companion to Linguistic Anthropology.* Duranti, Alessandro (ed.) Blackwell Publishing. Blackwell Reference Online

Goodwin, C. (2000a). *Action and Embodiment within situated human interaction.* Journal of Pragmatics 32: 1489-522

Goodwin, C. (2000b). *Vision and Inscription in Practice.* Mind, Culture, and Activity, 7:1-2, 1-3

Greenwood, D. & Levin, M. (2007). *Introduction to Action Research – Social Research for Social Change.* London, Thousand Oaks, New Delhi. Sage Publications

H

Hall, E. (1959). *Silent language.* Garden City, NY: Doubleday

Hansen, F. T. (2008). *At stå i det åbne.* København. Hans Reitzels Forlag

Haraway, D. (2008). *When Species Meet.* Minneapolis: University of Minnesota Press

- Heritage, J. (1984).** *Garfinkel and Ethnomethodology*. Cambridge: Polity Press.
- Heritage, J. & Watson, R. (1979).** *Formulations as conversational objects*. In Psathas, George (ed.) *Everyday language*. Studies in Ethnomethodology. New York: Irvington Publishers, 123–162.
- Heron, J. & Reason, P. (2006).** *The Practice of Co-operative Inquiry: Research 'with' rather than 'on' People*. p: 144-154 In Reason, P. & Bradbary, H. (2006) *Handbook of Action Research*. Sage Publications
- Heron, J. (1999).** *The Complete Facilitator's Handbook*. Kogan Page, London
- Ho, M-W (2008).** *The Quantum Coherent Organism in a Quantum Universe*. Presentation at Quantum Energy Medicine Conference, Copenhagen, 2008
- Ho, M-W (2008).** *The Rainbow and the Worm. The Physics of Organisms*. Singapore: World Scientific Publishing Co. Pte. Ltd.
- Homeyer, L., & Sweeney, D. (1998).** *Sandtray: A practical manual*. Canyon Lake, TX: Lindan
- Hutchby & Woofitt (1998).** *Conversation Analysis*, Cambridge, UK: Polity Press
- Hutchins, E. (1995).** *Cognition in the Wild*. Cambridge, Massachusetts. London, England. The MIT Press
- Hvid, T. (2005).** *Kroppens Fortællinger*. Forlaget Modtryk. Viborg.
- Højgaard, L. & Søndergaard, D. M. (2010).** *Multimodale Konstitueringsprocesser i Empirisk forskning*. P. 315-339). In Brinkmann, S. *Kvalitative Metoder*, København: Hans Reitzel

I

- Iedema, R. A. (2007).** *On Multimodality, Materiality and Contingency of Organizational Discourse*. *Organizations Studies* 28(06): 931-946. Sage Publications LA, London, New Delhi and Singapore.
- Iedema, R. A. (2003).** *Multimodality, Resemiotization: Extending the Analysis of Discourse as Multi-Semiotic Practice*. *Visual Communication*, vol. 2, no. 1, pp. 29-57.

J

- Jagger, G. (2008).** *Sexual politics, social change and the power of the transformative*. London: Routledge.
- Jones, C., Parker, M & Ten Bos, R. (2005).** *For Business Ethics*. London: Routledge.
- Jones, S. & LeBaron, C. (2002).** *Research on the relationship between verbal and nonverbal communication: Emerging integrations*. Journal of Communication, 52, 499-521.
- Juelskjær, M. (2011).** *Kvantefysiske subjekter? : ny-materialisme og studiet af subjektivering i tid og rum*. Working paper. Århus University, DPU
- Juelskjær, M. (forthcoming)**
- Juelskjær, M. (2009).** *En ny start – bevægelser i/gennem tid, rum, krop og sociale kategorier via begivenheden skoleskift*. PhD Afhandling ved Danmarks Pædagogiske Universitet, Aarhus Universitet.
- Jørgensen, K. M., A. M. C. Strand & A.O. Thomassen (2012).** *Conceptual Bases of Problem-Based Learning*. in J. Groccia, M. Al-Sudairy & W. Buskist (Eds.), *Global Perspectives on College and University Teaching*, London: Sage.
- Jørgensen, K. M. & A. M. C. Strand (2012).** *Stories of Material Storytelling*. Accepted for publication in D. Jemielniak & A. Marks (Eds.), *Managing dynamic technology-oriented business: High-tech organizations and work places*.
- Jørgensen, K. M. (2011).** *Antenarrative writing – Tracing and representing living stories*. In D. M. Boje (Ed.). *Storytelling and the Future of Organizations: An Antenarrative Handbook*, pp. 284-297. New York: Routledge.
- Jørgensen, K. M. (2011).** *Futures and Strategic Learning* in D. McGuire & K. M. Jørgensen (Eds.) *Human Ressource Development – A Critical Text*. An Academic Textbook, pp. 141-158, London: Sage.
- Jørgensen, K. M. & A. M. C. Strand (2011).** *Towards a storytelling ethics for management education*. In Wankel, C & A. Stachowich-Stanusch (Eds.). *Effectively integrating ethical dimensions in management education*, pp. 249-267, Information Age Publishing.
- Jørgensen, K. M. & D. M. Boje (2010).** *Resituating narrative and story in business ethics*, *Business Ethics - A European Review*, 19(3), pp. 251-262.
- Jørgensen, K.M. (2007).** *Power without Glory – A Genealogy of a Management Decision*. Copenhagen: CBS Press.

K

Kalff, D. (2003). *Sandplay. A Psychotherapeutic Approach to the Psyche.* Temenos Press. Cloverdale. California

Knudsen, A. (1998). *Her går det godt send flere penge.* København: Gyldendal

Kristiansen, M. (1993). *Professionelt nærvær – om underviserens ubevidste kommunikation.* In Alrø, H. & Kristiansen, M. (1993) *Personlig kommunikation og formidling.* Aalborg: Aalborg Universitetsforlag

L

Lakoff, G. & Johnson, M. (1999). *Philosophy in the Flesh. The embodied mind and its challenge to western thought.* New York: Basic Books

Lakoff, G. (1987). *Women, Fire and Dangerous Things – What Categories Reveal about the Mind.* Chicago and London: The University of Chicago Press

Latour, B. (1996). *Social theory and the study of computerized work sites.* In W. J. Orlikowski, G. Walsham, M. R. Jones and J. DeGros (Eds.) *Information Technology and Changes in Organizational Work.* London, Chapman & Hall: 295-307.

Latour, B. (1987). *Science in Action, How to Follow Scientist and Engineers through Society.* Cambridge Mass: Harvard University Press

Law, J. (1994). *Organizing Modernity.* Oxford: Blackwell

LeBaron ,C. & Streeck, J. (1997). *Build space and the interactional framing of experience during a murder interrogation.* Human Studies 20:1-25 Kluwer Academic Publisher. Printed in Netherlands.

Lemke, Jay (2005). *Place, pace and meaning: Multimedia chronotopes.* In Norris, Sigrid & Jones, Rodney (eds.) *Discourse in Action. Introducing Mediated Discourse Analysis.* London: Routledge, 110–122.

M

Madsen, B. (1996) *Organisationens dialogiske rum.* in Alrø, H. (1996) *Dialog i Organisationer.* Aalborg: Aalborg Universitetsforlag

Malchiodi, C. A. (ed). (2007). *Expressive Therapies*. New York. The Guilford Press.

Massumi, B. (2008). *The thinking-Feeling of What Happens. A Semblance of a Conversation*. In *Inflexions 1.1 How is Research-Creation? In course reader for 'The Affective Turn – an invitation to new analytical engagements? Doctoral school of organisational learning (DOCSOL). Denmark in June 5-7th 2010.*

McHoul, A. & Watson, D. R. (1984). *Two axes for the analysis of 'commonsense' and 'formal' geographical knowledge in classroom talk*. In *British Journal of the Sociology of Education*. 5(3), 281-302.

Middleton, D. & Brown, S. D. (2005). *The Social Psychology of Experience – Studies in Remembering and Forgetting*. London: Sage Publications

Miller A. (2005). *The body never lies. The lingering effect of cruel parenting*. W. W. Norton & Company, Inc.

Morgan, G. (1997, 2006). *Images of organizations*. 2nd ed., Thousand Oaks: Sage Publications.

Morin, E. (1992). *From the concept of system to the paradigm of complexity*. Translated by Sean Kelly. *Journal of Social and Evolutionary Systems*. Vol 15 (4): 371-385.

Morin, E. (1996). *A new way of thinking*. UNESCO Courier. February, pp. 10-14.

N

Norris, S. (2004). *Analyzing Multimodal Interaction - a methodological framework*. New York and London: Routledge

O

Orlikowski, W.J. (2007). *Sociomaterial Practices: Exploring Technology at Work*. *Organization Studies* 28(09): 1435-1448.

P

Parker, I. (2005). *Qualitative Psychology. Introducing Radical Research*. New York: Open University Press

Papoulias, C & Callard, F. (2010). *Biology's gift: interrogating the turn to affect*. *Body & Society*, 16(1) 29-56 [special issue on affect]

Pelias, R.J. (2008). *Performative Inquiry. Embodiment and its challenges.* In Knowles, J.G. & Cole, A. L. *Handbook of the Arts in Qualitative Research.* Thousand Oaks: Sage Publications

R

Rapley, T. (2007). *Doing Conversation, Discourse and Document Analysis. The Sage Qualitative Research Kit.* Sage Publications

Raudaskoski, P. L. (1999). *The Use of Communicative Resources in Language Technology Environments. A conversation analytic approach to semiosis at computer media.* Åbo Akademis tryckeri.

Raudaskoski, P.L. and Mcllvenny P. (2009). *Etnomethodologi* In: Medie- og kommunikationsteoretisk leksikon. / red. Søren Kolstrup ; Gunhild Agger ; Per Jauert ; Kim Schrøder. København : Samfundslitteratur, 2009. s. 126-128

Raudaskoski, P.L. (2010). “Hi Father”, “Hi Mother”: A multimodal analysis of a significant, identity changing phone call mediated on TV. *Journal of Pragmatics*, 42, 426-442.

Reason, P. & Bradbury, H. (Ed). (2006). *Handbook of Action Research.* London: Sage Publications

Rossi, E. L. (2002). *The Psychobiology of Gene Expression.* NY and London: W.W. Norton & Company, Inc.

Ryle, G. (1975, 1949). *The concept of mind.* London: Hutchinsons of London

S

Sabetti, S. (2006). *Life Energy Process.* (L.E.P.). Sherman Oaks, California: Life Energy Media

Schein, E.H. (1985, 2010). *Organizational Culture and Leadership.*

Schultz, M. (1990). *Kultur i Organisationer.* København: Handelshøjskolens Forlag.

Scollon, S. W. & Scollon, R. (2004). *Nexus analysis: Discourse and the emerging internet.* London and New York: Routledge

Scollon, S.W. & Scollon, R. (2003). *Discourses in Place. Language in the Material World.* London and New York: Routledge

Sidnell, J (2006). *Coordinating Gesture, Talk and Gaze in Reenactments.* *Research on Language and Social Interaction*, 39(4), 377-409

- Sims, D. (1999).** *Organizational Learning as the Development of Stories: Canons, Apocrypha and pious Myths.* P: 44-58 In: Easterby-Smith, M., Burgoyne, J & Araujo, L. (1999). *Organizational Learning and the Learning Organization. Developments in Theory and Practice.* London: Sage Publications
- Sfard, A. and Prusak, A. (2005).** *Telling Identities – In Search of an Analytic Tool for Investigating Learning as Culturally shaped Activity.* Educational Researcher 34(4): 14-22.
- Soltis-Jarrett, V. (2004).** *Interactionality: Willfully extending the boundaries of participatory research in psychiatric-mental health nursing.* Advances in Nursing Science 2004; 27(4):316-329
- Stafford, V.N. & Leshem, S. (2008).** *Stepping Stones to Achieving your Doctorate.* Maidenhead: Open University Press
- Staunæs, D, Juelskjær, M & Knudsen, H. (2010 submitted).** *Psy-leadership. New forms of (school) management as seen through three different optics: Affectivity, Virtuality and Materiality. In course reader for 'The Affective Turn – an invitation to new analytical engagements? Doctoral school of organisational learning (DOCSOL). Denmark in June 5-7th 2010.*
- Steffensen, S.V. (2009).** *Language, Linguaging and the Extended Mind Hypothesis.* Review article in Pragmatics & Cognition, 17:3, John Benjamins Publishing Company
- Stern, D. N. (2004).** *Det nuværende øjeblik.* Hans Reitzels Forlag, København
- Stivers, T. & Sidnell, J. (2005).** *Multi-modal interaction.* Semiotica, 156, 1-20
- Stivers, T. (2008).** *Stance, Alignment, and Affiliation During Storytelling: When nodding is a Token of Affiliation.* Research on Language and Social Interaction, 4(1), 31-57
- Suchman, L. (2007).** *Human-Machine Reconfigurations.* Cambridge: CUP
- Sørensen, E. (2009).** *The Materiality of Learning: Technology and Knowledge in Educational Practice.* Cambridge: Cambridge University

T

- Tally, J. (2001).** *The Story of Jazz. Toni Morrison's Dialogic Imagination.* Forum for European Contributions in African American Studies, Volume 7, LIT VERLAG, Hamburg.

Taguchi, H.L. (2010). *Going Beyond the Theory/Practice Divide in Early Childhood Education*. Introducing an intra-active pedagogy. London: Routledge

Turner, B. A. (2005). *The Handbook of Sandplay Therapy*. Cloverdale, California. Temonos Press

W

Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity*. Cambridge: University Press.

Wilhelm, R. (1988). *I Ching. Forvandlingens bog*, København: Strubes Forlag

Summary

Enacting the Between

On dis/continuous becoming of/through an Apparatus of Material Storytelling - is a dissertation that enacts a two-part 'posing' (in a two-book-cut) of a research-based methodology coined as Apparatus of Material Storytelling. Part 1 (Book 1) builds theoretical evidentiary support by diffractively coining the phenomenon of *Material Storytelling* and the *Apparatus of Material Storytelling* as a metaphysical, philosophical, theoretical and methodological backdrop for three modes of enacting 'the between' of reworking organizational practices; *Stories of space* inspired by Feng-shui, *Stories of artifacts* inspired by Sand-play and *Stories of bodies* inspired by Bodynamic. Part 2 (Book 2) builds evidentiary support for the Apparatus of Material Storytelling through an example of reworking organizational practices through these modes of enactment and from the act of a turn-by-turn multimodal constituent analysis (as 'documentation') of such a practice.

The research motives that have governed the envelopment of the Apparatus of Material Storytelling are the following:

“

1) how does the meaning and matter (including time and space) entanglement of (processes of becoming in) organizational living enable us to understand processes of organizational change (and not least the concept of change itself) rather differently?

And:

“

2) how can the recognition and active employment of this intra-play of meaning-matter modalities reconfigure (what is presently mostly talked about as embodied/enacted hegemonies of) habitual (working) life practices in-formed by the Cartesian duality split as well as a Newtonian space-time framework that dominate Western thinking?

Book 1:

Posing (an Apparatus of) Material Storytelling as discontinuous intra-active rework of organizational practices

Configures the Apparatus of Material Storytelling by placing Material Storytelling within the research fields of multimodality and materiality and specifically within the posthuman performative approach of the Baradian onto-epistemology of *Agential Realism*, with the diffractive meth-

odology that accompanies it. On this ground the notion of Material Storytelling is diffracted as a (non-local) diffractive grating for material-discursive-affective practices of the three (material-story) modes of enactment. This is done first through a diffractive reading of the Baradian onto-epistemology and Bojean storytelling theory and (as part of that) narrative research. A *quantum amendment* is made that poses Material Storytelling as a *diffractive approach* of intra-active-being-of-the-world that is cut together/apart from two other approaches to reworking organizational practices within the field of storytelling; an *interpretive approach* of a narrative-being-in-the-world, and a *resituative approach* of historical-being-in-discourse. As a diffractive approach Material Storytelling is elaborated further as *subterranean subtleties of vital intra-actions*, to account for an affective dynamic integral to the congealing of agency of spacetimedmattering in Material Storytelling practices. This is accomplished through a diffractive reading of the Bergsonian process-philosophical apparatus and the Baradian and Bojean apparatus'. Thereby a model and a specific vocabulary of the Apparatus of Material Storytelling are enacted entailing among others; *deconfiguration, spacetimedmattering, vital intra-actions, affective sites of engagement, material-discursive-affective practices, entangled durations, touching responsiveness, quantum jazzing*.

Book 2:

'How to build an oasis with a good conscience' – organizational becoming through an Apparatus of Material Storytelling

Enacts 'the between' of human-non-human agencies of an action research project as diffracted by the Apparatus of Material Storytelling. The three modes of enactment are here depicted as apparatuses working in the organizational change process - thus as modes of *intra-active being-of-the-world* to build evidentiary support for the Apparatus of Material Storytelling. The Material Storytelling model and vocabulary diffracted through Part 1, Book 1 are working as an analytical apparatus for a five part analysis of the (action research) process of reworking organizational practices at a Deaf and Blind institution in Aalborg, Denmark over a six months period (September 2008 - March 2009). The analysis of the process is structured around a partial element of the complex storytelling event as a whole, a crucial moment that took place midway into the six-months duration of the project and in the analysis this 'moment in time' is enacted as the recursive fixed point for excursions - outings - into both the chronological past and the future. The five part multimodal constituent analysis thereby documents the dis/continuity of this change process and depicts how various material story configurings functions as memory-devices of/for the dis/continuous enactment of entangled durations across various spacetimescales of the between intra-act of the workshop setting. Book 2 builds the evidentiary support for the stated claims on meaning/matter entanglement in the following two formats:

1)

In a multimodal constituent analysis of (the videotaped) intra-active material-discursive-affective practices of ‘the between’ of the constituents in the crucial moment of deconfiguring the problem-complex dealt with December 10th 2008. Thus the deconfigurative enfolding of *spacetime*dmatter manifold of the crucial moment as it progresses turn-by-turn aka cut-by-cut. This ‘documentation’ is performed in Analysis Part 1, Part 3 and 4.

2)

In a multimodal constituent analysis of how the sandbox-based storyboard apparatus of the ‘Now’ envelope entangled durations across larger *spacetimescales* of the six months development process and beyond. Here the recollected *spacetime*dmatter manifold (the sandbox storyboard) functions as a diffractive grating for enacting the ‘relevant rest’ of the ‘data-material’. Again snapshots (literally) of former or subsequent events (in a *chronos spacetimescale*) of *spacetime*dmatterings are functioning as memory devices to ‘document’ dis/continuent *spacetime*dmatter deconfigurations across larger *spacetime-scales*. This is ‘documenting’ how other *spacetime*dmatterings are re-actualized, recollected; or *deconfigured* as entangled durations of the sandbox-based apparatus of the ‘Now’. Those de-localized agencies are ‘voiced’ so to say by the local mutually constituted agencies of the enacted *spacetime*dmattering; the material storyboard or the rebuild living room of the organizational surround. This ‘documentation’ is performed in Analysis Part 2 and to some extent in 3 and 5.

Together the two modes of ‘analysis as documentation’ thus cover the/a developmental process of organizational restory-work as a process of Material Storytelling of six months’ duration diffracted through a multimodal constituent analysis. What ties the two modes of analysis together is the ‘Now’; A crucial moment of a co-storying action of intra-active material-discursive-affective practices (sto-

rymodes) that diffracts (affects) the *spacetime*dmattering of the ‘Now’ where indeterminacy gets solved action-by-action, cut-by-cut.

How the enactment of a possibility for a different cut of relationalities – in this case of a priority of practices - enacts a possibility for change is an important way of making

change believable and congealed. Here, this believability and congealing is enhanced because the sandbox-apparatus afforded these material-discursive practices in question to be invited 'in' by being reconfigured through this maneuverable world of the sandbox as 'Stories of artifacts'. As the material objects are visual, material and maneuverable memory-devices or onto-semantic *diffractive apparatuses*, they co-constitute a different field of possibility for reconfiguring problem complexes to that of the 'verbal cure'. A different participatory framework is enacted with possibilities for intra-actively 'grasping' phenomena (perhaps in a different fashion than would be possible in talk only) as 'showing in action' or 'Stories of bodies' and 'deal with them' as a problematic not just physically, but also through talk, emphasizing the problem-complexes dealt with very literally as material-discursive practices. This process of organizational rework entails as such the dismantling of the 'old' practices understood also as the breaking down of the 'old' materially configured practices and the establishing or the materializing of the 'new' configuration in a rebuilt organizational surround as 'Stories of space'. Both aspects are part of Material Storytelling's manner of reconfiguring organizational practices. I argue this to be a mundane, yet highly important, but often overlooked, point in approaches to organizational rework that do not credit the agency of matter.

The contribution of the dissertation can be summarized as:

- 1) 'grounding' the Baradian theoretical framework of radical new materialism to analyzing everyday practice, especially in relation to organizational change (the apparatus of organization meeting the apparatus of action research project meeting the apparatus of three 'alternative' methods)
 - *'applying' the Baradian approach to a concrete, longitudinal case study*
- 2) approaching organizational theory and change from a quantum, complexity/entanglement perspective to enact a different 'cut' of (the practice of) change altogether that questions the 'Great Divide' of human superiority
 - *bringing practice closer to the material-discursive-affective, situated character of it*
- 3) leaving the talk-based (be it conversation or interview analysis) approach to organizational life/change and going for multimodality
 - *taking storytelling to another, material level*
- 4) debating and enacting seriously the nature and entanglement of theory, analysis, and scientific reporting/writing
 - *the 'productive machinery' of the dissertation*

Danish summary

Enacting the Between

On dis/continuous becoming of/through an Apparatus of Material Storytelling - er en afhandling som gennem et to-delt format tilbyder sig som en forsknings-baseret metodologi ved navn Apparatus of Material Storytelling. Del 1 (Bog 1) bygger teoretisk understøttet argumentation herfor gennem en såkaldt diffraktivt opnået indramning af fænomenet *Material Storytelling* samt *Apparatus of Material Storytelling*, der herefter udgør den metafysiske, filosofiske, teoretiske, og metodologiske baggrund for tre 'materiel story' modaler for konstituering af den 'between', hvorigennem bearbejdningen af de organisatoriske praksisser finder sted. De tre 'materiel story' modaler er *Stories of space* inspireret af Feng-shui, *Stories of artifacts* inspireret af Sandplay and *Stories of bodies* inspireret af Body-namic.

Del 2 (Bog 2) bygger empirisk understøttet argumentation for Apparatus of Material Storytelling gennem et praksis eksempel på bearbejdning af organisatoriske praksisser gennem de tre 'material story' modaler og gennem multimodal konstituerings analyse (som 'dokumentation') for sådanne praksisser.

Følgende forskningsmotiver har fungeret som guide for 'foldningen' af dette Apparatus of Material Storytelling:

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1) hvordan sætter den 'entanglement' af mening/materialitets modaler (inklusiv tid, sted/rum) som organisatorisk liv er præget af, os i stand til at forstå organisatoriske forandringsprocesser (og ikke mindst begrebet om forandring selv) på en anden måde?

Og

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2) hvordan kan anerkendelse og aktiv brug af dette 'intra-play' af mening/materialitets modaler rekonfigurere (hvad der på nuværende tidspunkt mestendels tales om som kropsligt forankrede, hegemoniske) habituelle (arbejds)livs praksisser in-formeret af den Cartesianske dualitets tænkning så vel som den Newtonsk tid-rum forståelse som dominerer i Vesten?

Book 1:

Posing (an Apparatus of) Material Storytelling as discontinuous intra-active rework of organizational practices

Konfigurerer Apparatus of Material Storytelling ved at placere Material Storytelling indenfor forskningsfeltet omkring multimodalitet og materialitet – og her – indenfor den posthumane performative tilgang som Karen Barad's onto-

epistemologi *Agential Realism* – og den dertil hørende diffraktive metodologi - er udtryk for.

Dette gøres i første omgang gennem en (såkaldt) diffraktiv læsning af den baradske onto-epistemologi og Boje's storytellings teori og (som en del heraf) den narrative forsknings tradition. Her udføres en såkaldt 'quantum amendment' som fremsætter Material Storytelling som en diffraktiv tilgang, der trækker på *intra-aktiv-væren-af-verden*, og som adskilles fra to andre tilgange til bearbejdning af organisatoriske praksisser indenfor storytelling feltet; en fortolknings tilgang, der trækker på *narrativ-væren-i-verden*, og en resitativ tilgang, der trækker på en *historisk-væren-i-diskurs*. Som en diffraktiv tilgang er Material Storytelling herefter videre bearbejdet som 'subterranean subtleties of vital intra-actions' for at argumentere for en affektiv dynamic integreret i den 'størkning' af rum-tids-betydningens agens (spacetime-mattering) som finder sted i Material Storytelling praksisser.

Dette opnås gennem en diffraktiv læsning af den Bergson-ske proces-filosofi apparatus og det Baradske og Bojanske apparatus. Derved stadfæstes en model og et vokabular som er specifikt Apparatus of Material Storytelling og bl.a. rummer; *deconfiguration, spacetime-mattering, subterranean subtleties of vital intra-actions, affective sites of engagement, material-discursive-affective practices, entangled durations, touching responsiveness, quantum jazzing*.

Book 2:

'How to build an oasis with a good conscience' – organizational becoming through an Apparatus of Material Storytelling

Stedfæster 'the between' bestående af et kompleks af 'human-non-human' agencies i et aktionsforsknings projekt som diffraktes gennem Apparatus of Material Storytelling. De tre 'material story' modaler er her sat som apparaturer for den organisatoriske forandringsproces, altså som modaler for *intra-aktiv-væren-af-verden* med det formål at bygge empirisk understøttet argumentation for Apparatus of Material Storytelling.

Den model af Material Storytelling og det vokabular herfor som blev diffraktet gennem Del 1, i Bog 1 fungerer nu som et analytisk apparatus for en fem-delt analyse af en (aktionsforskningsbaseret) organisatorisk forandringsproces på Ungdomshjemmet på Døvblinde Centeret i Aalborg i en seks-måneders periode (september 2008 – marts 2009).

Analysen af den proces er struktureret omkring et del-element i den komplekse storytelling proces set som helhed; et 'afgørende øjeblik' som foregik midtvejs i den seks-måneders lange projektperiode og i analysen fungerer dette 'afgørende øjeblik' som et rekursivt fixpunkt for ekskursioner – 'Outings' – ud i såvel den kronologiske fortid som fremtid. Den fem-delte multimodale konstitueringsanalyse dokumenterer 'derved forandringsprocessens dis/kontinuitet og udpinder, hvordan forskellige 'material story' konfigureringer i workshop-settingens 'between' intra-action fungerer som 'memory-devices' og dermed gensættelser (enactments) af 'entangled durations' og

derved muliggør at konfigureringen af forandringen går på tværs af rum-tids-skalleringer. Bog 2 opbygger den empirisk understøttede argumentation for de fremsatte påstande omkring mening/materialitets entanglement gennem følgende to formater:

1) I en multimodal konstituerings analyse af de videooptagede intra-aktive materielt-diskursive-affektive praksisser af den 'between' af konstituerer i det 'afgørende øjeblik' af dekonfigurering af problem-komplekset, som blev arbejdet med d. 10 December 2008. Altså den deconfigurative 'foldning' af den afgørende øjeblik's multifoldede 'stedtidsbetydning' (spacetimedmatter) som det skrider frem 'turn-by-turn' eller 'cut-by-cut'. Denne 'dokumentation' genereres performativt i Analyse Del 1, 3 og 4.

Ikke-lokaliserede agenser får stemme, så at sige, gennem de lokale gensidigt konstituerede agenser af den konfigurerede stedtidsbetydning; det materielle storyboard og organisationens ombyggede faciliteter. Denne dokumentation performs i Analyse Del 2 og til en vis grad i Analyse Del 3 og 5.

Tilsammen dækker de to formater for 'analyse som dokumentation' dermed en/den seks-måneders organisatoriske forandringsproces som en Material Storytelling proces, der difraktes gennem en multimodal konstituerings analyse. Det, der binder de to analyse formater sammen, er 'Nu'et eller det 'afgørende øjeblik', hvor den intra-aktive

2) I en multimodal konstituerings analyse af hvordan dette 'nu's sandkasse-baserede story-board apparatus 'folder' entangled durations på tværs af større stedtidsskalleringer i den seks-måneders forandringsproces. Her fungerede sandkasse-storyboard'et som et diffraktivt gitter for at konfigurere det 'relevante andet' af data-materialet. Helt konkrete 'Snapshots' af tidligere eller senere sessioner (målt i en kronos tids-skallering) fungerer som 'memory-devices' til 'dokumentation' for de dis/kontinuerede stedtidsbetydninger (spacetimedmatterings) på tværs af større sted-tidsskalleringer. Dette dokumenterer hvordan andre stedtidsbetydninger aktualiseres gennem dekonfigurering som 'entangled durations' eller 'arvede relationaliteter' af dette afgørende øjeblik's sandkasse-baserede apparatus.

materielt-diskursive-affektive story ændrer en afgørende relationalitet mellem pleje praksissen og den pædagogiske praksis på Ungdomshjemmet's Hus 1 ved at omarbejde prioriterings orden herfor.

Ved at give muligheden for en sådan storying af ændrede relationaliteter – i dette tilfælde praksissers prioriterings orden – forstærkes muligheden for forandring. Dette, fordi sandkasse-apparatet giver mulighed for at de materielt-diskursive praksisser som søges bearbejdet 'inviteres' indenfor i en bearbejdet udgave i den manøvrerbare miniature verden i sandkassen - som 'Stories of artifacts' så forstærkes såvel 'troeligheden' som 'vedvarigheden'

af forandringen. Da de materielle objekter er visuelle, materielle og manøvrerbare 'memory-devices' der samkonstituerer et andet mulighedsfelt - sammenlignet med 'the verbal cure' - for at kunne re-konfigurere problemkomplekser. Det giver et andet 'deltager-rammeverk' (participatory framework) for (den menneskelige) deltager med mulighed for en anden intra-aktiv '(be)gribning' af fænomener (måske på en anden måde end det, der er mulig ved brug af tale) som en 'showing in action' eller 'Stories of bodies' - og dermed mulighed for at håndtere problematikker på en måde. Ikke kun fysisk, materielt, men også via samtale, men på en måde, der meget bogstaveligt understreger problemkomplekserne som materielt-diskursive praksisser.

Den pågældende organisatoriske forandringsproces rummede opløsningen af 'gamle' praksisser forstået som nedbrydning af 'gamle' konfigurerede praksisser og etableringen eller materialiseringen af de 'nye' konfigureringer gennem ombygningen af de organisatoriske rammer som 'Stories of space'. Alle aspekter er del af Apparatus of Material Storytellings måde at om- eller re-konfigurere organisatoriske praksisser. Argumentet er her, at sådanne verdslige, omend meget vigtige pointer i fht. at gå til organisatorisk forandring, almindeligvis overses af tilgange der (endnu) ikke anerkender materialitetens agens; hvordan matter matters.

Afhandlingens bidrag kan opsummeres som:

- 1) 'grounding' af det Baradske teoriapparat - baseret på den radikale ny-materialisme - i analyser af hverdagspraksisser, specielt i relation til organisatorisk forandring (organisationens apparatus møder aktionsforskningsprojektets apparatus møder tre 'alternative' metoder)
 - *'anvender den Baradske tilgang på et konkret, longitudinal case studie'*
- 2) 'tilgå organisations teori af forandring fra et kvantefysisk, complexitets/entanglement perspektiv, der gennem en anderledes skæring gensætter (praksissen) 'forandring' på en måde der stiller spørgsmål ved den menneskelige overlegenhed ved 'the Great Divide'
 - *bringer praksis tættere på dens materielt-diskursive-afektive karakter*
- 3) forlader den talt-baserede (uanset om det er samtale eller interview) tilgang til forståelse af organisatorisk liv og går efter multimodalitet/materialitet
 - *tager storytelling til et andet, materielt niveau*
- 4) debatterer og tager konsekvensen af sammenviklingen af teori, analyse og videnskabelig afrapportering/skrivning
 - *medtænker seriøst afhandlingens 'produktive maskineri' i konfigureringen af indholdet*

