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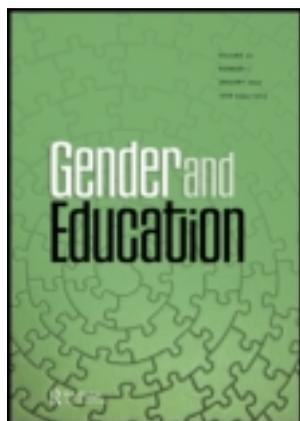
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A more ‘livable’ school? A diffractive analysis of the performative enactments of girls’ ill-/well-being with(in) school environments

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School girls in Sweden are reported to develop psychological (ill)health in relation to their school behaviour and over-achievements. The methods offered as prevention and treatments are aimed at the individual girl’s self-management of stress, health and psychological state, putting the responsibility on the girls themselves. This feminist agential realist study aims to explore how the material-discursive school environment, that is, the entanglement of architecture, materialities, bodies, discourses and discursive practices – including the discourses on girls’ health in research and media texts – are collectively responsible for, co-constitutive of and enacting female students’ ill- and well-being. Doing a diffractive analysis, we register how we as researchers are involved and co-productive of this complex apparatus of knowing of school-related ill-/well-being. A diffractive analysis aims to not only analyse how this apparatus is made and what it produces, but also how it can be productive of new possible realities that might produce more livable school environments.

Keywords: girls; health; school environment; agential realism; diffractive methodology; Karen Barad

Introduction

It has been argued that any production of knowledge is actually a production of reality with very specific material consequences for the agents involved in that particular reality (Barad 2007; Hekman 2010; Law 2004; Mol 2002). When, for example, the ‘boys’ problem’, that is, boys finding it unmanly and feminising to study, is blamed on over-achieving girls and the female teachers who privilege girls’ learning styles in research (Nyström 2012), this will inevitably produce one of multiple realities that will have material consequences for the agents involved (Hekman 2010). In the context of the extensive scientific reporting in media on young Swedish school girls’ increasing psychological (ill)health, and of the increasing amount of preventive programmes and self-treatments being implemented in schools around Sweden to enhance the individual girl’s self-management of stress and psychological problems, it is only fair to ask how such knowledge production becomes part of a larger and extended apparatus (Barad 2007) of producing school girls’ (multiple) realities and their enactments of ill- or well-being in those realities. The question is, in what ways do reported scientific findings (based on various psychological, psychoanalytical and

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neuro-cognitive theories) become co-constitutive agents in the production of the phenomenon of school girls' ill- or well-being together with other performative agents? Such agents are here understood to be entanglements of discourses, places, materialities and embodied practices in or connected to the school environment. All of these involve socio-historical aspects of gender, ethnicity, class, age, etc. in various situated ways. Although this study focusses primarily on the materiality of language (MacLure 2013) as the strongest agent in these intra-active entanglements, our analysis also shows how various other material agents, such as the school building and architecture, which we usually take to be the fixed material backdrop of human agency, are themselves strong co-constitutive agents of school-related ill- or well-being.

From an agential realist (Barad 1999, 2007) stance, the aim of this paper is thus to explore how the material-discursive school environment, with all its various agents and the plurality and diverging character of practices (Stengers 2007), can be understood to be collectively responsible for, co-constitutive of and collaboratively enacting the phenomenon of Swedish female students' ill-/well-being. These enactments are understood to emerge as effects of an open-ended *material-discursive apparatus of knowing* (Barad 2007, 149–150), in which we as researchers constitute significant performative agents as well. This means that we are not looking for answers located 'inside' of the pre-existing subject, as the psychological and neuro-cognitive epistemologies suggest. Instead we analyse events of encounters of multiple material-discursive agents and situated practices, and what emerges as *differences* in these events: that is, how matter *matters* in an ongoing process of material-discursive mattering (Barad 2007, 145–147). In terms of methodology, this can be understood to put to work what Barad (2007, 73–94) and Haraway (1997, 268–274) have called a *diffractive analysis*. For our analysis, we will make very specific agential and provisional cuts in the multiple realities produced by the apparatus that we understand to be productive of girls' school-related ill-/well-being. These cuts and how they are diffractively produced in the research process will constitute our analysis in the core section of the paper called *Enacting a diffractive analysis*.

What a diffractive analysis might entail will be unfolded shortly. We wish, however, to point to the diffractive analysis as, what Stengers (2007) has called, an experimental achievement of 'the power to wonder' that can be celebrated as an event of knowing things differently (5). The 'power of wonder', says Stengers, is about constructing relevant problems that provide relevant other ways of knowing as well as new imaginings that can escape the knowledge economy that buys right into the state machine of managing public order (Stengers 2007, 6). In this case, such knowing might be able to interfere with the seemingly unanimous discourses and practices that put the cause and responsibility of ill-/well-being on the girls themselves. Hence, this is a methodology that experiments with controversy and the fact that 'it could be otherwise', as Mol suggests (2009).

Agential realism and how phenomena are produced by an apparatus of knowing

How will we, as two collaborating researchers, be able to identify '*which* specific material practices matter, and *how* they matter' (Barad 2007, 168, italics added)? To do this we first need to know more about the wider, multiple and open-ended *apparatus of knowing* that we take to be productive of the phenomenon. It is in the *events of*

encounter with the different agents of this apparatus – including the affective responses and memories of our own – that we can make intelligible how this phenomenon will come to matter as an effect of the material-discursive intra-activities taking place in this apparatus. Before showing how this specific apparatus is assembled and how it is possible to produce knowing together with and as constituted by this apparatus, we will discuss a couple of key concepts in Barad's agential realism: phenomenon and apparatus.

Constructionism and realism can be said to be brought together in agential realism as a relational ontology (Barad 2007, 332–336). This means that instead of thinking about a world of physical stable objects out there and language and concepts to represent the meaning of these bodies, it is *phenomena*, as an ongoing process of mutual intelligible-making of matter and meaning, that are constitutive of reality (139, 333). The phenomenon of, in this case, girls' school-related ill- or well-being, is thus to be understood as material-discursive intra-active enactments. In this study we show how the materiality of, for example, a panicking girl-body is attached with a specific meaning of ill-being in a specific situated event of intra-activities in a wider apparatus of girls' school-related ill-/well-being. Thus, the primary ontological unit (e.g. the body of the girl) is no longer an object with inherent boundaries and fixed properties, as in classical physics and philosophy. Rather, the ontological unit is understood as a *phenomenon*; defined as 'the ontological inseparability/entanglement of intra-action "agencies"' (Barad 2007, 139). In the example of the panicking girl-body, this can be understood as an event of an entanglement of multiple performative agencies: the agencies of discourses of schooling and ill- or well-being as well as the agency of the physical school building and practices of schooling. These are collectively intra-acting in situated events where the phenomenon of school-related ill-being is produced and subsequently reported on in media. Hence, phenomena are enacted (or produced) in specific agential intra-actions, where 'the boundaries and properties of the components of phenomena become determinate' as the particular concept that we attach to that phenomena becomes meaningful in the very same event (Barad 2007, 139). This is why Barad (2007, 334–335) suggests for us to talk of concepts not as linguistic entities but as 'specific material arrangements' and of 'discursive practices' that should not be confused with discursive speech acts, where discourse is merely a synonym for language. Hereby, writes Barad, *material-discursive intra-activity* will replace the dominant notion of language as representations of a reality separated from meaning-making Barad (2007, 141). Thus, in a Baradian agential realist account, matter and meaning are always already co-constituted:

Neither discursive practice 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 in determining the other. Neither is articulated or articulable in the absence of the other; matter and meaning are mutually articulated. (2007, 152)

If matter and meaning are seen as co-constitutive of each other, then so is being/becoming (ontology) and knowing (epistemology). This is how Barad's agential realism can be understood in terms of an onto-epistem-ology (2007, 185).

'What is an apparatus?' Barad asks herself this question in the opening phrase of a central section of her book by putting it side by side with other more familiar concepts (2007, 141). If it is not a Kantian grid of intelligibility, or an Aristotelian schemata, and not the same as Althusserian apparatuses, or Foucault's discursive practices or

dispositive, then, what is it? Barad's theory on apparatuses of knowing relies on Niels Bohr's thinking from quantum physics. Apparatuses, writes Barad, are specific material-discursive practices that become productive of phenomena by ways of specific boundary-making cuts (2007, 333–224). '[A]pparatuses are macroscopic material arrangements through which particular concepts are given definition, to the exclusion of others, and through which particular phenomena with particular determinate physical properties are produced' (Barad 2007, 142). As researchers, we make a cut in a world made up of phenomena that are *not manifest in themselves* but that become temporarily manifest through this practice of the scientific knowledge production (Barad 2007, 335–336). And this is what makes it possible to write scientific texts with provisional descriptions of the phenomenon.

A crucial part of understanding the apparatus as a material-discursive practice is that we as researchers (irrespective of research disciplines) inevitably become an entangled part of these apparatuses, as we set them up and become productive of the boundary-making agential cuts that will then be written up as scientific knowledge. Thus, we can no longer be seen simply as the agency of observation, observing an object at distance, distinctly (as well as ontologically) separated from us. The subject–object distinction is invalidated in Bohr's and Barad's thinking. The production of knowing is constituted by the process by which this larger material arrangement (*of which we are an entangled part*) produces differences and enacts specific cuts that are boundary-making and meaning-making; that is, that 'determinate the boundaries and properties of objects and meanings of embodied concepts within a phenomenon' (Barad 2007, 143, 143–147, 332–336). This will have consequences for how we understand ourselves as researchers, as we will expand on below and as previous material feminist studies have already shown (Lenz Taguchi 2012, 2013; Palmer 2011; Banerjee and Blaise 2013; MacLure 2013; Mazzei 2013).

Setting up the apparatus of knowing for a diffractive analysis

It was with an increased wish for a critical and innovative discussion about young school girls' (ill)health in Sweden today that we set up this apparatus of knowing. During the last years, there has been an intensified media discussion with reference to various research studies in medicine, psychology and neuro-cognition that unanimously situate the cause of ill-being within the girls themselves or their families. For example, a newspaper interview, drawing on psychological studies, reports that young female students' stress problems and ill-health refer almost exclusively to high-achieving girls with a 'good-girl' syndrome (Alfvén, Caverius, Karling, and Olsson 2010). Reports in media on young girls developing fibromyalgia are exclusively connected to girls with high-achieving performance anxiety (Ant Jacobsson 2012). Recently, the governmentally appointed commission on gender equality in schooling concluded that girls' reports of health problems have to be taken seriously (SOU 2010, 99).¹ The preventive programmes and treatments aimed at girls with stress problems are, without exceptions, self-treatments, putting the responsibility of change and well-being on the girls themselves (Eldh and Ingvar 2012; Wilson and Murrell 2011).

When we as researching agents enter into and simultaneously become productive of this apparatus of knowing, we are engaged with all of our own previous and ongoing experiences of these kinds of realities of young girls' illness in and outside school that are described in media and various research reports. We both know young girls who have suffered/suffer from some of these problems, and both of us are high-achieving

academics who navigate with various exercise- and self-treatment programmes to prevent the damaging effects of work-related stress. As Barad (2007, 168) writes, we are, as researching agents, not ‘fully formed, pre-existing subjects, but as subjects intra-actively co-constituted through the material-discursive practice that /.../ [we] engage in’. This means that the way this apparatus is set up depends not only on the kinds of data we encounter, ‘find’ and ‘collect’, but also on the differences that get made in our embodied engagements with these data in the apparatus of knowing. This means that it matters that we are white, middle-class, heterosexual women in the production of knowing, but this does also matter for how we will be transformed in new events of encounter in the researching process (Lenz Taguchi 2012, 2013).

Apart from reading and engaging with various kinds of research reports and following the media discussion, we chose to meet and engage with the stories produced by two young school girls, Alice (grade 7) and Emma (grade 10).² We first met with Alice and Emma at a coffee shop where the girls usually hang out to make them feel comfortable. The first meeting was all about information and getting informed consent from the girls.³ During the upcoming two meetings, the girls told us memory stories and showed us photos that they had taken with their smart phones. To get away from discursive descriptions of physical and psychological symptoms or diagnosis, and to, instead, get to the material-discursive situatedness of the phenomenon, we asked about specific spaces, places, things and practices or activities that mattered to experiences of ill- or well-being. ‘Something must always take place somewhere’, as Mol (2009) says in relation to the situatedness of material-discursive phenomena. For example, where in, or outside, the school buildings and while doing what would they feel well, ill, comfortable or anxious? Could they describe smells, sounds or other details in these places or practices that affected the way they felt? The girls had no problems talking about these events and then writing on them at home, adding more details and sent them to us by e-mail the same or the next day. We also asked them to take photographs of these or other places or situations where they experienced ill- or well-being. The girls told us that the photos helped them write on the stories and that they felt differently about these events after having written about them and discussed them with us.

In the events of engagement with the data produced by the two girls and the various research reports, articles and media clips, memories and critical incidents of our own would emerge. The two of us would sit together in one of our studies, surrounded by all the data: the articles and books, written stories, photographs and images, or different web-sites on the internet on the screen in front of us. We read data out loud to each other or put the photographs into different software to highlight or downplay parts of them. We thus enacted agentic cuts in the construction of various encounters with data, while talking and telling each other stories or experiences, as a way to collaboratively produce knowing in this rhizomatic zigzagging flow. This process felt as if we passed ourselves over to a flow of entangled social, material and discursive forces in the apparatus of knowing, where one text would link, connect or collide with another, and produce something new or different. This might be a memory or experience evoked in one of us, or associating to another field of research, such as architecture or art, or connecting different data to each other in previously unexpected ways. It was these events of engagement with data in the apparatus of knowing that made us physically experience the workings of a diffractive analysis. We felt like surfers taking advantage of ‘the diffraction patterns created by the rocks or pieces of land that stick out near the shore/.../literally riding the diffractive patterns, wave after wave in different directions’, as Barad writes (2007, 80). In this way, the analysis constituted events where

minds and bodies, thinking and feeling cannot be understood as separated but entangled in a 'spacetime-mattering' practice (Barad 2007, 179).

The doing of diffractive analysis

When we claim to do what Barad (2007, 73–94) and Haraway (1997, 268–274) have called a diffractive analysis, what does this mean? Diffraction, as a concept from physics, can be illustrated by the rolling, pushing and transformation of waves in, for example, the sea, as in Barad's quote above. However, in physics it can be any kind of wave, sound waves or light waves. A diffractive analysis can be understood as a wave-like motion that takes into account that thinking, seeing and knowing are never done in isolation but are always affected by different forces coming together, or, to use Barad's words; '... knowing is a matter of part of the world making itself intelligible to another part of the world' (Barad 2007, 185).

For Haraway and Barad, diffractive analysis basically constitutes an alternative methodology to critical reflection (Lenz Taguchi 2012). While reflection basically mirrors reality as a more or less fixed phenomenon seen from a distance, diffraction is about engaging in the world and its differential becomings (Barad 2007, 87–91). A diffractive way of doing analysis, then, is not about a researcher interpreting what the data means, where the analysis is supposed to be 'out there' to be studied, reflected upon and deriving meaning/knowing from (Barad 2007, 29, 81). Rather, a diffractive analysis can be understood as an enactment of flows of differences, where *differences get made* in the process of reading data into each other, and identifying what diffractive patterns emerge in these readings.

A diffractive style of reading allows for the researchers to identify the intra-activities that emerge in between the researchers and the data. These shifts do not happen completely at random; new directions are marked out in the very intersection between the data, theory, methodology and the researcher. In these diffractive crossroads, the original 'wave' partly remains within the new wave after its transformation into a new one, and so on, wave after wave (Barad 2007, 71–83). The new disturbs, intervenes and calls for attention and in this event something new can be created with the data and new data might be produced. In this Baradian (2007) way of thinking, intention, as we know it, cannot be ascribed to a single human subject as a pre-existing determinate mental state. Rather, writes Barad, intention is something distributed that emerges from a complex network of human and nonhuman agents, including historically specific sets of material conditions, thus exceeding the notion of being assigned to an individual who produces intention that pre-exists an activity (2007, 23).

However, in this process, we also found that our own gender-, class- and ethnic performativity was an important factor in the production of the diffractive analysis: how we inter-related to each other's (gendered, classed, ethnic, aged) experiences, connections and memories, and how we negotiated and came to decide on how to perform the specific agential cuts we made. Thus, the diffractive analysis unfolded below consists of cuts produced in a predominantly ethnic, white, middle-class reality of girls and women that have all the opportunities of a western democracy in a progressive nation-state of Northern Europe, and it is exactly this socio-material historical situatedness that became productive of this specific school-related ill- or well-being produced in these cuts. Last but not least, it was in the writing of the analysis/paper and in the hands-on production of the power point to be presented that the diffractive analysis, more than any place else, took place. This is where new additional cuts were made and where different data were literally written into each other.

Enacting a diffractive analysis

The photograph and the story below, as part of this larger apparatus of knowing, both call our attention to research on the liberal school reforms of the 1990s, implementing ‘free choice of schools’ (Bunar 2010). Thus, in rush hour you will find thousands of children and youth, and especially girls, of different ethnicity, class, skin colour or religion, travelling, sometime for an hour, to an inner-city school ‘of their own choice’. They hope to get a better education in predominantly ethnic Swedish, middle-class (white) high schools, in order to enter a good university programme (Bunar 2010). The girl in the story, just as we ourselves as female academics and researchers, together with many women since the late nineteenth century, seems to have understood that education is the only way to compete with men in the labour market.

The subway starts and stops; station after station. I feel the anxiety growing in my chest; my heart beating harder and quicker and my breathing as if on top on my lungs. I feel sick: maybe I must get off at the next stop to throw up? I can’t make it. I will get off at the next stop! The air smells grossly of sweat. I cannot breathe too deeply. Cannot get any disgusting bacteria into my body. Only two more stations to go. But I have to get out. Cannot miss maths today – must pass maths to get into the university. The sound of the breaks as the train prepares to stop cuts through my head. I hate this train! Why do I throw up almost every day before school? (Alice’s story)

The blurry image of people in a hurry or blocking the way on the subway platform in the photograph intra-acts, as narrated in the story, with the molecules of sweat and smell from other bodies, and the penetrating sound waves generated from the breaks of the train as it arrives at a station (Figure 1). All of these different material agents are entangled with discourses on school achievement, mathematics and anxiety about the future. They become, in the story, productive of bodily contractions of the stomach, a speeding heart rate and breathing pushed to the top of the lungs.

‘Human concepts [such as mathematics] are clearly embodied’ writes Barad (2007, 154). They should not be understood as abstract and immaterial, or ‘ideational’ according to Barad based on Bohr, but rather as ‘actual physical arrangements’ that intra-act with other matter (Barad 2007, 147). In this specific apparatus of knowing, concepts such as mathematics become productive of *difference* that will come to *matter* in the experiences of the girl in the story, as bodily sickness and increased anxiety. And as part of this specific apparatus of school-related ill- or well-being, concepts and practices of mathematics, or even simply the experience of using public transport during rush hours to get to work every day, will come to matter in our own bodies as researching subjects, as intrusive feelings of sickness in the event of engagement with this data. Things, places, emotions and bodily reactions described in the story intervene, connect and take action in our own bodies, evoking memories of a mathematical practice neither of us could ever properly master. We become *with* this data in an event of engagement and become, in a sense, different from what we just were.

This story intra-acts in painful ways to another story about Paulina, reported in a major daily newspaper. The headline reads: ‘Paulina had cold-sweats every time she came even close to the school building.’ The article continues:

When Paulina [after a three month break] tried to go to school she had attacks again. Her legs trembled so badly she had to sit down on the sidewalk. [Three years later] – I still have difficulties going into school environments and often have light forms of panic attacks in the classrooms of my community college, but it works. (Lerner and Lofors 2010).



Figure 1. The central station in rush hour. Photo by Alice 10th grade.

How can the school environment become such a powerful performative agent in enacting Paulina's failed sense of well-being that she does not even need to be inside of it to feel bad? In an agential realist sense, the school environment is making itself intelligible to Paulina in ways that do not enact her well-being, but rather quite the opposite.

Paulina's story can be read into research on children who refuse going to school. What can this research teach us about the school environment? And what differences are made in relation to girls' illness and well-being when reading into the stories above? In a report on a programme for girls with extensive truancy (up to two years of school absence), the researcher concludes that all of these girls (ten girls in a school of over 600) desire an education and basically want to go to school; they just have not found the right way to do it (Bodén 2010). While mainstream research on truancy shows that truancy is either caused by individual psychological problems, sometimes expressed in 'school-phobia' (Kearney and Bensaheb 2006), or family problems (National School Agency 2010; Reid 1999; 2006), Bodén (in press) suggests that truancy can instead be understood as material-discursive intra-actions of many different performative agents such as the formal structures of schools, architecture, the computer technology to register absence and presence, as well as human agents. In Bodén's (2010) report she shows how the postmodern transparent glass constructions of a school, even at the level of the individual classrooms, intra-act with a

particular girl to cause frequent anxiety attacks. This girl feels as if she is always watched and can never escape the eyes of the other children or teachers. While the teachers and some other children would report on the beauty of this architecture and appreciating the light, most children asked would complain about the feeling of not being able to find spaces of integrity within the school building (Bodén 2010).

The piece of data below activates a diffractive movement that evokes a theorising of how schools have been architecturally constructed in a way to enable adults' surveillance and children's self-regulation (Foucault 1991). In the history of architecture, there is a strong connection between schools, army stations, prisons, hospitals and mental institutions (Foucault 1991). Many schools take pride in their large hallways sometimes called their 'hall of light' or 'the open market place' for communication and interaction. This theorising of self-regulation practices and feelings of severe stress in situations of open threat connects diffractively to Emma's story and the photograph she took presented in Figure 2.

Don't look up, don't look up! It takes about 30 seconds to walk through that light-hall in school. It is a risky 30 seconds! Without having to look, I know there are plenty of older students up there, mostly guys, who lean over the rails of the balconies. If you for only half of a second look up there is a risk that you will get a gob of spittle right in your face. Or a rubber in your eye, or a comment about your behind. The walk through the



Figure 2. The light hall. Photo by Emma 7th grade.

light-hall is dangerous but has to be done several times a day. There is no other way to get to the classrooms on the other side. (Emma's story)

In the event of reading these data into each other, the materiality of the architecture in the photograph and the anticipated embodied materialities and emotional responses in the story become multiple performative agents that enact ill-being together with discursive practices of gender, sexuality and age in this situated space of the school. When we as researchers engage with these data and acknowledge all of these entangled performative agents, 'we do not stand outside of the world, we are instead part of the world in its ongoing intra-activity' (Barad 2007, 146). We read into this story research and reports on bullying in hallways. Bullying is frequent among students, but adults assaulting students is also more frequent in the hallways than in classrooms (Human Rights Watch 2001, 2010).

However, other photographs and stories of the participating girls in our study intervene and force us to read into the above horrifying data another image of the hallway. The hallway provides, for some girls, one of the very few spaces in school of personal integrity: the personal locker. Emma and Alice tell us that the locker is the only space in school you can call your own. At best the locker works as a secret hide-away for your stuff and yourself, but it can also become a central part of your enactment as school girl, and pose high demands on your ability to decorate your locker in the right way (Figure 3). Alice (grade 10) writes:

The locker. It was probably the most important thing when I chose upper secondary school. I wanted a locker – just as in High school musical or Glee. Just the thought of having a locker of my own, with a code – was irresistible. There were several other schools that were closer to my home. Other programs that seemed interesting and fun. But there you had to carry your things around in your bag all day long. It felt unthinkable. No, I would rather travel a bit longer and have a locker of my own. A place of my own. Just as in Glee. (Alice's story)

Alice and Emma talk about how many Swedish teenagers live in close relationships with TV shows (such as *Glee*, *Gossip girl* or *High school musical*) that seem to intensify and have transformative effects on concrete school situations in their everyday life. The school environment in *Glee* can, as one of the girls says, constitute a different image of what going to high school might be, which feeds into and transforms the everyday experience of going to high school in Sweden. As 'modest witnesses' (Haraway 1997) of this scenery that our participant girls narrate to us, we can – as researchers – perfectly imagine similar material-discursive imaginaries in our own lives, which make our days in the academy transform into something else. Like when intra-acting with the memories from scenes from the unisex bathrooms in *Ally McBeal* while preparing for a lecture, or images from *L.A. Lawyers*, when trying to convince the head of department of why your particular research contributes highly to the programme you are about to construct. These mediated images from television intra-act in our everyday lives. They are entangled with our bodies, clothes, gestures, emotions and talk, and can thus have transformative effects in the production of our realities, for better and for worse: as normalising, self-managing discursive practices, or as occasional escapes, but sometimes as offering possible inventive leakages and enhancement of transformative and productive change.

The above analysis shows that school environments constitute spaces that produce stress of different kinds, and both ill- and well-being as a result. In our readings about



Figure 3. The personal locker. Photo by Alice 10th grade.

school- and work-related stress, we understand how stress can be both positive and negative, and that stress can work on your body and mind in ambivalent and sometimes paradoxical ways: there is a very thin line between ‘good’ and ‘bad’ stress and they sometimes overlap (Hasson 2008). There has been a lot of attention on girls’ school-related stress problems during the last five years in Sweden. Girls claim to feel worried and anxious in school due to stress, but they also brag about and use this stress to enact who they want to, and/or feel forced to, become as school girls: ‘I was in the natural science program in high school and the girls there were obsessed with studying. It was natural to be stressed in order to get high grades and good test-scores. It was almost a sport.’ (Lerner and Lofors 2010). We read this quote diffractively into the realities of (female) academics. We often express an agitated and almost aggressive stress, claiming to work 60–80 hour weeks seven days a week. This seems to be the way to enact a successful or even just good enough scholar in the reality of the academy today. Based on her research, the psychologist Malin Bergström states in an interview that ‘the connection is clear between demands of individual school performances [self-imposed or imposed by parents] and psychological illness’ (Mlik 2010). The girls she treats are generally ‘overambitious’ and ‘need to lower

the demands on themselves to a more reasonable level to achieve a balanced life' (Mlik 2010). This is also in line with the experiences of the welfare officers Susanne Håkanson and Åsa Gotte, who are working in two of the largest schools in the inner city area of Stockholm (Mlik 2010). They state that girls are over-represented in relation to stress-related problems and often ask for help after already having developed eating disorders, anxiety, pain problems or depression. They think that these girls need to get out of 'the achievement tunnel' and formulate to themselves other values with life than education. They should not be so fixated with becoming a lawyer, doctor or any other high-achievement vocation (Mlik 2010). These statements can be read into a newspaper article, where the psychotherapist, Irena Markower, claims that it is sad that high-achieving girls

do not plan their studying in a smart way /.../ To get the highest grade and be perfect these girls think that they cannot make priorities. They read everything from the first page and every detail is as important as the other. (Carling 2011)

When we read the adults' gender-biased notions on over-ambitious girls diffractively into one of the researcher's own memory plugged in below, it is possible to evoke another possible enactment of girls' well-being in school. This enactment is based instead on emancipatory feminist goals within, and with an awareness of, the patriarchal brute reality that young girls/women are still living in. The other reality expressed in the memory below is a reality of a competent and equally smart high-achieving school girl, but who – importantly – does not perceive herself as a victim of her high achievements, as in the statements by the adult doctors, psychologists and counselors above. High achievement is here, as it is in the work environment of the academy, enacted as something good, useful and respectful, (albeit its adherence to masculine norms), rather than something to be looked down upon as a risk behaviour for girls' psychological ill-health. Therefore, let us read diffractively into the data above of the memory of a girl who puts to use her imaginary faculties to enact possible future realities as a strategy, both for learning and of becoming in various ways:

The way to motivate myself to study was to imagine that every fact and turn of the words in the book was needed for something someday in my life: something that I could often visualize as a possible future scenario where I needed to know this particular thing/fact that made learning more fun. Going to the test not knowing everything was simply to fail, the way I saw it. You never knew what this particular teacher would ask or try to trick you around: you had to outsmart her/him: this was an equally important goal. When a teacher one day told me to study 'smart' instead – like the guys – and just learn the basics and overalls, this was like a disrespectful spit in my face: how could this be 'smarter' than knowing everything? Just think about all those things I had imagined I could do knowing this or that: becoming a biologist or famous diplomat, or whatever! I could never again trust or respect this teacher. (Researcher's story)

In the reading of these data, it is possible to unfold a different reality of ambition and high achievement that merge with this girl's well-being. This is a reality where a young girl tries out different possibilities of becoming an adult and a professional in different fields, in relation to the stuff she needs to learn in school. This is an active engagement of transformation and *becoming-different-in-herself*, using your imaginative powers to do so. Such a practice makes new realities emerge, although so far in her imagination

only. Such a practice of imagining can, as in the example from our participating girl referring to the media discourses of *Glee* and *High School Musical*, enhance the girl's possibilities to do well both in school and later in life as well. Relating to Barad (2007), the 'I' isn't separated from the word but *of* the world of material things, places, dreams and imaginaries.

The 20-year-old girl, Malin, used to be an over-achieving girl 'who asked for help too late' (Mlik 2010). Similar to around one percent of Swedish school children, she let many years of stress and pains have her brain put the switch to the level of constant and chronic pain. She was diagnosed with fibromyalgia at the age of 18 (Ant Jacobsson 2012).⁴ This chronic pain syndrome is usually associated with middle-aged women degradingly called 'ace-and-burn-hags' among doctors. You cannot observe or diagnose a physical cause 'in the body', rather, the pain is said to be 'all in your head' (Wilson and Murrell 2011). Malin describes how she cannot even cook herself a meal because of the pain she feels in her hands while handling pots and pans. The doctors tell her: 'Since we can't help you – it's your problem ...' (Ant Jacobsson 2012). She has to, as the doctors keep saying, 'take command over her own pain' (Eldh and Ingvar 2012). Girls and women with fibromyalgia 'need to make their own effort and to learn how to use the powers of their own brain', writes the neurologist Martin Ingvar in his new book with the witty title: *Brain-control your pain* (Eldh and Ingvar 2012). Evidently, the good-girl syndrome needs to be cured with girls getting to be even better at enacting an even more self- and brained-controlled subjectivity. If you cannot do it, you can only blame yourself.

Barad (2007) writes on responsibility the following way: 'is not a commitment that a subject chooses but rather an incarnate relation that precedes the intentionality of consciousness' (392). In relation to the story of Malin, this means that Malin's pain, her diagnose and her daily routines cannot be a matter of an individual choice for her to navigate completely on her own. Rather, the phenomenon of schoolgirls' ill-/well-being is constituted by a larger apparatus of multiple discursive practices. This way of theorising makes it possible to understand Malin's condition as a complex process of multiple intra-acting agents that are collectively productive of and responsible for her ill-being (compare Mol 2002).

We read the story of Malin into reports from the Swedish state-health institute describing the treatment programmes offered to Swedish schools and health centres. All these programmes are focused on 'self-help', and most commonly based on *Cognitive Behavioural Therapy*, *Dialectical Behavioural Therapy* or *Acceptance and Commitment Therapy* (ACT). The latter treatment is recommended by basically all Swedish University hospitals and clinics. The ACT treatment understands language and thinking both as the source of illness but also, by ways of formulating new 'higher values', the way to health (Wilson and Murrell 2011). Basically, you need to get away from thinking too much, since thinking is saturated with valuing: and acceptance is about refraining from valuing. The call to girls and women with low self-esteem, or in chronic pain, is to 'defuse yourself from thinking and language' and 'establish a transcendent sense of self' (Hayes and Shenk 2004). Hence, it is *not* about trying to think differently to *become* different in yourself; but rather to *detach* yourself from your thinking, *accept* the hardships of life and connect to a transcendental self *beyond* your body (Hayes and Shenk 2004). But do we really want to tell our youth that their thinking about the future, whether in success, mediocrity or drop-out failure, is not real and cannot become possible future realities?

Concluding discussion

Girls' well-being in schools is a multiple phenomenon (Mol 2002). As researching 'modest witnesses' (Haraway 1997) we are part of an apparatus of knowing that consists of multiple performative agents; photographs, images, research, media-texts, our own memories, etc. We have only been able to make a few provisional cuts in this complex and dense multiplicity of ongoing intra-activities that are part of a larger apparatus, producing the phenomenon of school girls' ill- and well-being. Because we do the choosing of those cuts, as Barad (2007, 178) points out, we are responsible for the boundary-making that takes place. These cuts depend on what is 'given' in that instance, in terms of who and what we think we are as white, middle-class, female academics and mothers of daughters, but also on our imaginary faculties. It is upon this ontologically co-constitutive and ethical relationship that the diffractive patterns depend, as they emerge in our writing of this paper. Therefore, how have we come to know the phenomenon of girls' ill- and well-being throughout this process? And have we, in this experimental achievement, been able to construct a problem relevant enough to produce other ways of knowing and even some new imaginings, as Stengers (2007) suggests? That is, knowledge and imaginings that can help us interfere with and escape from the notions of a regulating knowledge economy that puts the blame and responsibility on the girls themselves (Eldh and Ingvar 2012; Hasson 2008). And finally, how might our analysis suggest that 'it could be otherwise' (Mol 2009)?

In this diffractive analysis, we have seen how ill- and well-being emerge as enactments of (material-discursive) intra-activities between entangled material environments and discursive notions in different and situated ways. One material-discursive practice of doing schoolwork and studying might evoke ill-being in one situated context, but it might also evoke a sense of well-being, control and even a sense of emancipation for the same girl in another situation. Some girls are on the threshold of what produces ill- or well-being: a threshold that is never clear or definite but situated and shifting. Such are the diffractive patterns that emerge in this analysis: indeterminate from a wider perspective, but determinate in the situated local cuts we make. This is what Barad (2007, 175) describes as 'the resolution of the ontological indeterminacy' – a provisional agential reparability *within* the phenomenon where the local and situated cut is made: The cut that makes it possible for us to at all write about the phenomenon despite its indeterminacy. This also means that '[d]ifferent agential cuts produce different phenomena' (Barad 2007). In terms of ethics, we will have to take the local situatedness into account every time we evaluate what material consequences the knowing we produce of a specific phenomenon will have for the agents involved. Thus, we need to be careful before we draw conclusions about individual school girls' apparent over-achieving behaviour and what they might be productive of.

However, the overall diffractive pattern that emerges from this collective analysis shows that the phenomenon of school-related ill-/well-being can never be an individual affair; it is rather a collective and distributed phenomenon that engages multiple performative agents that are collectively responsible for counteracting practices as well as prevention. Opposed to what the dominant notions and practices suggest, we should as human agents *not* try to free or defuse ourselves from thinking. On the contrary, we need to think more, but think *differently* and together with other material-discursive agents in the school environment. Children, youth and adults need to collaboratively engage in practices of intra-active engagements of imagination, where multiple images and discourses about the school environment, ill- and well-being, are allowed

to be expressed, enunciated and actualised. Such enunciations might enhance well-being and make the school environment become a more livable place.

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Notes

1. National School Agency (2009) concludes that almost 50% of the girls and 20% of the boys claim to feel stressed frequently in school. Figures show that 24% of the girls and 10% of the boys aged 16–24 claim to feel moderate or strong stress. Forty-six per cent of the girls and 25% of the boys feel anxiety and/or panic attacks regularly. Fifty-eight per cent of the girls and 42% of the boys have problems with feeling tired and 27% of the girls and 19% of the boys have sleeping problems. See also Bragée (2009).
2. Emma and Alice are not the girls' real names.
3. Since Emma and Alice are under 18 we first contacted their parents and informed them about the study and asked for their permission to contact the girls. We made clear that the participation was voluntary, we described how the data would be used (as data in a research article), and that they would have access to our writing throughout the process. We also said that they could read the article before it was published and that the article would be written in English. However, the talk was carried out in Swedish and the data that were produced were translated to English by us. After giving this information we asked if they would consider participating in the study.
4. Fifteen per cent of school children in Stockholm state that they often suffer from bodily pain in the stomach, head, back and shoulders, and 4% or 5% have severe pains almost every day. One per cent of the school children develop chronic pain syndromes like fibromyalgia and irritable colon syndrome. This makes them physically and psychologically impaired to study and work, sometimes for life: chronic pain syndromes that cost the Swedish society ten million Swedish crowns per year (Mlik 2010).

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