Pedagogical Documentation: A Key for Change and Transformation

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The discourse on pedagogical documentation inspired by the municipal preschools in the Italian city of Reggio Emilia is currently travelling around the world. The fact that this discourse has become so prominent can largely be seen as a resistance towards the reform development that has taken place internationally within the educational system since the 1990s, a reform development linked to global economic competition in the shape of new forms of quality assurance instruments connected to the ideology and policy of neoliberalism. In the article, three constructions of pedagogical documentation are described that can be seen as a form of resistance towards the above educational reforms.

Key words: *pedagogical documentation, learning processes, Deleuze, affect, ethics*

I have got trust in life as I always tried to change it.
(Loris Malaguzzi)

The discourse of pedagogical documentation, inspired by the municipal preschools in the northern Italian city of Reggio Emilia, for more than four decades has travelled around the world and has given rise to different understandings and interpretations in both research and pedagogical activities (see, e.g., Alnervik, 2013; Dahlberg et al., 1999/2013; Elfström, 2013; Fleet et al., 2006; Fochi, 2022; Giamminuti, 2013; Grieshaber & Hatch, 2003; Kocher, 2008; Lenz Taguchi, 1997, 2010). That this discourse has become so prominent can, from our perspective, to a great extent be seen as a resistance towards reforms of governing the educational system that have been intruding into the whole educational system since the late 1980s and early 90s. These reforms are linked to global economic competition inscribed in market models connected to the ideology and policy of neoliberalism, expressed in economic rationales such as new public management, total quality control, public choice, and human capital (see Dahlberg & Åsén, 1994; Dahlberg et al., 1999/2013).

Within the Research Group for Curriculum Theory and Cultural Reproduction at Stockholm University, we early saw tendencies of how this new rationality of governing the educational system placed quality, evaluation, and assessment into focus. In connection with a reform to decentralize the educational system in Sweden in the late 1980s, we could observe how the power and responsibility that this imagined decentralization intended to give educational professionals tended to be reclaimed and centralized through various forms of quality assurance instruments. We, at the time, described this as *the paradox of decentralization*, as centralized power and control entered back through the instruments of evaluation (Weiler, 1990). This made us worry because we saw, in front of

us, how 1- to 6-year-old children were, at an earlier and earlier age, being more frequently assessed in preschool, although this was not part of our tradition. In this situation, and with a strong conviction and research base, we argued that how we follow up, assess, and evaluate our educational activities is one of the most important issues we have to address, as evaluation easily comes in as a form of *action at a distance* and as an instrument of power (see Dahlberg et al., 1991; Dahlberg & Åsén, 1994; Porter, 1995; Weiler, 1990).

Questions that we asked in relation to this were if documentation, through the above culture of quality assurance, would just become an instrumental technique for measuring predetermined outcomes, and hence, result in a more standardized and programmed practice in which the pedagogical *processes* going on in preschool would turn out to be just a *black box*. We also asked if the quite open goals of the Swedish preschool curriculum and the pedagogical attitude of *dialogue pedagogy* that had been an important characteristic of the Swedish preschool system as a *common good* since the early 1970s would be dismantled. Another question was, if children are being judged through a relatively reductionist construction of knowledge and learning, would they lose interest and confidence in their own ability to learn and explore the world?

Three constructions of pedagogical documentation

With the above as a background, the purpose of this article is to describe three different constructions of pedagogical documentation that have been generated within the research group: *pedagogical documentation as a way of following and challenging children's learning-processes, meaning making, and reflection*; *pedagogical documentation as a way of challenging dominant discourses*; and *pedagogical documentation as a transformative force*.

These constructions cannot be seen as separate. In our work they have emerged, not as a linear and orderly process, but at the intersection between our own experiences from Reggio Emilia and from theoretical and philosophical thoughts and research that we, together with teachers and local authorities, have carried out since the early 1990s when we started the Stockholm Project (see Dahlberg et al., 1999/2013). Readers of this article should bear in mind that *documentation*, like other concepts we are using in this article with inspiration from Reggio Emilia, is inscribed and situated within a specific historical and social context.

Construction 1: Pedagogical documentation as a way of following and challenging children's learning processes, meaning making, and reflection

In a research conference in Reggio Emilia in June 1995, the late Carlina Rinaldi, former pedagogista and chair of Reggio Children, gave a talk on observation and documentation. In that talk she proposed that documentation in Reggio is mainly a question of values and ethics and offers children and adults real moments of democracy. She stated, "A democracy that has its origins in the recognition and visibility of *differences* achieved through dialogue. This is a question of ethics and values" (Rinaldi, 1995, emphasis added). This view of documentation as *primarily* a question of values and ethics became important for us because it, in a crucial way, differed from the above-mentioned neoliberal discourse on evaluation and quality assurance. It also resonated well with our own reading of the Lithuanian philosopher Emanuel Levinas's work and the French philosopher Jacques Derrida's work on the ethics of an encounter and a pedagogy of hospitality and welcoming that starts with affirmation and listening (Dahlberg, 2003a; Dahlberg & Moss; 2005; Halvars-Franzén, 2010). In honour of Levinas, Derrida (1999) stated that for every question one must open oneself to the other and welcome difference, which means an unconditional welcoming and affirmation, a "yes" to the other. This statement suggests that we need to develop the art of listening through an unconditional welcoming of the other that can open up the promise of democracy.

Documentation starts with sensitive listening. The above philosophers' thoughts resonate well with Rinaldi's

enlightened ideas on sensitive listening (Dahlberg & Moss, 2005; Rinaldi, 2001). Listening was for her an ecological attitude, "a sensitivity to the patterns that connect, to that which connects us to others; abandoning ourselves to the conviction that our understanding and our own being are but small parts of a broader, integrated knowledge that holds the universe together" (Rinaldi, 2001, p. 80). In the book *In Dialogue with Reggio Emilia*, Rinaldi (2006) asserted that if we involve children as co-protagonists while building knowledge and meaning together, then the most important verbs, when it comes to pedagogy, must no longer be to talk, to explain, to transmit, but to pay attention and to listen. It is a welcoming of the Other and an openness to the difference of the Other. And it depends on whether the school and society want to give their children and citizens equality or anonymity or whether they want to emphasize difference. A school or a society that emphasizes anonymity is much easier to govern.

So, rather than just speaking and transmitting a predetermined body of knowledge, sensitive listening connects to what Bill Readings (1996) wrote about listening to thought "as a means to think besides each other and ourselves … so that we can keep the question of meaning open as a locus of debate" (p. 165). Readings continued by writing that if one wants to do justice to thought, one must try "to hear that which cannot be said but which tries to make itself heard," which is a process that "is incompatible with the production of stable and exchangeable knowledge" (p. 165).

So, if you want to use documentation as a way of *following and challenging children's learning processes, meaning making, and reflection* with inspiration from Reggio Emilia, you must not lose sight of the fact that documentation builds on a pedagogy of hospitality and welcoming that starts with affirmation and listening. To listen to and affirm what children say was also something that Loris Malaguzzi firmly supported. Ernst von Glasersfeld (1991), a researcher in conceptual analysis, cybernetics, and epistemology for whom Malaguzzi showed great respect, argued that the most successful learning starts from taking whatever the child produces as a manifestation of something that makes sense to the child in the context of that child's present construction of their experiential world. A pedagogue who wants to challenge the child's concepts and understandings has to begin there, and through this construct, viable ideas of this particular child's ways of organizing and making meaning of its own experience will emerge.

Like in the following example with Ella, a one-and-a-half-year-old girl, who has just started preschool. The preschool teacher writes in her documentation:

Ella is standing at the small table in the washroom. In front of her are four transparent plastic bowls filled with water. On the table the teachers have laid out stones, sticks, and cones. The first thing Ella does is to take a stick and with it hit the bottom of the bowl. It makes a funny sound and she looks at me and smiles, as she wants to confirm that I have also heard. She hits the stick many times, and after a while she tries the same stick on the bowl next to the first. She hits the new bowl a few times and then with the same stick tries the bowl just beside the other bowl. The teacher asks: Can you hear a difference? Now Ella lets go of the stick, and she realizes that it floats! Then she puts in a stone—it sinks! She laughs. She has made a discovery. She picks up the stick and catches sight of her hand through the wall of the bowl. The hand looks big and weird. Ella bends down to get a better look. She has discovered the refraction phenomenon. She tests how the stick might look when she puts it into the water. After observing for a while, she starts sorting: sticks in one bowl, stones in another, and cones in the third.

We here want to stress the importance of taking care and time for such small events that open to questions such as: What is happening here? Where do we go from here as pedagogues? How do we challenge the child? And how can we bring new children into the situation?

This is not the same as replacing the pedagogue, and it is not the same as simply affirming what the child already knows. In the process of *formazione* in Reggio, the pedagogue functions as listener, director, supervisor, challenger,

and organizer of environments. The choice of attitude depends on the specificity of the context. The many different traces that the teachers follow and produce through documenting, such as notes, drawings, clay creations, constructions, music, dramatic play, tape recordings, reflection protocols, documentations, give the teachers the opportunity to follow the learning processes and strategies and children's meaning making and reflections. Together, this becomes a basis for reflection and for creating possibilities for challenging new learning processes and creating new conditions that can be used when the children encounter, explore, and construct meaning of the world. As such, documentation is not *primarily* a form of assessment, although pedagogical documentation also offers a possibility to revisit, reinterpret, redirect, re-reflect, and revalue the processes afterwards.

Besides that, documentation poses serious questions to us as adults of how to continue and challenge the processes of learning. Here there is no easy answer of right and wrong of how to continue. Malaguzzi often said: *It depends!* By this he meant that everything is connected and contextualized, which visualizes his systemic and ecological sensitivity in which everything, from the smallest parts to the whole, is connected to everything (Vecchi, 2010). A whole that influences the relational attitude the pedagogues are taking. Consequently, when we are working with *documentation*, we have to take notice of how it is always connected to *listening*, *progettazione*, *children's one hundred languages*, and the *third teacher* (see Giamminuti et al., 2024). This makes the teacher's work more complex, as it opens up uncertainty and children's unpredictable doings, as well as the possibility for change and transformation. At the same time, it allows more engaging, interesting, and joyful work, both for the children and the teachers. In a talk in Stockholm in 1993, Malaguzzi formulated Reggio's pedagogical attitude in his beautiful and poetic way as follows: "Pedagogy is not created by itself. It is only created if one stands in a loving relationship and in *confronto* with other expressions and experiences of the present." Confronto here means a form of participation, a kind of being and becoming together, in which thoughts are transformed (Malaguzzi, 2013; Unga, 2013).

Teachers as reflective practitioners. This above way of working with pedagogical documentation and progettazione corresponded with John Dewey's pragmatic philosophical thoughts and his emphasis on taking children's experiences seriously in education. In his work, Dewey (1916/1966) also emphasized the importance of educators being involved as co-researchers in the development and change of their own work. Through being co-researchers, and not only reproducers of knowledge, teachers become involved in the production of new knowledge, something that Dewey believed could only happen if teachers were given the opportunity to develop their ability to formulate their own problems and reflect on them. According to him, this presupposes a "problem-rich environment" that can trigger children's curiosity and eagerness to construct and pose their own thoughts, individually and in cooperation with other children and adults. The central ability is therefore, according to him, the ability to research and construct relevant problems rather than to find technical solutions to problems presented, which also resonates with the Italian historian Carlo Ginsburg's (1989) statement that we, in the Western world, are constantly offered solutions before the crucial questions have been asked.

In Reggio Emilia, the term *progettazione* is used to describe this process of research where children and teachers take time to create genuine problems based on exploration and participation, before coming to solutions (see, e.g., Barsotti, 1986; Giamminuti et al., 2024; Rinaldi, 2006). In cooperation with colleagues in Reggio Emilia, Stefania Giamminuti puts forward that *documentation*, as used in Reggio Emilia, cannot be seen as inseparable from progettazione.

Progettazione and a narrative way of working. Following from the above, documentation, with its narrative structure and as an integral part of the everyday work, offers pedagogues and children alike an important tool for experimentation and research in their daily work (see Giamminuti et al., 2024). The narrative structure implies that there are not only objective categories that are followed in the process of documentation. Rather, it is the children's

and the teacher's learning strategies, meaning making, and reflections in connection with the environment that are followed, which means there are no "meanings imposed ex hypothesis by an outsider" (Bruner, 1991, s. 17).

Sensitivity to the reciprocal relations and the narrative way of working allows differences to be expressed and, in turn, lays the base for negotiation. As Jerome Bruner (1991) wrote, "I have a strong hunch, which may at first seem counter-intuitive, that it is this very sensitivity that makes narrative discourse in everyday life such a viable instrument for cultural negotiations" (p. 17). In this way, the processes of documentation support continued experimentation at the same time they enable possibilities to develop a provisional "interpretive theory" (Rinaldi, 2001, pp. 79–80) that gives meaning to events and things of the world. Provisional, as it offers a satisfactory explanation that can be continuously reworked.

Construction 2: Pedagogical documentation as a way of challenging dominant discourses

Reggio Emilia's research and experimental attitude, in which children's learning-processes and meaning making are in focus, raised questions about how the images and constructions of the child, knowledge and learning, and the environment are constructed in the Swedish preschool. As in Reggio, we had in the 1970s begun to challenge the decontextualized and universalized child of traditional developmental psychology through different theoretical and philosophical perspectives (Dahlberg, 1985; Hultqvist, 1990). This questioning was much in line with the reconceptualizing movement (RECE) that started in the 1980s with scholars around the world who were concerned about the dominance of psychology and child development theory in the field of early childhood education and care (for an overview see Bloch et al., 2018).

In the Stockholm Project, which we carried out between 1993 and 1996, Valerie Walkerdine's (1984), Michel Foucault's (1983, 1991), and Nikolas Rose's (1989, 1999) philosophical and theoretical perspectives provided significant inspiration for examining and challenging dominant discourses. In line with Foucault's thinking, we had begun to see how such discourses functioned as taken for granted, almost like "truths" and as power/knowledge regimes (see Dahlberg et al., 1999/2013). Following Foucault, we argued that we exercise power over ourselves through such dominant discourses; we are made through them, and we make ourselves as subjects through them. These discourses and power/knowledge regimes have a close connection with expertise, and therefore they are given interpretative priority and are materialized in practice; hence, they may contribute to normalization, exclusion, and social injustice.

Further, in relation to expertise, Foucault's idea of governmentality, *the conduct of conduct*, opened up for us in the Stockholm Project an understanding of how a wide range of techniques of control that are being used in our practices may be seen as practices to make subjects more governable. In *Governing the Soul: The Shaping of the Private Self*, Rose (1989) had extended Foucault's thoughts on governmentality and shown how normalization cannot be separated from the disciplines of the humanities and social sciences and their technologies. Above all, Rose highlighted the psy-sciences' dominant and crucial role in organizing and expanding techniques and practices to evaluate and to control subjectivity—techniques and practices that are permeated by norms, expectations, dreams, hopes, and fears. In this context, he highlighted in particular developmental psychology's close link to the rationalities and technologies of political power in advanced liberal democracies at the end of the 19th century and the beginning of the 20th century. Specifically, these technologies were directed at young children through the observational methods that developmental psychology had contributed. In relation to this, the following questions became important for the Stockholm Project: Had developmental psychology, with its universal stages, come to function as a form of rationality of governance, with normalization and exclusion as a result? If so, how had this thinking affected the gaze of pedagogues, and us as researchers? For example, how had it affected our reasoning, ways of acting, and assessment practices?

Through formulating these questions, we understood that pedagogical documentation and Reggio's way of working with documentation and progettazione could function as a tool to trouble and deconstruct discourses in our field, and thus challenge dominant discourses in order to make us able to reconstruct complementary and more empowering discourses, more politically pleasing discourses. With this as a basis, the following three questions were asked in the network meetings of the project: What construction and image of the learning child and the learning pedagogue do we have? What construction of knowledge and learning do we have? What kind of affordances does the educational environment provide for children's learning strategies, meaning making, symbolizing, expressions, and dreams? With these three questions we inspired each other to place ourselves on the threshold of a classroom and challenge ourselves with additional questions: Which learning child and learning teacher are constructed in this space? Can the learning child and the learning pedagogue be constructed otherwise? These questions opened up to similar questions concerning knowledge and learning, and to questions of the affordances in the environment and in relation to time and space.

At network meetings and during analyses of documentation processes, the pedagogues were actually surprised how prominent the role of developmental psychology was in their thinking and their practices. For example, stages and other categories such as cognitive, emotional, and social development were very prominent. They had been taken for granted and seen as natural. In accordance with what we said above, we came to see these stages and categories as normalizing techniques and practices because they directed our gaze towards what was "normal" and "not normal." Through the idea of the normal-curve we observed more so-called problem children: a child in need, a lacking child, and a child at risk (see also Dahlberg, 2003b; Dahlberg et al., 1999/2013; Dahlberg & Lenz Taguchi, 1994; Elfström, 2013; Lenz Taguchi, 2000; Lind, 2010; Nordin Hultman, 2004; Olsson, 2009).

In accordance, traditional developmental psychology had become productive and the child had become reduced to the maps we were drawing over their lives—something Lynn Fendler (2001, p. 120), by apostrophizing Foucault's (1991) thoughts on governmentality, described as follows:

> Finding a universal and scientific guide for who the child is, can be and should be by representing, classifying and normalizing the child through the concepts of "developmentality" as well as directing how to govern the child's development and progress.

Following on from this, the project made visible how theoretical classifications and concepts were productive and became materialized in practice, and that the exercise of pedagogical documentation can function as a very effective tool for challenging dominant discourses and constructions of what a child is, can be, and should be. The same applies to the construction of knowledge, learning, and the environment. This concretized Foucault's position and the positions taken in Reggio—that the interpretations we make are never neutral or innocent. They do not exist independently and separate from our own participation but are contextual constructions, similar to how Walkerdine (1984) argues:

> The understanding of the "real" of child development is not a matter of uncovering a set of empirical facts or epistemological truths which stand outside, or prior to, the conditions of their production. In this sense developmental (as other) psychology is productive; its positive effects lie in its production of practices of science and pedagogy. (p. 163)

From then on pedagogical documentation became a crucial tool for opening up complementary discourses that contributed to a more welcoming preschool space characterized by greater diversity and a more meaningful everyday life for the children.

The said and the saying. In order to open up for a more welcoming, diverse, and non-normalizing preschool space,

we turned to Levinas's ethics of an encounter, where Levinas makes visible the difference between *what is said* and the *saying*. What is said then stands for the complex, linguistic structure of language, which exists independently of a specific subject and governs all so-called rational thinking. The saying, on the other hand, inhabits *the event* and opens up, for the ethical openness to the other, an ethical responsibility that cannot be represented and assimilated. It refers to the event itself; it is a relationship that is characterized by singularity and multiplicity, and it opens up to the experience of unpredictability, for the ethical responsibility that every human being receives when they act.

Construction 3: Pedagogical documentation as a transformative force

With support from Levinas's thoughts on the *event* and *saying*, we began to see listening and pedagogical documentation as an opportunity to relate to the *event*, to the singular and multiple in a situation (see also Säfström, 2005; Todd, 2003). This directed our interest towards exploring the meaning of the concept of the event and how pedagogical documentation could respond to and meet up *with* the event. The event and its dimensions are something philosophers have pondered over at different times. Foucault (1991), for example (see also Nordin Hultman, 2004), claimed that in our knowledge tradition we have been so preoccupied with the general, abstract, and underlying that our existence has been dispossessed. In order to *eventalize* existence, he meant that we need to rediscover and direct attention to the undecided processes and life-giving encounters and potentials that at a given moment are going on and are in the making.

This becomes particularly important and interesting in learning situations where children and pedagogues are involved in ongoing processes. In everyday pedagogical work, it can be about small moments, such as when a small group of 2-year-olds are standing and exploring water with funnels, sponges, and bowls with holes, and a girl suddenly exclaims, "I can make bubbles!" She laughs, dips the sponge in the water again, and squeezes it so the water quickly flows down, forming bubbles when it hits the surface of the water. "Look!" she shouts to her companions, and more children try to do the same.

Foucault's thinking led us further toward Gilles Deleuze and Felix Guattari's immanent process ontology of becoming. Deleuze (2001) wrote Life with a capital L and pointed out that A Life, in indefinite form, is carried by *events*—events that he saw as a kind of intensities and forces, as pre-individual and pre-personal singularities that exist before something stable and an intersubjective "we" has arisen (Rajchman, 2001). These intensities and forces open up for movement affect and vitality, for *becoming*, in relation to what is immanent in the present moment of experience (Massumi, 2002a). It's a becoming that is produced before something is brought to consciousness and actualized, and put into self-reflection, interpretations, and representations—as in the example above when the hand's squeezing of the sponge caused the water droplets hitting the surface of the water to form bubbles, and something unexpected happened, a becoming. But which, soon after this "now-moment," turned into a conscious act where the children gave words and representations to what had happened and then curiously started exploring further.

To make visible the difference between what we have already actualized and nonintentional immediacy, Deleuze used the concept of the *virtual*. The virtual, for him, was something *real*, a *potential* and a self-generating and self-creative process that is *felt* and produced only for short moments. In order to open up to the event, to the emergent nonverbal linguistic dimensions of production, to what is *felt,* Deleuze therefore suggested that we must try to escape representations, even if this is not possible (Deleuze & Parnet, 1987).

Like Levinas, Deleuze challenged the idea of the self-reflexive and self-conscious self. He was instead inspired, among others, by the mathematician and philosopher Alfred North Whitehead and by the father of radical pragmatism, William James. The two of them became for Deleuze a possible way to open to a belief in immanence

and towards the world we live in here and now (Rajchman, 2001). Brian Massumi (2011, p. 1) writes with support from these two thinkers that we are always in the middle of the event, *in the immediacy*, and that this immediacy is an experience of activity:

> Something's doing. ... Something's happening ... in the midst of it. ... What's middling in all immediacy is "an experience of activity" ... "change taking place is a unique content of experience" ... the basic matter of the world ... all this is felt. (pp. 1–3)

Like the 2-year-olds, in another example, who explored spinning water eddies while discovering how the washing machine spins the laundry around as it centrifuges—

> It shakes and spins.
>
> It spins round!
>
> It spins like that: spin, spin...

—and at the same time they demonstrate with their bodies by jumping around while spinning and saying: "It spins like that." They put their arms around their bodies and heads and spin, zigzagging with their hands, and they point with their tongues. They sit down on their bottoms and spin themselves around with the help of their feet, and they wave their arms. They roll on the floor and get back up and run around in a circle, all the time repeating: "It's spinning, it's spinning, it's spinning."

Subjectivity and learning as a relational field of potential. To open up to Deleuze's immanent ontology of becoming and the nonintentional, we began to explore subjectivity and learning as a form of mobile, unconstitutional, and *relational field of potential*: as assemblages, collective experimentations, and productions among dynamic elements instead of mediated representations (Deleuze, 1997; see also Dahlberg & Moss, 2005; Lenz Taguchi, 2010; Olsson, 2009). Based on the idea of the relational field of potential, and with inspiration from Deleuze's (1997) *Essays Critical and Clinical*, we came to see the preschool environment as an environment in which children and adults move around and explore through dynamic movements. In the environment, people, drawings, paper, colours, documentation, furniture, toys, sounds, smells, traditions, mathematical signs, written language signs, children's singing, speaking, walking, and various dramas function as paths that mix, not only with the child's subjectivity, but also with the subjectivity of the environment. In that sense, other children and pedagogues are an environment through which the children travel. They pass through its qualities and powers.

We see this with the two-year-olds who discover the spinning of the washing machine and shortly after the "contagious" spinning, document the spinning themselves by drawing what it looks like inside the washing machine by using various round signs. One boy, then, talks about his drawing and immediately shows with his arms around himself that what is inside the circle is all that is inside the machine. What stands out are the gestures he does with his feet when he sits on the floor and spins his body again.

These children's thinking and their body language gives a complex picture of their coexistence and differential attuning with the world—a world that continuously unfolds and intertwines the organic with the inorganic, which means that we need to transcend ontologies and epistemologies that take as a point of departure the notion of a stable, unified, and independent subject as opposed to dynamic notions of virtual forces of processes and becomings. As Massumi (2012) says:

> Vitality belongs to individuals only to the degree that they are braced into that field, in differential attunement to its stirring toward movement, to the potential making itself felt in it. Our whole being is in

> it, body and thought, together toward movement. It's more an intensity of movement, and of processual attention. It is the virtual force of a process that creates us. … [I]t is a nonconscious thinking-feeling of what happens between. (quoted in Manning, 2012)

Combined with the experiences from Reggio Emilia and our own research studies in preschools (Dahlberg et al., 2013; Elfström, 2013; Olsson, 2009; Unga, 2013), this immanent ontology of becoming gave us a complementary understanding of the function of documentation as *a transformative force* that is produced and *collectively* articulated and effected here and now. Connected with active listening and processual attention, it can meet the *event* and work *with* and *through* other elements in the relational field of potentiality. There it can function as a trigger that taps into the children's commitment, desires, and curiosity, the very intensity and vitality of the momentary and instantaneous events. In the same way that children, pedagogues, and things can function as triggers, documentation then functions as an active element for the direction and constitution of what happens.

Landscapes of worms

Yet a further example from a preschool of such a momentary and instantaneous event is described in Elfström and Furness (2010). The event appeared while a group of children were working in a half-year-long project, Landscapes of Worms, that started with explorations of worms in a compost located in the garden of the preschool. Here we describe an episode of the project in which the children and the pedagogue, through books, explored different sorts of exotic worms that live in the sea. This excited the children—an excitement that the teacher nurtured by challenging the children to make enlargements of the drawings of exotic worms they had seen in the books. In the photo below you can see the children's total engagement and concentration on the task of enlarging and painting their drawings.

To nurture and attune with this excitement, the pedagogue prepared a table with a big lump of clay and asked the children to make their drawings in clay, in this case of a signal iron worm and a sun worm. This was hard work that needed a lot of reflection and cooperation.

In the middle of their careful and intensive work of modulating their ideas and images, the children made clay pistols and started to play and shoot at each other. Suddenly, they stopped and said "We're friends instead" and went back to their work. On the table they formed a *string* between the sun worm and the signal iron worm.

When we as researchers saw this documentation and the children's concentration, engagement, and creativity in their work, we actually got goosebumps. We asked ourselves: What have we been involved in? Something had triggered us, a kind of subtle process not readily describable in words. Maybe the children were also triggered? We can only speculate.

We never know what a body can do

This made us go back to the idea of the Dutch philosopher Baruch de Spinoza (1632–1677) that *we do not know what a body can do*, which has been an important source for Deleuze's and his colleague Guattari's thinking. Spinoza wrote: We become affected and we affect, and we then get power to act (*potentia*). A similar way of thinking can be found in Daniel Stern's work. In his last book, *Forms of Vitality*, Stern (2010) combined neuroscience and phenomenology with ideas from art and proposed that with every perception, and with all the micro-dynamics of every day, follows a *swarm of life*, a kind of relational activation that contributes with its own vitality-affect. It is an imperceptible force that expands our capacity and makes us feel more alive. Stern also proposed that forms of vitality do not belong to any of our five senses. They are a specific sensory modality, or domain, separate from emotions, cognition, and motivation, a kind of *amodal modality* that consists of a configuration that in one way or another entangles direction, force, movement, time flows, and tendencies. For Massumi (2011) this nonconscious perceptual feeling of the amodal is transindividual, a kind of thinking-feeling of what happens in-between, in the midst (Massumi, 2011).

According to this thinking, *with* and *through* movement, something new is set in motion: a new experience that results either in a strengthening or in a reduction of the body's ability to act. A potentia, to speak with Spinoza, or a dynamic *form of vitality* as Stern says, or an *aesthetic vibration*, as Malaguzzi often said when he wanted to characterize their work in Reggio Emilia. In his lectures, Malaguzzi often referred to the Chilean biologists Humberto Maturana and Francisco Varela's concept of *autopoiesis* when he spoke of their efforts in Reggio Emilia to create an activity that germinates with an aesthetic vibration—a self-producing and self-generating capacity of living systems that keeps us alive. A vibration that differs from what we already know (Vecchi, 2010).

If we go back to the last photo in which the string had already been placed between the two worms, the children in retrospect named the string the *talk-string.* Through naming, something had been actualized and brought to consciousness through children's self-reflection, interpretation, and representation. The present moment, the becoming, that appeared for a millisecond, then turned into a conscious process. However, through their new power to act, the children enthusiastically began to further explore the functions of the talk-string and the lives of the worms. The talk-string, they said, connected the worms to each other. They could communicate with each other, warn each other about birds, and the string gave the worms life, iron, food, and air. Hence, they were showing us that they understood the worms were living in some form of symbiosis with each other and the surrounding world.

Documenting processes like this, through attentive listening and attunement, combined with challenges with new material, discussions, and constructions of new problematics for children to explore, makes it possible for pedagogues to be open to the event, the unexpected, and to children's inventions and power to act. It also opens to nurturing children's scientific questions and subject matters arising from the potential that was opened up in the event and not conceived and planned in advance by the pedagogues.

With the above philosophical perspectives as a point of departure, we can return to the use of documentation in Reggio Emilia and ask if it is it the case that the pedagogues in Reggio, through their active listening and processual documentations, manage to open up to the event and immanent potentials (immanent not as something essential, but as a real and dynamic process and force, modulated from within the situation).

Potentia, vitality affects, and aesthetic vibration are not easy to take in; they are risky as they open up forces and perspectives outside orthodox thinking. It's a kind of *shock to thought* (Massumi, 2002b). However, if you succeed in opening up to vitality and intensity, there is no going back, which many pedagogues who have experienced this usually talk about.

Immanent didactics, immanent critique, and immanent ethics

This third construction of documentation as a key for change and transformation presupposes an *immanent didactics* that has border-crossed the idea of *action at a distance*, in which the classroom space is manipulated from outside the situation by measurements and procedures constructed by others, as if we were disembodied subjects handling an object (Dahlberg, 2016; Massumi, 2002a). An *immanent didactics* presupposes an *immanent ethics* and *immanent critique*—that we surf the event rather than programming it toward pre-identified goals. If everything is given and decided in advance then very little intensity and vitality are created, and flows of desire and potential are reduced. This requires that we as pedagogues place and install ourselves in the situation, though with caution, attention, and attunement so we do not break movement and the children's bodily attunement with the potential of the situation (e.g., the relational vitality and intensity of the experience) and the swarm of life, that always is going on in the everyday of a preschool. If we experiment and tune in through being involved in what is happening here and now, then uncertainty may become a form of power that can bring a sense of potentiality into the situation, a potentiality that opens to the power to act.

By tracing and following the unique and singular ways through which children and we as adults encounter the world, we also become participants in bringing forth the world. This requires great responsibility, hard work, systematic and rigorous preparation and planning combined with an attention to detail. It also requires deep knowledge about the phenomena and subject areas that the children are exploring. But above all, it presupposes a great trust in children's capacities, and that we work together in processes of negotiation, in a kind of *solidary togetherness*, in which there is a support for the children's exploratory processes and learning without given answers.

A conclusion

The constructions of documentation that we have sorted out here can be seen, if we use the words of Tom Popkewitz (2005), as a form of travelling libraries that today travel around the world and are intertwined with Reggio Emilia's constructions of formazione, documentation, progettazione, one hundred languages, and the third teacher. In the encounter with different national contexts and different scientific and philosophical paradigms, these constructions will be changed and may be naturalized and neutralized in relation to specific cultural ways of thinking and acting. Pedagogical documentation therefore needs to be continually deconstructed in relation to new experiences, new scientific and philosophical perspectives, and new contexts. Otherwise, we may lose sight of the inescapable complexity and richness of children's concrete experiences, potentialities, theories, affects, and hopes—their *lived lives*.

Foucault's (1983) idea that everything is dangerous but not always bad may here guide us (Dahlberg & Bloch, 2006). But above all, we must start in what the Deleuzian researcher Liane Mozère (personal communication, June 3, 2008) so insightfully expressed: *We must take notice of the extraordinary small, unexpected, and playful battles for life that children carry out. Otherwise, the children and everyone else involved are not given the opportunity to develop their power to act!*

Note:

This article is a revised version of Dahlberg, G., & Elfström, I. (2014). Pedagogisk dokumentation i tillblivelse [Pedagogical documentation in becoming]. *Pedagogisk forskning i Sverige, 19*(4-5), 268–296.

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