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# Human Development as semiotic-material Ordering:

## Sketching a Relational Developmental Psychology<sup>1</sup>

### Summary

The paper presented here is an attempt at casting human development as a semiotic-material phenomenon which reflects power relations and includes uncertainty. On the ground of post-structuralist approaches, development is considered here as a performative concept, which does not *represent* but *creates* realities. Emphasis is put on the notions of ‘mediation’, ‘translation’ and ‘materiality’ in everyday practices of students and teachers in a concrete school setting, where I conducted ethnographical research for one school year. The analysis of discursive research material of teachers’ discussions and interviews with students proves the developmental discourse to be interrelated to teachers’ and students’ positioning in the school; the developmental discourse orders ongoing interaction and enables students and teachers to perform the past and witness the future in a way which corresponds with dominant values and state social/educational policies. By translating a variety of events into a line moving from the past to the future as well as by materializing this line as diagrams and other semiotic-material objects, development becomes a technology of the self of (late) modernity which implies power relations and supports the maintenance of the modern order. On these grounds, a relational approach to development is suggested, which raises methodological and political issues.

### Introduction

On considering the wide range of developmental psychological research it can be inferred that the discursive and performative turns in social sciences (Bial, 2003; Butler, 1993, 1997; Haraway, 2004, Wulf, 2001, 2004) have had little effect on developmental psychology. Even non-mainstream researchers, who situate childhood and development in social practices and socio-cultural contexts and argue about diversity in order to suggest alternative developmental models (Hedegaard, 2005a,b; Cole, 2005), do not reflect on how their knowledge is generated, transferred, mediated and how it interrelates with the phenomena under consideration. What can be noticed in these works is an effort to *represent* development, to understand the Other (i.e. the child), to find out a single truth – which attitude would be at least vexing from the perspective of Foucault or the recent science and technology scholars. Realities exist neither prior to, nor outside, methodologies. In terms of the so called ‘poststructuralist approaches’ there is no single reality – in the interaction with the ‘real’ there are multiple ways of translating events and action into theories and discourse. As Law put it, science “is performative. It helps to produce realities” (Law, 2004, p. 143).

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The practice of viewing the world as a single order which exists prior to and independently of science, is deeply rooted in modernity, where also developmental psychology originated. However, what stands behind this idea of a universal order is, according to anthropological approaches, a dominant instance of God (Nietzsche, 1882/1974) or white male European adult (Foucault, 1975/1979, 1982; see also Wulf, 2004, 2006). In contrast to this, science and technology studies do not presuppose any given order, but examine ordering efforts meant to establish relations between different entities. Within their framework, the world is envisaged as “*not a thing, but a doing, a congealing of agency*” (Barad, 2003, p. 821-2). There is no *being* but only *becoming* – becoming which includes uncertainty (Deleuze, 1968/1994). Development can only be seen as one of the orders which modernity tried to establish.

Critical developmental psychological approaches, which do not perceive the world from a universal rational perspective (Walkerdine, 1991, 1993; Burman, 1994) or focus on the question of discourse, nonetheless, completely disregard another issue, namely that of *materialization*. Cultural psychological approaches, on the other hand, study the role of signs, tools, and artifacts and often theorize material relations – but they do it only in macro-sociological terms. They do not study concrete material objects and the phenomena and practices related to them. In contrast to this, science and technology studies, as well as feminist theory, explore how material relations are performed and dynamically interrelated to semiotic and discursive phenomena:

[W]e should treat discourses as ordering attempts, not orders; ... we should explore how they are performed, embodied and told in different materials; and we should consider the ways in which they interact, change, or indeed face extinction (Law, 1994, p. 95).

[T]he universe is agential intra-activity in its becoming. The primary ontological units are not “things” but phenomena – dynamic topological reconfigurings/ entanglements/ relationalities/ (re)articulations. And the primary semantic units are not “words” but material-discursive practices through which boundaries are constituted. This dynamism *is* agency. Agency is not an attribute but the ongoing reconfigurings of the world (Barad, 2003, p. 18).

What would a developmental psychology which perceives the world as “a dynamic process of intra-activity” and an “ongoing flow of agency” (Barad, 2003) look like? Is development a semiotic phenomenon? What are the performative aspects of developmental discourses? How is development materialized? Is development a semiotic-material ordering? If yes, then what are the practical consequences of this ordering? I explored these questions during a one-year ethnographical research project undertaken in an experimental secondary school. In this paper I will attempt to answer these questions through discussing the findings of an ethnographic study of this secondary school. I will examine the way in which discursive and non-discursive action are interrelated and will treat the everyday action at school as a messy interactive *becoming*. I will also demonstrate the importance of the concept of development in ordering this ‘mess’. Finally, I will outline a relational approach to development.

## Context and methodology of the study

The School for Individual Learning-in-Practice (name slightly changed), where I conducted my research, is experimental and has been set up in one of Germany’s biggest cities. The school has been set up for students who have hitherto been unsuccessful in their school career and have failed, twice or more times, to be promoted to the next grade. What this entails is that these students come mainly from

lower social classes and subcultures; they have an immigrant background, or have been raised in problematic home environments in which they were affected by either/both alcoholism or/and unemployment. The process of student selection resulted in approximately the same number of male and female students, as well as students of German and foreign (mainly Turkish) ethnicity. The students in the School for Individual Learning-in-Practice are about 18 years old but continue to pursue a school education ending with a certificate which is normally obtained by students who are 15 years old. In this situation, the main aim of "Individual Learning-in-Practice" is to enable these students to find employment after finishing the school, so that they can be 'independent', i.e. incorporated into society. If all goes well, on finishing the school, the students have a certificate of a lower level of education but are motivated to actively look for and perform a low-paid job.

As a school psychology trainee and a PhD researcher, I participated in the everyday life of this school for one school year. The material presented below comes mainly from teachers' discussions and interviews with the students. I audio-recorded and later transcribed about 17 hours of teachers' organisational meetings taking place every week. I have also audio-recorded and transcribed 21 such semi-structured, open-ended expert interviews with the students. Furthermore, my ethnographic research material consisted of video-recordings of class activities, and field notes. What I documented was the movement of students and teachers between different places and the construction and ritualised use of these places (e.g. announcements on the notice board on the classroom wall, the arrangement of chairs and other pieces of furniture, the rituals of entering the classroom, etc.). Another aspect on which I regularly focused was the use of technological equipment (mainly PCs but also phones, mobile phones, etc.) and the use of

files. In particular settings, I also documented the use of other artefacts, e.g. drawings, films, drinks, clothes, etc. I also documented the circulation and use of all possible sorts of written language employed at school (e.g. learning materials, apprenticeship reports, etc.) and collected its photocopied versions.

My data analysis has been inspired by ethnographic approaches (Jessor, Colby & Shweder, 1996) and the documentary method (Bohnsack et. al., 2001). However, in collecting and analyzing my material I did not try to represent reality but to relate theoretical concepts, methods and research materials by performing what Deleuze & Guattari (1980/1987) call 'mapping'. 'Mapping' means creating new mediations, i.e. translating the words, the movements and the interactions which the researcher hears, sees, and records, as well as his/her experiences in the research field, etc. into a new quality. Mapping does not just *represent* something already existing but constructs the research matter by orientation "toward an experimentation of contact with the real" (Deleuze & Guattari, 1980/1987, p.12; s. also Kontopodis, 2007). This methodology assimilates critical ethnography, i.e. "the reflective process of choosing between conceptual alternatives and making value-laden judgements of meaning and method to challenge research, policy and other forms of human activity" (Thomas & O'Maolchatha, 1989, p.147, s. also Thomas, 1993). The aim of my study has been to provide possible answers to the political question of how human development can be conceptualized so that freedom, imagination and movement are reflected and generated at school – a question which proves important especially with regard to gender-conscious education, as well as the education of social and cultural minorities. Below I will attempt to answer this question by presenting and analyzing exemplary pieces of my research material.

## Personal teachers review students' 'unclear developments'

Imagine how complicated, controversial and colorful ongoing interaction and intra-activity – what can be called ‘reality’<sup>2</sup> – is. Think for example of how difficult it is for researchers or psychologists to set borders between interaction and intra-activity occurring in school and interaction and intra-activity occurring outside school in the ‘everyday life’ settings of students. Does the one type of interaction and intra-activity influence the other and how? Is there some objective relation between these two types of interaction and intra-activity or does it depend upon one’s point of view how one defines school and non-school and brings them together (Latour, 2005)? Think also of how difficult it is to separate interaction and intra-activity taking place ‘now’ from ‘past’ interaction and intra-activity. How is ongoing interaction and intra-activity related to the past? In the context of interaction and intra-activity, what criteria should be considered when moving beyond the ‘ongoing’ event and moving into the ‘past’? Are such criteria objective or do we define past, present and future, separate them and perform connections between them during remembering *and* forgetting (Middleton & Brown, 2005)?

Usually scientists forget these questions and claim for the self-evidence of ‘reality’. Especially psychologists avoid such questions and abstract from the colorful and messy ongoing interaction and intra-activity, a human subject which exists in an abstract space and

develops in parallel to an ‘arrow of time’. This process renders invisible how place, time and subjectivity is performed during concrete activities. What psychologists and other scientists actually claim for is not the self-evidence of reality but of the ways they *translate* ongoing interaction and intra-activity to something else: narrations, diagrams, reports etc. A lot of *translations* and *mediations* are required to *organize* ongoing interaction and intra-activity for the purposes of educational/ psychological practices. Translations and mediations relate objectivities and subjectivities in a variety of possible ways; these relations should be *performed* to exist. Translations and mediations do not only bring different parts together in terms of communication, but also define them as such: specialists, teachers, psychologists etc. are *performed in relation to* children, deviant students etc. (Latour, 2005) *in relation to* classrooms, buildings, streets (Latour, 2005) *in relation to* ways of remembering and forgetting the past (Middleton & Brown, 2005) and of witnessing the future (Elgaard, 2007). Different translations and mediations would lead to different relations i.e. to different realities. In these terms ‘reality’ can vary endlessly and translations include decisions and have political implications (Deleuze & Guattari, 1980/1987). Let us consider an empirical example:

### Extract 1<sup>3</sup>

1. **M:** (.3) Also mein Eindruck ist, gut das  
(.3) *Well, my impression is, okay,*
2. ist vielleicht auch normal, dass jetzt  
*that this may be normal, that now*
3. einfach diese anderen (...) mir auch  
*simply these other students (...)*
4. vielleicht persönlich jetzt einfach so  
*become individually*

2 Ongoing interaction and intra-activity can be both discursive and non-discursive and should not be understood as ‘intentional action’. Both terms imply a processual ontology, according to which “subjectivities and objectivities may all be treated in similar terms: as *processes* which produce and arise out of partially connected and endlessly deferred ordering schemes or logics” (Law & Moser, 2003, p.16, italics mine). See also Whitehead, 1929/1978.

3 For the Translation and Coding of Oral Data s. Appendix.

5. langsam in den Blick geraten mit  
*visible to me so slowly with*
6. auch ihren ganzen ungeklärten  
*their whole unclear developments*
7. Entwicklungen oder sonst was.  
*or whatever.*
8. Und ich weiß nicht so genau, <ob die  
*And I do not know exactly*
9. Gruppe, äh, (2.)> wo die Gruppe  
*<whether the group, uh, (.2)> where*
10. zurzeit so ist. (...)   
*the group is at this moment.(...)*  
Extract from teachers' discussion 1

### Extract 2

1. **W:** Und ich denke, da ist auch noch ein  
Prozess wieder. Also, da sehe ich einen  
Prozess.  
*And I think, there is still a process there. I  
mean, I see a process there.*
2. Das sehe ich jetzt gar nicht so negativ, aber  
insgesamt (...) – #Nantin Nachname#  
*I regard it now not as something nega-  
tive at all (...) but generally – # Nantin  
surname #*
3. kriegt das nicht hin.  
*does not manage it.*
4. **M:** Nee, die ist irgendwie weg.  
*No, she is somehow away.*  
Extract from teachers' discussion 1

The extracts presented here come from an audio-recorded and then transcribed discussion which took place between two co-operating teachers – Wolfgang and Monika (names changed) – and myself. We are in a classroom, and are sitting at a big centrally placed table in the School for Individual Learning-in-Practice (name slightly changed). The space is 'internal public'. We are not in a private space but no other participants are allowed in. Teachers meet regularly once per week to assess individual students and exchange information and views about student's public activities, or what students recorded of their pri-

vate activities in their daily reports. What is of particular interest for our study is that in Extract 1, Monika uses the words 'unclear developments' to refer to the state of some students she slowly begins to have a 'view' or an opinion on (in German it is Blick, i.e. glance). In the second extract from the same discussion, Wolfgang uses the word 'process' to refer to something he 'sees there', i.e. in the case of one of the students Monika spoke about earlier. He evaluates it "not as something negative at all" (Extract 2, line 2). Then he refers to another student who "does not manage it". Monika agrees. For the time being, I am only listening, without making any comments.

Which position from which teachers' view should students speak to in relation to 'process' or 'unclear development'? The students of the School for Individual Learning-in-Practice are permanently connected to a 'personal' teacher. The organization of the school allots each teacher responsibility for about 12 students for one or two years. The teachers presented above, Monika and Wolfgang, work in a team and 'have' about 24 students – each of them supervises about 12<sup>4</sup>, who together belong to the C.G. 13 (number changed)<sup>5</sup>. The personal teacher has no contact with other students, except on special occasions and during the teaching of maths, English and obligatory courses. Students are then assessed for their overall school performance, and their behaviour and attendance are controlled by their personal teacher. The personal teacher follows the year's plan, contacts his/her students, fills in the students' School Files, controls the absence cards and checks the students' reports, etc.. The personal teacher also supervises the students during their apprenticeships outside school (by

4 The numbers of students refer only to the beginning of the school year, as, gradually, there are many drop-outs and by the end of the year the numbers are much smaller.

5 C.G. (in German: K.G.) stands for Communication Group.

using mobile phones or by visiting students), contacts the authorities providing the apprenticeship as well as other teachers working with this particular student. The personal teacher also helps the student develop questions and answers in the context of his/her apprenticeship and evaluates the student's performance, or, in the teachers' words, 'the student's development'. In this ordering, the discourse on a student's 'unclear development', which has been exemplified in the extracts above, connects teachers to concrete students and at the same time detaches students from groups, families, subcultures, etc. In taking their own discourse and perspective for granted, the teachers reveal how they translate ongoing activity into 'unclear development'. While an 'unclear development' is abstracted out of a variety of events and situations, many aspects of ongoing interaction and intra-activity and everyday life remain invisible, i.e. the fact that these students come from ethnic and social minorities. As a result of this decontextualization, the teachers 'see' just individuals. From the mediated perspective of the personal teacher, a student's actions are perceived as not collective at all, they are regarded as individual.

Teachers translate and reduce ongoing interaction and intra-activity into the discourse on students' development and in this way legitimate also their role as the ones who treat these 'individuals'. From the personal teacher's point of view, the student's actions form a continuum, a meaningful entity. Personal teachers consult one another during weekly discussions, illustrated by the extracts presented above, *exchanging information* and *reflecting* on the past of their students. The continuous flow of information is expected to reconstruct a 'whole'. The teachers share the conviction that if the process of informing functioned flawlessly, they could 'understand' the students completely so that it would be possible to continuously plan their next small steps in their education. Such gradual steps are

intended to bring a given student closer to the final stage in his/her development which s/he cannot achieve immediately. The teachers' various 'pedagogical interventions' address the student seen not as the person that s/he is now, at present, but as the person that s/he will become in the future – in other words, they address the desired final product of this process of schooling.

The concept of development is here of primary importance. By using the words 'development' or 'process' in their school practices, the teachers refer to something that has or has not been clarified or is or is not in progress at the time of the discussion. They 'see' it and evaluate it. They position themselves outside the concrete settings of their interaction with students and view their development as a whole from a distant point of view. They presuppose a natural order of development and ignore that they are the ones who actually fabricate this order in the school institutional settings. Teachers need an individual past which is connected to the present – to be able to direct it to a certain kind of future. For this they need ongoing, regularly updated, evaluation of the student, and for this, in turn, they must position themselves in a particular perspective. What the teachers actually 'do not know that they know', what their 'everyday understanding' (Bohnsack, 2003) is, is that time and development, in their view, unfold toward a particular final state. This last state is predefined by them and is what is wished for. This understanding of time goes back to evolution theory and thermodynamics and dominates developmental psychology (Kontopodis, 2007; Morss, 1990). The teachers appear to consider the development 'unclear' or say that a student 'does not manage it', if no change in the direction of the state desired by them takes/has taken place. What is this desired state and how is it related to social norms and values? Also, who makes this decision?

## Performing the past and witnessing the future

### Extract 3

1. **F:** Also ich war ein Problemkind gewesen  
(.2) ähm (...) ich hab meine Eltern  
*Well, I was a problematic child (.2) erm*  
*(...) I stole from my parents,*
2. beklaut, äh (...) ich hab (.2) auch Drogen  
genommen und sonst so was, und das  
*uh (...) I (.2) also took drugs and so on,*  
*and I turned*
3. Leben meinen Eltern zur Hölle gemacht.  
*my parents' life into hell.*
4. **I:** Mm.
5. **F:** (.2) Und damit auch nie  
irgendwie gezeigt,  
*(.2) and (I've) never shown*  
*in any way*
6. dass ich verantwortungsbewusst bin und  
dass ich selbst für mich verantwortlich  
*that I am conscious of responsibility and*  
*that I am responsible for myself*
7. bin und erm, alles richtig mache. Das kann  
ich jetzt ändern.  
*and erm, (that I'll) do everything right.*  
*Now I can change that.*
8. **I:** Und was hat die  
*And what has*
9. Veränderung gebracht oder zu dieser Verän-  
derung geführt? Dass [du weißt]  
*caused this change or has led to this*  
*change? that [you know]*
10. **F:** [Die Einsicht]  
*[the insight]*
11. **I:** und dass du jetzt  
*and what you want*
12. (was) machen willst oder machst?  
*to do (something) now or (already do)?*
13. **F:** Die Einsicht. Als ich äh,  
hierher gekommen bin (...)

*The insight. As I uh, came here (...)*

14. das erste Jahr.  
*the first year.*
15. ((Es ist sehr laut. I. steht auf und  
schließt die Tür.))  
*((it is very loud. I. stands up and*  
*closes the door.))*
16. **I:** In der Schule meinst du?  
*At this school you mean?*
17. **F:** Ja hier in der #Name der  
Schule# (.2) da war das sofort  
*Here in the #name of the*  
*school# (.2) it (all) changed immediately.*
18. anders. Ich musste mich anders äh, ent-  
scheiden, ob ich jetzt nun den Weg des  
*I had to make decisions differently eh, de-*  
*cide if I wanted (to follow) the way of the*
19. grausamen Jungen der Eltern @ sein  
möchte, oder ob ich äh nun endlich mal,  
*parents' terrible boy @ or whether I uh*  
*finally*
20. anfangen  
*(could) begin now*
21. **I:** Mhm.
22. **F:** Erwachsen zu werden. Und  
das hab ich jetzt geschafft. [Das war  
*to become an adult. And now*  
*I've managed that. [that was*
23. einfach nur]  
*simply only ]*
24. **I:** [Mm.]
25. **F:** ein Umdenken.  
*a reorientation.*  
Extract from Interview with #Felix#

This interview between a student and myself, audio-recorded and now transcribed, took place in 'internal public' space (see above). Felix (name changed) is one of the presently non-deviant male students, who perceived me as an older student who supported them at school and someone they trusted (partially because of my gender) – in contrast to other students' subjectivities e.g. Turkish women or

German deviant students. After I asked him about his future plans, which he described to me in the earlier part of the interview, he starts telling me that he has been a ‘problematic child’ for his parents. He describes his deviant behavior and mentions his wish to totally change the *picture* his parents have of him. When I ask him about what caused the change in his behaviour he refers to his first year in the school, when an ‘Umdenken’, i.e. a change of thinking, took place. As he says, “it (all) changed immediately” (line 17).

Felix does not only perform his past during this narration – he also witnesses his future, the future he would like to have. He has decided to try to enter the job market and is looking for training as a caterer. One could say that his development is no more ‘unclear’; his ‘process’ is almost accomplished (compare the extracts 1, 2). From his present point of view, his past appears to be meaningful in one specific way – his present self-awareness and self-responsibility for his future. *In* the school, *next* to the teachers, his way of thinking changed (‘Umdenken’) so that he now *confesses* his past *blaming* himself for this (Luther, 1988). He is also *proud* of what he has now achieved by himself (line 23). For Felix, development is a kind of discursive order. He performs his past by reflecting on himself, organizes his ongoing activity in terms of self-responsibility and thus directs it into a future which he can be proud of. Even if there are discontinuities, divergences, surprises, accidental events in everyday life (Foucault, 1971/1972; Stephenson & Papadopoulos, 2006), even if one acts always in relation to others, *development*, as it is remembered and imagined in the present, is a line which brings different events and situations together, and enables one to evaluate him-/herself and act on one’s own. In this way, a variety of different actions and events is translated into order, which influences one’s further actions.

What is more, development, as presented in

Felix’s discourse, leads to a given predefined outcome, which depends on the point of view of educational institutions (e.g. the concrete school, Felix’s family). Felix does not want to be the “parents’ terrible boy” any more, he wants to be an “adult”. Speaking in similar terms, both teachers in extracts 1 and 2 use negations and negative words to speak about change in their students (“unclear”, “not as something negative at all”, “does not manage it”). The school’s discourse not only creates an order of development but also institutionalizes and legitimizes the way of development at school – which can be seen as the realization of only one possibility (Deleuze & Guattari, 1980/1987). Normative values with regard to the development of students from ethnic minorities have been extensively studied and criticized by cultural-developmental psychologists such as Hedegaard (2003, 2005c). Normative values of developmental-psychological discourse – established by psychologists and taken over by teachers and other practitioners and, in this case, also by re-adapted students – have also been widely criticized in the context of critical approaches to pedagogical and developmental psychology (e.g. Holzkamp, 1983; 1997; Burman, 1994).

Broadly speaking, it could be argued that the teachers’ beliefs on the ‘unclear development’ of the students have political implications for the way in which students are classified and treated. In turn, the positioning of students goes together with the way in which students perform their past and project their future. ‘Development’ proves to be, simultaneously, an organizational principle of a student’s action, of teachers’ and students’ interaction and of institutional classification. The formerly excluded students, for whom the School for Individual Learning-in-Practice was designed, should actively enter the current economy. Activity has replaced dependency as the welfare system has been reformed to become a ‘workfare’ system. In this situation “an unemployed



person is understood as a ‘*job seeker*’” (Rose, 1999, p. 268, emphasis added) and citizenship should be *actively* purchased:

“citizenship is not primarily realized in a relation with the state nor in a uniform public sphere, but through *active engagement* in a diversified and dispersed variety of private, corporate and quasi-corporate practices, of which working and shopping are paradigmatic” (p. 246, emphasis added).

In this context, development appears to be a semiotic ordering bringing these particular students together with the teachers and organizing their action and interaction. Foucault referred to such orderings as ‘technologies of the self’, which are the specific practices by which subjects constitute themselves as subjects within and through systems of power, and which often seem to be either ‘natural’ or imposed from above (Luther, 1988). In the following section, I would like to focus on the term ‘technologies’ and examine the material dimensions of the discourse on development which has been presented so far.

## School diagrams and materializations of development

Above, we have examined the interrelation between the students’ and teachers’ positioning at school and their respective discourse. What is particularly interesting is that in the everyday knowledge of both students and teachers, development is understood as something that begins at some point in the past, continues till the present and should unfold to reach its target in the future. The question which I would like to pose at this point is: how is this discursive and social order stabilized; how do teachers share the same perspective with the students and how are the interdependent teachers’ and students’ positions maintained? In terms of performativity theory every kind of action could be considered as both discursive and non-discursive and, in this sense, performative

(Middleton & Brown, 2005; s. also Scheffer, 2004; Wulf, 2001, 2004, pp. 173-190). In the School for Individual Learning-in-Practice, it is not only *discourses but semiotic-material objects* that mediate the communication and stabilize the order between teachers and students. They enable the teachers to control the students – as implicit power relations – and at the same time make the students control themselves.

Felix’s verbal description of his past, presented above, mirrors a diagram which he drew at a different time during the school year. He narrates his development as a line, as an arrow of time, which leads to ‘now’ when this process can be accomplished and he can prove that he is finally reliable (see also Brockmeier, 2000). He speaks about the exact point at which his thinking changed – the point at which he started attending this school. In the School for Individual Learning-in-Practice, students fill in diagrams illustrating their development and narrating it in linear-temporal terms. In the excerpt below, two teachers talk about using such a diagram meant to help students “perceive the process” of their development during a 15-day-long individual learning project.

### Extract 4

1. **W:** Ich habe gerade überlegt, ob wir zum Abschluss dieses selbstständigen Projektes  
*I have just been thinking, whether we could find, for the end*
2. irgende (irgendeine) Form finden, wo die sich ^schriftlich noch mal zu ihrem  
*of this self-organized project, some form in which they could express themselves in writing*
3. eigenen Prozess äußern (.2). Was wahrscheinlich [ganz offen]  
*on their individual process (of learning/development) (.2) This apparently cannot just happen*
4. **I:** [ Mm ]

5. **W:** nicht irgendwie geht.  
*in an open way (on its own).*  
...
6. **W:** so'n bisschen diesen Prozess mal (...) wahrzunehmen für sich selber. Ich denke, *(so that they) perceive (...) this process for themselves a little bit. I think,*
7. da braucht man ein paar Fragestellungen (...) als Hilfe. (...) Also ich mein, nicht jeder  
*one needs some questions (...) as an aid. Well, I mean, not everybody, can*
8. kann jetzt einfach los: ‚Das war gut und mein Problem ist immer das und so‘  
*just start (saying): 'This was good, and my problem is always that and so on'*
9. Also das wär (wäre)  
*Well, this would be*
10. **I:** Mm
11. **W:** wunderbar, aber das, denke ich <ist äh> zu viel verlangt.  
*fantastic, but, I think that <this is uh> this would be asking too much.*
12. **I:** Mm
13. **W:** Aber (...) noch  
*However (...) once*
14. mal so ne (eine) Richtung: das noch mal zu sehen, und äh ha, ha ‚möglichst‘ (...) *again such a direction: to view it once more and uh ha, ha, 'if possible' (...)*
15. so das geht nicht ‚möglichst‘.  
*well, it cannot be 'if possible'.*
16. Das eine ist ja die Bewertungsebene (.1) ist auch klar. Und das ist klar, das ist jetzt  
*This is certainly an evaluation level (.1) that is also clear. And it is clear, that now it is*
17. vorbei (.2).  
*in the past (.2).*
18. Ähm aber, wenn jetzt z.B. #Daniel#, der hat ja vorhin auch gesagt, äh ja er  
*Errm however, if now e.g. #Daniel#, who also said earlier uh, yes, he*
19. würde doch wieder eben gern auch ein bisschen mehr soo und er ist auch  
*would rather do a little more again in such a way and he is also*
20. selber unzufrieden mit seinem Zeug ...  
*dissatisfied with his things ...*
21. Das ist ja, (...) also das sind ja verschiedenste Sachen, warum du nicht  
*there are for sure various different reasons, why you do not*
22. weitermachst. Oder warum machst du am Anfang so wenig, dass du nachher nicht  
*continue. Or why you do so little at the beginning that you cannot afterwards get over (this level)*
23. darüber steigst, oder..., also diesen Prozess noch mal zu ^beleuchten.  
*or... Well, just to shed light on this process.*
24. **I:** (.1) Mm
25. **W:** (.1) Und das würd (würde) ich gerne schriftlich (...) machen.  
*And I would like to (...) do it in writing.*  
...
26. alle... ‚Aber das, was sie kennen, sind (...) die Graphiken  
*but, this, what do they know, (...) [about] graphics*
27. **I:** (...) [Mm]
28. **W:** [und es] gibt vielleicht ein  
*[and it] there would probably be*
29. paar... #Anton# müsste, wenn er ehrlich ist, sagen: „Bei mir sah die Grafik so  
*a few... #Anton# would have to say, if he is honest: 'in my case the diagram looks*
30. aus“ (.5) Weißt du?  
*like this' (.5). You know?*  
...
31. **W:** Also ne (eine) Grafik, die  
*Well, a diagram, which*
32. **I:** Mm
33. **W:** die Zeit- (...) struktur hat.  
*has a temporal (...) structure.*

We learn from this extract that Wolfgang would like to pose questions to students to make them reflect on their own development process. He emphasizes the importance of doing this in a written form and refers to it as giving the students a “direction”. He wants a “diagram which has a temporal structure” (line 33). Why?

The semiotic-material practice of “reflecting on development” through graphics is part of everyday life of the School for Learning-in-Practice. The picture or diagram which Wolfgang is referring to above would concern a narrow time-space and would *provide an overview* as well as the *ordering of* various students’ actions and students’ and teachers’ interactions. It is interesting that it is not the teacher but the student who provides this overview; the student is to engage and produce it in order to reflect on him/herself. Another diagram which concerns a much broader time-space is presented in Picture 1. The instruction is: “Please draw a line which presents your school time so far. ‘1’ means here very bad; ‘10’ means super”. This diagram has been used by teachers during students’ counselling and is kept in the official school students’ files.



Picture 1: Official school document used in counselling of students and kept in the School’s Official Students’ File.

The diagram presented here is abstract and encompasses the student’s complete school past. Time as represented here, is not only spatialized but it is fabricated as a line connecting the past, the present and the future, i.e. it is fabricated as irreversible time. A student’s development is ‘objectified’. The term “*to objectify*” is used here to indicate the translation of something vague (ongoing interaction and intra-activity in everyday life) into something visible, in a way which is accepted as objective; the term also indicates embodying a vague idea in a materiality e.g. a document (Middleton, Brown, & Lightfoot, 2001; Middleton & Brown, 2005). Discursive interaction and intra-activity is always also non-discursive: the graphics of development go together with the students’ auto-biographical narrations and the teachers’ discussions/reports mediating the institutional memory.

The correspondence between Felix’s diagram (Picture 1) and his discourse (Extract 3) is remarkable. Just as in the diagram, Felix judges his past as either “very bad” or “super”; there is no way of escaping the given territory, denying these categories and imagining a radically different reality. A psychological subject or a self who develops (or not) in time and who is the main person responsible for his/her development is thus materialized. Similarly to the teachers’ discourse, ongoing interaction and intra-activity is translated into a line, the subject is abstracted from everyday life situations and development is decontextualized. In this way, no critique can be directed at social hierarchies, educational settings, cultural values – any change can be introduced only as a purely individual, personal matter. As a result, the ‘non-standard’ students belonging to social and cultural minorities become directed – through ‘development’ – to the social order of working, consuming and setting up and maintaining their own family. Diagrams clarify whether students have incorporated and reproduced the terms of the mainstream and

dominant relations or whether they should be excluded as ‘un(der)developed’. No change of dominant relations through public politics (Vygotsky, 1935/1994), art (Artaud, 1958), or learning resistance (Holzkamp, 1993) is foreseen as possible. What is also (or preferably should be) avoided is spontaneous interaction and intra-activity which evades the temporal order of development and so could open possibilities for new semiotic-material formations and radically different forms of experience and organization of subjectivity –Stephenson & Papadopoulos (2006) call it ‘outside politics’. Escaping the institutional order means that one becomes responsible for and potentially guilty of the consequences of one’s choices in the career in educational and social institutions.

### Outlook: *back to Vygotsky and forward*

Mediators were not thoroughly examined either by Vygotsky or by other Psychologists of his time. Vygotsky admits at 1931 that no psychologist of his time – including himself – has deciphered the notion of tool in regard to psychological processes, such as memory and thinking (Vygotsky, 1931/1997, p. 61). Vygotsky introduced the idea that child development is possible only through mediation. However, he was unsure about the differences between signs and tools (Keiler, 2002– in contemporary terms: about the relation between discourse and materiality). In Vygotsky’s terms, the psychological cannot be contemplated and examined in separation from the social – a higher mental function is primarily a “social relation” (Veresov, 2005). Papadopoulos (1999) regards this tendency in Vygotsky’s work as anti-modern and focuses on: the relations of the notions of subjectivity, mediation, and context in Vygotsky’s work, with their strong political implications. However, Vygotsky’s ‘anti-modern psychology’ remains an unfinished endeavour. In the ideo-

logical frame of Hegelian Dialectic, he did not reflect on how his own mediations, tools – or, in more contemporary terms, semiotic-material practices – are related to development.

The argument developed in the present article is that it is not only the communication between the child and another human being that is mediated – as claimed by Vygotsky – what is also mediated is *our knowledge of the human development*. Our knowledge is not objective but determined by a series of mediations, reductions, abstractions and other translations, which are materialized. The mediators (Vygotsky, 1934/1987), the ‘actants’ (Latour, 1987), the ‘jokers’ (Serres, 1980/1982), participate in determining what is considered and how it should be examined. What is more, development is a performative term; it is not only a scientific concept but a directed and organized everyday semiotic-material practice in educational institutions. It does not *represent* reality but is a way of *creating* it. Development is a relation. Relation requires a triad: researchers or teachers, students and mediators, i.e. humans and non-humans/semiotic-material objects. The ordering of these non-humans – what has previously been referred to as semiotic-material – is also an ordering of subjectivities. Development is a semiotic-material ordering, organizing interaction and intra-activity – it determines populations of students, establishes specialists groups, enables self-reflection and self-control. It is a way of establishing concrete relations and hiding or avoiding others. There would be ongoing interaction and intra-activity and change but no ‘development’ without all the mediators and the entire semiotic-material practices taking place at the school and partially presented in this article. A variety of discursive and non-discursive practices enables, supports, and stabilizes ‘development’, to ensure that no *othering* takes place. After extending Vygotsky’s discourse on mediation, one could claim that development is a modern semiotic-material

ordering which stabilizes relations, organizes ongoing interaction and intra-activity and, as Serres puts it, “slow[s] down the time of our revolutions” (Serres, 1982/ 1995, p. 87). Development, in general, includes such values as ‘good life’, work, health, etc. (s. also Hede-gaard, 2005c).

Development in the School for Individual Learning-in-Practice implies the creation of a neo-liberal self that, independently of gender and socio-cultural background and perspectives, reflects upon her/his past in order to ‘discover’ her/his ‘talent’, become orientated towards a profession and enter the job market without any critical reflection or resistance. Not only diagrams are used to materialize development in a school but also files, reports, registers of absence, CVs, application letters, etc. What kind of development would we have without such semiotic-material networks of objects? Could we develop and experiment with other materializations and discourses on everyday interaction and intra-activity of children and youngsters? Could this lead to different modes of organization of self and subjectivity, to different relations between adults and children/youngsters, and to different relations between the institutional and the subjective? How can development be conceived and practiced so that the generation of totally new socio-material relations is possible?

In relational terms, one could claim that multiple realities are possible: different semiotic-material practices would not only concern the child’s or student’s development but would even create new or different relations between subjectivities and objectivities. The self as organizational principle could then be posed in question with the aim of generating difference and novelty instead of maintaining the controlled status quo. From this perspective, the query presented here can be considered as a springboard for the ‘politics of development’, i.e. for a relational developmental psychology which is founded on two methodological

principles: that of transparency and that of multi-perspectivity. Instead of struggling for validity and reliability, the principle of transparency claims that it is of primary importance to render all translations which researchers and specialists (i.e. we) make visible. Making all mediations and translations that psychologists, teachers, etc. engage in visible would challenge all the power relations between the ones who plan, evaluate, support, etc. development and the ones who undergo it.

If development is a concept and a reality created in and through the developmental psychology and the educational science – which is then translated into everyday practices of educational institutions and the application of school psychology – then the development of new relations between subjectivities and objectivities and the generation of new semiotic-material orderings is possible, only if also the relations between scientists and children change and new materializations of development, new research methodologies, new discourses are generated. Thus relational developmental psychology challenges the modern white male European order as opposed to sustaining or supporting it – which position can also be regarded as anti-modern (Papadopoulos, 1999) or non-modern (Latour, 1993)<sup>7</sup>. It claims for *multi-perspectivity* in determining ‘development’.

Doctors, psychologists, anthropologists of childhood, sociologists of childhood, religious texts, political movements, artists etc. speak in very different terms of development

7 The ‘anti-modern’ approach strongly differs from all ‘modern’ and ‘post-modern’ approaches: it neither considers only discursive phenomena and speech while ignoring materiality, nor treats materiality in naturalistic terms. ‘Relational materialism’ (Law, 2004) or antimodernism, is a twofold effort meant: a) to deal with the interaction between semiotic/discursive and material phenomena and b) to regard knowledge on these phenomena not only as mediated but also as performative: knowledge is not just ‘intersubjective’ – it *creates* reality.

and of childhood. A relational developmental psychology would render all these perspectives visible. It would take the performative effects of knowledge into consideration and view reality as multiplicity – not as singularity. Such an approach would then justify its own criteria and understanding of development and childhood and would reveal and not hide controversies and conflicts resulting from different semiotic-material practices. A relational approach to development cannot avoid being political. And it would not predefine a desired state to be reached by youngsters but would continuously question research, educational, school-psychological, etc. semiotic-material practices. In relational terms, development unfolds towards *the unknown* and not towards *the known*. To quote Morss: “the forgetting of development may be a remembering of childhood” (Morss, 1996, p.ix).

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- ers, students and myself can be traced only in German. All utterances have been transcribed phonetically rather than in accordance with standard grammatical rules. The correct orthography is often given in single round parentheses, e.g. Dis is ja ‘ne (das ist eine). On the basis of the book by Edwards et. al. “Talking Data: Transcription and Coding in Discourse Research” (1993), I have developed the following code regarding particular features of my research oral data:

@ =	laugher
(text) =	(the author’s correction of language/ word originally missing, here added)
((text)) =	((the author’s comments))
[text] = <b>T:</b>	[text articulated simultaneously]
<b>H:</b>	[text articulated simultaneously]
#text# =	#changed name for purposes of anonymity#
(...) =	pause lasting less than 1 second
(.2), (.3), etc =	pause lasting several (number) seconds

## Appendix: Translation and Coding of Oral Data

Adhering to a performative understanding of translation and in order to ensure transparency, all extracts are given in both their original German version and their English translation. Of course, the idioms and dialects used by teach-