Addressing Uncertainty: Futures Studies as Critical Inquiry

[Critical] futures studies aims neither at prediction nor at comparison but seeks to make the units of analysis problematic, to undefine the future, to seek a distance from current understandings and epistemological agreements. /…/ The role of the state and other forms of power in creating authoritative discourses is central to understanding how a particular future has become hegemonic. Critical futures studies asserts that the present is fragile, merely the victory of one particular discourse, way of knowing, over another. The goal of critical research is to disturb present power relations through making problematic our categories and evoking other places, other scenarios of the future. Through this distance, the present becomes less rigid, indeed, remarkable. (Inayatullah 1998)

Addressing education theory futures (or any scientific futures) requires some understanding of the basic ideas of futures studies epistemology. Futures studies utilises results from a diversity of scientific fields to form integrated views of the future. Futures studies is sometimes viewed as impossible and contradictory as a field of knowledge since the future cannot be directly researched. The research object is therefore the present, and futures studies is less concerned with predictions and forecasts than with uncovering various means by which to handle uncertainties we face when thinking about the future. In futures studies, the future is never dealt with as a singular course of development but in a plural form, where alternative futures may be viewed as more or less possible, probable and preferable (Pedersen and Dian 2010). Futures studies involves studying phenomena (and relationships between them) which may bear an influence on the future, such as incidents, trends, emerging issues, images of the future, value change, and actions. Futures studies also assumes that the future is possible to influence with actions and choices (Rubin 2002).

While traditional futures studies has been criticized for modeling ‘good’ futures on specific (Western-oriented) worldviews and oversimplified ideas of progress, critical futures studies aims at the problematisation of general historical presumptions, attitudes and ideas about the future and attempts to develop tools for understanding and influencing the processes of cultural formation, orientations, and traditions of enquiry (Rubin 2002). Influenced by literary criticism, critical theory and sociology of science, critical futures studies seeks to move away from narrowly defined and reductive visions of futures constrained by Western worldviews, logical positivism and technical instrumentality (Ramos 2003). Thus, critical futures studies seeks to raise awareness of the paradigm within which we are locked and lift the curtain to possible new paradigms (Pedersen and Dian 2010).

The present paper draws on these foundational ideas from the field of futures studies¹ by sketching four possible futures, or development orientations, for education theory, in order to, in Inayatullah’s (1998) words, make its present conditions appear ‘less rigid’. These futures are all ‘posthuman’ insofar as they aid education in rethinking itself by embracing elements it may otherwise ignore, negate or reject. In addition, the four futures delineated share a critical

¹ I want to emphasize that this is not a futures study proper, since it does not employ any particular futures studies method such as environmental scanning, cross-impact analysis, etc. Rather, it should be read as an exploratory discussion paper; a thinking exercise inspired by futures studies thought. It does, however, draw on some current trends and emerging ideas in education theory and other disciplines while allowing for interplay with the unexpected and speculative.
unsetting of what is commonly understood as the human subject as the sacrosanct centre of educational theory; however, the four futures engage with this process to different degrees, and in significantly different ways. They collectively approach two overarching questions: What purposes of education may these theoretical futures enable or disable, and what is the role of the critic in them?

**Future #1: Educational Zoontology**

My first future for education theory is populated with nonhuman animals. Nonhuman animals enter systems of knowledge production in multiple ways, and on several levels. They may interrupt and disrupt ‘our’ familiar formations of knowledge and alert us to knowledge forms for which we (as yet) have no name. Zoontology – a term denoting that ‘ontology’ not only concerns the ontology of the human (Rossini 2006; Wolfe 2003) – points to the fact that there are many ways of relating to the world, of which ‘human’ ways only constitute a small subset. The non-generic nature of animals and animal agency has potentially unsettling implications for the internal structure of any discipline (Wolfe 2009). Likewise, zoöepistemology (Miller 1992) offers an alternative outlook toward forms of knowledge and knowledge creation that do not only include nonhuman animals, but bring them centre stage as key actors in the innumerable different modes of being in, and making sense of the world.

While animal presence in the social sciences and the humanities is no longer a novelty – the so-called ‘animal turn’ (Armstrong and Simmons 2007; Weil 2010) having proliferated in, and brought about multiple conversations between, a number of disciplines over the last two decades – the interesting question emerges why education, with a few exceptions (e.g., Boggs 2009; Kahn 2003) is still under-represented in these dynamic, interdisciplinary theory developments.

Formal education in Western societies has, traditionally, been a profoundly anthropocentric enterprise, a site of celebrating human exceptionalism in the name of ‘humanist’ traditions and ideals, and education policy and theory have been significant ideological actors in maintaining a stubborn human/animal divide. From the perspective of interspecies critical education theory, education works not only by passively reflecting, but actively reproducing ideological speciesism as well as the material basis of the animal economy (for a definition of the ‘animal economy’, see Emel and Wolch 1998), profoundly affecting the life conditions of nonhuman animals (Pedersen 2010). However, education is not a fixed, stable and predictable project: Its dynamics may be resisted, destabilized, and perhaps even transformed by unexpected alliances of actors and knowledges, and by the contradictions and indeterminacies inherent in education itself. As Fudge (2009) has pointed out, anthropocentrism in knowledge production and dissemination is a choice, not an inherent essence.

My educational zoontology future would intervene in conventional anthropocentric arrangements of education by asking: How do animals open up and expand the repertoire of questions that can be asked about education? What narratives and knowledge of human-animal relations are privileged in education? What narratives are socially and culturally reproduced? How does the animal question interrupt the compulsory ‘becoming-human’ idea of education and its didactic control of ‘the animal’? What species-discourses organise education, and what (human and animal) subject positions do they produce, enable, or disable? What happens to education when the human is no longer regarded as the only subject? Perhaps the very constitution of education – its syntax, its grammar, its DNA – needs

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2 See also recent themed issues of education and animals in *Critical Education* and *Canadian Journal of Environmental Education*. 
to be re-coded to respond not only to the ‘animal question’ but the ‘animal condition’: the hyperexploitative reality most animals experience in human society. My educational zoontology future would explore overlaps and conflations between Renée Descartes’ beast-machine, Gayatri Chakravorty Spivak’s teaching machine, and Giorgio Agamben’s anthropological machine. If education theory can disassemble one of these apparatuses, it may be possible to disassemble them all.

Future #2: What if Multiplicity Comes First?

My second education theory future extends Foucault’s (1977) famous premonition that ‘[…] perhaps one day, this century will be known as Deleuzian’ (165). It is a future where education theory will unsettle its own long-standing preoccupation with meaning-making around the (human) subject (i.e., ‘the student’, ‘the child’, ‘the teacher’, ‘the parent’ etc.), seriously posing the question: ‘What if multiplicity comes first?’

There are many readings of Deleuze, of which this brief sketch of the second future will draw on only a few. Shifting attention from substance, subject and form to the dynamics of forces and fluxes requires, I believe, a re-programming of how we think about educational relations. The pragmatics which Deleuze sets to work is, writes Bergen (2010), a pure description of intensive variations; ‘a mapping which refrains from teaching any lessons’ (38). This second future might see learning and knowledge development not as something that is ‘constructed’ or ‘achieved’, but rather, as a convergence of energies; a mutual contagion (cf. Calarco 2008) between entities moving and traversing different sides of the learning process (‘teacher’, ‘learner’, ‘classroom’, ‘computer’, ‘textbook’, ‘subject matter’), forming momentary, unstable learning assemblages3 within a varying specter of world-forming and world-affecting potentialities. These entities are in a constant process of redoing themselves and the environment with which they exist, so that their effects, such as the learning that may unfold (or not), or any other shared or divergent concerns, cannot be anticipated. Their dynamics might bring about a completely different condition or direction that has little to do with the educational set-up or arrangements from which they originated. To examine a vital assemblage is to ask how it positions itself in relation to life: ‘[W]hat can a [learning] assemblage do, what experimental states can it reach, what are its speeds, the affects of which it is capable, how does it construct its plane?’ (Bergen 2010: 35) Such an examination reveals a composition that, again, refrains from teaching any lessons, although the questions it enables are genuinely educational ones.

An educational future that refuses dividing up the world into discrete, analyzable elements and sees the activity of education as vibrating multiplicity, or, borrowing Massumi’s (1987) words, a combined set of circumstances creating ‘a fabric of intensive states between which any number of connecting routes could exist’ (xiv), is surely a death-blow not only to conventional subject didactics, but to present rationales of organising educational universes in, for instance, curriculum theory, education policy, and teacher education. Conceived in this way, educational situations might be largely self-organising, enacting their own orientations, purposes, modes, and affects.

Future #3: The Absurdities of Relationality

3 ‘Assemblage’ can denote any set of relationships one is engaged in: individual or collective, of thought or of desire; cf. Bergen (2010).
If my Deleuzian educational future as roughly sketched above emphasizes relations rather than subjects, my third future for educational theory takes another step further and renders problematic even this move, questioning whether relationality is at all possible as a central unit of analysis and meaning-making in education. If futures #1 and #2 build on an addition of phenomena, a complement to conventional thought in education or an evoking of latent educational forces in some sense, then futures #3 and #4 work in a different direction. Future #3 takes literally Lather’s (2006) reiteration of Britzman’s wish for educational research to become increasingly unintelligible to itself. It conceives of education and educational relations over an ‘abyss of non-comprehension’ (cf. Berger 1980: 3). Education, articulated in this way, is characterised not by the dissemination and fostering of rational thought, but by the bringing together of a loose constellation of subjects who normally would have nothing to do with each other; by a mismatch between language, thought and action; by arbitrariness; by miscommunication, confusion and isolation. (Ask any teenager struggling through the ordeals of upper secondary education, or any teacher caught up in the same mess!)

Future #3 sketches an education theory in the spirit of Stone’s (2006) application of ‘the absurd’ to educational philosophy, recognising the senselessness of ‘the human condition’, and seeing education as a microcosm of this condition wherein senselessness presents itself. An educational theory future of the absurdities of relationality links closely to what I have elsewhere analysed as educational ‘meta-mimesis’ (Pedersen 2012); education as such as a project of simulation, mimicking the illusion of itself. Drawing on Baudrillard, Moran and Kendall (2009) argue that what takes place in schools is not education, but ‘a simulation that hides a scandal, the result of an imbalance of power’ (327). There is, according to Moran and Kendall, no such thing as education beyond a reproduction and repetition of a range of para-educational commentators and comments, organisers, interventions, curricula designs, testing regimes and ‘improvement’ policies, including a repetition of educational critique. In brief, future #3 suggests a theory of education that does not affirm meaning-making, but negates it. It is a theory of an education that barely, and only provisionally, manages to hold itself together; a theory that distances itself from any aspirations to put things ‘right’ or attempts to make meaning out of a genuinely absurd arrangement.

**Future #4: The End of Linear Progression? Queer Educational Anti-Futurism**

A few years ago I listened to a presentation by a prominent Professor of Education on the developments of the educational sciences in Sweden. His PowerPoint presentation included a table depicting a fictitious individual’s (modeled, as I understood it, on the Professor’s own grandchild) pathway through the formal education system, from preschool all the way up past doctoral level and ‘learning in worklife’. The table started at the child’s age of 2 in year 2007, and ended at age 28 in year 2032. The image adhered to the logic we have been used to in thinking about education: A progressive, linear accumulation of years and grades through the education system and a (presumably) accompanying progressive advancement in knowledge development. This image is itself embedded in another, wider but analogous image about the assumption of a never-ending succession of future human generations following the same path.

While future #3 distances itself from any promises for the future about increased possibilities for meaning-making in and about education, future #4 works by negating the future as such by intervening in the trope of chronological, progressive, generational and developmental linearity as the self-evident fundament of educational thought and policy. Thus, future #4 is an educational adaptation of Edelman’s (2004) queer theory on ‘reproductive futurism’. Edelman notes that heterosexuality produces a future embracing
‘more of the same’, an ideology of reproductive necessity of which the hegemonic figure is the Child. The position and existence of the Child is non-negotiable, fetishised, universalised, and as compulsory as the future itself. The institution of education, with the Child as its main target and basis of subsistence, plays a pivotal role in this process of ideological reiteration. In Edelman’s view, the Child produces nothing but predetermination of meaning. His analysis takes an opposing view to many philosophers of education, such as Arendt, to whom ’every single [human] birth [is] the hope for something entirely other to come and break the chain of eternal recurrence’ (Habermas 2003: 58). What could be added is that the fantasy of the ‘perpetual new beginning’ of natality (Greenaway 1992: 33), and its inherent linearity, is complicated not only by Edelman but by the limits to its own life-sustaining conditions. To bring in an example from systems ecology, theories of resilience teach us that once being exposed to excessive pressure, social-ecological systems do not necessarily behave in the linear fashion that are most convenient to conceptualise and handle (Walker and Salt 2006). Reformulated in posthumanist terms, human dominance may be viewed as ‘not an inherent or essential attribute, but a negotiated position within a system, a position that can be overturned’ (Bartlett and Byers 2003: 29). What does this mean for the possibilities of the educational subject to come about? How does the linear time axis built into the logics of education (and the education system) relate to the possibility of planetary destruction, resource depletion, and the mass-extinction of species (the human species included)? What kind of education will be possible in a future society where global warming has reached the nightmare scenario of a 6 degrees increase? Future #4 situates education theory at the queer margins of the radical negativity posed against reproductive futurism and its embedded ‘perpetuation of the code of the human’ (Halberstam and Livingston 1995: 12).

**Posthuman Educational Futures and Critique**

My scenarios for educational theory futures are, as sketched above, necessarily incomplete and provisional. In futures studies, scenarios are neither predictions nor detailed accounts: they are outlines or sketches of developments (May 1996). Also, it is outside the scope of the present paper to discuss the validity of the assumptions on which the scenarios are based and the plausibility of the development processes involved. The point is, rather, that the four futures take education into different directions, although they also exhibit certain overlaps. This is a consequence of the idea that they all depict, in their different ways, ‘posthuman’ futures for education theory wherein the human subject is no longer viewed as the self-ascribed organising agent of what I in future #2 have termed ‘educational universes’. This also means that the conditions formulating the purposes of education will have to move away from presumed core ideas in education such as progress, development, knowledge acquisition, and dealing with the challenges of life. To begin to conceptualise such a shift, I want to address the role of the critic in the four futures; a role I see as twofold:

The first role of the critic in posthuman educational futures would be to nurture and release the feral communities populating educational theory’s margins, or, to borrow Margaret Atwood’s (2004) formulation, its ‘pleeblands’ – communities formed by awkward, maladjusted, undesired non/humans of all taxonomies and species; disorderly multiplicities; queers; the senseless; the random; the arbitrary and the irrational. Educational critique should send these non/humans, or ‘posthumans’, much like Zarathustra’s beasts (Nietzsche 2006: 219), flying, fluttering, crawling, leaping all over, across, and through the curriculum.
The second role of the critic would be to embrace the threat of breakdown in meaning caused by the dissolution of distinction between education theory and the above non/posthuman entities, and trigger their vital transformative potentials. New purposes of education may then begin to unfold and flourish in these potentials: not in the centre of educational authority and power, but rather among the outcast in educational theory’s ‘pleeblands’; in the periphery of educational knowledge.

References


Rubin, A. (2002). *Futures studies as a field of knowledge and as scientific work*. Unpublished teaching materials for the course “How Can We Explore the Future?” at Finland Futures Academy, Fall 2002.


