Unlearning to Be Human? The Pedagogical Implications of 21st-Century Postanthropocentrism

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Posthumanism and Education

It is astonishing how stupid education can make people... To most people the very idea of education connotes a bettering of the self distinct from any possible acquisition of skills... It is no wonder that people should think in this way, for they have been taught to do so by sappy movies, college catalogues, and devoted teachers and parents, not to mention centuries of humanist propaganda. (Cottom 2003: 2, 18)

Education needs to change, of that almost everybody is certain. Under the impact of a global pandemic politicians, policy makers, educationalists, parents and children realized that educational systems were ill prepared for such adverse conditions. However, the discussion quickly got side-tracked into a blame game about lacking investment and inadequate teacher training, bad technical equipment and obsolete humanist values and standards. If anyone mounted a half-hearted critique of and resistance to calls for more digitalization, blended learning, zoom teaching and so on it was mainly stubborn liberal humanists with an ingrained technophobia. Basically, the current war about "Bildung" is being waged mainly about form, or technical media, and much less about content, one might say. Is distance learning able to replace analogue human-to-human and face-to-face interaction in a classroom? Should robots replace teachers (Selwyn 2019)? How much technology is good for pedagogy? These are the questions currently exercising most people and governments. Posthumanist education in this context is usually associated with a technoeuphoric approach, embracing technological possibilities and promises of enhancement, networking, distributed cognition and participatory (media) culture.

Henry Jenkins's report on digital media and learning was an early case in point even though it did not specifically engage with posthumanism at the time (Jenkins 2009). It was strongly emphasising the opportunities of participatory (media) culture afforded by digital and social media and thus equipping students with the necessary media literacies, cultural competencies and social skills "for full involvement" (xiii). The potential benefits of this shift included "opportunities for peer-to-peer learning" (sometimes also referred to as "peeragogy"), "a changed attitude toward intellectual property, the diversification of cultural expression, the development of skills valued in the modern workplace, and a more empowered conception of citizenship" (xii). The emphasis was to be on an "ecological approach, thinking about the interrelationship among different communication technologies, the cultural communities that grow up around them, and the activities they support" (7) that would enable participants to understand themselves as "produsers" rather than media consumers. Games and simulations, sampling and remixing, multitasking, using distributed intelligence, awareness of the affordances of technical media and media platforms – would all require "multimodality" (88) and "transmedia navigation" awareness, so much so that one might speak of a general shift or "disruption" (Van Mourik Broekman et al. 2015). Even though this is just one but prominent example, digitalization by and large works well with a utilitarian technological drive towards adapting students' abilities to changed media technological needs. They usually involve an extension or revision of the arch-humanist notion of "literacy" to new domains opened up by technological change and economic requirements – a revised adaptation process of the future workforce to new socio-economic conditions based on new technological "possibilities". In that sense, they form a continuation of modern educational policy based on a renewed alliance between the liberal subject now future-proofed for a transhumanist future.

Posthumanism as I would argue, lies entirely elsewhere. Technology in the discussion about how humanist education should be is a red herring. It is not, at least not predominantly, about cyborgs (1990s), data and algorithms (2000s), digital, social and open media (2010s), or artificial intelligence (2020s). These media-technological developments are without doubt important. And they rarely fail to captivate – money, attention, headlines. Posthumanism, at least in its "critical" variety, is about the place of the human on this planet, human responsibility, and the relation to nonhuman others. It is about ecology, ethics and politics. It is about constructions of the future and genealogies of the past. It is about a changing world picture, away from centuries of humanist anthropocentrism and towards multispecies social justice (Haraway 2008). It is about new answers to an old question: what does it mean to be human? Have we ever been human? Will we ever be? Should we be? How does one learn to be (a) human? Or should one rather unlearn to be just that?

Education has always been key to humanism and thus it is no surprise that it should continue to be so for posthumanism as the contemporary critique of humanism. Humanism, as Michael Bonnett (2003) writes, is "that broad perspective that assigns to human beings a special place in the greater scheme of things, setting their nature and interests at the centre of study and policy" (Bonnett 2003: 707). It is based on Enlightenment values, following Kant, that connect humanness with a process of progressive self-liberation from self-incurred tutelage through reason with the aim of producing an elevation above nature through cultural and scientific achievements. It expresses itself in modern, rational and colonial domination, conquest, exploitation and extraction of natural resources, "indigenous" humans and nonhuman others. Humanism thus understood is from its beginning a pedagogical process positing and addressed to a very specific form of "liberal humanist subjectivity". It is a subjectivity in tune with a self-perception of an individual who learns to embody certain (gendered, racial, national, social...) identities that modern societies "construct" and privilege or set as normative and thus as worth aspiring to. The "decentring" of this liberal humanist subject, always available, was begun in earnest in the second half of the 20th century by theoretical and philosophical formations like poststructuralism, postmodernism and deconstruction. This decentering continues today due to the emergence of posthumanism and postanthropocentrism under radically new technological, ecological and social conditions and due to new global challenges like climate change, depletion of natural resources, loss of biodiversity, extinction threats. These developments are signs that humanism "as a guide to human being" and as a "basis for education" is no longer adequate as an explanation of how we (humans) "should be in the world" (Bonnett 2003: 707).

In this sense, posthumanist education begins with a questioning of and a challenge to the quasi monopoly humanism has been exercising over education. And form that vantage point, it is therefore often, wrongly in my view, equated with "posteducation", or with an attack on education as such. William Spanos's The End of Education: Toward Posthumanism (1993) must be one of the first texts to acknowledge this tendency. Spanos describes the "shattering" of the humanist curriculum by the protest movement of the 1960s and the "complicity of truth and power, of knowledge production and the dominant sociopolitical order" exposed by the Vietnam War and the subsequent calling into question of the "discourse of disinterestedness" by theoretical discourses that have come to be called "postmodern" or "poststructuralist", but which he prefers to call "posthumanist" (Spanos 1993: xiv). Spanos returned to his argument in a long article in 2015 emphasising the "dehumanizing work" of the "global free market" and the neoliberalization of the university together with threats this poses to the survival of the humanities (Spanos 2015: 37). The same threat of "dehumanization" also exercised John Knight in his intervention to a volume entitled After Postmodernism (1995), in which he emphasizes that "to equate mass schooling with a humanistic education is almost certainly to commit an oxymoron" (Knight 1995: 24). Knight, like many at the time, and in fact ever since, laments that (humanistic) education "is replaced by the (re)production of flexible human units of production/consumption" – a "disappearance of the (human-educational) referent" that he names "posthuman" (24). While traditional humanism and (postmodern or poststructuralist) anti-humanism still depended on a previous knowledge of humanism, what Knight understands as "posthumanism"

is a (Baudriallardian) "simulacra", or "posteducation" (27) that fully embraces the ("post)ethos of the universal market and its (de)valuing of the individual to the status of commodity" without any place for "human emancipation" and "very little place for the human" (31). It is probably true to say that Knight's perception has become the central tenet of the critique of posthumanism as a theoretical discourse colluding in the neoliberalization and globalization of education. And to a certain extent I would agree that this is in fact so, if posthumanism is understood, as it mainly is, as "technocentric". As Knight explained: "The availability of technologies (the metaphor itself is significant) for transforming schooling intersects with the need for flexible and multiskilled workers for a (presumed – this is an item of faith) post-Fordist situation in industry and with presses for economies in the public services" (Knight 1995: 32). The "posthuman world" envisaged by "emergent corporatist forms of posteducation" (33) that Knight foresaw has indeed led to a certain "dehumanization" but not necessarily in the "apocalyptic" way Knight and many others believed. What has in fact disappeared in the process is the ideal addressee of a "humanistic" education, as well as the consensus about the universal reach of humanism as a discourse and political and ethical value system. And this is not an entirely bad thing.

Around the same time, other voices like for example that of Gert Biesta, saw the legacy of poststructuralist anti-humanism much more favourably, namely as an opportunity for a "pedagogy without humanism" (Biesta 1998). The focus was on the social interaction or "transaction" at work in pedagogical settings and the critique of the "asymmetry" this usually presupposed, i.e. between the subject-supposed-to-know and the subject to knowledge. Largely following Foucault, Biesta saw the intersubjective transaction and the subject formation through interpellation or "positioning", and thus the "production" of the individual, as a the result of "power exercised over bodies, multiplicities, movements, desires, forces" (Biesta 1998: 7). Biesta's search for a pedagogy "without humanism", like Foucault's critique of humanism before him, is not so much an attack on subjectivation as such but is rather aimed at the ideological obfuscation that seeks to disguise pedagogical transaction through a metaphysical world picture and its values that is actually standing in the way of "true" emancipation and freedom. It is precisely in confusing education with humanization, for example, that one prevent a questioning of what it actually means to be "human" and of challenging anthropocentrism, or as Biesta provocatively concluded his essay: "Who designs the entrance exam for humanity?" (11). There is no fixed "norm of what it is to be human" and thus pedagogy can and should not offer any "anthropological comfort" (32). At the same time, however, the focus on the "singularity" of every subject formation, which then translates into (human) identity as task rather than as normative given, also implies a critique of the "instrumentalization and dehumanization" of (post)education that Knight perceived as the main threat arising out of the vacuum left behind, once the consensus about humanism in education has disappeared.

This is where a *critical* posthumanism has its role to play – a posthumanism that is mindful of the contemporary and accelerated postanthropocentric drift, but one that at the same time is also critical of its technological determinism and the instrumentalization of education as such. In an educationalist setting, posthumanism arrived surprisingly late and there are still relatively few attempts at thinking through its pedagogical implications (cf. Weaver 2010, Pedersen 2010, Herbrechter 2014, 2018, Knox 2016, Petitfils 2015a). In the manifesto, "Toward a Posthumanist Education" (Snaza et al. 2014), a number of educators and educational researchers identify three ways in which posthumanism can transform educational thought, practice and research:

First, it forces us to reckon with how resolutely humanist almost all educational philosophy and research is. Second, it allows us to reframe education to focus on how we are always already related to animals, machine, and things within life in schools at the K-12 and university levels. Third, building on and incorporating these first two insights, it enables us to begin exploring new, posthumanist directions in research, curriculum design, and pedagogical practice. (Snaza et al. 2014: 40)

The aim of posthumanist education is thus to break up the anthropocentric foundations of virtually all education that tacitly or openly presupposes that "the world" or all "things" exist "in relation to" or "for" humans, in the sense that the world is "ours" to explore and exists only insofar as it exists for humans (46). Consequently, Snaza and his colleagues call upon "everyone – and everything! – implicated in the "anthropological machine" (Agamben 2004) of education to begin experimenting with forms of thinking, teaching, learning, and interacting that seek to create distance between us and humanism" (51).

The manifesto was followed by a volume edited by Snaza and John A. Weaver, Poasthumanism and Educational Research (2015), that stakes out the major areas in which posthumanism has been making inroads into (humanist) education and which have led to reconfigurations of it. Snaza and Weaver ask: "What would a world be that did not insist on human superiority or dominance and that did not disavow the human's ecological entanglements?" (3). The greatest challenge apart from escaping the predetermination of "learning outcomes" that close off "wonder in the face of the world" (7) and thus radical change, and the compartmentalization of knowledge into "disciplines", is to acknowledge the agency of knowing in nonhuman subjects, Weaver and Snaza suggest (5). The key in stopping, jamming, maybe even disassembling the "anthropological machine" that (humanist) education is, continues to lie in a focus on "subjectivity" and on thinking "about how meaning is generated among subjects (although this word will have become untrustworthy)" (Snaza et al. 2014: 51-52). Extending subjectivity beyond the traditional humanist and anthropocentric human exclusivity to nonhuman others (animals, machines, things, plants, environments, the planet etc.) is not just a new and more inclusive learning process, or a generalized animism (although this may be a good start), it is first and foremost an "unlearning" process. In other words, the decentring of the human(ist) subject does not "automatically" lead to a pluralization of "other" voices and agencies, it must be accompanied and motivated by an active process of deconstruction, of undoing, or "unlearning".

Un-learning

A posthumanist education goes beyond a humanist (or modernist) education by thinking through the complex relations between humans, nonhuman animals, and machines. (Morris 2015: 43)

Snaza himself opens up the avenue of "unlearning" when he says that "if posthumanism has taught us that we have become 'human', it also asks us to un-learn to be human" (Snaza 2015a: 105). For education to cease to be a form of humanization (in the sense of humanism's anthropological machine) however, it is not enough to reimagine the world "without humans" although this can undoubtedly serve as an initial "eye-opener". It is necessary to understand how learning to be a human works in the first place and then, through a patient and thorough working-through and rewriting process, to "un-learn" it. The "un" in "unlearning" does not function as a simple negation, instead it is its deconstruction. Like the "un" in Freud's "unheimlich" (Dunne 2016: 20), it makes at once strange and familiar and is a sign of the return of the repressed and a symptom of repetition-compulsion.

"Unlearning the hidden curriculum" is thus a "crucial component of the learning experience", as Alan Wald already suggested in "A Pedagogy of Unlearning" (1997: 127). Wald was writing in the context of the institutional racism in the humanities curriculum of the 1990s while following in the footsteps of Freire's *Pedagogy of the Oppressed* (1993 [1979]) and bell hooks's *Teaching to Transgress* (1994), but his argument in my view also applies to the "hidden speciesism" of all "humanist" education, when he says that "[i]f a pedagogy is to lead to empowerment, in the sense of a student's gaining control over the forces shaping his or her life, one must develop courses that allow students who choose to do so to

reassess the superficial and misleading paradigms brought into the classroom as a consequence of 'the hidden curriculum'" (1997: 133-134). In a similar vein, in the context of queer studies, Jack Halberstam, commenting on his The Queer Art of Failure (2011), writes that "unlearning is an inevitable part of new knowledge paradigms if only because you cannot solve a problem using the same methods that created it in the first place" (2012: 10). Halberstam, too, evokes the notion of wonder, namely "the curiosity, the sheer wonder, of not knowing on the path of transformation" that daring to unlearn promises (2021: 16). For Madina Tlostanova and Walter Mignolo, it is "thinking decolonially" that implies such a Learning to Unlearn (2012), while Éamonn Dunne invokes Jacques Rancière's "ignorant school master" (Rancière 1987) and Barbara Johnson's paradoxical "teaching of ignorance" to the same effect, as the hardest pedagogical task of "unteaching something to your students" and to "suspend knowledge" (Dunne 2013: 625-626). Unlearning in the sense of creating or at least accepting, working with an "enabling ignorance", despite its undeniable risks, is the only way of keeping the horizon of knowledge and futurity open, as opposed to masterful "explication" which, perversely, always risks placing and keeping the student in a relationship of dependence and acceptance. This is the "lesson" Rancière attributes to Joseph Jacotot, the "ignorant schoolmaster", who "taught" his Dutch students to "self-teach" themselves French without him speaking any Dutch himself, and without "explaining" the task. "Explaining" as Rancière explains – which attests to the difficulty of "unteaching" as a practice, is the blindness at the centre of teaching (Rancière 1987: 11-12), because it creates a dependence based on an infinite and unbridgeable regress of a distance (of an advance in knowledge) between the teacher and her students. In fact, and this may be almost too obvious a claim, it is the problem of subjectivity in education, in that a student needs to be addressed or positioned (as a subject to knowledge and learning) by a subject-supposed-to-know in order to start the learning process in the first place. Rancière's reading of Jacotet's practice characterized it as a prime example of unlearning of "apprendre à désapprendre". Learning – as opposed to "learnification" – is in fact inherently unpredictable as Dunne explains:

Learning begins when knowledge gets suspended. Good teachers are teachers who suspend knowledge, who open up the abyss. They're the ones that know that counselling Enlightenment values of self-reliance and autonomy initiate an inescapable double bind. "Listen to me but don't listen to me". "Listen to me: Think for yourself!" *Sapere aude*. Some instruction! (Dunne 2016: 20)

Subjectification through interpellation or addressing is about power, not about equality. The subject interpellated by the representative of the knowledge institution is everything but free, even when it, ironically, or even cynically, is interpellated as "free individual" – it is for your best, in your own interest, that you should learn to learn... As Rancière explains, it is not a question of forgetting this but of "unexplaining" it:

Un-explaining in general means undoing the opinion of inequality. Undoing it means undoing the links that it has tightened everywhere between the perceptible and the thinkable. On the one hand, the un-explanatory method unties the stitches of the veil that the explanatory system has spread on everything; it restores the things that this system has caught in its nets to their singularity and makes them available to the perception and the intelligence of anybody. On the other hand, it returns their opacity, their lack of evidence, to the modes of presentation and argumentation which were supposed to cast light on them. (Rancière 2016: 35).

It is hard not to hear the echoes of Althusser, Rancière's own teacher and his characterization of education as an "ideological state apparatus" with its central power mechanism of subjectification through interpellation in this comment (Althusser 1971). A posthumanist education worthy of its name and time will have to primarily unlearn this aspect, this mechanism, of the anthropological machine, bearing in mind however that there is no simple escape to subjectification, neither in the form of decentring, nor through proliferation.

To deny the importance of subjectivity in the process of transforming the world and history is naïve and simplistic. It is to admit the impossible: a world without people. (Freire 1993 [1970]: 32)

In a move similar to Simone de Beauvoir's famous expression that one is not born a woman but becomes or is "shown" how to behave as one, one could argue that one is not born human (at least not in the humanist sense) but is strongly "encouraged" to behave as one, or to embody this identity. It is a learning process that involves developing subjectivity to able to connect with others through language, culture, media and technologies. Posthumanism implies that technological and ecological change poses challenges to humanism's anthropocentric model of subjectification. "Posthumanizing" developments like digitalization, cyborgization, artificial intelligence, as well as anthropogenic climate change, or bioengineering require new conceptualizations of subjectivity and new narratives out of which subjects can construct identities, and which are different from traditional (liberal) humanist understandings of what makes a "me", human. One could thus say that posthumanism involves an unlearning and relearning process as far as human identity is concerned. Un- and relearning to be human differently passes through undoing traditional and constructing new subject positions. It is therefore important to look closely at the actual subject positions posthumanism or postanthropocentrism can provide or "afford".

In fact, there is no reason why Althusser's basic conception of the subject should not also apply under posthumanist conditions, provided one takes into account Althusser's antihumanist "blindspot". While Althusser seems to have had a quite specific "ideal" addressee in mind in his description of the "little ideological theatre" of hailing (undoubtedly human, French-speaking, probably white, male and being interpellated by police), alternative, less ethno- and anthropocentric scenes of interpellation under posthumanist conditions are not only imaginable but have always been available (cf. Althusser 1971; and Gearhart 2004). The interpellation mechanism as such is by no means suspended under new techno-, or eco-cultural and new, digital and social media conditions. Humans (and nonhumans) can be interpellated by a whole variety of social actors: machines, animals, things, etc. Furthermore, subjectivity is, to extend Catherine Belsey's argument, not only linguistically and discursively but also technically, environmentally, maybe even epigenetically constructed (Belsey 1980: 61). Machines, animals, things, environments, media can function as interpellators of humans as well as nonhumans. They are also constantly being addressed by humans and, provided they can all be attributed with some subjectivity, which means that when machines address machines, animals, things, etc., or when animals address... etc., aspects of subjectivity are always potentially involved. So, far from any end to subjectivity, posthumanist conditions rather imply a proliferation of subjectivity, ideology, address or forms and instances of interpellation and thus also "agency".

Although the posthumanist critique of humanism often focuses on scientific and technological challenges, there are aspects that apply even "without" technology. A post- or non-anthropocentric worldview according to which we no longer see "ourselves" as the central meaningful entity and form of autonomous agency in the universe, challenges "our" ingrained habit to anthropomorphise everything that comes into human view. This may have become visible and seemingly "inevitable" thanks to 20^{th} and early 21^{st} -century technological development, however, especially "critical posthumanism" has been proceeding "genealogically", i.e. has been un- or recovering previous or parallel connection points with non-anthropocentric knowledges, beliefs and subjectivities. Donna Haraway's work on companion species, for example, provides such a theoretical framework for non-anthropocentric posthumanist forms of address and subjectivities. In her *When Species Meet* (2010), she explains that: "human beings are not uniquely obligated to and gifted with responsibility; (...) animals

in all their worlds, are response-able in the same sense as people are" (2010: 71). Haraway's notion of "response-ability", which she, in this particular context, restricts to the interaction between companion species (i.e. human and non-human companion animals) and the proliferation of subjectivities this implies, poses a number of political and ethical challenges. Haraway's suggested framework for dealing with these challenges is a "multi-species flourishing": "Now, how to address that response-ability (which is always experienced in the company of significant others, in this case, the animals)? (...) multi-species flourishing requires a robust nonanthropomorphic sensibility that is accountable to irreducible differences" (2010: 89, 90). Haraway's answer to this challenge lies in a new (posthumanist, post-anthropocentric) "ecology": "We are face-to-face, in the company of significant others, companion species to each other. That is not romantic or idealist, but mundane and consequential in the little things that make lives" (2010: 93). One could argue that from a posthumanist point of view, Haraway's ecology should probably be extended to all kinds of social actors (human, animal, machine, collectivities and networks in the way advocated by Bruno Latour (2005) and actor-network-theory, or object-oriented-ontology, as well as new feminist materialism more generally.

For posthumanist education – unlearning and relearning to be human – the proliferation of subjectivities and their connection through postanthropocentric stories or narratives in a "post-human landscape":

...repositions childhood [or becoming-human more generally] within a world that is much bigger than us (humans) and about more than our (human) concerns. It allows us to reconsider the ways in which children [or humans] are both constituted by, and learn within, this more-than-human world. (Taylor, Blaise & Giugni 2013: 49)

The realization of this involves a "decentering" (or an unlearning) of humanist subjectivity or selfunderstanding, but also a "recentering", according to Brad Petitfils, since, "especially in an age of exponential innovation, how are young people supposed to understand their 'decentred' selves if they cannot first have a reasonable understanding of themselves in relation to the posthumanist world in which they live?" (Petitfils 2015b: 33). In a concrete educational context one might, according to Petitfils, "help students decenter themselves and understand the implications of their digital and virtual lives" (2015b: 35), and help them "recenter" by helping them see "their own primordial essence as these formative years of posthumanity emerge" (36). The recentering, however, even though it may be triggered by media-technological change and directed against its dehumanizing ("post-biological", transhumanist) possibilities, is first of all a relearning of human "animality", or "humanimality", or even more urgently, a resistance to human "deanimalization". It is illusory and harmful to both human and nonhuman animals to believe that humanity might be able (through technology) to escape its own animality. The "anthropological machine", far from guaranteeing an exclusion of animality by creating a radical difference between humans and animals, constantly reinscribes the very continuity it seeks to deny. Instead of the (humanist, or transhumanist) desire of "deanimalization" it is important to stress the "animal side" of the unlearning and relearning process of becoming human, especially in these current techno-centred and techno-euphoric times.

Animals in School - Zoomimesis and Rewilding

For a bird's flight to be an epiphanic event, the human being must see itself in the flight: there must be an overlapping between the human being and the bird – the emergence of a bird-shaped man, or a reflection of the human in the bird. (Marchesini 2017: 95-96)

One of the most basic questions posthumanism asks of (humanist) education is "must an educated being be a human being?" (Heslep 2009). Since posthumanism extends "being" to all kinds of

nonhuman entities, it also proliferates ontologies. Even though technology is seen by many posthumanists as "originary" to human (and arguably nonhuman animals, even plants) ontologies, there is at least an equally good and arguably even more urgent case of (re)acknowledging the "originary" character of animality in anthropogenesis. Rather than seeing animality as a primordial state of humans and their bodies that education as a main "anthropotechnics" must seek to overcome, being (with) animals can and should be seen as a necessary condition for (re)learning to be human, thus acknowledging "human-animal co-constitution and mutual reconfiguration [as] being inextricably bound together in vanishing ecosystems", as Helena Pederson writes (Pedersen 2010c: 246; see also Pederson's *Animals in Schools*, 2010a). Animals are thus not only good to "think" with, they are also essential for "learning", as Pederson explains:

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. They may challenge preconceived boundaries between subjectivity/objectivity, inside/outside, and center/periphery in knowledge production, and they may, literally and figuratively, eat away at the artifacts that are simultaneously products and signifiers of knowledge... (Pedersen 2010b: 686)

In other words, "our commonality with all (other) animals is cause for wonder" (Snaza 2013b: 27). Animals help us "unlearn" to be humans in a humanist sense and "relearn" to be human differently, postanthropocentrically, posthumanistically, in exploding "the anthropocentric conceit that the world or cosmos is as it is for us only" (Carstens 2018: 63).

If unlearning to be human involves "jamming" the anthropological machine (cf. Calarco 2007), especially in the sense of rethinking the relationship between human and nonhuman animals through the construction of alternative, posthumanist and postanthropocentric subjectivities, then one might also speak of a "rewilding" of education. Humanism traditionally sees education as a refinement, or a purification process of "deanimalization", or, in short a "de" or "unwilding" of the "barbaric" and "uncultivated" human. By the same token, negligence, a slip in standards, a decline in humanism's central apparatus, i.e. "literacy" mean giving in to a "natural" process of Verwilderung (going feral, returning to some original state of "savageness" or barbarization; cf. Sloterdijk 1999). Current ecological thinking, on the other hand, is strongly advocating "degrowth" and "rewilding" as a "pathway to compassion and coexistence" (Bekoff 2014). The "unwilding" that modern education has caused, according to Bekoff, has produced an "animal deficit disorder", which produces a lack of connection with nature more generally (122-26). Even though nothing may or should replace the firsthand experience of "nature, nonhuman animals, and our shared home" (130), and as loaded and problematic as the word and concept of "nature" may be, pedagogical practice informed by posthumanist theory can and should contribute to a more general ecological awareness by "bewildering education", as Nathan Snaza puts it (2013a: 40).

The main paradox of any humanistic education lies in the fact that it both presupposes the human – education is only possible or available for humans – and promises to "produce" the human and guarantee (its) "humanity". As Snaza writes:

In conceiving of the human as both an ontological given (a being) and the result of a particular process of education, education structurally introduces the necessity of intermediate concepts: the less human, the less than fully human. In order to justify the pursuit of humanization, educators must approach their pupils as not yet or not fully human (otherwise there would be no need for education). This structural gap between the not yet fully human animal and the human that is education's *telos* allows for dehumanization to become a fundamental political fact of modernity. (Snaza 2013a: 41)

This is therefore education's participation in the workings of the anthropological machine – a machine that reproduces what it seeks to overcome by repression. This is what needs to be "unlearned".

The actual encounter with the (nonhuman) animal, the "wonder" and strange empathy this may cause in the best circumstances, should produce an "attention away from issues of cultivating humancentred knowledge, skills, and aptitudes" (Lewis 2018: 122). In doing so, it actually returns us, according to Roberto Marchesini, to our evolutionary "zooanthropological" condition (based on the fundamental evolutionary continuity between human and other animals), in the sense that we learned (we had to learn) to be human, by observation and imitation of (other) animals (Marchesini 2016). What Marchesini calls "zoomimesis" - human imitation of animals and its influence on human (techno-)culture – is a dialogic learning process guided by interaction with nonhuman animals and the world more generally. In and through mimesis, Marchesini argues, "the subject discovers a new existential dimension, capable of undergoing an irreversible conversion in itself" (188), it involves a "dialogue with an alterity" (189). This encounter with the non-human animal "is a slow and painful metamorphosis, one that excites us but also exposes us to vertigo, broadening our horizon but also increasing our vulnerability since it moves us away from our species-specific gravitational centre" (Marchesini 2017: 100). Suspending anthropocentrism in this encounter means unlearning "centuries of humanist propaganda", as the first epigraph by Daniel Cottom claims (2003: 18). In such an encounter there is always a risk and a chance of "dehumanization" – a pedagogical moment par excellence, in its radical and non-instrumentalizable "uselessness", as Cottom says – before the postanthopocentric "relearning" process can begin and posthumanist subjectivities can arise.

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