Undisciplined Animals
Undisciplined Animals: Invitations to Animal Studies

Edited by

Pär Segerdahl

CAMBRIDGE SCHOLARS PUBLISHING
# Table of Contents

Acknowledgements ........................................................................................................................................... vii

**Introduction:** Interventions in Anthropocentrism  
Pär Segerdahl .................................................................................................................................................. 1  

Interlude: Hairy Metaphysics (Pär Segerdahl) ......................................................................................... 9

**Chapter One:** Animals and Education Research: Enclosures and Openings  
Helena Pedersen ........................................................................................................................................... 11  

Interlude: Hector (David Redmalm) ............................................................................................................. 27

**Chapter Two:** Does Learning Language from Humans Make Apes less Animal?  
Pär Segerdahl .................................................................................................................................................. 29  

Interlude: Reflections (and Refractions) on “Airycentrism” (Jacob Bull) .............................................. 49

**Chapter Three:** Living Together: Making and Becoming a Pet  
Rebekah Fox .................................................................................................................................................. 51  

Interlude: Dead Mouse Walking (Tora Holmberg) .................................................................................... 71

**Chapter Four:** In-Your-Face Ethics: Phenomenology of the Face and Social Psychological Animal Studies  
David Redmalm ........................................................................................................................................... 73  

Interlude: FingeryEyes (Eva Hayward) ....................................................................................................... 105

**Chapter Five:** The Imaginative Geographies of the Aquatic: Piscatorial Encounters with Landscape Geography  
Jacob Bull ...................................................................................................................................................... 109
Table of Contents

Interlude: Giraffe Kisses (Rebekah Fox) .......................................................... 133

Chapter Six: Controversial Connections: Urban Studies Beyond The Human
Tora Holmberg .................................................................................................. 135

Interlude: Zoocurriculum (Helena Pedersen) .................................................. 157

Chapter Seven: Sounding Out The Light: Beginnings
Eva Hayward .................................................................................................... 159

Contributors ........................................................................................................ 187
ACKNOWLEDGEMENTS

This book was written with funding from the GenNa Programme of Excellence at the Centre for Gender Research at Uppsala University, Sweden. We are deeply grateful for this support and the fruitful meetings across disciplinary borders that it enabled.

Some of the contributors use photographs and other images. David Redmalm wishes to thank Animal Rights Sweden, and photographer Johan Svensson, for permission to use their images; Jacob Bull wishes to thank Pat O’Reilly and Swan Hill Press for permission to use an image from the book Matching the Hatch (1997); Eva Hayward wishes to thank Allied Whale, College of the Atlantic, for permission to use their photographic materials; finally, Pär Segerdahl wishes to thank the Great Ape Trust of Iowa for permission to use two photographs of the bonobo Panbanisha.

Uppsala, Sweden
1 March 2011
INTRODUCTION

INTERVENTIONS IN ANTHROPOCENTRISM

PÄR SEGERDAHL

An animal studies riddle

In 2008, eight researchers at the Centre for Gender Research at Uppsala University formed the first Swedish animal studies group. Together we organized a number of well-attended animal studies conferences, workshops and courses. These activities brought together influential researchers in animal studies, as conference participants, as keynote speakers and as guest professors; people like Marlene Zuk, Patricia Gowaty, Lynda Birke, Carol Adams, Judith Halberstam, Ralph Acampora, Nina Lykke and Jody Emel.

These electrified meetings across the disciplines made us aware of a riddle about the emerging field of animal studies. The work strikes its practitioners as having important messages to tell about the presence of animals in our modern human lives. In the academic disciplines where animal studies emerges, however, writing about animals characteristically is viewed as a rather narrow and peripheral concern, like writing about farm fences in remote parts of the countryside. Animal studies, it appears, can be experienced as being just as central as it may appear peripheral; just as far-ranging as it may appear narrow. This book searches for the solution to this riddle: how can what easily is viewed as peripheral forms of study have such central significance for practitioners?

A solution to the riddle that can be discerned in the contributions to this book is that animal studies questions the same prevalent perspective that makes animal studies seem peripheral: anthropocentrism. If a human-centred outlook remains unseen and taken for granted, then writing about
animals in education, in ape language research, or in peoples’ homes, will seem a limited and peripheral concern. If the critical potential of such animal studies is sensed, however, then what is sensed is nothing less than a transformed relation to the world of living beings, and to us as participants in this world.

**The emergence of animal studies**

Animal studies is a new and growing field of study. As a result, it is not obvious what animal studies is. The field is in the making and there are divergent views on what it should become, as even this volume, meant to invite graduate and post-graduate students, will demonstrate. One thing is clear, though: animal studies is not a discipline of its own. Rather, these studies emerged more or less simultaneously in several disciplines, such as sociology, geography, biology, art history, education research, philosophy, anthropology, film studies, political science, and gender research.

One can only speculate as to why animal studies emerged in so many disciplines at roughly the same time. One factor may be societal awareness of ecological problems and a tendency to decentralize the human. Another factor may be the cultural turn in the human and social sciences, and the realization that how we relate to animals belongs to how we create meaning, understand the world, and construct identities. A third factor may be the emergence of so-called Science and Technology Studies (STS), questioning traditional nature/culture dualisms and broadening the notion of an actor beyond the human. A fourth factor may be concern among biologists that the name of their science sometimes is misused in problematic comparisons between human and nonhuman animals; a desire to clarify what biology can and cannot say about us and our relations to the great variety of animals. A fifth factor may be the animal rights movement: moral concern about exploitation of animals and the need of critical academic studies revealing broader economic and political patterns in the uses of animals.

Factors can be multiplied, revealing animal studies to be a motley of cross-disciplinary studies of human/animal relations. Certain academic coherence is created through the institution of new journals, such as *Anthrozoos* and *Society and Animals*, and through an expanding number of jointly recognized leading figures, such as Donna Haraway, Kenneth Shapiro, Cary Wolfe and Linda Birke; and also through tracing significant animal tracks
Interventions in Anthropocentrism

in the work of well-known thinkers like Friedrich Nietzsche and Jacques Derrida. Yet, if anything keeps the field together, it is the productive incoherence that it creates in the disciplines where it appears. Although animal studies draws on and uses notions, methods, and theories in the disciplines where it emerges, the fertility of the field lies in how the focus on animals and human-animal relations displaces the habitual human-centred outlook on life and world prevalent not only in the academia. The authors contributing to this book exemplify such displacements in their own work, in a joint attempt to display the vital meaning, or meanings, of animal studies.

**Undisciplining effects and efforts of other animals**

If animal studies is important, it is because animals are important. The contributors point out that animals are not merely inhabitants on the outskirts of a fundamentally human world. They have their own weighty existences, and the world is a variety of animal worlds too. We are thus not simply “deconstructing” human representations of animals, but collect reminders of how animals, as we can know and affect each other, have their own forms of life, interlaced with the human ones. Examined more closely, animals become undisciplined in that they begin to disturb how we habitually draw lines between “them” and “us,” not only as academics.

Questioning a habitual human-centred outlook comes with both linguistic and moral problems. Can we continue to talk about “humans” and “animals,” as if there were two separate categories? Language is full of anthropocentric traces and traps. The authors of the chapters made their own choices how to handle this dilemma. Some talk about “animals,” others about “nonhuman animals”; some talk about “other animals,” while others prefer to talk about the “more-than-human.” Regardless of which choice one makes, however, it is difficult to remain satisfied. Adopting a consistent technical terminology would indicate that a new habitual “ontology” is underway, insensitive to the hum-animal undercurrents that make animal studies so significant for its practitioners. So do not expect to find in this volume the terminological uniformity that often is demanded of academic writers. Perhaps rather than interdisciplinarity or transdisciplinarity, it is undisciplinarity that is at the heart of the matter. What may appear as terminological choices are most often temporary linguistic improvisations. Rather than relying on a common technical terminological appara-
tus, writers in animal studies typically invent their own neologisms as they go along, for example, “companion species” (Haraway), “zoontologies” (Wolfe), “zoocurriculum” (Pedersen) and “animetaphor” (Derrida). These linguistic creations are not defined terms but are meant to be striking where they occur and to be suggestive of novel and more animal-sensitive outlooks.

Animal studies also accentuates moral and political problems regarding the human use of animals in the food industry, in research and education, in entertainment and tourism, and so on. For many, contributing to radical solutions to these problems is the overriding justification of animal studies. But no one in animal studies can be insensitive to the problems. Becoming aware of the weight of other animal subjectivities challenges the self-righteous uses of animals and calls for a new responsibility towards all animals. It is as if a moral wound had been opened that ought never to heal. We have become vulnerable to what I, at this moment, want to call, the other animals.

**Synopsis of the chapters**

Each chapter in this book can be read independently of the others, but the productive motley of animal studies appears only by reading several. The authors cover a spectrum of disciplines: education theory, philosophy, cultural geography, social psychology, sociology, and film studies. They use their own work in these disciplines to exemplify how animal studies displaces human-centred outlooks – how animals can become undisciplined actors in the academia.

*Helena Pedersen* discusses how animals are used in education, but also how they can disrupt conventional education and our ideas about the educable subject. She starts with addressing three areas of animal presence in education: animals as “sites of sentimentality” in early childhood education (and beyond); animals as teaching and learning tools and as scientific objects in the classroom; and finally animals as antithesis to the human in discourses of humanity. By suggesting more critical questions about these conventional positions of the non-human animal, her chapter challenges prevalent forms of animal presence in education. Through her own original lenses of the “biopalimpsest” and the “zoocurriculum,” she proposes alternative ways of looking at education where animals might play new and
more critical functions. She concludes the chapter with discussing our expectations about the educable subject: must it be human?

Pär Segerdahl continues the discussion about educable animals. His chapter is about the famous apes of ape language research and their critical philosophical potential. Are these talking apes on the brink of a hairy humanity? Or does language imprison them in a no man’s land that neither is human nor animal? Ape language research is easily understood and practiced as an attempt to bridge the human/animal gap by teaching our closest living relatives our most precious possession, language. However, according to the story Segerdahl tells of this research, apes cannot be taught to speak. In the few successful cases of ape language research, the apes spontaneously begin to speak, as human children do it, without prior linguistic instruction, in the mere living of their lives. Researchers thought they could educate apes to use our language, but success was achieved by avoiding training: by cultivating more personal human-animal contact zones. So, this linguistic essence of our humanity that we tried to transfer to the apes through education: was it perhaps only an empty ideal?

Rebekah Fox explores human-animal contact zones more widespread than those of ape language research: our lives with pets. Her point of departure is how geography traditionally is split between human and physical geography, with animals falling between the central concerns of either party and often ignored by both. In her attempt to overcome this neglect through work in animal geography, Fox explores pet-keeping in contemporary Britain as an important relationship where animal presence is central and cannot be ignored. She describes the practices of breeding, discipline, care, control and play through which animals become “pets.” Thereby, she engages with recent efforts to re-think ideas of “nature,” “culture,” “human” and “animal,” recognizing the social as more than human. Her chapter vividly describes the many roles that animals can play in everyday human relationships, identities and lives; the easily unnoticed importance of the pets we face daily... and who face us.

David Redmalm discusses faces and facing each other. Meeting the eyes of another is a significant event, regardless of whether the eyes you look into, or that peer into yours, are those of another human or those of another animal. Social psychology works with meetings between living beings and what these meetings give rise to, but traditionally the discipline has focused on meetings between humans exclusively. Lately, however, a dis-
Discussion about Emmanuel Lévinas’ phenomenology of the face has challenged this preoccupation with human meetings, as if meetings with animals were shadowy semi-, proto- or pseudo-meetings, and not full-blown social ones. Redmalm’s chapter is a thought-provoking discussion of the notion of “face” and what a broadened Levinas-inspired phenomenology of the face can teach social psychologists about meetings across species borders.

Not all animals have what we recognize as faces, and to these animals the notion of “meeting the eyes of another” rarely is applicable. These animals may spend their lives in another medium than the airy one of human existence: in soil, or in water. Nonetheless, hum-animal contact zones arise even here; not only across species borders, but also across media, such as air and water. Jacob Bull discusses the landscape of the river as such a contact zone between angler and fish. It is inviting to view the river simply as a physical part of the landscape. But landscapes are shaped also by our activities in them: by our imaginations, skills, sensitivities and passions, dwelling in landscapes and interacting with those who inhabit them. Bull discusses the ways that anglers and fish meet and co-construct landscapes. His chapter investigates how anglers imagine aquatic space and how they communicate across the species divide as well as through the surface between air and water. It also examines the inevitable politics of imagining alternative – aquatic – forms of life.

Human presence in nature can be interpreted as an expansion of human society into animal landscapes where humans do not properly belong. But the opposite interpretation is also possible, when animals inhabit the spaces that we consider the proper human ones: our urban spaces. How do we handle the controversial hum-animal connections that arise in the social circumstances of city life? Tora Holmberg is studying animals and humans in the city park, as an Archimedean point allowing her to apply classical sociological methods to move sociology’s own habitual preoccupation with society as a purely human affair. The city park that allows her to argue how animals should be integrated into the sociological notion of society is “Slottsskogen,” in one of Sweden’s biggest cities, Gothenburg.

The book ends with a meditation on humpback whale photography. Eva Hayward describes her chapter as a series of ruminations on animals and photographs. She is, as Wittgenstein said is required in a philosopher, in “instinctive rebellion against language.” Although she writes about photography, Hayward insists that she is listening to the photos, sounding out the
light. Her rigorously undisciplined language turns out to be far from an arbitrary construction, however. By avoiding the easy habitual paths through language, her chapter suggests that our relation to photographed animals is not only visual and that the relationship between photo and animal is not purely representational. “Looking at” images of humpback whales, Hayward suggests that the photographs, and consequently the whales, invite other sensuous readings. How might we listen, touch, and move with these photographs? How can these whale photographs compel us to make sense of them through a whole range of sensitized and sensible material capacities of our own bodies?

**Genealogy of the book and the appearance of interludes**

The chapters were written and rewritten during almost a year, and our visions of the book changed during the course of a series of seminars and editorial meetings. At the beginning of the process, we saw the book as a textbook that would introduce animal studies to graduate and post-graduate students. The book would, in the style of many introductory textbooks, make the reader acquainted with basic notions, important theoretical ideas, and significant scholars in the field. Since our disciplinary backgrounds vary, the authors would be responsible for presenting animal studies as it emerged in their own discipline.

But then the riddle mentioned above began to haunt us. And when the essential undisciplinarity of the field dawned upon us, the idea of writing even a semi-conventional textbook had to be dismissed. Instead, each of us could only exemplify, by our own work, how animals made us undisciplined in our discipline. The book, then, can be read as a series of confessions: this is how I and my basic outlook changed through the efforts of unruly animals, neither of us happily adapting to human-centred categories and perspectives. We hope that the graduate and post-graduate students that we imagine as our main readers will recognize the same productive tensions in their work; that the book will help them use their tensions more consciously, and not hide them as shameful breaches of disciplinary rules. The chapters are invitations to animal studies, addressed to emerging scholars in a variety of academic fields who are interested to see how focusing on animals may vitalize their disciplines.

In our own case, the creative use of tensions gave birth to more perso-
nally written interludes. These short pieces often describe an experience, or a notion, or a thought that secretly drives our work but cannot be digested completely in scholarly form. These interludes reveal animal studies to transgress not only disciplinary borders, but also borders between the academic and the personal.

We decided to give the interludes to each other. They are not preludes to the chapters they precede, although there are connections to the subsequent chapter. The pieces are meant as interludes where the reader can pause and meditate between chapters: transgress borders between the scholarly and the personal.
I first visited the language-using bonobos in August 2001, when they still lived in Atlanta. As a newly arrived visitor, I was told by William Fields to sit quietly and just observe the apes. A chair was placed outside an enclosure where Panbanisha spent the morning with her two sons, Nyota and Nathan. Fields instructed me loudly and clearly, in the presence of Panbanisha, so that the situation would be clear to her. However, after a while, a previously employed caretaker came by to visit Panbanisha. She was looking for a keyboard to talk with her, and since I had seen one, I felt stupid just sitting there. So I stood up and began to explain, in broken English,
where a keyboard could be found. This did not seem to please Panbanisha. Disapprovingly she pointed to a lexigram on the keyboard she had inside the enclosure. Since I did not master the keyboard, I asked the former caretaker what Panbanisha was saying. She stretched to see, and with obvious embarrassment, she told me that Panbanisha was saying QUIET on the keyboard. I experienced waves of shame (because I had done wrong) and metaphysical vertigo (because an *animal* told it to me).

A little later another incidence occurred. When Panbanisha was out of sight, her sons enticed me to play peek-a-boo with them. While we were doing this, the younger of the two, Nathan, suddenly stretched out is hand towards me. Although I was not allowed to, I could not resist the temptation to touch it. Nathan immediately withdrew his hand and ran to Panbanisha. Given her earlier tendency to watch over my conduct, I worried what would happen next. After a few seconds, Panbanisha came running towards me, dragging the keyboard behind her. She hit the enclosure just in front of me with her fist, sat down, and placed her finger on one of the lexigrams. Fields, who was then in the kitchen area, asked Panbanisha, “Do you want to communicate with Pär?”, to which she responded with a high-pitched *eee*. I searched for a keyboard to read the English translation printed below the lexigram. This took some time and I feared Panbanisha would remove her finger from the symbol before I could identify what she said. But she firmly kept her finger on the lexigram. Not until I shouted to Bill, “She is calling me a MONSTER,” did she remove the finger. I once again experienced waves of shame and metaphysical dizziness.

After this experience, I could no longer see animals as living merely on the periphery of a fundamentally human world. I could not watch an animal, and certainly not an ape, without experiencing that my taken-for-granted view of life was displaced by that animal. Its existence had a *weight* I had not perceived before.
Paraphrasing Lévi-Strauss, Tapper (1994) has argued that animals are not only “good to think with”, but also “good to teach and learn with” (51). Still, “the question of the animal” (Wolfe 2003)\(^1\) has so far not attracted a great deal of attention in education theory, and education research has to a much lesser extent than other social and behavioural sciences (such as sociology, anthropology, and psychology) contributed to the dynamic theory development of animal studies. This could partly be explained by “humanistic” traditions and ideals that at least since the Enlightenment have been almost a fetish in education. In accordance with these ideals, formal education has, ostensibly, been preoccupied with the task of cultivating humanity, with becoming-human by fostering autonomous and rational human subjects, and there has been little space for taking the animal question seriously.\(^2\) Nevertheless, at a Nordic education research conference I attended some time ago, the presence of animals was striking: They appeared in a session on Kantian education; they appeared in a session on ecosystems education, and they appeared in a keynote on geography and mapping as

---

\(^1\) As Howard (2009) notes, “the question of the animal” may more accurately be reformulated as “the flock of questions that circle around the term ‘animal’” (Howard 2009: 1).

\(^2\) See Pedersen (2009) for a development of this argument. Critique of the idea of “becoming-human” has been articulated within childhood sociology as well as within animal studies/queer theory.
a world-making tool. Yet no questions were raised as to what all these animals are actually doing there; and what they are doing to us, to scholarship, and to education as a field of research and practice.

The presence of animals in education and education research can take different forms, and do different work. My intention with this chapter is to scrutinise and render problematic this work. I will focus on roughly three main areas of animal appearance:

- Animals as sites of sentimentality (e.g., in research on early childhood education);
- Animals as teaching and learning tools (e.g., as scientific objects or as aids in animal assisted therapies or humane education practices);
- Animals (and animality) as a trope and an a priori “antithesis” of the human in discourses of humanity.

Each of the above areas has its specific problems, delimitations, and enclosures. I will here briefly mention just a few of them, and then point toward a few other directions with a potential to open up for new questions regarding human-animal relations and education. These questions arise from alternative ways of looking at education through the lenses of “biopalimpsest” and “zoocurriculum,” but also through disturbing our notions of who is the educable subject.

**Animals as sites of sentimentality**

Animals as sites of sentimentality is a familiar topic in, primarily, early childhood education. Children’s books, animated media, and other modes of storytelling (not to mention advertisements and other commercial messages directed towards children) are often imbued with more or less anthropomorphic representations of animals. In this context animals themselves

---

3 Although the present chapter is primarily concerned with education as a field of scientific inquiry, it also addresses educational practice. This “double articulation” to some extent reflects the traditional intimate entanglement of Swedish education research with its related professional practice (i.e., teacher education).

4 I thank Eva Hayward for alerting me to the idea of animals as “sites of sentimentality” in discourses of childhood.
are not the primary focus of interest; rather, they become carriers of normative messages connected to moralising or socialising processes that are thought to be more easily internalised by children if presented in the form of animal imagery. At the same time, these representations offer a confirmation of preconceived ideas of the “natural” bond between children and animals as well as the fantasy of reconnecting with the primordial and the innocent (which to some extent both children and animals can be said to represent in Western culture) through this bond. In this manner, both children and animals are constituted as sentimental subjects and the world of children’s fiction a site of continuous production and reproduction of these subjects.

Sentimentality is productive not only in the socialisation of “real” children through formal, non-formal and informal education, but is, according to Edelman (2004), haunting the image of the Child as such, as well as the compulsory heteroreproductive future it signifies. I want to add to Edelman’s analysis that animals are significant components in the ideological production of the sentimental symbol of the Child in much the same way as in the socialisation and education of real children. Children’s picture-books, from the classical tales of Beatrix Potter to more recent Disney narratives (such as *The 101 Dalmatians*) often operate on both levels simultaneously, using animal nuclear family constellations to tell stories as a lesson in character education and celebration of heterosexual family life of which the Child, naturally, is the main icon. It is a form of futurism that, through education, is both reproductive and reproducing: an ideology of (human) species reproduction that feeds on reproducing itself infinitely.

Embedded in this ideology of reproduction are patterns of consumption, including the symbolic, visual, and material consumption of animals; omnipresent in socialisation processes and as compulsory as the heteroreproductive future itself. When the picture-books give way to other modes of educational animal stories as the children get older (cf. Pedersen 2010a), what appears to remain stable is the pivotal role of the animal in the interweaving of two hegemonic forms of reproduction: the reproduction of

---

5 Sentimentality can, of course, be productive in a number of ways, including as a driver of social change.

6 This is not necessarily a linear process; rather, a multi-layered one that may include several complexities, resistances, and overlaps.
(certain) species, and the reproduction of capital. While still (especially in the animal industry’s marketing strategies) being recognised as caring and cared-for “sentimental subjects” with physical and emotional integrity and intimate relations of their own, animals are, on a massive scale, incorporated as symbolic and material resources of production and reproduction in a capitalist regime – a regime that may actually utilise animal sentience and subjectivity to maximise economic output (Williams 2004). In socialisation processes these seemingly contradictory dimensions sit comfortably together when possibilities and promises of emotional identification with animals are relied upon to market animals as objects of visual or material consumption (Pedersen 2010a). The diverse sites and strategies of the animal economy (Emel and Wolch 1998) frequently produce such messages. The following fieldnote excerpt, taken from my own ethnographic field studies in upper secondary schools (Pedersen 2010a), describes an observation from a study visit to a zoo:

During the dolphin show, the dolphins are made to perform different tasks while background music is playing. “Dolphins are cuddly animals and it is important for them, just as it is for us, with closeness and tenderness. So the best moments we have are down in the water”, explains one trainer. She “dances” with the dolphins, kisses them, and rides across the pool standing upright on a dolphin’s back. We are told that the basic premises for good cooperation between human and animal is respect, trust, and having fun together. After the show, some of the students approach their teacher John and ask him to help them so that they can pat the dolphins, or get a job in the show. (Field notes)

The zoo’s manifestation of human-animal intimacy, displayed in the dolphin show, has another dimension to it: to maximise the entertainment

---

7 In this context, I refer to “species” as those categories of animals that provide use value, exchange value or commodity value in capitalist society, and to those categories of humans who are in a position to consume these animals and/or derive economic value from them, thereby driving economic growth.

8 Williams’ study shows how animal sentience, rather than being a reason for liberating animals from the exploitative practices of the animal agricultural industry, has become an effective measure to increase the industry’s production levels.
and economic exchange value of the animals\(^9\) under the guise of harmonious human-animal coexistence and “collaboration” (Desmond 1999; Pedersen 2010a). The show presents an effective “schooling for the emotions” (Kramer 2005) ensuring the continuity of animal commodification within a didactic regime of sentimentality.

**Animals as teaching and learning tools**

Animals as teaching and learning tools in education mirror a history that can be traced back to exploitative human-animal relations appearing in, for instance, medical and veterinary education, as well as in certain behaviouristic and experimental psychology traditions of education research. These practices point to the material dimension of using animals either as dissection “specimens” for hands-on training of certain skills in life science classrooms, or as other forms of “scientific objects” in biology and ecology curricula. In both cases animal bodies become objects of knowledge whose meanings are actively generated by an educational “apparatus of bodily production” (Haraway 1991). In the process, animals are incorporated in the natural science curriculum as carriers of a collected body of authoritative scientific knowledge about laws, conditions, and functions of what we call “nature.” In animal-assisted therapy and humane education\(^10\) practices, on the other hand, animals are used for purposes of enhancing children’s social, cognitive or emotional development. Embedded in these efforts is an idea that animals can be used in schools as a civilizing strategy (cf. Animals & Society Institute 2007) to assist education in its task of forming “good citizens,” assuming that education can, and should, be an instrument for bringing about a certain desired future society.\(^11\) Here, I will focus on animals as “scientific objects.”

---

\(^9\) This is not to say that all zoos are profitable, but that they are normally operating on a production/consumption logic similar to other economic actors in society.

\(^10\) Humane education, an approach to teach children care and compassion toward animals through formal and non-formal education, originated around 150 years ago as part of the organised animal protection movement (Unti and DeRosa 2003).

\(^11\) For a problematisation of the instrumental view of education, see Biesta (2006), Pedersen (2010b).
One conspicuous step in the process of transforming the animal into a scientific object is making its body available for experimentation work. The animal experimentation issue enters the education context at a practical as well as a theoretical level. At the practical level, students carry out hands-on animal experimentation exercises or other ways of handling animals in a faux laboratory situation as a part of the formal curriculum. At the theoretical level, students may participate in lectures or discussion seminars on animal experimentation as a research method, sometimes including the ethical issues arising from these methods. These two educational settings contribute different modalities of knowledge that work together (but may also create contradictions) in the scientific objectification of the animal. In the process, they calibrate the framework within which the possibilities of human-animal relations are regulated. The following quote from a student lab report of a crayfish dissection exercise, taken from my fieldwork in schools (Pedersen 2008), illustrates this point:

We discussed why crayfish turn red when they are boiled and we concluded that it is because the color of the shell is made from red, yellow, brown and blue pigment. The green, yellow and blue is susceptible to heat. So after boiling only the red and yellow remain. Therefore, the crayfish turns into a tasty red color. Lina [the student’s dissection partner] would have liked [to dissect] a living crayfish, which would have made it all the more exciting. But I don’t know if I agree with that. But we had a fun discussion. (Excerpt from student lab report)

The students above performed the dissection exercise in accordance with the instructions they had received, which structured their interaction with the animal as a compilation of body parts to work on (cf. Solot and Arluke 1997). Classroom discussions on animal ethics may provide more subtle means of enabling certain human–and animal–subject positions, while disabling others. The example below is my fieldnote excerpt from the orientation day in an upper secondary vocational animal caretaker programme (Pedersen 2008), when all new first-year students were gathered to receive introductory information from the school staff. In the end of the information session, one of the teachers addresses the ethics of animal experimentation by a pedagogical “performance” in which his students are coerced not only to co-act, but, implicitly, to comply:
The teacher approaches a student in the group. He asks her name. Then he creates a scenario when her future child has lost his fingers in a harvesting machine and says that the surgeon at the hospital where she takes her child informs her that he practised [his micro-surgical technique] on mice during his training. The teacher asks the student what she will tell the surgeon to do: “Suture” or “Not suture”? “Suture!”, the student replies. The teacher faces the rest of the student group: “Is there anyone among you girls, future mothers, who would say something different?” Then he tells the group how the training on mice is carried out: the mouse is anesthetized and it ends with “letting the mouse go to sleep”. (Field notes)

The values education stage above is set by the teacher and the role of the students is to deliver the answer already laid out by the scenario and known to everyone. The pedagogical narratives on which the scientific objectification of the animal relies can be viewed in terms of what Kheel (1993) has labeled “truncated stories” that ask students to reflect on certain issues or dilemmas, but not others. These stories commonly decontextualise, naturalise, and depoliticise processes of animal objectification by obscuring the power arrangements that produce them, dislocating these processes from social, historical, and political forces that give them meaning.

**Animals as antithesis in discourses of humanity**

A third way in which animals typically appear in education is the use of ideas of animals and animality as an invisible companion and antithesis in discourses of humanity. Throughout the history of education research, from Vygotsky to Noddings, in works on psychological development, sociocultural theories of education and philosophy and ethics of education, the animal appears as an anti-dote and anti-issue and yet paradoxically significant as a way of reinforcing the assumption of human specificity, uniqueness and superiority. The following Vygotsky quote on psycholinguistics and child development might, with all of its Cartesian undertones, illustrate this point:

Köhler found that a chimpanzee can imitate only those intelligent acts of other apes that it could have performed on its own. Persistent training, it is true, can induce it to perform much more complicated actions, but these are
carried out mechanically and have all the earmarks of meaningless habits rather than of insightful solutions. The cleverest animal is incapable of intellectual development through imitation. It can be drilled to perform specific acts, but the new habits do not result in new general abilities. ...drill imitation is carried out through repeating trial-and-error series, which show no sign of conscious comprehension and do not include understanding the field structure. In this sense, it can be said that animals are unteachable.

In the child’s development, on the contrary, imitation and instruction play a major role. They bring out the specifically human qualities of the mind and lead the child to new developmental levels. (Vygotsky [1934] 1986: 188, emphasis added)

With a slight overstatement, it could even be argued that the entire framework of the humanist educational ideal and its accompanying system for organised, institutionalised child upbringing is nurtured by an expanded, multilayered “textbook” of animal bodies and tropes; an “animal script,” or “biopalimpsest”\(^{12}\) of teaching and learning – that is; clusters of knowledge forms claiming access to the animal, materially or discursively, as well as educational authority. Since these knowledge clusters correlate with particular institutionalised human-animal practices, that have taken shape in specific historical-material moments and are subject to resistance and negotiation as part of ongoing ideological struggles taking place over time, they also contain possibilities of their own overwriting, erasure, or transition. The realisation of these transitional potentials of the educational biopalimpsest is, however, commonly inhibited by vested economic interests. In analogy with Armstrong’s (2007) conception of the “welfare animal,” a hybrid species created from a series of quality-control processes, management strategies and corporate values in the animal industries, I suggest that what emerges from the biopalimpsest is an “educational animal,” i.e., an animal with certain instructional qualities created in a gi-

\(^{12}\) A “palimpsest” is a manuscript written on a surface from which an earlier text has been incompletely erased, with traces from the earlier text legible through the later over-writing.
ven educational setting or moment for specific normative\textsuperscript{13} purposes, and used to mediate certain fragments of knowledge while obscuring others. The “educational animal” appears in the interface of scientific and commonsense knowledge\textsuperscript{14} about animals, especially in educational situations when scientific “facts” do not entirely suffice to explain and legitimate the accessibility of animal bodies for various human purposes such as meat consumption, medical experiments, and hunting (cf. Pedersen 2010a), and its presence allows us to rest comfortably with human supremacist assumptions and their embedded rationalisations of animal exploitation and use.

What is thereby created may be called a generic zoocurriculum;\textsuperscript{15} a curriculum that structures the selection and ordering of a shared frame of reference of human-animal relations and presents it in chunks suitable for dissemination, consumption, and digestion. In this manner, the zoocurriculum is involved in a form of boundary work not only positioning the “human” in a different ethical and ontological space from that of the “animal,” but also reaffirming human privileges in relation to other species. Paradoxically, this boundary work may occasionally employ discourses of human-animal continuities to do its job, as in an information leaflet about an exhibition entitled Between us predators (“Oss rovdjur emellan”) (Elander et al. 2003) that was the target of a study visit for one of my field schools:

The ambition of the leaflet was to refute fears of and prejudices toward “the five big predators” in Sweden (i.e., bear, wolf, wolverine, and lynx. The fifth one, as claimed by the leaflet, is the human being). In this vein, the leaflet states that “We [human beings] are also predators” and in a “fact column” the human being is described as an omnivorous animal and a predator. To

\textsuperscript{13} These normative purposes can include, for instance, moral, social, emotional, attitudinal, behavioural, cognitive, or analytical dimensions.

\textsuperscript{14} I refer to a Gramscian understanding of common sense, that is, conceptions of the world that are often fragmentary, incoherent, and inconsequential (Gramsci 2000). Commonsensical conceptions are often contradictory (containing elements of truth as well as elements of misrepresentation) and are accepted and lived uncritically. Many elements in common sense make situations of inequality and oppression appear natural and unchangeable (Forgacs 2000).

\textsuperscript{15} What I call the “zoocurriculum” is an elaboration of the “hidden curriculum,” a central concept in critical education theory that I have previously applied and developed in the context of human-animal relations (Pedersen 2010a).
underscore and enhance the predatory determinism in humans, a recipe for a reindeer meat dish is included in the text. (Field notes)

In this manner, the zoocurriculum (re-)produces and circulates a certain repertoire of “truths” about human-animal relationships, such as “meat consumption is natural/necessary for human survival,” “if we did not carry out animal experiments, we would die from simple infections,” and “hunting is an innate instinct in the human being” (Pedersen 2008; 2010a). The zoocurriculum draws on formal science curricula, yet is too inflected by commonsense knowledge production about animals (in school and elsewhere) to be said to be fully a part of it. The zoocurriculum is not simply a product created at the education policy or authority level; it is, more importantly, a lived educational experience co-produced among actors in school (students included) within their daily interactional activities; an experience that is given meaning precisely by its process of collective formation.

The “animal question” as an educational question

Drawing on poststructuralist education theory, I suggest that the animal question can be viewed as a form of “unconscious” (Bergstedt 2009), or subtle, knowledge in much educational theory and practice. The failure to problematise what the trope of the animal means, what work it does, and where it takes both humans and animals in educational discourses closes off novel and unexpected inquiries into how animals have shaped and continue to shape our ideas of what education, human development and knowledge production is and can be. What forms of knowledge emerge from the “educational animal”? What counts as “valid” knowledge about animals in a given educational setting, and how do these knowledge assumptions shift? 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? How do animals alert us to the necessary incompleteness, indeterminacy, and unpredictability of education?

Furthermore, how are the dynamics, emotions, and social relations of animal use played out, negotiated, and resisted in educational practices? How do animal bodies function as sites of knowledge accumulation and circulation? How does the knowledge economy rely on the mass-production and utilisation of animal bodies? What would a critical theory and
practice of human-animal education look like? The attention to animals and
animality in conceptualisations of pedagogy, knowledge production and
knowledge use requires us to seriously rework notions of humanity, anima-
ility, and interspecies entanglements as educational questions.

I want to end this chapter by addressing a piece of education research
that, from its own particular perspective, takes on the “animal question”
as a concrete problem, or, rather, potential for education. By asking “Must
an educated being be a human being?”, Heslep (2009) not only theorises
what would happen to education if the notion of the educable subject lo-
gically could be extended to include nonhumans, but also argues in favour
of such a position, as well as addresses its implications for the attribution
of personhood to nonhumans, their relations with human caretakers, and
their rights. This evokes the question not only how to think differently of
animals in education discourse, but how animals can make us rethink con-
ventional notions of education.

Heslep notes that between 1650 and 1850, the term “education” in
the English language could refer rather generally to the proper rearing or
shaping of growing things, “including children, silk worms, shrubbery,
and beards” (Heslep 2009: 334). By the twentieth century, however, the
English-language community started to reserve “education” for referring
to the development of knowledge and understanding in human beings spe-
cifically. Heslep argues that this later, narrow definition of “education” is
misleading since “it may deter us from seeing that some non-human beings
might share with humans the features by which humans are said to be edu-
cated” (Heslep 2009: 339). Starting from an understanding of education
as “learning… a disposition to act, freely and rationally, on the basis of a
form of life that is estimable for the learner” (330), Heslep proposes that
this definition may apply to some non-human animals (and even to some
appliances as well), such as porpoises, horses, dogs, raccoons, and parrots,
who can engage in social learning, reasoning, and decision-making with re-
spect to a preferred form of existence. Moreover, Heslep argues that if a hu-
man or non-human being is capable of developing as a “voluntary concrete
agent” through education, and providing that this education will not violate
other educable beings’ claims and rights to education or impose unreaso-
nable costs on others, then the being is *entitled* to education. If non-human
animals are seen as not only (potentially) educable subjects, but subjects
with justifiable claims and rights to education, what would the implications
be for educational practice? Heslep proposes a broadened range of educational activity in society based not on a government-school model, but on a familial model of education, according to which

...purchasers of educable non-human beings would be responsible for the education of their animals and machines in the way that parents once were responsible for the education or training of their children. But purchased educable animals and machines, given that they are to be developed as voluntary concrete agents, would not belong to their owners as pieces of property. Rather, they would belong to them in the way that children belong to their parents.... In other words, the purchase of an educable non-human entity would establish, not a proprietorial, but an educational relationship. Thus, upon the purchase of such an entity, one would acquire the duty to care for its education. (Heslep 2009: 347)

This duty of human guardians to assume responsibility for the education of the animal under their care would, more specifically, be constituted as follows:

Purchasers of educable non-human beings would have to keep in mind that their primary aim is to help those various entities to become severally inclined to make, freely and rationally, decisions on the basis of a beneficial way of existence. Different entities likely would need to acquire different beneficial ways of being, and they probably would need to be taught by different methods. For example, animals that might develop operant conditioning to some extent perhaps would need a supplement of activities that would enable them to learn to make voluntary decisions with respect to the respective ideals, practices, and technologies of relevant forms of being. Unlike zoo “keepers,” interested sociobiologists and animal psychologists could help purchasers by conducting investigations on which non-human animals are educable, which pedagogical methods work with which animals, and which kinds of voluntary agency are beneficial for which animals. (Heslep 2009: 347)

From both an animal studies and an educational perspective, Heslep’s discussion is extremely problematic in terms of the hierarchy it reconfigures, but still retains, between (presumably) educable and non-educable