Who Are We Talking About Anyway?
Anthropomorphism and Its Implications in Wildlife Films and Biology Textbooks

Vem är det vi egentligen pratar om?
Antropomorfism och dess implikationer i naturfilm och läroböcker i biologi

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Abstract

In this study I investigate anthropomorphism and its use in biology textbooks and wildlife documentaries. Through the use of critical discourse analysis and with the help of three analytical tools, Hillevi Ganetz's concept of the cultural boomerang, gender and sexuality, I attempt to investigate to what extent anthropomorphism is used and which implications can be found in the material.

My analysis shows that both the textbooks and wildlife films generally avoid explicit forms of anthropomorphism but that anthropomorphic terminology and language is quite common in the context of reproduction, sexual activities and parenting. In the textbooks the authors often seem aware of the anthropomorphic nature of some words and therefore use quotation marks as a strategy to both use the humanizing terms but still show their ambivalence with them.

In the essay I argue that the textbooks and the wildlife films' use of anthropomorphic terms often reinforce gender stereotypes and naturalize heteronormative discourses. The usage of human, culture-specific terms seems to be a way of explaining complex concepts, but the connotations are problematic from this study's feminist perspective in its naturalizing tendencies.

Sammanfattning på svenska

I den här studien undersöker jag användandet av antropomorfism i naturfilm och läroböcker i biologi. Med hjälp av kritisk diskursanalys och tre analytiska verktyg, Hillevi Ganetz kulturella bumerang, genus och sexualitet, försöker jag ta reda på hur vanligt användandet av förmänskligande språk är samt vad som diskursivt antyds genom användandet.

Min analys visar att antropomorfism i dess mest uppenbara former i allmänhet undviks i materialet men att förmänskligande terminologi och formuleringar förekommer i samband med reproduktion, sexuella interaktioner och föräldraskap. I läroböckerna verkar författarna ofta vara medvetna om deras ordvals förmänskligande natur och använder därför citationstecken som en strategi. Därmed används de antropomorfiska termerna samtidigt som de uppvisar en tydlig ambivalens gällande dem.

I uppsatsen hävdar jag att läroböckerna och naturfilmmernas användande av antropomorfiska termer kan förstärka genusstereotyper samt naturaliserar heteronormativa diskurser. Användandet av mänskliga, kulturspecifika ord kan tolkas vara ett sätt att förklara komplicerade koncept. Dock är användandets diskursiva konnotationer, som naturaliseringsprocessen, är problematiska ur det feministiska perspektivet jag utgår från i denna studie.
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1. Introduction & Background

1.1 Introduction

One very early summer morning I, too wakeful to return to sleep, decided to ride my bike through the southern outskirts of Karlstad. Anticipating who I would meet, I brought a bag of bread with me. I did not have to ride for a long while before I saw the crows. The first ones I drove by where likely a couple, and when they saw me throwing pieces of bread their curiosity overcame their wariness. In order to devour the delicacies I had brought them they came astoundingly close to me, allowing me to see into their deep brown eyes. Further away on my trail, I threw pieces of bread to a single crow who happily hopped after them, filling its beak and crop. After it had gathered enough, the crow flew to a couple of other crows, one of which probably was a fledgling that depended on its parents to find food.

When I use words such as curiosity and happiness when describing non-human animals, in this case hooded crows, I imply a sense of understanding of how they feel and think. However, since I cannot read their minds or have an idea of how a crow experiences the world it is not unlikely that my interpretation is colored by my own human experience. This is called anthropomorphizing, which can be defined as the act of attributing human thoughts and emotions on non-human objects (Libell 2014, 141). While anthropomorphism is the act of attributing any non-human actors or object the appearance or mental attributes of humans I will focus on the latter form and its application on non-human animals.

As I will describe in the section 2.1 anthropomorphism has its roots in Christian theology and has also been used in the context of scientific fields such as Physics. In this study, however, my main focus is on how anthropomorphism is used within the field of ethology, the science of non-human animal behavior and psychology (Oxford English Dictionary, 2014).

My reason for choosing the subject of anthropomorphism and its applications in ethology in particular stems from two different interests. For one, I have for several years had a large interest in Biology, and related scientific fields, both within the school system and as a hobby. This in turn developed into more specific explorations regarding behavior and intelligence, in particular the minds of birds (as my introductory retrospection might suggest). Secondly, my choice of study is also based on a personal interest in feminism and LGBT-issues where I have struggled and reflected on my own identity and
everyday interactions in the gendered, heteronormative world. Strangely, these two interests have rarely crossed paths in my thoughts, so this study is not only a scholarly challenge for me but a personal one as well: has my relationship with the natural sciences been one where I have only uncritically absorbed facts and have I missed important aspects regarding social issues?

The material which I will analyze is educational texts in the forms of textbooks and wildlife documentaries. These constitute two forms of media which is often used in schools for educational purposes and are therefore quite relevant for my own interest with its roots in the classroom setting. As I will describe more in section 1.3, the study of documentaries and textbooks is something that has engaged several scholars, both outside and inside gender studies.

### 1.2 Research Questions

In this article I will attempt to answer two questions: To what extent is anthropomorphism utilized in textbooks and wildlife documentaries? Which discourses connected to gender and sexuality are reinforced through the use or lack of use anthropomorphism in the material?

### 1.3 Background & Earlier Research

How is the issue of anthropomorphism and non-human animals relevant for gender studies? The topic of non-human animals has overall been a larger concern for several years in several fields outside of the natural sciences. Indeed, some scholars describe an “animal turn” within gender studies and other areas (Pedersen 2014, 13). Biology, and perhaps the study of the animal world in particular, often constitutes an arena in which human norms and values are inscribed onto non-human actors, thus reinforcing the idea that gender inequality, cisnormativity, heteronormativity and other structures are in some way “natural” (Hird 2004, 90-91).

Hillevi Ganetz, which in the article “Familiar Beasts” (2004) analyzes Swedish wildlife film, emphasizes that documentaries about non-human animals rarely manage to portray the heterogeneity of sexual behavior outside humankind. Instead, they often portray non-human animals as very homogenous behavior-wise in comparison to humans and are sometimes portrayed as if they were mirroring human norms (Ganetz 2004, 197). This human encoding of other species of animal often has a formative function, according to Ganetz, and can be described as a kind of “cultural boomerang”: a
non-human individual is interpreted through human discourses, than this understanding of the creature can be used, intentionally or unintentionally, to strengthen the very discourse that was inscribed in the first place (ibid., 209). This idea of the cultural boomerang constitutes one of the three analytical tools I use in this essay in order to answer my research questions and will be explained in more detail further on.

Analyses of educational material have been done before and there are several examples of research that deal specifically with material concerning the natural sciences. Some examples of this kind of work is Emily Martin's (1991) influential article about gendered personifications of eggs and sperm in textbooks and Malin Ah-King's (2013) article on heteronormativity and stereotypical views of gender in contemporary Swedish textbooks. The latter text is especially important for my own study and has been one of my main inspirations for the essay as well as a source of theoretical ideas. Also of note is the report written 2006 by the Swedish national agency of education Skolverket which, among other things, analyzed several textbooks and compared their contents to the formal values that the Swedish education system is supposed to follow.

As Ah-King's article has a similar scope as mine I will give a brief overview of it. The text is called “Queering Animal Sexual Behavior In Biology Textbooks” and focuses on the descriptions of sexual behavior of non-human animals in five biology textbooks ranging from the years 2003 to 2007. Her main perspectives is feminist Biology and queer theory. Her analysis of the texts covers many different themes, such as male-female dualism, heteronormativity (the thought system in which heterosexuality is portrayed as the only positive and natural sexual orientation. Ah-King 2013, 48). Examples of her analysis are that the textbooks generally only present different-sex sexual interactions and that they reinforce a male/female-dichotomy in which the former is given attributes such as activeness and aggressiveness as opposed to the latter's passiveness or reactivity, docility and caring nature (ibid., 57-58). She also discusses the usage of anthropomorphizing language, which occurs in all but one of the books and is highly relevant for my own text. Examples of what she found in the books are terms like fidelity, marriage and betrayal (ibid., 64-66). She ends her article by prescribing a larger representation of the sexual diversity in the animal world and that non-reproductive sexual behavior should be described in more detail as well.

I will also give an overview of Skolverket's report from 2006 on Swedish teaching materials in this
section. While the purpose of this study is not to compare the material to the values of the school system I believe that the report brings up many valuable points that have connections to this essay. The report is called “I enlighet med skolans värdegrund?” (“In accordance with the school's values?”) and looks through material from all of the subjects in the Swedish school system. It is not divided into chapters based on the different subjects but five aspects, which include ethnicity, sex/gender and sexuality. Because of its broad scope the report deals quite briefly with biology, as is the case with the other subjects, but there are some key themes that they noted as problems. For one, trans people are only mentioned in one of the books in the context of transsexuality and that men generally are representative of our species while women are rendered as “the other” (Skolverket 2006, 29). When it comes to sexuality the authors note that discussions regarding sex mostly focus on function, in other words reproduction, and forgo discussions about sex in a more societal and non-reproductive light. This, of course, leads to a situation where for example homosexuality and bisexuality remain unmentioned (ibid. 2006, 38). These point are quite similar to those which Ah-King brings up in her article and important to keep in mind when considering my material.

1.4 Scope and Purpose of Study

Since my subject matter is within the field of Biology, my focus concerning anthropomorphism is directed specifically towards ethology, the study of non-human animal behavior. While anthropomorphism can be found in many other areas of research, such as theology, I find this smaller scope to be more precise and useful for conducting this study. Anthropomorphism is also not something that is only applied towards our fellow animals: Emily Martin's gender stereotypical sex cells is well worth considering as is the many other groups of biological organisms, such as bacteria (Bivin 2000), that have been imbued with human symbolism concerning aspects such as gender and sexuality. Despite anthropomorphism's ubiquity in many different places I have chosen to focus on the animal kingdom. This is partly due to necessity – it would simply be too difficult and unproductive to have a too broad scope –but mainly motivated by my own personal interest: I am mostly interested in animals and therefore have more experiences with them than, say, plants or fungi. It is also hard to go around the fact that humans are animals leads to a situation in which anthropomorphism is more easily applicable than in the cases of more “alien” creatures.
One common question concerning anthropomorphism is its value: is it good way of understanding the rest of our fellow animals or is it a faulty as a perspective? That kind of question is a difficult one to answer, if it even can be decidedly answered, and would require its own essay or more. My focus is on its discursive implications. That said, the earlier research I have outlined, Ah-King in particular, likely paint the phenomenon in a way that likely is negative from, say, a feminist perspective. Despite that fact, as I will describe more in detail in the theory section the case for anthropomorphism is not clear-cut and while some scholars and researchers askew any kind of anthropomorphism others like Gordon M. Burghardt views it as not only inevitable but also viable for research if utilized critically. This is something I will explain more thoroughly in part 2.1.

1.5 Outline

In this section I have introduced my subject and gone through some of the academic background of it. In part 2, named Theory, I will describe the theoretical framework of postcontructionism which is the basis of my analysis and I will also explain anthropomorphism and its role in ethology in a historical perspective. In part 3 I will describe the material that I analyze in the study, consisting of six textbooks and two documentaries. Part 4 details the methods used for the essay, including critical discourse analysis and the three “analytical tools” which I will work with in my analysis of anthropomorphism. Part 5 contains my analysis of the material, which is divided into three parts based on the topics of anthropomorphism in a general perspective, gender and sexuality. In part 6 I will make my conclusions and present some ideas for future research directions.
2. Theory

2.1 Anthropomorphism

In this part I will describe what anthropomorphism is more elaborately and what common ideas there has been regarding it with a main focus on the debate within ethology.

2.1.1 Defining Anthropomorphism

Despite the common occurrence of anthropomorphism both outside and inside the scholarly world, defining it in higher detail can be challenging even though there seems to be a common definition of it. The Oxford English Dictionary describes the non-religious definition of it (which is the topic of this essay) as “The attribution of human personality or characteristics to something non-human, as an animal, object, etc.” (Oxford English Dictionary, 2016) and the user-written online dictionary Wiktionary defines it as “The attribution of human characteristics and behavior to which is not human.” (Wiktionary, 2016). The Swedish Encyclopedia Nationalencyklopedin describes its ethological iteration in this way: “It is also called anthropomorphism when we suppose that animals' behaviors are driven by motives similar to those of humans, something which is criticized in modern ethology” (Nationalencyklopedin, 2016).

The word anthropomorphism consists of the two ancient Greek word *anthros* and *morph* which means man and form respectively (Libell 2015, 141), but the term itself is not ancient. One of the earliest know instances of the term is from a book called *the Death of Death in the Death of Christ* which was published 1647. In the book the author, an English theologian named John Owen, expresses anger toward the “cursed madness of of the Anthropomorphites” who envisioned a God with a human form (Owen 1650, 173). As the quote and its context might suggest, anthropomorphism was in its early history primarily word used in theological discussions to describe the tendency to depict or describe God as if he was human and not the omnipresent being described in scripture – a kind of theological failure. Anthropomorphism's role in science was also discussed during the 17th century, although the term itself was apparently not used. One notable example of this, which is described by Monica Libell, is the Englishman Francis Bacon who in his work *Novum Organum* (1620) saw the
anthropomorphizing vision as something that happened despite our own feelings about it but could be countered by utilizing rigorous methods in research (Libell 2015, 143).

For the purposes of this study I define anthropomorphism as any instance where human terminology or narratives are used in the material. Of course, depending on ones view of science (which often are polarized, as I will describe in the theory section) anthropomorphism may be defined more narrowly or more broadly. In a narrow definition one may limit anthropomorphism to its most explicit forms, such as narrators in documentaries who tells the individual's “inner voice” (Ganetz 2004, 203). In the broad definition any writing that implies human or human-like consciousness (such as expressing feeling such as grief, happiness and remorse) is anthropomorphic in nature. In this study I focus on the latter definition due to my research questions' more general scopes and due to the fact that it still has a strong position in ethology (as I will describe in the following sections).

2.1.2 Anthropomorphism and Classical Ethology

According to Monica Libell anthropomorphism's status as an undesirable practice became more pronounced in the early 20th century, a time which also saw how the discipline of behaviorism rose to prominence (Libell 2014, 144). Behaviorism is in many ways a theoretical and methodological that is made within the positivist context and has close ties to the experimental setting. It also stands out in its insistence on the notion that only external behavior can be observed in an objective fashion while inner mental states cannot. John B. Watson, the founder of Behaviorism meant that anthropomorphism was an absurd thing for the purposes of research since it according to him meant that the scientists had to construct the research subject's conscious mental content (Watson 1913, 159) These aspects of behaviorism rendered anthropomorphism a dead end if one desired to be respected within the paradigm. In practice this meant that research into non-human animal cognition was seen as unfeasible as it by necessity seeks knowledge about “inner worlds” (Libell 2014, 146).

Clive Wynne, an American professor of Psychology, is notable in his criticism of anthropomorphism in ethology and in the related field of comparative psychology. He argues that anthropomorphism, in this context attributing non-human animals with human psyches, should not be seen as viable in the context of objective research (Wynne 2007, 125). Despite more modern theorists' investigations on the potential uses of anthropomorphism as a scientific tool, such as Gordon Burghardt's concept of critical
anthropomorphism (which I will present in the next section), he views the practice as a dead end due to its “folk-psychological” nature and due to the difficulty, or rather impossibility, to investigate individual mental states objectively (in the positivist sense) (ibid., 132).

2.1.3 A Changing View of Anthropomorphism

Despite the strong position of the aforementioned paradigm concerning anthropomorphism there were researchers who sought to change the dominant ideas within ethology. One example of this is the physiologist Donald Griffin who in the late 1970s argued that consciousness was not solely a human phenomenon. He came to be very important in the burgeoning field of cognitive ethology, the study of non-human animal awareness and intentions (Libell 2014, 145) Despite accusations of anthropomorphism and subjectivity from the behaviorist researchers the paradigm began to shift away from one where the subject of the mental lives of non-human animals was avoided to one where it was more acceptable, albeit controversial (ibid.).

One idea that I find to be interesting in this context is the concept of critical anthropomorphism, which was coined and developed by Gordon M. Burghardt. According to him, the great problem when studying other species of animals is not anthropomorphism but anthropocentrism, the perception that humanity is the measure of the world. A consequence of this thinking is that researchers look for attributes that are similar to ours but forget the dissimilar ones. He gives the example of the research on aposematic coloring (colors on the body which deters predators): while coloring has been thoroughly researched, other manners of aposematism, like aposematic scents, are under-researched. He argues that this is due to our own species's high degree of visualness which generally overshadows different senses, like smell. He argues that it is necessary for researchers to avoid anthropocentrism if they are to understand more of the animals they study (Burghardt & Rivas 2002, 12-13).

While he sees uncritical or “naive” anthropomorphism as problematic and emphasizes the usefulness of reductionist methods (Burghardt 2007, 138) Burghardt argues firmly for the possibilities of using critical anthropomorphism as way of formulating good questions and making productive and creative hypothesis (ibid.) As a final note, Burghardt addresses the criticism he has received concerning the lack of objectivity in his approach by emphasizing the problem of not acknowledging our own animal embodiment:
By dismissing our own status as animals evolved to deal with the problems of living that other species also have to face, and attempting to be completely objective, we fall into serious errors as readily as through being naively anthropomorphic. (Burghardt 2007, 137)

2.1.4 Anthropomorphism in Documentaries

Anthropomorphism is a common tool in wildlife film. One of the earliest pioneers in this context is Disney who began in 1940s to produce films that rendered the animals depicted as very human and personalized, not unlike their own famous animated films (Ganetz 2004, 206). Anthropomorphism is today an important and ubiquitous approach in wildlife films, so important that Ganetz argues that it is institutionalized in the business and regarded as a 'natural' part of the enterprise (ibid., 206). Mainly, anthropomorphism is made through the means of the voice-over which is used to give the viewer an “insight” into what the animal on the screen is feeling (ibid., 206). In the material which Ganetz analyzes in “Familiar Beasts”, which consists of films about elk and lions, she notes that there are not many “startling” examples of anthropomorphism to be seen (ibid.). Instead, human norms and morality color the accounts and narratives in the films more subtly, which Gantetz analyzes as a way of making the nature on the screen seem more graspable to the human viewer. One of her examples from the documentaries is a scene in which a group of elk are called “the gentlemen's club” (ibid.), which likely is used to give the viewer picture of human men in a luxurious setting (possibly connected to the elk's Swedish nickname “the king of the forest”).

2.2 Theoretical Framework: Post-constructionism

My study is one which has its basis within the theoretical framework of post-constructionism.

For about two decades there has been an increased focus on the body within the field of gender studies. This tendency has been labeled in different ways: corporeal feminism and feminist materialism are two examples of names (Lykke 2010, 131). In this essay I use the term post-constructionism, a name which Danish scholar Nina Lykke has coined in order to give overarching theme on this larger theoretical pattern (ibid., 132). She also uses the term point out the concept's continuities, as well as discontinuities, in connection to earlier feminist theories, such as feminist constructionism (ibid.). However, the prefix “post-” is not used by Lykke as a way of portraying the movement as a successor or “upgrade” to the older constructionism: the focus on matters concerning the body can be seen in
several earlier theorists' work.

Before delving into the meaning of post-constructionism I feel that it is necessary to explain what feminist constructionism is. One of the major struggles during the 20th century for feminism was the theoretical discussions regarding the nature of gender. There were, and are, many conservative discourses in which gender is a direct result of biology or culture – in other words, essentialist ideas of gender (Lykke 2014, 83). In contrast, feminist constructionists argued that gender is something which is negotiated and renegotiated through discourse. Gender is in this view a process and a doing and not something that just is (ibid., 63). Feminist constructionists also focused on gender as an analytical category, which within that context generally, but not always, is seen as separate from the concept of sex.

While post-constructionism should not be seen as a “rivaling” framework to feminist constructionism, within the former category there has been a criticism on the latter's primary focus on gender as a cultural construction. Several theorists, such as Donna Haraway, argued that the body is something that had been out of focus in feminist research due to the connotations between discussions on biology and biological determinism (Lykke 2010, 132-133). Post-constructionism is Lykke's theoretical umbrella term that covers concerns such as Haraway's, as well as other scholars’ ideas and interests regarding “bodily and transcorporeal materialities” (ibid., 134). Thus post-constructionism is not a monolithic movement but rather a way of describing a certain academic discourse. While my own study is perhaps more constructionist in its focus on discourse and human vision this theoretical framework has constituted an important are for inspiration.
3. Material

3.1 Textbooks

In total I study seven different textbooks which all have their different approaches and idiosyncrasies (which I will describe further ahead in this section). What they have in common however is that they all are written for basically the same course. I use “basically” here since 2011 saw many reforms to the Swedish school system, most importantly, the upper secondary-school reform called gy11 which succeeded the previous system GY 2000. Thus the subject Biologi A became Biologi 1. Despite this large restructuring of upper secondary school the courses in Biology saw few, if any changes (Skolverket). While the purpose of this essay is not to study changes over time, I believe that this aspect is important to add when comparing the different books. Another important point is that in Ah-King's 2013 article she analyzed textbooks from the years 2001 to 2007, which means that we do not cover the same texts. This is, however, something which I found out after I already had gathered my material and thus it did not affect my choice of textbooks to analyze but is yet another detail which is relevant to this section.

As to why I chose books from this particular course it has to do with personal interest on one hand – it was in upper secondary in which I became interested in Biology – and the fact that topics directly connected to behavior are absent in the following courses Biologi B and Biologi 2 (Skolverket).

The documentaries notwithstanding, the material which the textbooks constitute is quite large and everything within them is not likely to be relevant for my study. Therefore I limit myself to sections that are dedicated to behavior, which generally is confined to the specific chapters on ethology but also evolution when sexual selection is described (the specific sections can be found in the references). This is due to my interest in anthropomorphism's controversial role within the field of ethology and due to the fact that behavior includes aspects such as sexuality and issues surrounding sex and gender.

One important point that needs to be raised is that a couple of the books from the later period are in many ways new versions of older textbooks and share authors. I will describe the two pairs before I move on to the other textbooks. The first pair is Biologi Kurs A from 2000 and Iris Biologi 1 from 2012, both written by Anders Henriksson. The first one stands out in its heavy use of illustrations.
Indeed, on its back it is described as being “richly illustrated” with an “intimate” connection between the written text and its illustrations. Other than that aspect it does not have an explicit thematic focus as some of the other texts have. *Iris Biologi 1* is very similar to the other textbook and some of the texts seem to have been transferred from 2002 with few changes. Although the images in this particular book are many they do not seem to have a position that is as elevated as in *Biologi Kurs A*. The other pair is *Biologi A med Naturkunskap A* (2000) and *Biologi 1* (2011) which are both written by the four authors Karlsson, Krigsman, Molander and Wickman. The 2000 textbook is markedly different from the other one in that it integrates the two courses: Biologi A (Biology A) and Naturkunskap A (Science Studies A). The textbook *Biologi 1*, while only working within the context of one course (Biologi 1), is quite similar in the sections about ethology in its structure (despite a specific chapter on terminology which is removed in *Biologi 1* but present in the 2000 book).

Lastly I will also briefly describe *Liv i utveckling A* (2000), *Insikt Biologi 1* (2011) and *Spira Biologi 1* (2011). *Liv i utveckling A* is written by Ljunggren, Söderberg and Åhlin and is described on its back as consistently having evolutionary thinking throughout the book. The title, which can be translated as *Life in Development A* reflects this specific perspective. The title stands out from the ones of the other textbooks which are named after the relevant courses with or without a specific noun (like *spira* and *insikt*) which makes them more easy to distinguish (this latter pattern seems to be a more modern trend since it is only used in the newer Biology books which I am looking at). The book *Insikt Biologi 1* (2011) is written by Brynhildsen, Bränden and Ehinger and is using the term insight (as in the title) as a recurring element throughout the book, for example by having small “insight-squares” (marked by an eye) with additional information (Brynhildsen et al. 2011, 3). Björndahl, Landgren, Thyberg's book *Spira Biologi 1* from 2011 does not seem to have a specific angle theoretically, or at least not explicitly. Something which I deem relevant in terms of transparency and my own involvement in the topic is that this specific textbook was the one to which I was assigned when studying basic level biology in upper secondary school. Therefore I am more familiar with it than the other textbooks, although I did use some of them (particularly *Insikt Biologi 1*) as supplementary material during that period.

### 3.2 Documentaries

Admittedly, the documentaries are quite different than the textbooks in content and purpose with a
larger priority on entertainment value than straightforward pedagogical focus. Thus they might seem a bit too dissimilar to fit into the rest of the essay. I argue however that while they lean more toward popular science than education they clearly have the purpose of teaching the public about biology. This sort of material is not non-existent within the educational world either, which Life's Swedish teacher guidelines (provided by the distributing company of educational film Filmo) shows.

Both of the documentaries are originally made for English, which is another aspect that makes them different from the textbooks. The choice to choose two films translated from English to Swedish is due to two different considerations: British and American productions are more in number due to their larger countries but a Swedish translation can still say a lot about a Swedish context. In the case of Baby Tales the narration is in English but the subtitles are in Swedish, which motivates an analysis in which I need to both study the original voice-over and the Swedish translation, for example by comparing the two in order to find any possible differences.

### 3.3.1 Life episode 1 – “Livets utmaningar”

The first documentary I am going to describe is the first episode of the British television mini-series Life, which is called “Livets utmaningar” in the Swedish translation and 'The Challenges of Life' in the original English. The series was first aired during late 2009 and was produced by the BBC. In its original language it is narrated by the famous David Attenborough and in Swedish it is narrated by Henrik Ekman. Its main theme is on the ways and strategies different species of animals as well as plants utilize in order to survive in the world.

The first episode introduces the series' theme and describes evolution in a broader perspective, which contrasts the nine other episodes which are divided between the different animal groups. As I have touched upon in previous sections, one component of evolutionary theory that is interesting for my essay is sexual selection and the gendered and often heteronormative implications that is often involved in discussions surrounding it. As Ah-King notes in her 2013 article, since reproduction is such a major part of biological evolution non-reproductive sexual behavior is generally not presented due to its assumed irrelevance (Ah-King 2013, 72). As mentioned, the program is not solely about animals but present different plants as well. Since accounts of plants are not a part of this study I will not analyze how they are described and depicted.
As an additional point I wish to add the fact that this particular documentary and this episode specifically was shown in a class during my science studies course in upper secondary school. However, since I realized this before selecting it the fact that I have seen it before did not factor in my choice of analyzing. This is relevant for my analysis of it though and will be accounted for.

3.3.2 Baby Tales
My second documentary is an American film produced in 2000 by National Geographic. It focuses on how different animals live during the earliest times of their lives (or as the title suggests, as “babies”). The particular version I analyze in this essay has English narration with subtitles in Swedish. This aspect adds a layer to the material that in some senses make it more interesting. While subtitles are meant to be as close to the source material as possible and often involve omission by necessity, a comparison between the two parallel narrations, one spoken and one written, can possibly give insight to a narrative from an American context and how it is interpreted in a Swedish one.

My reasoning for choosing this particular program is mainly availability but its subject matter, young non-human animals, is often (and not surprisingly) presented within a framing of cuteness, which was an important element in one of the earliest successful wildlife shows, the American Zoo Parade which began to broadcast in 1950 (Ganetz 2004, 200) and is thus interesting in a larger historical context. Cuteness is also something which is heavily associated with femininity, which makes especially relevant in a gender perspective.
4. Method

4.1 Critical discourse analysis

The main method for my thesis is critical discourse analysis, a method and theoretical approach in which the researcher investigate the discourses that can be found in texts and relate them to how they both reflect but also reinforce social practices and ideology (Jørgensen & Phillips 2000, 76). Critical discourse analysis is not solely a method but also a theoretical perspective in which social structures and practices are in large parts constituted and affected by discourse, defined by Norman Fairclough as “language seen as a form of social practice” (Fairclough 1995, 7). This theoretical framing makes texts, such as textbooks and documentaries in my case, a valuable source of data for investigating society and its norms.

The critical discourse analysis which I use is not solely focused on language but other semiotic forms as well, such as visual and auditory aspects. Thus my analysis can be described as multisemiotic, a term that Norman Fairclough uses to describe the application of this broader definition of text (Fairclough 1995, 4). I find this to be more fitting for this study than a perspective that focuses on the written or spoken word. This is very much needed for the documentaries which use images, sound and narrative to communicate information as well as emotions to the viewer, but the high amount of images used in the textbooks motivate a multisemiotic approach as well.

To describe more in detail, the analysis in practice involve in-depth reading of the material for the purpose of finding recurring themes, both within each of the texts (which includes the documentaries) but also between them. Since my first question regards the occurrence of anthropomorphic accounts that is one of my prioritized items to look for. I am also interested in how animalness is separated from humanness, since that might have relevance for analyzing why anthropomorphism might or might not be used in the books and documentaries. For example, in a discourse that sets humans strictly apart from the rest of animalkind anthropomorphism will be less feasible, and the other way around.

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1 Multisemiotic analyses seem to be near identical with the similiar “multimodular” ones based on Anders Björkvalls (2012) description of the latter term, though he does not seem include auditory aspects (Björkvall 2012, 323). Due to this difference and my use of Fairclough's framework I have chosen the term which is more closely connected to critical discourse analysis.
4.2 Analytical tools

In this essay I will analyze the phenomenon of anthropomorphism from three different angles: gender, sexuality and the concept of the cultural boomerang. Together they make up analytical “tools” that I will use in order to answer my research questions.

It is important to note that although I separate sexuality and gender in this essay’s structure, within Judith Butler's idea of the heterosexual matrix (which I use as a starting point in this study) they are so connected to one another that they are hard to separate. With this in mind, however, I still find it to be necessary to give each of the perspectives separate sections. Mostly, I believe that it gives the text more clarity and allows me to give specific attention to specific aspects of gender and sexuality.

4.2.1 The Cultural Boomerang

As I described in the theoretical section of this essay, Ganetz's concept of the cultural boomerang describes how norms and structures are inscribed into non-human animals and then re-inscribed onto humans in order to reinforce a power structure connected to for example race or gender (Ganetz 2004, 209). Ganetz coined the phrase in “Familiar Beasts” as something that seems more of a side-note in the end of a late paragraph rather than a theoretical concept. Yet I think that this term is useful in that it is a metaphor that is easy to understand conceptually and has many applications, especially in the context of anthropomorphism. Therefore, I use the cultural boomerang as a conceptual tool that concretely describes how anthropomorphism can reproduce discourse.

4.2.2 Gender

In this essay my primary theoretical standpoint regarding gender is a post-constructionist one influenced by Judith Butler's idea of the heterosexual matrix. The heterosexual matrix is a theoretical model in which humans are separated into two stable gender categories: men and women. We are then expected to desire the opposite gender – in other words be heterosexual. Living outside of this “grid of cultural intelligibility” renders the individual dissonant to the system and incomprehensible (Butler 1990, 151). In this theoretical framework gender and sexuality constitute each other discursively: being a woman means desiring men and being a man means desiring women.

The assumed stability of the gender categories is an important part of Butler's concept and leads to a
The duality between masculinity and femininity. The oppositional relationship of these two categories is often reinforced through ideas about sex and biology, which often is expressed through biological essentialism or determinism.

Gender is partially constructed on dualisms: females are associated with some attributes and males with others. One common dualism that is brought up in several texts, such as Ah-King’s 2013 article, is that males are generally active while females are passive or at least reactive. This oppositional characterization is very apparent within the ethological idea of sexual conflict theory, which posits that there is a conflict between males and females due to their different fitness interests (Karlsson Green & Madjidian 2011, 902). In the article “Active males, reactive females: stereotypic sex roles in sexual conflict research?” (2011) the authors Karlsson Green and Madjidian explore this particular phenomenon. Their focus is on how males and their actions generally are described in a more active way and how female behavior is described as being more passive. Yet, as the authors argue, the implication that the males are the ones who primarily take initiative is misleading:

In true coevolution it is not possible to disentangle who acts first; the idea that males take the first step may thus be caused by a sex-stereotypic preconception. (…) The current characterization of sex roles in sexual conflict research can be compared to how females were described in more passive terms, for example as coy, in traditional sexual selection. Thus, males are described with active and females with reactive phrasing, although both actively affect each other. (ibid., 904)

The implications of the aforementioned idea that gender is a result of biology is that not only are there two categories into which humans (and many other species) are divided, but that the division is definite and not surmountable. Within this context people who are transgender are rendered as anomalies or as even “against nature”. This is dualist notion of gender is what the gender binary is all about and is an important component of cisnormativity, the assumption and belief that being cisgender is the only viable identity to have – either you are man or a woman, and it is based on your bodily attributes.

Before I move on I want to explain the term cis and how it relates to trans. The term, often used as a prefix in words such as cisgender the aforementioned cisnormativity, has its roots in the American transgender movement which during the 1990s grew into a larger liberation movement. The term was created in order to name a position of normative privilege and to demonstrate that being cis is not a neutral, natural ground but another position. (Enke 2012, 63-65).
Describing different non-human animals as being transgender is quite anthropomorphic in a negative way in my mind, since it implies a universality of the concept of gender. One can however describe some animal species as being transsex in different ways. As Myra Hird writes in the text “Animal Transex” (2007) can for example be seen in many species of fish, such as the coral goby. She notes that in some groups changing sex is so common that those who do not are labeled as gonochronistic, which interestingly depicts them as exceptions to the norm (Hird 2007, 42). This fact and others concerning changing sexes, intersexuality and ambiguous genders in the non-human world is according to Ah-King important in that they threaten the idea that sex/gender is stable and universal (Ah-King 2009, 218). With this in mind I look for narratives that reflect this complexity and heterogeneity in my material and investigate how it is related to anthropomorphism.

As a last note on gender, a concept that Hillevi Ganetz works on in “Familiar Beasts” is gender routine. It can be defined as the uncritical and unreflected coding we do in everyday life (Ganetz 2004, 198). This habitual phenomenon can be very apparent in language usage and choice of terminology. Ganetz's term is inspired by Judith Butler's idea of performativity in its focus on how gender is constructed through constant reiteration and repetition (ibid., 209). Due to my own use of Butler's theories of gender I find this idea to be both useful and fitting for this study.

4.2.3 Sexuality

Due to my perspective on gender being one based on the concept of the heterosexual matrix, in which gender and sexuality are parts of the same construct, it might seem strange to have sexuality as a separate analytical tool. Indeed, I have myself been ambivalent of the idea. In the end, however, I felt that separating gender from sexuality in this section was needed for clarity's sake and for the reason that it is an aspect whose prominence in my literature, such as in Ah-King's text “Queering animal sexual behavior in biology textbooks”, merited a place of its own. When I discuss sexuality I mainly focus two elements derived from my literature: non-heterosexuality/heterosexuality and discourses regarding family structure.

One of Ah-King's main critiques of the textbooks she analyzed is that their focus when describing sexual activities is solely on the reproductive aspects, leading to a situation in which sexual activities are only mentioned in relation to interaction between males and females (Ah-King 2013, 69) One
interesting point in her analysis is that same-sex sexual interactions are only mentioned once in the material consisting of five textbooks, there in the context of male frogs copulating with other males. The reason behind the act is described in the textbook in question by noting that the male frogs are unable to determine the sex of another member of the species until they emit sounds (which only the males do) (ibid., 67). Ah-King relates this to the recurring narrative that same-sex copulation among non-human animals is a “mistake” in that it does not lead to procreation and thus not an adaptive behavior in the evolutionary sense (ibid.).

Despite the prevalence of behavior that might be regarded as homosexual in nature little of this is seen in textbooks and documentaries. I have already mentioned Ah-Kings observation that same-sex sexual interactions are only mentioned once in her material, but there are also examples of heteronormativity in educational documentaries. In Brett Mills's article about heteronormativity in nature documentaries, called “The Animals Went in Two by Two” (2012), he writes about how the medium can be used as a way of presenting different kinds of lifestyles but that most programs stick closely to a perspective in which heterosexual interaction and reproduction is in focus (Mills 2012, 111). Even in the context of species in which homosexual behavior has been thoroughly documented, such as chimpanzees, only heterosexual behavior is depicted and described (ibid., 104).

When it comes to norms concerning family structure it is not uncommon for narratives that reinforce the “naturalness” of the nuclear family to be expressed in different media (Hird 2004, 102). This often takes a form that I find to be examples of the cultural boomerang and anthropomorphism. This includes explicit or implicit comparisons between different species's social structures and human family structures that are not necessarily applicable in the context and may also reinforce a stereotypical and limited view of interactions within species (ibid.). In an American context the prominence of anthropomorphizing accounts of the nuclear family has been attributed by the scholar Mitman to the cold war of the 1950s where American cohesion and unity against a common enemy reinforced the social structures of the time. The universalization of the nuclear family in documentaries served towards this goal by rendering human phenomena such as family as 'natural' (Mills 2012, 108).

As I also mentioned earlier, the almost exclusive focus on reproduction leads to a narrative that renders aspects such as pleasure invisible on account of their lack of obvious evolutionary benefits. Yet despite this, non-reproductive sexual behavior does occur in many species of animals (Hird 2004, 103). This is
an interesting aspect which very relevant for this essay due to the educational aspects of my material: what is discussed and what is out of focus? Which parts of non-human animals' lives are regarded as interesting and what role does anthropomorphism play in the material's choice of focus?

4.3 Reflexivity and Transparency

Throughout this essay I have not refrained from acknowledging my own role in the analysis and writing process. While my study does not use an auto-ethnographic approach I believe that a more personal tone is important. This concern of mine is very much inspired by Donna Haraway's idea of situated knowledge, an idea which opposes the positivist ideal of scientists being “outside” their research in their writing, something which Haraway calls a “god trick” since it involves “seeing everything from nowhere” (Haraway 1988, 581). This is something I hope to avoid in my own text and I believe that Haraway's concern regarding ostensibly “neutral” writing and its lack of transparency is a very valid one.

As a part of this reflexivity, I believe that is important in research to be transparent in ones work. There is not much space for more in-depth descriptions of my analytical process, but one important aspect of the essay that I had planned to include was the time aspect: are there any differences in terms of anthropomorphizing to be found between the two time periods (early 2000s and early 2010s) which my material can be divided into, or are they very alike? In my early analytical work this was hard to determine and I found my other questions to be more interesting and less fruitless to work with, mostly due to the low degree of difference between them and the small amount of material when it came to the documentaries. Although the aspect of time was important early on I soon found that the research question became more and more overshadowed by the other aspects of the texts. Thus I decided, though at a quite late point, that I would not study this question further and instead focus more on the other issues found in the texts.

Another element of this study which was omitted was one where I investigated my material with race as an analytical tool. In my analysis process this turned out to be quite fruitless in terms of finding relevant data. This might have to do with my own lack of experience with working analytically with racism at a more advanced level, perhaps reflecting my own experiences of being white in a white scholarly context. While race was something which would give my analysis greater depth and make it
more intersectional I decided to focus on the aspects which I have better experience with due to time limitations.

Lastly, since my essay is written in English but is on Swedish material all quotes that is found in the analysis are translations from the original language. However, when I predict that important information is lost in the translation I will use the Swedish word, terms or sentences followed with an explanation in English for purposes of clarity. In cases where English terms are used within the texts it will be noted by me.
5. Analysis

In this section I will go through my analysis of the material. It is divided into three parts based on two of my analytical tools, gender and sexuality, and one concerning anthropomorphism in a general sense. In the first part I focus on the use or avoidance of anthropomorphism in a more general manner and its connections to the. In 5.2 I analyze the material from a gender perspective and in 5.3 I investigate aspects concerning sexuality. The four sections are divided into different themes based on the relevant theoretical material of mine and the results of my analysis.

5.1 Anthropomorphism and Non-human Animal Behavior

In this section I will analyze the views of humans' and non-human animals' behavior as they are presented in the material as well as discuss the use or unwillingness to use anthropomorphism in a general way. Specific examples of anthropomorphism and my analyses of them connected to gender or sexuality can be found in 5.2 and 5.3 respectively.

5.1.1 View of Human and Non-human Behavior

Before I move on to anthropomorphism itself I believe that my analysis will be more easy to grasp by contextualizing my findings with the more general accounts on behavior in the textbooks and documentaries. Overall, all of the textbooks and the documentary make a sharp distinction between human behavior and that of other animals. The section on ethology in Biologi Kurs A begins with an image of a yellow-billed stork standing in the water. The wings are spread in order to create shadows – a strategy that lures fish. This behavior is not to be interpreted as a display of cunning however:

One can easily come the conclusion that the stork's “clever” behavior is a conscious act. But we should remember that animals' behavior largely is the result of heredity and evolve in a similar manner to other attributes through natural selection. (Henriksson 2000, 153)

Here it is explained to the reader that while we can find all sorts of intricate behavior among non-human animals, intelligence is not a prerequisite. This idea is further urged by the wording “But we should remember...”, setting up an expectation for the student to follow. Similar recommendation can be found in Biologi A med Naturkunskap A and Biologi 1:
One should not perceive it like the apes choose a type of life in an insightful way. It is not as if a baboon one day would tire of walking around on the savanna and wanders into the forest for the purpose of eating insects alone in a treetop. (Karlsson et al. 2000, 250)

The behaviors of the herring gulls [cannibalism] are advantageous but they do not behave in the way that they do based on an understanding of what is right. A male gull does not feed his female when she needs energy for her egg-production because he understands that the behavior is advantageous. A female does not fly away with broken eggshells with the intention of reducing the risk of predators discovering the nests with the chicks. (Karlsson et al. 2011, 249)

These three quotes reflect an overarching position regarding animalness as a contrast to humanness with insight and consciousness as major factors. This can also be seen in the documentary Baby Tales, albeit with a hesitance to abstain from anthropomorphism completely:

We cannot know how chimpanzees feel about one and another or what might be going through the mind of a chimpanzee. Yet at times their behavior invites us to draw our own conclusions. (Baby Tales, 33:10)

This quote shows that while the producers of Baby Tales still adhere to the idea that non-human animals do not have conscious behavior as we do they also believe that sometimes it is more or less obvious what is going on in the minds of other animals. This more relaxed attitude seems to allow for more anthropomorphism and, indeed, Baby Tales stands out in its more generous use of anthropomorphic language and narratives.

5.1.2 Strategies for Avoiding Anthropomorphism

As I described in the previous section, the authors and producers use a framework in which anthropomorphism is seen as undesirable due to the perceived large differences between us and “them”. As I will get more into in the following sections, anthropomorphism can still be found in different forms.

One of the most common strategies for attempting to avoid using anthropomorphic terminology in the textbooks is using quotation marks around a term that might be interpreted as overly human. While quotation marks might be used to emphasize a term that might be perceived to be odd for the reader, such as “gumpfläck” (rump patch) in Iris Biologi 1 (Henriksson 2012, 215), there are many instances which I interpret as this particular avoidance strategy. For example, in Iris Biologi 1 a couple of sentences use this:
Even animals that have effective weaponry can be harmed or killed in a battle. Therefore it is good if other animals “know” that they are armed and do not even attempt to catch them. (Henriksson 2012, 7)

Other examples include “administrating” (offspring administrating their parents' genes) (Björndahl et al 2011, 183), “dialects” (ibid., 174) and “foster parents” (ibid., 175) in **Spira Biologi I**; “taken” (already in a monogamous relationship) (Karlsson et al. 2011, 270), “attractive”(ibid., 271), “dance” and “visitor” in **Biologi I**; “fencing” (as one would do with swords” (Henriksson 2000, 160) and “unwritten laws” (ibid., 165) in **Biologi Kurs A**.

This ubiquitous use of quotation marks suggest a hesitance concerning the words and phrases placed in between them, implying a concern of the authors that they might have human connotations. Yet the fact that most of the textbooks to different extent utilize the quotation marks is interesting but hard to interpret. As Libell writes in “Seeing Animals” several of the researchers dubbed “cognitivists” argued that the strict avoidance of anthropomorphic language in ethology led to less informative descriptions of results in comparison to the one that could be viewed as more anthropomorphic (Libell 2014, 145). However, as Ah-King notes in her study, terms that are culturally specific and are used in everyday life might encourage people to draw misleading and problematic parallels between non-human animals and humans (Ah-king 2013, 70). While the authors can mark a distance with the quotation marks the implications remain. The “semi-use” of anthropomorphic terms becomes a way in which the authors can both simplify the facts for a lay reader but at the same time attempt to avoid anthropomorphism.

### 5.2 Gender

#### 5.2.1 Gender binarism and dualism

One of the most common themes I have found in my material is one in which males and females are characterized as having oppositional natures, mostly due to their different biological attributes such as gamete size and its biological cost. This reasoning can be seen in several of the books such as **Spira Biologi I** (Björndahl et al. 2011, 183) and **Biologi I** (Karlsson et al. 2011, 268) Thus a clear behavioral boundary is placed and maleness and femaleness are reinforced as being two points on a binary.

On common discursive pattern in connection to the trope and paradigm of active males and choosy
females that can be seen in the textbooks is that males are more sexually assertive than females. This can be seen in one paragraph that appears in both of Karlsson et al.'s books *Biologi 1* and *Biologi A med Naturkunskap A*, as well in the 2005 edition of the latter work which is analyzed in Ah-King's article\(^2\) (Ah-King 2013, 56):

> Males often have high sexual motivation and react more easily than females on sexual signals. As mentioned a male turkey can try to mate with a briefcase, which would hardly be expected by a female. The female demands stronger signals to react and is more selective for which signals she reacts to. (Karlsson et al. 2000, 254 and Karlsson et al. 2011, 269)

Ah-King analyzes this as a way of further reinforcing the aforementioned paradigm (Ah-King 2013, 56), but the usage of the word 'hardly' is interpreted as me as perhaps being more or less prescriptive. In this dualism of high versus low sexual motivation I see parallels to human norms of what is seen as 'fitting' regarding the behavior of women and men, especially when considering the discrepancy of females who mate outside their monogamous relationship being called “unfaithful” when males doing the same do not get a similar label (which I will discuss later in this analysis).

The view that males have higher sexual motivation can also be seen in another context within the material concerning anthropomorphic terminology. In two of the books, *Liv i Utveckling A* and *Insikt Biologi 1* the term “sneaky fucker” (which is in English in the original Swedish text) is used to describe physically weaker males that are not able to find a mate through displays or similar rituals but instead attempt to mate with a female through force or stealth. As Ah-King noted in her 2013 article, the term is also used in the 2007 edition of *Liv i Utveckling A* (Ah-King 2013, 62). In *Insikt Biologi 1* the authors Brynhildsen et al. present a synonymous term, namely “satellites” (since they “orbit” around the stronger males), which is used before “sneaky fucker” (Brynhildsen et al. 2011, 114), thus perhaps indicating a hesitance regarding its appropriateness. However, as Ah-King writes, the term seems non-existent in the scientific community, in which the term “sneaker generally is used, and she had not seen it herself in her scholarly experience prior to her study (ibid.). While the term's use in my material is limited to *Liv i utveckling A* and *Insikt Biologi 1* I find it interesting that such a sexualized term is used in an educational context, and in the case of the latter textbook the term is in a bold font, which the

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\(^2\) However, Ah-King's quote differs from mine since it says “Males have...” (Ah-King 2013, 56) and not “Males often have”. I have not been able to investigate whether this difference can be found in the textbook in question or if this is an omission in the translation.
authors Brynhildsen et al. generally only use for terms of a more theoretical nature that might be new to the reader, such as sexual selection and sexual ornaments which is used on the previous page (ibid., 113). In *Liv i Utveckling A* “sneaky fucker” is placed in quotation marks and not in italics as the more theoretical terms are, likely for the sake of underlining the word's informal tone (Ljunggren et al. 2000, 67).

Something which makes the term “sneaky fucker” especially interesting for this essay is its anthropomorphic connotations. Would it be deemed scientifically appropriate to describe two non-human individuals as “fucking” as opposed to the arguably more neutral words mating or sexual intercourse? Brett Mills notes in his 2013 article that even words such as 'sex' are often avoided in wildlife documentaries due to a focus on reproduction and instead prefer terms such as mating and breeding (Mills 2013, 105), which makes this usage even more curious. I connect this choice of words to dualistic view of gender I mentioned earlier concerning males' assumed higher level of promiscuity and sexual motivation. This is also reinforced by the fact that the term is seemingly only used for this particular male behavior pattern: “sneaky fucker” or similar terms are not used for females who mate with other individuals outside their socially monogamous relationship, a phenomenon which is discussed in several cases in my material, such as in *Liv i Utveckling A* concerning “surveillance of one's partner” and female “deception” (Ljunggren et al. 2000, 66) and in *Biologi Kurs A* on the monogamy of swallows (Karlsson et al. 2000. 256).

Another important dualism is the one concerning the discourse of the caring and nurturing female, something which the documentary *Baby Tales* reproduces all throughout the film. It stands out in comparison to the episode of *Life* and my textbooks in that it focuses a lot on the life and behavior of females while (adult) males have small or even periphery roles. In one case a female polar bear and her two cubs are the protagonists while an adult male only exists in the film as a background threat to the young (*Baby Tales*, 12:03). Of course, this is a consequence of the documentary's main framing of non-human mothers and their children and its overarching theme of the species-crossing nature of “motherhood”. Yet I still find this focus on females, both due to the individuals portrayed but also because of the female narrator, very notable as a contrast to the rest of my material in which males are more prominent.

In the film *Baby Tales* a picture of caring and protective femaleness is portrayed through the narration's
insistence on species-wide motherhood but also due to the threat which the male animals with few exceptions are characterized as. In one scene we see an alligator taking its first breathes as it exits its egg. Suddenly, as the soundtrack creates a sense of looming danger an adult enters the frame and seemingly eats the newborn. However, I the viewer am reassured when it turns out that it was the mother who simply relocated her offspring into a body of water. "It seem that even the most feared of predators can have a soft spot for her young" (*Baby Tales*, 20:12) the narrator tells the viewer, emphasizing that even females of species that are so fearsome in our minds are included in this species-wide motherhood.

As I noted earlier, males primarily have the role as threats in *Baby Tales* while females are nurturing. Indeed, in only one instance there is a depiction of a male taking care of his young: a male penguin who “shares brooding duties with mom” (ibid., 4:50). Even in the case of male nurturing, it is important for the narration to inform that “mom” is still involved. Interestingly, the Swedish subtitles emphasizes the theme of motherhood at two occasions in the film by replacing gender neutral terms like “nurturing response” with gendered ones such as “motherly feelings” (ibid., 06:11 & 21:38).

Female nurturing can also be seen in the episode of *Life*. In two scenes the main theme is females who at great cost help their offspring survive. In the first instance, a female giant squid (whose size is emphasized by a quick shot of a fish opening its mouth while looking upwards in an “awed” expression – a likely intentional and lighthearted example of anthropomorphism) goes into hiding in order to lay her eggs and take care of them until hatching. She is described as “tenderly” nurturing her young and in the end when the eggs finally hatches and leaves she makes a “final sacrifice” and dies in the dark (*Life*, 35:45). In the following part, a female poison dart frog and “her” male watches over their tadpoles. The male is mentioned once and then disappears from the narrative. Instead, the documentary follows the female who is traveling up and down many times a tree in order to transport the tadpoles to a small body of water in a plant. “For the little frog it is like if a human climbed the Empire State building carrying a baby on their back” (ibid., 37:45) the narration tells us to emphasize the great effort. Both of these examples focus on females sacrificing themselves while males are in the background, seemingly unnecessary for the nurturing process. Thus the theme of the nurturing female is reinforced with males notably absent.

The textbook *Insikt Biologi 1* stands out in this regard by having a section with a specific focus on male
parenting. Under the header “Gender equality in the animal world” the authors ask themselves rhetorically why females are most often responsible for taking care of their offspring as well as why females often do the choosing in sexual selection (Brynhildsen 2011, 131). Regarding the first question the authors have a section called “single dads” where they describe species in which males take care of their offspring to a large extent or are the primary caregivers. While they write that this behavior likely an adaption in which they have a lot gain through assuring that it is their offspring and not another male's (ibid., 132-133), it is still notable that they have a specific section for the topic. This particular text is also especially interesting in its use of anthropomorphism. “Gender equality” and “single dads” have very human connotations and implies parallels to contemporary Swedish society with its debates about feminism and parenting. Thus if I use the cultural boomerang as a perspective in this case the result is not the typical conservative discourse on gender that Ganetz discusses in “Familiar Beasts” (Ganetz 2004, 209) but a slightly “progressive” one. While these particular cases might be a result of Insikt Biologi 1's more lighthearted and “friendly” tone (more humor, informal language and more question directed to the reader) I see these examples as clear uses of anthropomorphism and possibly the cultural boomerang but with gender equality as the inscribed and re-inscribed discourse.

5.2.2. Male dominance

As a general but not absolute rule my material generally places a lot of focus on males, having a larger presence in the spotlight of the authors and being depicted as more active in their behavior than the females. Males also tends to dominate visually, especially in the textbooks. This depicted power asymmetry is easiest to find in the context of mating and the search for partners. The trope of choosy females of and active males is one that is very widespread in descriptions of sexual behavior, and few counter-examples can be found to give more nuance to the otherwise homogenous picture. As I described in the previous section, males' sexuality is also emphasized as being stronger than that of females.

In many cases the narratives in my material indicate a form of male “ownership” of the female (or females) that he has mated with or has socially monogamous relationship with. In two of the textbooks (by the same authors, interestingly enough) this is simply implied through the use a possessive pronoun: in Biologi 1 a male gull is described as not feeding “his” female (Karlsson et al. 2011, 249) and in Biologi A med Naturkunskap A male terns are described as feeding “their” females (255). There
is however one example in which the opposite can be seen: in *Life* there is a part with two poison dart frogs in which the narrator says “she and her male” (*Life*, 36:45) In *Life* the most successful male fly in a competitive situation acquires the “right” to mate with all the females (*Life*, 27:18). The word used here, “right”, seems very anthropomorphic and also gives the message that the dominant male acquires a degree of ownership of the females due to his impressive attributes. I have also found this kind of possessive narrative in the several accounts on female birds’ “infidelity”, itself an arguably anthropomorphic wording, to the males that they mate with. This can be seen in several instances. In *Liv i Utveckling A* the authors write that “For a male it is important to make sure that the female does not deceive him.” (Ljungren et al. 2000, 66).

Interestingly, even though it is often mentioned that males mate with more females I have not seen one instance in which it is described in terms of “infidelity” or “unfaithfulness”. This is likely due to the idea that females always are aware of who their offspring are while males cannot know for certain. This argument is for example seen in *Liv i Utveckling A*, where the word “deceit” is used for the females but not males.

The fact that in most pair it is the female who bears the main responsibility is assumed to be due to males being uncertain whether it is their own offspring they are feeding and not the offspring of someone else. (ibid.)

Despite this, anthropomorphic descriptions of “infidelity” or “deceitful” and “unfaithful” behavior still paints a picture in which males have a contract of sorts with the female and that she is breaking it, something which I determine to be a form of value judgment.

In some cases male sexual dominance is portrayed through language with connotations of violence. In *Iris Biologi 1* male moose and red deer are described as fighting with other males in order to “conquer” as many females as possible (Henriksson 2012, 114). The previously mentioned “sneaky fuckers” in *Insikt Biologi 1* and *Liv i Utveckling A* also fits into this kind of violent language with its sexualized tone and the context of unaware females. This is likely related to the larger narrative of competitive and violent males which garners much attention in both the textbooks and documentaries.

### 5.2.3 Summary

Overall, in my material sex is represented as dualistic in nature and this is further reproduced with the different anthropomorphic descriptions. Females are generally humanized through narratives of
motherhood and nurturing on the one hand and an idea that females are expected to be loyal to their male mate on the other hand. A human understanding of masculinity can also be seen in the material's framing of male dominance with violence and implied “ownership” of the females as main components. In both the textbooks and documentaries human gender discourse and ethological facts are interwoven, which I argue might lead to a way of thinking in which gender norms are framed as natural and biologically determined.

5.3 Sexuality

5.3.1 Counterexamples to Heteronormativity
In my material I can find no accounts of same-sex sexual relationships and only one instance of sexual behavior that involves two males. The example in question is in *Iris Biologi 1* and is about a particular behavior found in males of the species common frog: the males are described as likely being unable to visually tell apart males from females and therefore attempt to mate with any other frog regardless of sex. The male will however stop if the frog he is mating with emits a particular sound that only the males can emit (Henriksson 2012, 202). That this is the only example found in my material is notable in that it details a situation in which the male-male interaction is somewhat unintentional and “self-corrected”, which, likely unintentionally, portrays same-sex relationships or matings as mistakes. This particular fact is also the sole counter-example that Ah-King found in her study (Ah-King 2013, 67), and since her material is from the early 2000s and mine is before that and from the beginning of the 2010s it shows that diversity is something still lacking in the textbooks.

5.3.2 Family Values and Motherhood
In descriptions of sexual bonding and monogamous relationships the human concept of marriage is often referred to, either explicitly or implicitly. I have found several examples of this specific category of anthropomorphic language. In a small box of text with additional information about polyandrous females, the authors of *Liv i Utveckling A* describe females which mates with several males and write the following: “As a counterweight to her polygynous husband the great reed warbler female is sometimes polyandrous.” (Ljungren et al. 2000, 67). In the same textbook the males of the insects called mecoptera are described as giving the females “nuptial gifts” (*bröllopsgåvor* in Swedish)
(Ljunggren et al. 2000, 67). In Anders Henriksson's *Spira Biologi 1*, which does not contain a lot of anthropomorphism in general, two greylag geese, male and female, are described as having a “marriage”, though the author seems to be aware of its humanizing connotations due to his use of quotation marks (Henriksson 2012, 183).

It find it interesting that the term nuptial, which implies marriage, is used for mecoptera who do not seem to be a species in which two individuals take care of their offspring together. Instead, the authors write that the female mates with several males in order to find the best sperm and there is no indications of monogamy, social or otherwise. Therefore the term nuptial gift seems not only anthropomorphic but also misguiding regarding the biological facts, contrary to the educational purpose of the textbook.

Monogamy is something which has a prominent place in the textbooks, both in the written text and the choice of images. When it comes to images, one of the most interesting one related to anthropomorphism is a photography of two mute swans in *Iris Biologi 1*. The two of them are facing each other, their necks make up a shape similar to a stylized heart; the caption describes the species's life-long monogamous behavior as a contrast to the more seasonal monogamy of many other birds (Henriksson 2012, 218). That it is this picture that is chosen and not any other with two mute swans is likely not coincidental. The aforementioned descriptions of “infidelity” and “faithfulness” also fits into this romanticized anthropomorphism.

As I described in the part about gender dualism, the film *Baby Tales* stands out due to the prominence of females. As mentioned, this is a consequence of its larger theme of motherhood and nurturing females and males being mostly absent in nurturing roles. Yet this also means that there are very few examples of nuclear families being implied. There are many anthropomorphic portrayals of caring mothers, such as a hog “singing a lullaby” (*Baby Tales*, 03:12) or non-human mothers being “charmed” by their offspring (ibid., 21:39), but there is only one instance in which the nuclear family is implied. The instance in question is a previously mentioned scene in which the penguin “father” and “mom” take care of their chick together (ibid., 04:50). Instead, the anthropomorphic depictions are of females who take care of their offspring alone or, in the case of elephants, females taking care of them together with other females. The viewer is told by the narrator that the birth of an elephant is a “celebrated occasion” and is shown a picture of all the adults touching the newborn (ibid., 16:11). While this is
reinforcing the gender stereotype of females being inherently nurturing it is still curious that the narrative of the nuclear family is so absent. The fact that the documentary is American is also notable due to the intimate relationship between family values and wildlife film in the US (Ganetz 2004, 200).

5.3.3 Summary

Same-sex interactions of a sexual nature are extremely rare in my material and in combination with the anthropomorphic narratives of “marriage” and the like non-human animals are portrayed in a quite heteronormative light. Despite this, there are not many descriptions that make parallels between non-human interactions human family norms. One of the few examples that fits the picture of male and female with their offspring is the two emperor penguins with their chick in Baby Tales. This might reflect the fact that males rarely are described in the context of nurturing behavior in my material. Indeed, the focus on motherhood is quite ubiquitous (as I described in the section on gender) to different degrees in the material, particularly in Baby Tales. While the narrative of caring females and absent males might be interpreted as one that fits within heteronormative discourse, it can hardly be described as the “ideal” family which Brett Mills describes as being part of the nuclear family discourse (Mills 2012, 106). Thus implications of normative human family values are not reproduced to a high extent in my material, despite heterosexuality having such a dominant status in it.
6. Conclusions

6.1 Conclusions

In this study I have found that while blatant anthropomorphism is generally avoided in most of my material it still has a significant presence, despite its bad reputation in ethology. A majority of the examples I have found is from the context of sexual behavior and bonding.

As the first research question in this essay I ask whether or not anthropomorphism is something which can be found in my research material. Very simply put, my analysis shows that it in fact does, but its occurrences are few and it is used in specific contexts, such as is relation to facts regarding reproduction, sexual behavior and taking care of offspring. In many cases anthropomorphism is avoided through different means, mainly through the use of quotation marks. This shows that while anthropomorphism seems to be undesired the authors of the textbooks are quite ambivalent in practice.

My analysis shows that the textbooks and documentaries generally employ anthropomorphic terminology for purposes of explaining social interactions among non-human animals but that they through the use often give connotations that are problematic from a feminist perspective, such as the double standard attitude regarding females mating outside monogamous relationships. There are however exceptions to this, such as Insikt Biologi 1's mix of Swedish gender politics and the non-human world and the ambiguous focus on females and nurturing found in Baby Tales. While the material is very normative in its portrayals of sexuality and sexual interactions anthropomorphic descriptions of families are rare. Instead the human concept of motherhood is reproduced, both explicitly and implicitly.

In this study I have seen that anthropomorphism is a quite complex matter in the context of textbooks and documentaries. While it is often countered in different ways or prescribed as poor scientific thinking it still appears. Despite its bad reputation, it seems that anthropomorphism is hard to completely avoid.

6.2 Future Directions

During my research process I have found many fascinating aspects and patterns, both relevant and
irrelevant for the purposes of this essay, which I believe could be quite productive. One of my main findings is that anthropomorphism is not found to a high extent in some context but more so in others, namely those concerning gender and sexuality. While I touch upon the question in my analysis, I find it intriguing why this is the case. Further study of when and where anthropomorphic language is utilized is likely needed, but I think that it is also important to investigate the *whys* further: is anthropomorphism closer at hand when, for example, sexual relations are described due to a possible higher degree of similarities between humans and non-human animals? Or is it something else that might be behind this pattern?

While gender and sexuality have been my focus in this study, anthropomorphism can likely be researched in relation to many other structures and norms, such as racializing anthropomorphism. To study humanizing accounts of non-human animals from a perspective of race was, as I have previously mentioned, something which I wanted to do as well in the beginning. Due to the fact that non-human animals are often burdened with upholding human ideals and norms (Hird 2004, 91) I believe that studying anthropomorphism from different perspectives is necessary to understand how different oppressive structures, or counter-narratives to those structures for that matter, can be naturalized.

I also believe that it would be interesting to study how anthropomorphism is used in our everyday language. How can our descriptions of non-human animals (and other creatures or objects for that matter) be understood when considering gender and sexuality discourses? Can the cultural boomerang be used as a tool in this context? I think that this approach can be very interesting in connection to my own study, mostly due to the other term Ganetz coined in “Familiar Beasts”, namely gender routine - “habitual, instinctive, unreflecting and iterated accounts of masculinity and femininity” (Ganetz 2004, 198). While the article in question is about media I interpret the term as including performative expressions of gender in a general sense. It is relevant in that the anthropomorphic terms seem to have their basis in an everyday understanding of gender and seem to be employed in the documentaries and textbooks in order to clarify and explain ethological facts. Investigating these everyday anthropomorphisms within an ethnological framework might give insights on how non-human animals are perceived based on different norms and, importantly, how we can understand how we as humans view ourselves in relation to other animal species.
7. References

7.1 Textbooks

7.2 Documentaries

7.3 Literature


Watson, John B. 1913. Psychology as the behaviorist views it. *Psychological Review*, 20, 158-177


### 7.4 Electronic Sources


