Hunting Down Animal Verbs

An Investigation into The Mechanisms of Meaning Transfer Underlying English Verbal Zoosemy

by

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Contents

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[1] This publication does not include Appendix 1 or Appendix 2, as they contain data that continue to be used by the author for further research at the PhD level. If desired, the data can be provided for review upon contacting the author.

[2] See Footnote 1.

1. Introduction

For millennia, animals have been an integral part of the human world. They are always present in our physical environment in some way, be it in the form of food, clothes, pets, house vermin, etc. It is, therefore, not surprising that, having occupied a significant portion of our physical world for so long, animals have also made their way into human culture, human thought and, eventually, into language, specifically, in the form of people's names and surnames; derogatory terms; toponyms; names of groups of people, such as clans, tribes, modern sports clubs, etc.; names of tools, equipment and other physical objects that look or function like animals; names of plants, parts the human body, etc. Thus, employing animals as symbols to conceptualise non-animal-related phenomena of human life is as important a part of the side-by-side existence of humans and animals as employing real-life animals in home protection, hunting, etc.

The specific animal-related language phenomenon that this thesis concerns itself with is animal names that are used as verbs to denote human activities, e.g. *to spaniel after* (someone), *to beaver away*, *to horse/jackass/ass/monkey around/about*, etc. These verbs seem to be so frequent and established in the English language that their metaphorical imagery often goes unnoticed, which can lead to awkward situations like the one that occurred in 2018 governor elections in Florida, U.S. In a public speech, Ron DeSantis, a white candidate, running against Andrew Gillum, a black candidate, urged the voters not to "monkey it up", which unleashed a storm of criticisms highlighting the racial undertone of DeSantis's statement. It seems unthinkable that any candidate would intentionally put themselves at risk of potentially alienating a part of their base by making such racist comments, which leads to the assumption that the speaker might not have considered the metaphorical imagery that the verb connotes, relying solely on its current denotational meaning, i.e. 'to spoil something through careless handling (as a monkey would)'. At the same time, against the backdrop of the centuries-long racial struggle in the U.S., a darker situational interpretation of the verb, namely 'to put a dark-skinned candidate, opprobriously referred to as *monkey*, in power' cannot possibly be overlooked. Exploring linguistic issues like this one from a scientific prospective is of crucial importance since it has the potential to help the speakers to distinguish between the peculiarities of the semantic development of certain language units, on the one hand, and situational framing of extra-linguistic phenomena in a certain light, on the other hand.

Using the methodological apparatus of cognitive linguistics, in particular, its sub-discipline of historical semantics, this investigation endeavours to peek behind the curtain of language change and establish how nouns denoting animals come to be used as verbs in the process of semantic change termed *verbal zoosemy*. The perspective that this study takes is the one of the language user, since one of the main premises of historical semantics is that semantic change never occurs on its own but is tied to the conversational goals and needs of the speaker. Which is why the study attempts to not only trace semantic changes in animal nouns in the process of their reclassification as verbs, but also shed light on how *language speakers* are able to make sense of these changes and rationalise them. Therefore, the goal of this thesis is to utilise the Conceptual Metaphor and Metonymy Theory in unravelling the intricacies of metaphor-metonymy interaction patterns underlying verbal zoosemy and create a comprehensive classification of English zoosemic verbs.

In the past, there have been several attempts to classify English verbal zoosemy, most of which were based on a relatively small number of verbs. What sets this study apart from the previous research is its unprecedented dataset featuring 96 denominal animal verbs, which is supposed to provide a much more comprehensive account of the linguistic phenomenon under investigation and facilitate a more precise, large-scale classification of the cognitive mechanisms underpinning verbal zoosemy. Building on the success and navigating around the weaknesses of the previous investigations into English verbal zoosemy, this study is meant to further the current understanding of the functioning of animal verbs in the English language.

The thesis is structured as follows: Chapter 2 introduces theoretical notions forming the foundation for this investigation; it also provides an overview of the general notion of zoosemy and its sub-type verbal zoosemy, with special attention being paid to the strengths and weaknesses of the previous classifications of verbal zoosemy; Chapter 2 closes with an outline of the methodology as well as methodological considerations that shaped the present investigation; Chapter 3 focuses on the findings of the study, presents a new classification of verbal zoosemy, and ends with an explication of a few special cases of English verbal zoosemy that evaded classification; Chapter 3 closes with a brief discussion of findings, followed by the conclusions in Chapter 4.

2. Theoretical Framework

2.1. Animal Symbolism in Human History and Culture

> […] natural species are chosen not because they are
> "good to eat" but because they are "good to think".
>
> (Lévi-Strauss, 1991: 89)

It is hard to underestimate the magnitude of the role that animals have played in human life since the emergence of anatomically modern humans on Earth. Throughout the various developmental stages of our civilization, we have relied on animals for food, clothing, protection, physical labour, transportation, etc. For centuries, we have used them in scientific explorations (including early as well as modern medicine and anatomy, palaeontology, psychology and behavioural studies, space exploration, etc.) as well as for entertainment purposes, i.e. keeping animals as pets, using them for sports, hunting, etc. Animals have been eternalised in art in the form of cave drawings, folklore, poems, fiction, paintings, photography, film, etc., which led to representations of members of the animal kingdom being ubiquitous in both *material* and *immaterial* sides of human culture. The omnipresence of animal imagery in the human world paired with the creative ways these images have been used in art, science, language, etc. unavoidably led to an increasing degree of abstraction of the animal image from the actual physicality of the animal, which, in turn, resulted in the gradual rise of *animal symbolism*. In his book "The Others: How Animals Made Us Human", Paul Shepard (1997: 281) describes the complex relations between humankind and animals spanning millennia and arrives at the following recognition:

> For five thousand human generations animals served our species as delicate signs of the way the world goes, as elaborate metaphors and symbols, as spiritual beings, and as themselves – beautiful and imponderable counterparts in a mysterious cosmos. In the immensity of time, humans acquired, deep in their hearts, the expectation that animals signify.

Surprisingly, even the fact that the author of this text is able to capture her thoughts in writing is partially due to animal symbolism, in that some of the letters of the Latin alphabet go back in their origin to ancient inscriptions depicting animal form. More specifically, the earliest form of alphabetic writing, also called *proto-Canaanite* or *proto-Sinaitic alphabet*, which can be attested as early as the 2nd millennium BCE and which gave rise to almost all modern-day alphabets, derived from the Egyptian hieroglyphic prototypes of the alphabetic letter forms (Hamilton 2006: 5). One of those prototypes was

the Egyptian hieroglyph F1, which had the appearance of a profiled head of an ox and stood for the word *aleph* (a proto-Canaanite word for *ox*). The reason why it can without a doubt be asserted that the graph in question depicted the head of an ox and not something else that the scientists might have wrongly read into the inscription is that there is a corpus of such ancient Egyptian inscriptions, a number of which feature the *aleph* graph drawn with a varied degree of complexity (see Figure 1).

Figure 1. Varieties of the hieroglyph F1

Hieroglyph F1 "head of ox" Möller I, 154 NP Dyn. 3	Same,[4] Stewart 1979: pl. 26.1 NP MK	Same, Ullman 1927: fig. 2 Sinai 53 Serabiṭ Dyn. 12	Same, Sinai 421 Serabiṭ MK	Same, Valley of the Queens NK	Same, Ullman 1927: fig. 2 Sinai 89 Serabiṭ Dyn. 12

Sinai 377 v	Sinai 362 v	Sinai 365a v	Sinai 350 v	Sinai 378 v	Sinai 349 r-l
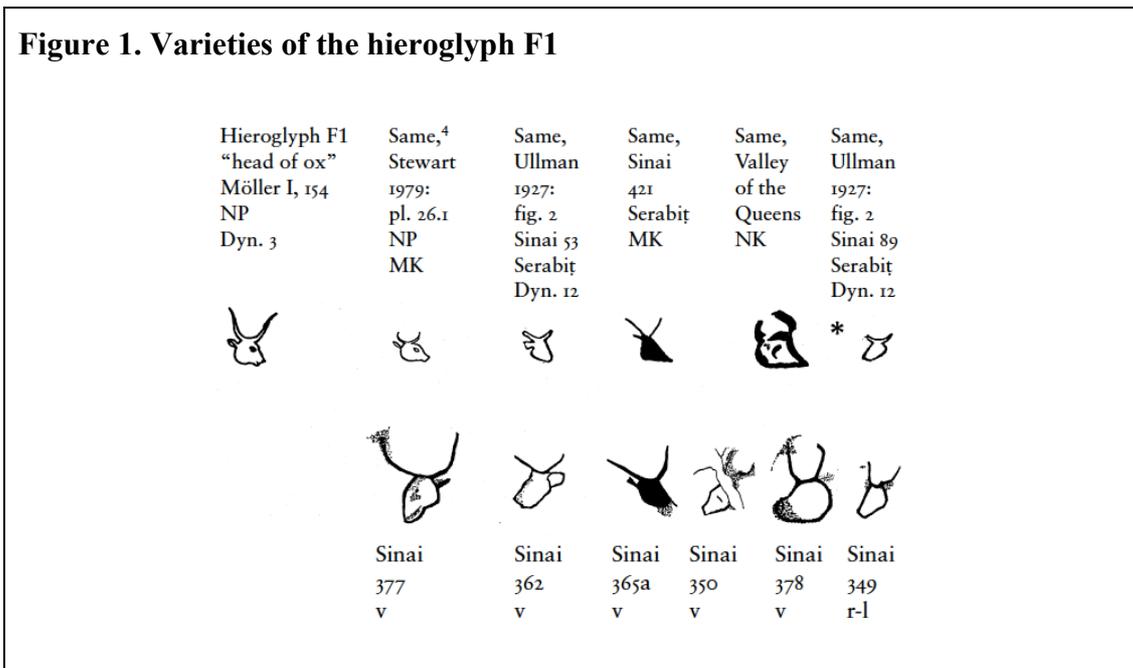
Note. Reprinted from *The origins of the West Semitic alphabet in Egyptian scripts*, p. 31, by G. J. Hamilton, 2006, Washington, DC: Catholic Biblical Association of America

Palaeographic evidence shows that, having been borrowed into the Semitic writing system, the Egyptian hieroglyph F1 underwent continuous transformations, which ultimately resulted in a reduction of its pictographic complexity (Hamilton 2006: 32-35). In other words, over time, fewer lines were used to draw the ox's head and less attention was paid to the accuracy of the representation of the actual animal. As the graph entered the Greek alphabet (through the Phoenician alphabet) around the 8th century BCE (Cook 1987: 9), there was little resemblance between the original inscription and the corresponding Greek letter *Alpha* (A). Later, the graph in question became part of the Latin alphabet, which is the system of writing used for this paper. Several other "offspring" of the original Egyptian *aleph* pictograph are currently in use in other modern-day alphabets, viz. Arabic and Hebrew, and none of the "offspring" resemble their forefather, i.e. a drawing of the head of an ox.

It should be noted that *aleph* was not the only Egyptian letter prototype to have made the leap from an animal drawing to a letter of the alphabet. The list also includes the letter *n*, which supposedly developed from the depiction of a snake (*nûn* in Proto-Canaanite) (Hamilton 2006: 154-171); *q* is believed to have its origin in the image of a monkey (*qôp* in Proto-Canaanite) (Hamilton 2006: 209-220); the origin of the letter *d* is disputed, with some scholars maintaining that its prototype was a drawing of a door (*dālet* in Proto-Canaanite), while others contend that the original pictograph in this case was that of a fish (reconstructed **dag-* in Proto-Canaanite) (Hamilton 2006: 61-75).

The curious metamorphosis of ancient animal drawings, spanning millennia, led to their insensible presence in our text-laden modern world, which testifies to the fact that animal symbolism is more deeply rooted in our culture than one might be aware of. In fact, using animals as symbols goes even farther back in time than the ancient Egyptian inscriptions, namely to pre-historic cave art created by modern humans in the Upper Palaeolithic period, the earliest examples of which date back about 40,000 years according to recent estimations (Aubert et al. 2014). Kövecses (2005: 24-25) suggests that the images of animals in cave art might have been used symbolically to represent people, which would mean that as early as in the Upper Palaeolithic period, humans developed a kind of brain allowing for metaphorical thinking, i.e. conceiving of one thing in terms of another, namely of humans in terms of animals. And while it is impossible to determine with absolute certainty what the animal paintings in ancient caves meant, recent scientific findings suggest that those images were indeed used symbolically, in fact, they are likely to have been used to record the position of stars, as Sweatman and Coombs' 2019 study shows. The researchers managed to age individual animal drawings in a number of caves in Europe and Turkey and compare the chronological order of these drawings on cave walls to the order of the star constellations visible from the respective cave sites around the time that the cave images must have been created. With the help of special software modelling the positions of stars at the established times, Sweatman and Coombs were able to verify, with a high level of statistical significance, their hypothesis that the "zoomorphic artworks" were used "for recording dates based on precession of the equinoxes, with animal symbols representing an ancient zodiac" (Sweatman & Coombs 2019: 1). This study puts evidential meat on the hypothetical bones of Kövecses's assumption about the emergence of a "cognitively fluid" (2005: 24) brain in early humans, i.e. a brain capable of creating and understanding metaphors.

As can be inferred from Sweatman and Coombs' study, our distant ancestors from the Palaeolithic period tied the repetitive movement of the star patterns in the sky to the recurrent events of their own lives and, thus, to time. However, in the absence of a conceptual apparatus capable of managing the knowledge about time (at that stage of human development), early humans had to resort to something of which they had a more concrete understanding, namely animals. This mode of knowledge acquisition and categorisation is what Levi-Strauss (1966) calls "science of the concrete". Levi-Strauss distinguishes between two modes of acquiring knowledge: mystical thought and scientific thought, with the former being "a sort of metaphorical expression of the latter[3]" (Lévi-Strauss 1966: 13). Whilst science operates at the level of concepts and reaches "beyond the constraints imposed by a particular state of civilisation" (Lévi-Strauss 1966: 19), mystical thought relies on signs, "the possible combinations of which are restricted by the fact that they are drawn from the language where they already possess a sense which sets a limit on their freedom of manoeuvre" (ibid.). Going back to the cave art drawings, it can be inferred that in the absence of science, ancient people resorted to mystical thought, particularly, to using animal symbols to manage knowledge about time. Hence, using animals as symbols in order to explain emergent phenomena in other domains of human life seems to be a manifestation of a fundamental strategy of knowledge capturing and categorisation in humans. This would also explain why animal symbolism is traceable in so many spheres of human life, viz. names and surnames; toponyms; coats of arms and flags; names of sports teams; names of tools and equipment; names of parts of human body; yoga poses; plants, etc. (Shepard 1997: 49; Scanes & Chengzhong 2018) Lawrence (2013: 678) writes: "No other realm [other than the animal kingdom] affords such vivid expression of symbolic concepts." But perhaps the most notable phenomenon that animal symbols have over centuries been employed to explain is people themselves.

Two major forms of myth created by people in order to give meaning to their presence on Earth, namely religion and folklore, abound with animal characters meant to represent people. More specifically, in ancient mythologies, such as the Greek and Egyptian mythologies, gods and deities, which have human bodies and act very much like people, can either turn into animals or they have animals body parts (Buxton, Bolle, & Smith

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[3] It should be noted here that Levi-Strauss does not assert that science is in any way primary or more correct than magical/mystical thought. In his view, these are two parallel modes of inquiry, which "differ not so much in kind as in the different types of phenomena they are applied to" (Lévi-Strauss 1966: 13).

2017). The same is true for Hindu Gods. In Buddhism, Buddha is believed to have taken the forms of various animals "in search of the final goal of 'Buddhahood'" (Scanes & Chengzhong 2018: 265). Both Hinduism and Buddhism are premised on the idea of reincarnation, i.e. the possibility of human spirits to be reborn as animals. One of the many examples of animal symbolism in the Christian Bible would be Satan taking the form of a serpent and appearing in the Garden of Eden to tempt Eve to eat the forbidden fruit from the tree of knowledge (Genesis 2:17). The list of animals symbolising people in religious contexts goes on and on.

One of the most prominent examples of animals symbolising people in folklore is Aesop's fable, which is a "generic term for an anecdote, especially one involving animals, written in antiquity" (Sax 2017: 457). In fables, animals speak and behave like people, and they are placed in a difficult situation or faced with a problem, solving which leads them to learn a lesson. Fables are clearly stories *about people for people*, in which animals are used as a means of distancing the reader from the situation being described. As Daston and Mitman (2005) aptly put it:

> Whereas the same stories told about humans might lose the moral in a clutter of individuating detail of the sort we are usually keen to know about other people, substituting animals as actors strips the characterizations down to prototypes. Animals simplify the narrative to a point that would be found flat or at least allegorical if the same tales were recounted about humans. (p. 9)

The same trope is widely used in fairy tales, such as Grimm's fairy tales as well as other children's tales.

With the advent of the printing press, verbal folklore began to be gradually ousted to the cultural periphery by the ever-growing body of written literature, based on the creative output of individuals, as opposed to folklore's collective authorship. However, the themes and tropes of folklore, including anthropomorphising animals, transcended seamlessly into the new medium, landing first in children's literature[4] and eventually making their way into general fiction (e.g. J. R. R. Tolkien's "The Lord of the Rings*"*, George Orwell's "Animal Farm*"*, etc.) Eventually, a number of anthropomorphism-based narratives were adopted to the screen by such media giants as first Disney and then Pixar, which resulted in a further boost in the popularity of the given trope. Today, animals acting as people are

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[4] According to Cosslett (2017, Introduction), "the talking animal story began its career as a genre specifically for children" back in the mid-eighteenth century.

such a mundane element of our cultural landscape that we hardly ever notice its odd nature anymore.

Following this train of thought, one may conclude that animal symbolism plays as crucial a role in human life and culture as animals themselves. For millennia, we have been using animals to survive in the world as well as to understand the world and ourselves. Shepard put it best when he wrote:

> Our species and our best observers emerged in watching the Others [animals], participating in their world by eating and being eaten by them, suffering them as parasites, wearing their feathers and skins, making tools of their bones and antlers, and communicating their significance by dancing, sculpting, performing, imaging, narrating, and thinking them. (1997: 11)

2.2. Cognitive linguistics

Cognitive linguistics is a relatively new school of linguistic thought that emerged in the 1970s as a response to the formalist approaches to language, which had dominated the field of linguistics throughout the 20th century. As part of the domain of cognitive sciences, cognitive linguistics examines language as a product of general human cognition, meaning that language is viewed as neither a separate module in the brain, nor an abstract idealized system of symbols, existing in its own right, but rather language is considered to be reflective of "whence it came", i.e. the human mind. Cognitive linguists base their investigations of language on the assumption that "language offers a window into the cognitive function, providing insights into the nature, structure and organisation of thoughts and ideas" (Evans & Green 2006: 5).

2.2.1. Conceptual Metaphor Theory

The Conceptual Metaphor Theory (hereinafter CMT) constitutes the bedrock of the cognitive approach to the study of language. It foregrounds the importance of metaphorical and metonymic processes in general human cognition and, more specifically, in language. Contrary to the old view of metaphor as a literary trope used almost exclusively by writers and orators for the sake of "rhetorical flourish"(Lakoff & Johnson 1980: 3), the CMT postulates that any case of a word used in a sense other than its core, most basic meaning can be considered metaphorical. (Deignan 2005: 34)

In cognitive linguistics, metaphor is considered not just a feature of language but a mechanism governing our thought. According to Lakoff and Johnson, "our ordinary conceptual system, in terms of which we both think and act, is fundamentally

metaphorical in nature" (1980: 3). Thus, *metaphorical expressions* **(**also called *linguistic metaphors***),** which can be observed not only in literary texts, poetry, etc., but also – and even primarily – in everyday language are a proverbial tip of the iceberg of the corresponding *conceptual metaphor*, the rest of which is submerged in the human mind. (cf. Kövecses 2010: 4-5) Kövecses writes, "metaphor is only derivatively a linguistic phenomenon. It exists in language because it exists in thought" (2005: 8).

The CMT, therefore, operates on the premise that any instance of "understanding and experiencing one kind of thing in terms of another" (Lakoff & Johnson 1980: 5) or "understanding one conceptual domain in terms of another conceptual domain" (Kövecses 2010: 4) is a manifestation of the general cognitive process of metaphor. The conceptual domain that lends its structure, and in most cases the linguistic material associated with it, to another domain is called *source domain* (SD). The conceptual domain that receives the structure of the source domain and becomes modelled after it is called *target domain* (TD). In an instance of conceptual metaphor, certain elements of the source domain are paired with certain elements of the target domain via *metaphorical mappings*, i.e. a set of systematic correspondences stipulating what elements of the SD are projected onto what elements of the TD. Any metaphorical linguistic expression "must conform to established mappings, or correspondences, between the source and the target" (Kövecses 2010: 10) to make sense. For example, the conceptual metaphor LOVE(TD) IS A JOURNEY(SD) maps LOVERS onto TRAVELLERS, their RELATIONSHIP onto the VEHICLE, DIFFICULTIES IN THE RELATIONSHIP onto IMPEDIMENTS ON THE ROAD, etc., which is why an English speaker talking about love might use such expressions as *we've come so far*, *it's been a bumpy road*, *where is this going, we've had a hell of a ride*. However, it would not occur to the speaker to spontaneously map LOVERS onto the VEHICLE or onto the IMPEDIMENTS ON THE ROAD and nor would it make sense to the listener, even if the speaker intentionally chose to do so by saying, for instance, *my wife is not running smoothly*. The notion that "metaphorical mappings preserve the cognitive typology (that is the image schema structure) of the source domain, in a way consistent with the target domain" (Lakoff 1993) has been termed the *Invariance Principle* in the CMT framework.

It is important to point out that it is never the whole of a source domain that is mapped onto a target domain by means of metaphorical projection. Both the source and the target domain usually have a range of aspects inherent to them. If all of the aspects of A were projected onto all of the aspects of B, then B would be A, which is not the case in the

metaphorical process of conceptualising B in terms of A. Hence, metaphorical mappings are partial, with only selected elements of A being mapped onto B. Lakoff and Johnson (1980) call this phenomenon *metaphorical highlighting/hiding*. Metaphorical highlighting refers to certain aspects of the target domain being foregrounded due to the choice of a particular source domain[5]. Metaphorical hiding, on the other hand, points to the aspects of B which are not profiled by the choice of A as a source domain[6] and which, however, can be profiled by a different source domain: C, D, etc. It follows that a target concept can be conceptualised in terms of several source domains, each highlighting certain aspects of the target concept. (Kövecses 2010: 97) Similarly, a source domain can be employed in the conceptualisation of multiple target domains (e.g. see this thesis: Chapter 2.1. on animal symbolism). Having examined multiple cases of a single source domain lending its structure to multiple target domains, Kövecses observed that there is a certain regularity as to what aspects of individual source domains are repeatedly mapped to a range of target domains correlating with them. He termed these prominent aspects of the source domain *main meaning focus (foci)*[7] and described them as follows: "(…) meaning focus is conventionally fixed and agreed-on within a speech community; it is typical of most cases of the source; and it is characteristic of the source only." (2010: 138)

Another tenet of the CMT that must be mentioned here is the direction of metaphorical transfer. The principle of embodiment, which is one of the founding blocks of Cognitive Linguistics, specifies that our cognition is grounded in and shaped by our bodily experience in/with the world. It may further be deduced that our conceptual system, being the product of our collective human cognition, is also largely grounded in the human bodily experience. This, in turn, would mean that the concepts arising from this first-hand bodily experience (e.g. space, temperature, etc.) would be most familiar and easily

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[5] In the case of the conceptual metaphor AN ARGUMENT IS A BATTLE, it is the antagonistic manner of leading an argument that is highlighted. If another source domain was at play, e.g. AN ARGUMENT IS A JOURNEY as in '*We have covered a lot of ground*' or '*We will proceed in a step-by-step fashion*', the progress made in the argument would be the subject of metaphorical highlighting (examples adopted from Kövecses 2010).

[6] Expanding on the examples in the previous footnote, the prominence of the highlighted aspect of fighting in the AN ARGUMENT IS A BATTLE metaphor obscures the possibility of an argument as a respectful search for the truth, which would be an example of metaphorical hiding.

[7] Kövecses explicates various instantiations of X IS A BUILDING metaphor and shows that it is the central, most prototypical knowledge about the strength, structure and creation of buildings that is repeatedly mapped over to various target domains, be it LIFE IS A BUILDING, AN ARGUMENT IS A BUILDING, A THEORY IS A BUILDING, CAREERS ARE BUILDINGS, etc. (Kövecses 2010: 136-138).

accessible to humans. According to Lakoff and Johnson, "concepts that emerge this way are concept that we live by in the most fundamental way" (1980: 57). It is then logical that these primary, familiar experiences, of which we have more direct understanding, are employed metaphorically to conceptualise more abstract concepts, which we have less direct experience with. In other words, in a metaphorical process, the source domain is, as a rule, more concrete (and experiential) than the target domain (e.g. *building* versus *relationship* in A RELATIONSHIP IS A BUILDING). In the framework of the CMT, the fact that the metaphorical transfer generally occurs in the direction from more concrete to more abstract and not vice versa is called the *Principle of unidirectionality.*

2.2.2. The Great Chain Metaphor

First described by Lakoff and Turner in their seminal 1989 book *More Than Cool Reason,* the Great Chain of Being[8] metaphor is, in fact, not a metaphor per se, but rather a metaphorical conceptual complex consisting of four elements: (1) the Great Chain of Being cultural model, (2) the Nature of Things theory, (3) the GENERIC IS SPECIFIC metaphor, (4) the communicative Maxim of Quantity.

As is clear from its name, the Great Chain metaphor derives from the notion of the Great Chain of Being as a model of an "ordering of creatures endowed with different capacities for action" (Gardelle & Sorlin 2018: 147), which developed from Aristotle's taxonomy of nature and was formalised under the name of *Scala Naturae* ("Ladder of Being") during the scholastic period (ibid.). Depending on the interpretation, the Great Chain usually starts with inanimate objects at the bottom and ascends through plants, animals and human beings to the level of God/Cosmos. From the point of view of modern science, which shapes our constantly evolving understanding of the place of humans in the world, the Great Chain of Being hierarchy might seem obsolete. However, linguistic as well as cultural research suggests that it has "an enduring influence on humans' perception of the world and their place in it" (Gardelle & Sorlin 2018: 147). Similarly, Lakoff and Turner maintain that the Great Chain of Being has transcended scientific discourse and became a cultural model that is still "indispensable to our understanding of ourselves, our world, and our language" (Lakoff & Turner 1989: 167).

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[8] Lakoff and Turner introduced the metaphor under the name the *Great Chain metaphor*. Kövecses and other authors refer to it as the *Great Chain of Being metaphor*. For the sake of consistency, I refer to this metaphor as the *Great Chain of Being metaphor* or GCoB metaphor.

The second element of the Great Chain metaphor, the Nature of Things theory, posits that the behaviour and/or function of things in the world arise from their respective natures/attributes. For instance, substances have particular physical attributes (e.g. water is a liquid) and because of these attributes, they behave in a certain way (e.g. water takes the form of the container that it is in). A chair, on the other hand, has physical attributes that determine its physical behaviour (being a stable physical object, not changing its form), but apart from that, a chair also has structural attributes that make the chair what is it – a piece of furniture with a certain structure, which makes it suitable for sitting. Plants have physical attributes (they are made of a certain kind of matter typical of them), structural attributes (they have certain structures and forms that allow them to exist in the world in the form of plants) and, in addition to that, plants have biological attributes, which determine their biological behaviour, such as growth, withering, etc. Beside having all of the attributes of plants, animals also have instinctual attributes and resulting from this is their instinctual behaviour (e.g. hunting or procreation), whereas humans have all the attributes that animals have with the addition of reasoning and character, which explains their higher-order human behaviour such as moral judgement, logical thinking, aesthetics, etc.

As is evident from this extended description, the Nature of Things theory operates at all the levels of the Great Chain of Being cultural model to produce a description of all things in the world in their relation to each other, which results in the following hierarchy:

- HUMANS: Higher-order attributes and behaviour (e.g. thought, character)
- ANIMALS: Instinctual attributes and behaviour
- PLANTS: Biological attributes and behaviour
- COMPLEX OBJECTS: Structural attributes and functional behaviour
- NATURAL PHYSICAL THINGS: Natural physical attributes and natural physical behaviour (Lakoff and Turner 1989: 170-171)

It is when one level of the hierarchy is conceived of in terms of another level that "the system becomes metaphorical" (Kövecses 2010: 154), for instance, humans can be conceptualised in terms of animals (e.g. *a foxy woman*) or, conversely, animals in terms of humans (e.g. *Lion is the king of the jungle*). This leads to metaphorical mappings, which can extend either downward or upward the hierarchy. The mappings can occur between two neighbouring levels, as in the given examples, or they can skip over some

levels, connecting, for instance, the uppermost level and the bottom one, e.g. *dumb as a rock*.

So far, it has been shown how instantiations of the Great Chain metaphor come to be. The rest of the Chapter unravels how they come to mean. For this, let us consider the last two elements of the Great Chain metaphor complex, viz. (3) the GENERIC IS SPECIFIC metaphor, and (4) the communicative Maxim of Quantity. In order to illustrate how these two cogs of the Great Chain metaphor turn, I will loosely follow Lakoff and Turner's (1989) explication of "Achilles is a lion" metaphor, which is an instantiation of the HUMANS ARE ANIMALS metaphor rooted in the GCoB metaphorical complex.

The majority of the speakers of English would interpret the metaphorical statement "Achilles is a lion" to mean that Achilles is said to be as courageous as a lion. This is due to the fact that our collective conceptual schema for *lion* features a number of instinctual traits and behaviours that we associate with lions, *courage* being one of them. This comes from the fact that we know that lions do not back down in the face of danger. In theory, we also know that, on the part of the lion, this behaviour is instinctual and it does not involve reasoning and potential self-sacrifice, as courageous behaviour on the part of a human being would do. Essentially, both behaviours (a lion's "courage" and human courage) appear to be the same on the outside but have different motivations on the inside. From our anthropocentric point of view, it is easy to disregard the instinctual motivations of the lion and to conceptualise its behaviour in terms of our own. As observed by Krzeszowski (1997: 80) "people have a great tendency to ascribe higher values to various things and concepts at lower levels on the Chain." Consequently, the element of human COURAGE ends up firmly embedded in our collective conceptual schema for *lion*. Therefore, the first step in analysing this metaphorical statement is the acknowledgement that the metaphor is premised on a metaphorical projection of a quality of human character onto an animal.

So far, it has been established that calling Achilles a lion would, in essence, mean the same as calling Achilles courageous. This raises the question: Why would a generic speaker of English make an extra effort comparing Achilles to a lion instead of saying overtly that Achilles is courageous, if both statements have the same meaning? It follows logically from this line of argument that the two statements, viz. *Achilles is a lion* and *Achilles is courageous*, must differ in their meanings. This is, in fact, the case, and the difference in their meanings is due to the working of the GCoB metaphor. Specifically,

by conceptualising a human being, Achilles, in terms of an animal, the lion, we superimpose the second highest level of the Lakoff and Turner's hierarchy onto its uppermost level, namely:

lion < "ANIMALS: Instinctual attributes and behaviour"

is superimposed onto

Achilles < "HUMANS: Higher-order attributes and behaviour"

Given the knowledge that the Nature of Things theory provides about the elements of the hierarchy and their respective placement of the scale, lowering the human being one step down the scale would mean that its higher-order attributes no longer apply, and therefore, they can no longer be used to explain the behaviour. In the case of *Achilles is a lion*, Achilles is conceived of in terms of the general essence of an animal, which means that his courage is perceived not as a consequence of his high-order human attributes, such as character, reasoning, potential for self-sacrifice, etc., but rather as an effect of the instinctual animal attributes, to which he has been reduced by the metaphor. As Lakoff and Turner put it, "[*Achilles is a lion* metaphor] asks us to understand the *steadfastness* of Achilles' courage in term of the *rigidity* of animal instinct" (1989: 195, emphasis added). Hence, the subtle difference between the two statements, *Achilles is a lion* and *Achilles is courageous*, lies in the general structure of the attribute attachment: the former statement carries the metaphorical meaning of Achilles being courageous because it is an indispensable part of his nature, whereas the latter statement conveys the image of Achilles being courageous in a human way, i.e. out of his human volition/character.

Such changes in the nature of the attribute attachment, which occur when the general structure of one level of the Great Chain of Being is implanted into another level, is an example of the metaphorical mechanism that Lakoff and Turner (1989) call the GENERIC IS SPECIFIC metaphor. This particular kind of metaphor does not link individual elements of the source domain to individual elements of the target domain via metaphorical mappings, as is normally the case with conceptual metaphors. Instead, the GENERIC IS SPECIFIC metaphor singles out the general conceptual structure or *schema* of the source domain (e.g. *ANIMALS: Instinctual attributes and behaviour*) and implants it into the target (e.g. *Achilles is a lion [courageous]*) resulting in the restructuring of the original elements of the target domain (e.g. *Achilles' courage is as rigid as an animal instinct, and it is a defining part of his nature*).

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The last but not the least element of the Great Chain metaphor is the communicative Maxim of Quantity, which generally stipulates that the speaker should be "as informative as required and not more so" (Lakoff & Turner 1989: 171). Within the framework of the GCoB metaphor, the Maxim of Quantity assures that only the highest-ranking properties at each level of the hierarchy take part in the metaphorical process. As is clear from the explication of the Nature of Things theory presented above, each level of the Great Chain of Being hierarchy also "has all of the attribute types lower on the hierarchy" (ibid.), which means that only highest-ranking properties distinguish any level from a level below it. A lion, for example, in addition to its instinctual attributes discussed above, also has biological (mammal, gives birth to cubs, etc.), structural (has a tail, walks on four paws, etc.), and physical (self-propelled object, doesn't change its form, etc.) attributes. However, employing lower-ranking attributes of *lion* as a basis for metaphorical transfer and foregoing its higher-ranking instinctual attributes would result in confusion on the receiving end of the metaphor because the recipient would end up "with a great deal of superfluous information to sort through, namely, all the higher properties defining that higher level" (Lakoff & Turner 1989: 173). This would constitute a violation of the communicative Maxim of Quantity on the part of the speaker. As Lakoff and Turner phrase it, "the Maxim of Quantity thus places extremely strong constraints on the application of the Great Chain + GENERIC IS SPECIFIC" (ibid.), as it limits what can and cannot be conceptualised in terms of what.

From this line of argument, it follows that what appears to be of particular importance, when an object at a higher level of the Great Chain of Being is conceived of in terms of a lower-order object, is not any particular attribute of the source, which serves as the ground for metaphorical transfer, but rather the nature of the anchoring of this attribute in the source. In particular, in case of human beings metaphorically conceived in terms of animals, it has to be borne in mind that humans *a priori* possess all of the characteristics of animals, as is stipulated by the Nature of Things Theory combined with the Great Chain of Being model. It would, therefore, go against the Maxim of Quantity if a lower-order quality, which a higher level already possesses, were to be mapped upwards onto the higher level. In contrast, what seems to be at play in PEOPLE ARE ANIMALS metaphor not the ascription of certain animal characteristics to humans but a structural change in the schema of the attachment of human qualities to humans, as specified by the Nature of Things Theory.

2.2.3. Conceptual Metonymy

Since the beginning of human inquiries into the nature of language in the antiquity, metaphor and metonymy have been regarded as related rhetorical tropes, as both of them describe shifts in word meaning from direct/core meaning to indirect/transferred meaning. As metaphor was propelled to the spotlight of cognitive linguistic research in the 1990s, metonymy, albeit briefly recognised as a parallel to metaphor cognitive mechanism, stayed in the shadows. However, the following decades saw "a rising concern with metaphor's ugly sister, namely metonymy" (Nerlich et al. 2011: 19). More specifically, such renowned cognitive linguists as Gibbs (1994), Radden & Kövecses (1999) Barcelona (2003a) and others stressed that metonymy is just as essential to human thought as metaphor, with Barcelona even going as far as to claim that metonymy is "probably even more basic to language and cognition" (2003b: 4).

Metaphor and metonymy are very much alike in that they both are essentially conceptual phenomena, which manifest, *inter alia,* in human language. In the words of Lakoff & Johnson, both these mechanisms are "part the ordinarily, everyday way we think and act as well as talk" (1980: 31). However, whilst the primary function of conceptual metaphor consists in helping us understand one thing in terms of another, metonymy mostly serves a referential function, i.e. it allows us to use one entity to refer to another related entity. (cf. Ruiz de Mendoza Ibáñez & Diez Velasco 2003) A classic example of metonymy that comes up over and over again in the relevant literature is *The White House is not saying anything* (Kövecses 2010: 172), in which the location of the American administration stands for the people who make up the administration in an instantiation of THE PLACE FOR THE INSTITUTION metonymy. Even though the primary function of metonymy is referential, it should be pointed out that the relationship between *the White House* and the entity that it serves as a reference to, viz. members of the administration, is not one of a mere substitution, but rather one of on interrelation, which results in "a new, complex meaning" (Radden & Kövecses 1999: 19). In this particular case, the grand image of the White House as a building can be interpreted as adding grandeur to the status of the administration, which is located in it.

From the above example, it can also be inferred that the relation between the two entities connected by means of metonymy seems to be more immediate than the relationship between metaphorical source and target domains. This results from the fact that conceptual metaphor generally arises from real or perceived similarity between the

source and the target, whereas conceptual metonymy is predicated upon the contiguity of the two entities participating in the metonymic process (Kövecses 2010: 174). Thus, the crucial difference between the two conceptual mechanisms is that metaphor is a cross-domain mapping that links up two distinct, distant conceptual domains, whereas metonymy connects two elements that belong to one and the same conceptual domain. Consequently, at the end of a metaphorical transfer, after certain aspects of source domain have been mapped onto the target, the source domain is "wiped out" (Dirven 2003: 100), with only the target domain remaining in the foreground. In metonymy, on the other hand, both entities that are brought together "keep their existence and are construed as forming a contiguous system" (ibid.).

Since metonymy operates within one conceptual domain, it is helpful for analytical purposes to re-imagine the conceptual domain as a collection of elements that are connected to each other and that can invoke a metonymic bond. Lakoff (1990) refers to the remit of conceptual metonymy as an "*idealized cognitive model*" (ICM). He defines an ICM as a "complex, structural whole, a gestalt", which "structures a mental space, as described by Fauconnier" (1990: 68). Radden and Kövecses (1999: 20) elaborate further on the nature of ICMs as conceptual models encompassing "people's encyclopaedic knowledge of a particular domain" as well as " the cultural models they are a part of". They also note "we have ICMs of everything that is conceptualized, which includes the conceptualization of things and events, word forms and their meanings, and things and events in the real world" (Radden & Kövecses 1999: 21). The concept of an ICM is similar to what other cognitive linguists call frames (Fillmore 1976) or mental spaces (Fauconnier 1994).

Radden and Kövecses suggest that conceptual metonymy makes use of our stereotypical, idealized knowledge about how entities compound into ICMs, and provide the following definition of conceptual metonymy:

> Metonymy is a cognitive process in which one conceptual entity, the vehicle, provides mental access to another conceptual entity, the target, within the same idealized cognitive model. (1999: 21)

The choice of metonymic vehicles and targets within an ICM does not occur at random. Radden and Kövecses distinguish two main kinds of metonymy-producing relationships between the elements of an ICM: on the one hand, the metonymic connections that occur between the ICM as a whole and its parts, and, on the other hand,

the relationships involving parts of an ICM standing for its other parts. An example of the first type would be A WHOLE THING FOR A PART OF THE THING (e.g. *America* for 'United States'), whereas the second set of metonymic relationships can be exemplified by AGENT FOR ACTION metonymy (e.g. *to author a book*). Out of space considerations, I will refrain from presenting the whole typology of metonymy-producing relationships devised by Radden and Kövecses but I will use such metonymies as SUBEVENT FOR THE WHOLE EVENT, SUBEVENT FOR ANOTHER SUBEVENT, OBJECT INVOLVED IN THE ACTION FOR ACTION and other metonymies suggested by the authors in my analysis in Chapter 3.

2.2.4. Metaphor-Metonymy Interaction

It might seem from the brief summary of Conceptual Metaphor and Metonymy theory (hereinafter CMMT) presented above, that these two conceptual mechanisms are clearly demarcated both in linguistic literature and in naturally occurring language, especially since the linguistic examples that are normally used to illustrate these phenomena without going into much detail are so clear-cut (e.g. *Achilles is a lion* vs. *The White House is not saying anything*). However, this is not the case, since any attempt to analyse naturally occurring linguistic data is bound to show that, in fact, conceptual metaphor and metonymy march in lockstep, and that it can at times be difficult to say with certainty which of the two mechanisms is at play in the intricate process of online meaning construction. Barcelona (2003a) illustrates this point with the help of the sentence *He fell in the war*, which could be interpreted either metaphorically or metonymically, depending on the context. If the sentence describes a person actually falling to the ground and dying as a result of war wounds, then it could be interpreted as an instantiation of THE SUBEVENT FOR THE WHOLE EVENT metonymy. If, on the other hand, the sentence tells the story of person, whose death in the war did not follow the scenario of falling to the ground and dying (e.g. the person could have died in their sleep, drowned, etc.), then the reading is metaphorical (namely LIVING IS STAYING UPRIGHT / DYING IS ASSUMING A HORIZONTAL POSITION), with the metaphorical mapping being "grounded in the prototypical metonymic connection between actual falling and dying in the war." (Barcelona 2003a: 240) Hence, even a metaphorical interpretation of this sentence has a metonymic motivation. This echoes Kövecses's work on the metaphoric and metonymic nature of emotion concepts. Kövecses observed that, in the context of human emotions, "the metonymies can be said to motivate the metaphors" (2010b: 281), in that metonymies

capture certain physical aspects of the human body involved in emotion, which then provides fertile ground for metaphor.

A number of articles published in recent years have addressed the issue of metaphor-metonymy interaction, putting forward different theories of how to explain fuzzy boundaries, overlaps, and ambiguities between metonymy and metaphor (e.g. Barcelona 2003b; Dirven & Pörings 2003). For the most part, the consensus seems to lie in the notion of a metaphor-metonymy continuum, which would accommodate the nuances of metaphoric and metonymic conceptualisations. An example of this would be a metaphor-metonymy continuum proposed by Deignan (2005). Degnan ran the findings of Goossens' (1995) dictionary-based study of metaphors-metonymy interaction patterns through a large-scale computer-based corpus, and used the results to compile the following metaphor-metonymy cline:

metonym – metonymy within metaphor (orig. Goossens) – metaphor from metonymy (orig. Goossens) – metonymy-based metaphor – metaphor

The left pole of the cline, a metonym, is a case of an intra-domain mapping, which can be either non-conventional or conventional, with the former deriving its meaning from the context (as in *The ham sandwich is getting impatient for his check*), whereas the meaning of the latter is often an established sense of the word (e.g. *The White House is not saying anything*). Metonymy within metaphor is a rather rare phenomenon, wherein one component of an overall metaphorical multi-word phrase appears to be a metonym (e.g. *to bite one's tongue off*, in which *tongue* stands for the ability to speak). The third position on the continuum, viz. metaphor from metonymy, is the most prevalent pattern, which includes linguistic expressions whose interpretation is ambiguous and can either be more metaphorical or more metonymical, depending on the context (e.g. *He fell in the war*). The next category encompasses metaphorical expressions, the interpretation of which is rarely ambiguous and which bear a clear metonymic motivation (e.g. a *heated argument* as an instantiation of ANGER IS HEAT based on PHYSICAL EFFECT OF EMOTION FOR THE EMOTION). And the right pole of the cline, metaphor, a clear-cut case of a cross-domain mapping, with no ambiguity between literal and figurative use (e.g. *He shot down all of my arguments* (Lakoff & Johnson 1980: 4) as an instantiation of ARGUMENT IS WAR). Deignan concludes her study with the admission that the categories she identified are not clear-cut but rather they signify the movement among the cline of semantic development of lexical units in the process of metaphor-metonymy interface.

2.3. Zoosemy

It is widely recognised in the field of cognitive linguistics that animals constitute a rather productive metaphorical source domain, especially for conceptualising people. (Kleparski 2013; Kövecses 2010a and others) As Shepard (1997: 10) puts it, "like amusing, wise, terrible, curved mirrors, animals prefigure human society." In the same vein, Deignan observes, "there seems to be a widespread tendency to draw on the animal kingdom as a source of similes for human behaviour" (2003: 226). PEOPLE ARE ANIMALS conceptual metaphor is one of the most basic conceptualisations that structures our life as people and surfaces in language with an astounding frequency.

According to Goatly (2006), there are at least three ways to interpret the statement *humans are animals*, namely as a hyponymic statement ('humans are part of the category animal'), as a near-identity statement ('humans and animals are more or less alike'), and as a metaphorical statement ('humans are like animals'). The first interpretation is connected to Darwinism with its emphasis on aggressive competition and struggle among species to survive; it is commonly used in the framework of socio-biology to provide justification for various patterns of human behaviour, including morally disreputable ones, by categorising humans as sophisticated animals, partially governed by bestial instincts (see *A natural history of rape: biological bases of sexual coercion* by Thornhill and Palmer [2000]). The second interpretation stresses the symbiotic co-operation and co-existence between the human and the non-human forms of life, i.e. the so-called endosymbiosis. It sees people as a particular kind of animals not opposed to the rest of the animal kingdom but fitting in with the rest of the species and defined by their humanity. The third, metaphorical, interpretation draws a sharp demarcation line between humans and animals, with humans being placed on the one end the superiority-inferiority pole and animals on the other. It is this distancing that makes the HUMANS ARE ANIMALS metaphor possible because, in order for the conceptual metaphor mechanism to work, the source and the target domain must be distinct and distant from one another. The workings of the HUMANS ARE ANIMALS metaphor and its linguistic manifestations are subsumed under the term *zoosemy*.

The term *zoosemy* was first introduced as early as 1971 by the Ukrainian lexicologist N.M. Rayevska to describe using animal names "metaphorically to denote human qualities" (1971: 159). It was later popularised in linguistic circles by researchers at the Rzeszów School of Diachronic Semantics, namely Kleparski (1990, 1997, 2002, 2017),

Kiełtyka (2008, 2016, 2017), Górecka-Smolinska (2012) and others, who define zoosemy as a category of semantic change, "whereby animal names are employed to designate human characteristics" (Kiełtyka 2013: 325). However, Resovian semanticists are not the only ones who endeavoured a peek behind the curtain of human-animal conceptualisation mechanism. In other publications, zoosemy has been explored under the name of *animal/[-related/-based] metaphor* (Kövecses 2010a; Thornton 1989), *zoometaphor* (Kleparski 2017; Sakalauskaite 2010), *zoomorphy* (Sommer & Sommer 2011), *zoomorphisation* (Martsa 2013), *zoonymy* (Dobrotă 2017), and *critter constructions/ construction involving animal terms* (Panther & Thornburg 2012).

Not only does it go by many names, zoosemy also inhabits a wide number of "lexical, morphological and syntactic environments" (Milić 2016: 73). Rayevska (1971) distinguishes between nominal zoosemy, which she calls "nicknames from animals" (*bear* for a 'clumsy person', *tiger* for a 'cruel fellow', etc), and verbal zoosemy (e.g. *to ape* for 'to imitate', *to wolf* for 'to eat greedily, etc.). She also draws the reader's attention to zoosemy in idiomatic phrases and proverbs, such as *a snake in the grass* or *as the crow flies*. Apart from that, zoosemic developments in language can also result in adjectives and adverbs featuring animal names (Deignan 2005: 49), e.g. *dogged* and *doggedly*. Kiełtyka sheds light on the naming function of zoosemy by conducting an investigation of zoosemic origins of surnames in several languages (e.g. *Crow(e), Swan* or *Byk* – Polish for 'bull', etc.), concluding that "animal-related surnames are one of the areas that show ubiquity of broadly understood zoosemy and its established position in many natural languages" (2016: 57). Kiełtyka also examines such manifestations of the PEOPLE ARE ANIMALS metaphor as animal-action verbs applied to humans (e.g. *to bark a command*)*,* nouns denoting parts of animal bodies used to describe part of human bodies (e.g. *camel toe*), as well as many other manifestations of zoosemy.

Clad in many cloaks, zoometaphors occur in a wide variety of discourses, where they serve as a powerful cognitive tool for conceptualising and structuring diverse social phenomena, viz. gender dynamics and sexuality (Baider & Gesuato 2003; Fontecha & Catalan 2003; Hines 1999; López-Rodríguez 2016); economy and business (Dobrotă 2017; Silaški 2011; Silaški & Đurović 2010); politics (Lung 2018; Riabov & de Lazari 2009; Wekesa 2018) and migration (Marshall & Shapiro 2018; O'Brien 2003; Santa Ana 1999); religious matters (Basson 2008), etc. An example of the gender-related zoosemy would be a study by Hines (1999), which explored zoosemic conceptualisations of

women as objects of sexual attraction (e.g. *Playboy bunny, chick, kitten*, etc.) as encoded by the metaphor DESIRED WOMAN IS A SMALL ANIMAL and established that "women-considered-sexually are described not just as animals, but specifically as those which are hunted or possessed, conflating not just sex and appetite, but quite explicitly, control" (Hines 1999: 16).

The menagerie of animal terms inhabiting the discourse of economics and business underscores the "survival-of-the-fittest" nature of the relationships of the human actors within these fields. For instance, economic policy advisors with a negative view towards inflation and its effects on society are called *hawks*, while their rivals promoting opposite views are nicknamed *doves*. Hostile investors looking to capitalise on weaknesses of others or *sharks* are not to be confused with *sheep*, i.e. investors who lack in strategical thinking and, therefore, trade on the advice of others, or *lemmings*, investors who follow the trend without thinking their investments through and eventually fail (Silaški 2011). It could be argued that the mirroring of the world of business/economics in terms of wildlife magnifies the power dynamics inherent in these activities and frees the human actors from judgement for their sometimes unsavory behaviour by foregrounding their animal instincts.

Migration is another aspect of social relations wherein zoosemy seems to have a notable presence, since animal metaphors can be an effective discursive strategy of othering, denigration and, in extreme cases, even dehumanization. In an in-depth study, O'Brien (2003) describes *inter alia* how the MIGRANTS ARE ANIMALS metaphor played out in the immigration restriction debate of the early 20th century, with prospective immigrants to the U.S. being portrayed as *a swarming ball of bees*, *a nest of venomous snakes,* a *big swarm of mosquitoes, infested with malaria and yellow fever germs*, etc. by the media as well as U.S. politicians.

What unites these examples as well as the studies referenced above is that they appear to suggest that animal metaphors often seem to reflect negatively on the metaphorical target. In fact, many cognitive linguists observe that the great majority of animal metaphors are negative and pejorative, "suggesting that it is desirable to distance ourselves from animals, both conceptually and emotionally" (Goatly 2006: 34). According to Kleparski (2002: 27), "animal names used for people are often depreciative, more or less abusive appellations, and the element of similarity is either a quality that is reprehensible or contemptible in itself, or else a quality that is neutral or favourable in an

animal, but becomes reprehensible in a human being." In a similar vein, Kövecses (2010a: 153) argues that it is the very objectionability/undesirability of animal behaviour perceived from the human point of view that serves as the foundation for metaphorical transfer. Hence objectionability/undesirability is the main meaning focus of the course domain ANIMAL, which would warrant a reformulation of the original PEOPLE ARE ANIMALS metaphor to OBJECTIONABLE BEHAVIOUR IS ANIMAL BEHAVIOUR and OBJECTIONABLE PEOPLE ARE ANIMALS. This account, however, does not explain the semantics of positively or neutrally connoted animal metaphors, such as *Achilles is a lion* or *That brand of dogged determination that succeeds over the long pull.* (OED Online: dogged, adj.&adv.) As observed in Kiełtyka (2016: 49), people tend to utilize animal imagery to describe other people that they "either dislike, despise or simply wish to insult, mock or ridicule, or – on the other end of the teleological scale – to express endearment, admiration or humorous intent." Thus, the question of semantic derogation in zoosemy is far from being settled and warrants further research.

2.4. Current Research on Verbal Zoosemy

Verbal zoosemy is a subtype of animal metaphor that encompasses denominal verbs which originate from animal nouns by way of conversion and denote "activities that are related to the animals the parent noun refers to" (Martsa 2013: 149). From all the linguistic cloaks that animal metaphors come clad in, verbal zoosemy is perhaps the most ubiquitous and, at the same time, the least conspicuous one in the eyes of the language user. Traditionally, cognitive scholars who tackle the HUMANS ARE ANIMALS metaphor have used such examples as *Achilles is a lion* or *Richard is a gorilla* in their explications of the meaning behind animal metaphors. However, drawing on the findings of such scholars as Cameron (2003)[9] and Goatly (2005/1997)[10] as well as on her own corpus research, Deignan (2005: 147) posits that "the focus on nominal examples in much metaphor theory is not representative of the diversity of use in naturally-occurring data," since the most frequent instantiations of zoosemy involving the actual animal names are, in fact, denominal animal verbs, e.g. *dog*v, *squirrel*v *away*, *horse*v *around*, etc. Deignan further buttresses her claim by adducing corpus searches that she conducted for various

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[9] In a corpus study, Cameron compared the ratios of different parts of speech used metaphorically and found out that verbs accounted for almost half of all metaphorical instances in her data.

[10] Goatly suggested that verbs produce inherently less marked metaphors than nouns because of the less tangible nature of their referents.

animal nouns, which established that when such lexemes are used metaphorically to refer to the target domain PEOPLE, they are rarely or never used as nouns, but rather as verbs or, less frequently, as adjectives. For example, in case of *squirrel*, corpus data suggest that, used in its literal sense, it always occurs as a noun, whereas whenever it is used metaphorically, there is a very strong tendency for the word to change the word class and occur as a verb. Furthermore, even if an animal noun has a nominal metaphorical counterpart, e.g. *fox*, "the noun metaphor often tends to be a good deal less frequent than the other part of speech" (Deignan 2005: 154). For example, out of 461 citations of the lexeme *fox*, which were found in the Bank of English corpus, 440 citations accounted for the nominal literal uses of the word, 18 uses were metaphorical verbal ones, and only 3 times did the word occur as a noun with a metaphorical meaning (ibid.). Deignan goes on to conclude that in most cases the verbal uses of animal terms are exclusively metaphorical, as animal verbs seem to never occur with a reference to their original source domain and describe the behaviour of the respective animals. According to Deignan, the mechanism of the metaphorical meaning transfer and the concomitant word-class shift in animal lexemes can be explained by the fact that "the most frequent and salient lexis in the source domain are nouns describing animals, but these are required to describe ways of behaving, hence the logical transformation into verbs" (2006: 119).

Panther and Thornburg (2012) provide a more technical account of the conceptual mechanisms at work in verbal zoosemy, and devote their attention solely to particle verbs among the verbal fauna, e.g. *rat*$_V$ *out* (but not *rat*$_V$ *on*), which they term *critter constructions*. Their study rests on the notion of cultural (folk) models, incorporating folk knowledge about animals, their behaviour, physicality, etc., that is universally available to speakers. Panther and Thornburg claim that the first operation in the process of verbalisation of animal nouns is a metonymic selection of certain components of the respective folk model as coded by the WHOLE ANIMAL FOLK MODEL FOR SOME ELEMENT OF THE ANIMAL FOLK MODEL metonymy. The component that is invariably selected from the respective cultural model of the source animal in the first, metonymic phase of the meaning transfer is ANIMAL BEHAVIOUR, which is then mapped onto HUMAN BEHAVIOUR as a second step of the metonymy-motivated metaphorical process. In the next phase, the particle contributes its meaning to the aspectual meaning of the verb, as the process culminates in the final operation of "'sense specialisation' which provides for the

idiosyncratic, non-predictable but motivated meaning of the verb+particle gestalt" (2012: 72).

Panther and Thornburg explicate the critter construction *rat*$_V$ *out* 'to inform on', according to their model. In their view, in the first phase of the meaning transfer, the conspicuous attribute of VILE BEHAVIOUR is selected in the folk model for *rat*. It is then mapped onto the human property IMMORAL BEHAVIOUR, with the final touch being delivered by the sense-specialisation operation, whereby the general sense IMMORAL BEHAVIOUR OF A HUMAN is narrowed down to the specific immoral action of INFORMING ON a fellow human. Finally, the particle *out* contributes to the construction of the telic aspect of the verb. As the authors point out, "the final product of the (…) metaphoric and metonymic mechanisms is a specialised idiosyncratic meaning" (2012: 74), which is motivated by but not "strictly predictable from the cultural model of rats" (ibid.).

In my view, Panther and Thornburg's approach has a series of limitations that need to be addressed. Firstly, the inflexible character of the proposed model, which always selects the aspect of ANIMAL BEHAVIOUR in the source domain, does not account for such verbs as *badger*$_V$ 'repeatedly and annoyingly ask (someone) to do something' (OED: badger, v.) or *buffalo*$_V$ 'to outwit, confuse, deceive, or intimidate someone' (OED: buffalo, v.), which derive their metaphorical meaning from the source subdomain of the HUMAN BEHAVIOUR directed at the respective animal, rather than the subdomain of ANIMAL BEHAVIOUR[11]. Secondly, Panther and Thornburg's theory does not explain why the particular subdomain of VILE BEHAVIOUR is activated in the folk model for *rat* and what factors direct the further specialisation of the transferred meaning in the domain of PEOPLE, which is why the authors themselves characterise the resulting meaning of the animal verb as "idiosyncratic". Furthermore, it is not clear how the proposed schema would manage to account differently for such verbs as *rat*$_V$ 'to act as a strike-breaker', *rat*$_V$ 'to tease hair', *rat*$_V$ *off* 'to desert a party, cause or principle', and *rat*$_V$ *on* 'to inform'.

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[11] This issue was addressed by Clark and Clark (1979) in a study that examined the mechanisms of meaning creation underlying innovative denominal verbs. The researchers devised a broad classification of such verbs, dividing animal verbs, in particular, in such subcategories as agent verbs (e.g. *to fox, to parrot*, etc.), experience verbs (e.g. *to badger* the officials), and goal verbs (*to fish, to foal*), noting that verbs of the second class were relatively rare. Although Clark and Clark did not embed their investigation in the framework of the Conceptual Metaphor And Metonymy theory, their study provided many useful insights for this thesis as well as a considerable number of animals verbs for the dataset of this investigation.

Gil Ruiz and Ruiz Herrero (2005) propose another model of verbal zoosemy embedded in the framework of metaphor-metonymy interaction developed by Ruiz de Mendoza Ibáñez and Diez Velasco (2003). Similar to Panther and Thornburg, Gil Ruiz and Ruiz Herrero distinguish two phases in the process of verbalisation of animal terms, but unlike Panther and Thornburg, the authors put metaphorisation first and the metonymic expansion of the metaphorical target second. Gil Ruiz and Ruiz Herrero illustrate their argument with the help of the example *Peter foxed me*, in which, as they claim, an attribute of the animal is first mapped onto the human, i.e. "Peter is [conceived of] as clever and deceitful as foxes are thought be" (2005: 935). In the second phase, the metonymy AGENT FOR ACTION converts the ontological metaphor (i.e. what Peter is) into a situational metaphor (i.e. what Peter does), resulting in the verbal usage of *fox*. Gil Ruiz and Ruiz Herrero, however, do not consider other types of animal verbs, which were broached above and which do not fit their zoosemisation model.

Martsa (1999, 2013) provides a more comprehensive account of the conceptual mechanisms underlying animals verbs. In contrast to Panther and Thornburg's assumption that the only element of the folk model of an animal that is activated in a metaphorical transfer is BEHAVIOUR, Martsa draws on Wierzbicka's (1996) theory of the structure of animal folk concepts and contends that not one, but multiple constituting elements or *thematic parts* (Wierzbicka's terminology) of animal ICMs may give rise to the metaphoric application of animal terms, viz. HABITAT, SIZE, APPEARANCE, BEHAVIOUR and RELATION TO PEOPLE. Martsa (2013) also pays special attention to the direction of the metaphorical mappings between ANIMALS and HUMANS and distinguishes between unidirectional and bidirectional mappings. In his view, there are two kinds of unidirectional mappings between the domains in question, viz. anthropomorphisation (ANIMALS ARE HUMANS) and zoomorphisation (HUMANS ARE ANIMALS), both of which involve mapping the original attributes of the SD onto the TD by means of a single cognitive operation. A bidirectional metaphorical mapping, on the other hand, refers to the sequential activation of, first, anthropomorphisation, and, second, zoomorphisation, as in Lakoff and Johnson's *Achilles-is-a-lion* example.

Taking this into account, Martsa (2013: Chapter 8) suggests that, according to the underlying conceptual mappings, English animal verbs can be broadly divided into three categories, namely:

1. verbs arising from a metonymic mapping,
2. verbs arising from different kinds of unidirectional metaphorical mappings (either zoomorphisation or anthropomorphisation),
3. verbs arising from a bidirectional metaphorical mapping followed by a metonymical mapping.

The first category does not involve metaphorical mappings linking up the domains HUMANS and ANIMALS. Instead, it rests primarily on two metonymies, viz. YOUNG ANIMAL FOR BRINGING THAT ANIMAL FORTH, e.g. *calf$_V$, cub$_V$, kitten$_V$*, etc., and ANIMAL FOR CATCHING/EXTERMINATING THIS ANIMAL, e.g. *shrimp$_V$, worm$_V$, whale$_V$,* etc.

In the animal verbs of the second group, the metaphorical sense arises from "the unidirectional mapping of particular instinctual traits of animals as perceived by humans onto the activity profiled by the verb" (Martsa 2013: 160). The second category features two subcategories, namely (a) verbs, whose parent nouns are only used in their literal sense and have no metaphorical counterparts, e.g. *squirrel$_V$, carp$_V$, hare$_V$, ferret$_V$*, and (b) verbs, whose parent nouns have one or more metaphorical counterparts, which are only indirectly or not at all related to the verbs themselves, e.g. *beetle$_V$, cow$_V$, drone$_V$, duck$_V$, hare$_V$ (off), parrot$_V$, rabbit$_V$, weasel$_V$, snake$_V$*.

Finally, verbs belonging to the third category derive their metaphorical sense from a similar sense of the related metaphorical noun, which, in turn, arises from a bidirectional mapping – a process similar to Gil Ruiz and Ruiz Herrero's "metonymic expansion of the metaphorical target", e.g. *chicken$_V$, monkey$_V$, pig$_V$, beaver$_V$* and *fox $_V$*.

Martsa (2013: 158) notes that, depending on their meanings, the same verbs may fall into different categories, as exemplified by *worm* in the following set of sentences:
(a) Consult the vet about *worming* your puppy. (Category 1)
(b) He *wormed* his way under the fence. (Category 2a)
(c) Steve *wormed* his way out of going to the meeting. (Category 3)
Martsa (2013: 159-164) substantiates the proposed classification by explicating a series of animal verbs with metaphorical meanings belonging to Category 2 and 3 as follows (abridged here for space considerations):

Table 1. Explications of Animal Verbs According to Marta's (2013) Classification of Verbal Zoosemy

Category 2a: unidirectional metaphorical mapping, no metaphorical uses of the animal noun		
ferret$_N$ BEHAVIOUR [animals of this kind are known to be good and fierce hunters]	→	ferret$_{V1}$ [search busily for a thing (in not a very organized way) (about humans)] The General Director ferreted in his breast pocket for his reading glasses.
RELATION TO PEOPLE [animals of this kind are kept by people for hunting rabbits and rats]	→	*ferret*$_{V2}$ (out) [find sth thoroughly searching] O'Connor was the person who ferreted out the truth in this case.
Category 2b: unidirectional metaphorical mapping, unrelated metaphorical uses of the animal noun		
wolf$_N$ BEHAVIOUR [animals of this kind usually hunt in packs; male species are also known to roam and hunt alone]	→	*wolf*$_{N1[HUMAN]}$ [a person who prefers to be alone] A lone wolf. *wolf*$_{N2[HUMAN]}$ [a womanizer] He had the reputation of being a bit of a wolf.
BEHAVIOUR [animals of this kind eat quickly and greedily]	→	*wolf*$_V$ (down) [eat a large amount quickly and greedily (about humans/animals)] The boys wolfed the sandwiches down and then started on the cakes.
Category 3: bidirectional mappings, metonymic extension of the metaphorical target		

pig$_N$ APPEARANCE [animals of this kind are usually dirty, filthy] BEHAVIOUR [animals of this kind eat a lot greedily and noisily]	→	*pig*$_{N[HUMAN]}$ [a dirty, greedy, unkind, oppressive person] What a pig! He refused to help, even though he could see we were having trouble.	→	*pig*$_V$ (out/on) [eat a lot (on a particular occasion)] She is always pigging herself on chocolate.

Note. Adopted from *Conversion in English: A Cognitive Semantic Approach*, p. 159-164, by S. Martsa, 2013, Newcastle upon Tyne: Cambridge Scholars Publishing

It follows from Table 1, that *wolf*$_V$ and *pig*$_V$, despite appearing to have similar metaphorical meanings resulting from mapping the manner of eating of an animal onto the manner of eating of a human, are placed in different categories, namely Category 2b and Category 3 respectively, because *pig*$_V$ has a contemporary nominal counterpart with a related metaphorical meaning *pig*$_{N[HUMAN]}$, whereas *wolf*$_V$ has no such counterpart. This suggests that *wolf*$_V$ is a product of a unidirectional metaphorical mapping, whereas *pig*$_V$, results from a bidirectional one. Following Martsa's reasoning, one may assume that the verb *wolf*$_V$, therefore, denotes animal-like behaviour demonstrated by people with respect

to consuming food, whereas *pig*$_V$ describes certain human-specific behaviour of people, to whom the noun *pig*$_{N[HUMAN]}$ may have been applied metaphorically on the basis on them demonstrating certain human attributes associated with pigs, such as greed, dirtiness, and other negative characteristics. Interestingly, *pig*$_V$ is first attested in the OED with the sense 'to eat or help oneself to (food) esp. greedily' in the late 19th century (OED> *1897 At dinner he pigged at a table by himself*.) On the other hand, *wolf*$_V$ dates back slightly earlier and carries the meaning 'to eat like a wolf; to devour ravenously' (OED> *1862 [She] used to..wolf her food with her fingers*.) The initial semantic parallelism between these two verbs would seems to call for them to be placed in the same category according to the mechanisms of the metaphor-metonymy interaction underpinning their formation. However, Martsa does not take the diachronic dimension into account and bases his animal-verb typology on the assumption that whenever a nominal counterpart to an animal verb is available, the direction of metaphorical-metonymic transfer is invariably *noun*$_{ANIMAL}$→*noun*$_{HUMAN}$→*verb*$_{HUMAN}$.

Perhaps, the most prominent voice in the field of verbal zoosemy belongs to the Resovian semanticist Robert Kiełtyka. In contrast to Martsa, Kiełtyka (2016, 2017) completely excludes metonymically derived animal verbs (Category 1 in Martsa's classification) from the scope of verbal zoosemy and reserves the term for "human specific metaphorisation patterns" (2017: 67), thus drawing the line between animal metaphor, on the one hand, and its human-related subtype, zoosemy, on the other. At the same time, Kiełtyka broadens the scope of verbal zoosemy to include not only verbs derived from animal nouns by means of conversion, but also animal-specific verbs that used to exclusively describe animal behaviour but were redirected in the process of language change to metaphorically describe human behaviour (OED> 1897 *The old lady twittered and fluttered.;* 1958 *She seemed so content nested down there at the end of Tupelo Drive.*).

Contrary to Martsa's focus on linguistic synchrony, Kiełtyka pleads for a panchronic approach to the study of verbal zoosemy and shines the light on the role of metaphor and metonymy in the process of language change leading to the formation of animal verbs. Based on the assumption that animal verbs are a product of metaphor-metonymy interaction in the context of ever-ongoing semantic evolution, Kiełtyka's typology of zoosemic verbs rests on the degree of transparency/opaqueness of the metaphorical link

between the source and the target domain in the present-day meaning of a given animal verb. Specifically, Kiełtyka (2016: Chapter 2) introduces three types of verbal zoosemy:

(1) *overt zoosemy*, in which the denominal verb bears a transparent relation to the source animal, e.g. *fox$_V$, pig$_V$, rat$_V$*, etc.;

(2) *veiled zoosemy*, in which the ties between the source and the target domain are less obvious but can be still accessed with some etymological effort, e.g. *bark out orders*, *to tail someone* 'to follow someone', but also *badger$_V$, fish$_V$*,;

(3) *covert zoosemy*, in which the zoosemic motivation of a given verb is so opaque that it can only by uncovered through a panchronic etymological investigation with an occasional reference to broad encyclopaedic knowledge, e.g. *snore$_V$, sneer$_V$*.

In Kiełtyka's view, the difference between the denominal animal verbs that fall in the first category (i.e. overt zoosemy) and such verbs in the second category (i.e. veiled zoosemy) lies in the transparency of the origin of their semantic content. More specifically, overt zoosemic verbs, such as *fox$_V$, pig$_V$, rat$_V$*, are, in his view, part of a direct metaphorical mapping projecting animal attributes into the target domain HUMANS as specified by the HUMANS ARE ANIMALS metaphor (i.e. *fox$_N$, pig$_N$, rat$_N$*), followed by subsequent AGENT FOR ACTION metonymy. On the other hand, the meaning of veiled zoosemic verbs, such as *badger$_V$, fish$_V$*, is less straightforward, as it arises from the respective animal acting as an "object rather than the subject of a verb named after them [it]" (2016: 112). Therefore, in order to understand the mechanics behind the semantics of veiled denominal animal verbs, one must be familiar with the broad situational context that these verbs originated in, e.g. *badger$_V$* stems from the sport of badger-bating, in which badgers were bated with dogs, and, not unrelatedly, it carries the metaphorical meaning of 'bating/ harassing someone persistently'(OED: badger, n.) in present-day English.

With regard to the role that the metaphorical and metonymic mechanisms play in the formation of overt verbal zoosemy, Kiełtyka generally seems to adopt a position similar to Gil Ruiz and Ruiz Herrero's "metonymic expansion of a metaphorical target", stating that:

In the case of overt verbal zoosemy a given verb is derived from a noun (through the process of denominal formation) that labels the animal species and – in the process of metaphorisation followed by subsequent metonimisation [sic.] - comes to be used with reference to representatives of humankind (…) (2016: 96)

In other words, Kiełtyka effectively merges Category 2 and 3 of Martsa's classification into a single category, suggesting that all overt zoosemic verbs follow the $noun_{ANIMAL} \rightarrow noun_{HUMAN} \rightarrow verb_{HUMAN}$ pattern. Addressing the problem of missing nominal counterparts in some zoosemic verbs of this type (see Martsa's Category 2 hereabove), Kiełtyka introduces the notion of a *zoosemic gap*, stating that whenever a metaphorical noun corresponding to the zoosemic verb is missing from the lexicon (e.g. $pig_V - pig_N$, $wolf_V - \underline{\qquad}_N$) "the role of missing zoosemic senses (…) are [sic.], as it were, taken over by the knowledge speakers possess of some animals, i.e. real-world dogs, apes (…)" (2016: 98). Kiełtyka also notes that animal verbs paired with zoosemic gaps seem to represent a different, albeit not further specified, type of overt verbal zoosemy than animal verbs paired with zoosemic nouns, in effect, admitting that Martsa's division of such verbs into separate categories was not baseless. The author does not, however, provide any further explanation as to the nature of the differences between these two groups of animal verbs.

Table 2. Formation Patterns of Zoosemic Nouns and Verbs

	Pattern I $$N$$ $$\downarrow$$ $$V$$ bug_N 'an insect or other creeping or crawling vertebrate' bug_V 'to bother, annoy'	Pattern II $$N_1 \rightarrow N_2$$ $beetle_{N1}$ *'a kind of insect'* $beetle_{n2}$ *'a short-sighted person'*
Pattern III N_1 with arrows to N_2, N_3, V_1, V_2 *butterfly*$_{N1}$ *'an insect'* *butterfly*$_{N2}$ *'a person who never settles down'* *butterfly*$_{V1}$ *'to fly to and fro'* *(for more examples, see Štekauer et al. 2001: 71-72)*	*Pattern IV* $N1$ with arrows to $N3$, $N2$, $N2 \downarrow V1$ *hog*$_{N1}$ *'an animal'* *hog*$_{N2}$ *'a greedy person'* *hog*$_V$ *'to take more than one's fair share'(for more examples, see Štekauer et al. 2001: 72-73)*	Pattern V N_1 with arrows to $N_2 \rightarrow V_1$ and $N_3 \rightarrow V_2$ *bitch*$_{N1}$ *'a female dog'* *bitch*$_{N2}$ *'a lewd woman'* *bitch*$_{N3}$ *'a malicious, spiteful, domineering woman'* *bitch*$_{V1}$ *'to have sex with a woman'* *bitch*$_{V2}$ *'to make spiteful comments, to grumble'*

Note. Adopted from *A Comparative Research into The Transfer of Animal Names to Human Beings*, p. 71-73, P. Stekauer et al., 2001, *View[z]: Vienna English Working Papers*, *10*(2)

As far reaching in terms of historical semantics as Kiełtyka's investigation is, it offers no further classification of denominal animal verbs, proceeding instead on a case-by-case

basis. Drawing on Štekauer et al.'s (2001) morpho-semantic study of animal names referring to people, which identified 5 general patterns of formation of zoosemic nouns and verbs (see Table 2) as well as on the Oxford English Dictionary data, Kiełtyka reconstructs zoosemically motivated semantic evolution of two animal terms, viz. *horse* and *dog*. The diachronic development of the nominal and verbal zoosemic senses of the animal terms in question is then visualised with the help of elaborate charts (see Table 3).

Table 3. Zoosemic senses of *dog* and *horse* as charted by Kiełtyka (2016)

horse	N1 'horse, the animal' N2 'a horse and his rider, a cavalry soldier' N3 'applied contemptuously or playfully to a man, with reference to various qualities of the animal' N4 'a lottery ticket hired out by the day' N5 'among workmen, work charged before it is executed' V1 'to provide with a horse; to set on horseback' V2 'to mount or go on horseback' V3 'to carry on a man's back or shoulders' V4 'to spend in a lottery' V5 '(nautical) to drive or urge at work unfairly or tyrannically', also ' (among workmen, to work to death' V6 'to charge for more work than is really done' V7 'to make fun of, to indulge in horseplay, to fool about or around' V8 'to philander, to sleep around'
dog	N_1 'dog, the animal' (1050>PDE) N_2 'a male hound' (1450>PDE) N_3 'a worthless, despicable, surly or cowardly fellow' (1330-PDE) N_4 'a gay or jovial man, a gallant' (1597-PDE) N_5 'a watchdog' (1870-1959) N_6 'an informer, a traitor' (1846-PDE) N_7 'a beggar-searcher for cigarette-ends' (ca.1934) N_8 'one who assist the authorities to make [sic.] the arrest' (current in early 1970s) N_9 'an unattractive woman' (since 1937) V_1 'to follow like a dog; to follow pertinaciously or closely; to pursue, track (a person, his footsteps, etc.) especially with hostile intent (1519>PDE) V_2 'to drive or chase with a dog or dogs; to set a dog on' (1591>1974)
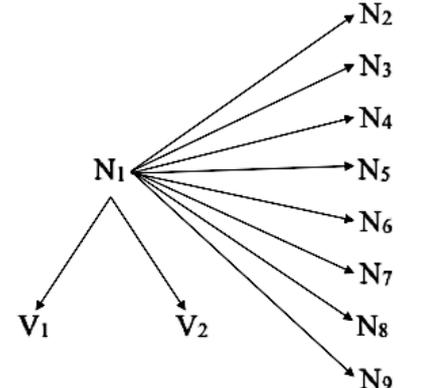
Note. Adopted from *Various faces of animal metaphor in English and Polish*, p. 136/144, R. Kiełtyka, 2016, Frankfurt am Main: Peter Lang.

Kiełtyka stresses repeatedly that the goal of his investigation is not to determine which sense developed out of which but rather "to classify the analysed historical senses to certain categories according to various patterns of nominal/verbal development in which they fit" (2016: 136). However, he does specify the exact steps of the diachronic sense development of *horse* and *dog* by offering the findings in the form of a chart (see Table

3) , from which it follows that, for example, *horse*$_{N4}$ 'a lottery ticket hired out by the day' originated from *horse*$_{N3}$ 'applied contemptuously or playfully to a man, with reference to various qualities of the animal' – a development neither substantiated by the OED, nor explicated by the author. It is also unclear why the chart for *dog* only lists two zoosemic senses of *dog*$_{V}$, particularly in the light of the OED offering such human related senses of *dog*$_{V}$ as 'to act lazily or half-heartedly; to slack, idle; (also) to hold back through fear or unwillingness to take a risk', e.g. *1905 I expected to see the youngster dog it.* (OED) or 'to shirk, avoid (a duty or responsibility); to undertake half-heartedly', e.g. *1930 He dogged his work wherever possible.*

However, the two major weaknesses of Kiełtyka's approach lie in the nature of the proposed charts: firstly, they feature quite a few nominal senses that seem to bear no relation to the zoosemic verbal senses and can, therefore, be considered superfluous to the analysis of verbal zoosemy; secondly, the idiosyncrasies of the sense development of the given animal terms appear to foil any attempt at a comprehensive, large-scale classification of denominal animal verbs (apart from the overt-covert-veiled classification based on the transparency of the semantic content of a verb to the modern language user).

In this chapter, it has been shown that, to date, a number of varying in scope theories have been proposed to explain the conceptual mechanisms underlying denominal animal verbs. Deignan (2005) shone a spotlight on the discrepancy between literal animal nouns and their metaphorical verbal counterparts, which had become evident in her corpus investigations. This, in turn, gave rise to further scrutiny of verbal zoosemy on the part of Gil Ruiz and Ruiz Herrero (2005) and Panther and Thornburg (2012). The most comprehensive attempt at the classification of zoosemic verbs according to the underlying mechanisms of metaphorical and metonymic transfer has been undertaken by Martsa (2013). Kiełtyka (2016), on the other hand, offered a broad classification of a much larger field of animal verbs with human-specific meanings as well as valuable insights into the diachrony of denominal animal verbs on a case-by-case basis.

2.5. Methodological Background

The goal of this study is to attempt to provide a comprehensive classification of the zoosemic verbs based on the cognitive mechanisms underlying their formation from animal nouns by means of conversion. Since animal verbs originate from animal nouns that are part of the lexicon at the point of conversion, it is important to acknowledge that denominal verbal zoosemy is a product of the general process of language change,

particularly semantic change. The framework of historical semantics, in which this study operates, recognises semantic change as "a cognitively motivated process" (Kiełtyka & Kleparski 2005: 22), as opposed to the formalist view of semantic change as an internally-motivated feature of language as an autonomous system. The cognitive branch of historical semantics strives to pay special attention to the role that the communicative needs and goals of language speakers play in the process of language change. Geeraerts writes, "because the language lives only through the linguistic activities of its users, linguistics deals with purposive actions rather than blind causality, and its method of explanation should be chosen accordingly" (1997: 152). The practical implication of the cognitive approach to semantic change for this study is that in order to ascertain the motivation behind the metaphorical use of, for instance, the verb *fish*ᵥ 'to elicit (a fact or opinion)', attested for the first time in 1374 (OED> *c1374 He that nedis most a cause out fisch.*), the researcher has to be able to transcend the boundaries of time and "inhabit" the mind of an average English speaker in the 14th century in order to be able to assess the speaker's linguistic needs and goals in using what used to be a noun as a verb. Only then will the researcher be able to fully understand the motivation and the cognitive mechanisms behind particular instances of semantic change.

Similar to the effects of anthropocentricity on our scientific explorations of the world, it is easy for historical semanticists to let their modern frames of reference guide their conclusions about language events of the past, thus falling into "semantic explanations that describe words changing meanings rather than speakers using words with a different meaning" (Curzan 2003: 136). Therefore, the question arises: Is there a way to "inhabit" the knowledge paradigms of the past, i.e. to access the ICMs of the language users at the estimated time of a given instance of semantic change and infer in an evidence-based way how contemporary speakers were able to *make sense of* an instance of semantic change, instead of *reading sense into* it from the position of our modern knowledgeability and linguistic development?

An answer to the question above seems to lie in the fact that, separate from its role as fabric of discourse, language is in itself a repository of knowledge. Wierzbicka maintains that the salient aspects of our collective knowledge of *folk concepts* manifest themselves in the lexical field that exists around the concepts under analysis in the form of related words, viz. derivations, compounds and *endonyms*, i.e. "words semantically (though not necessarily morphologically) derived" (1996: 345) from the name of a concept. She

writes: "(…) there is linguistic evidence. In case of mice, this includes words and phrases such as *mousy, mousetrap, mousehole, to mouse, mouser, mouse-ear, or mouse-tail*" (1996: 344). Word for word, Wierzbicka makes a convincing case highlighting the many aspects that the items from the lexical field of *mice/mouse* reveal about the concept of *mice* and its structure in the mind of the language user. She also draws the reader's attention to the role of linguistics metaphors and fixed (idiomatic) expression in coding conceptual knowledge, citing such expressions *as poor as a church mouse* or *quiet as a mouse* and pointing out that both of them not only convey the perception of mice as quiet animals but also reveal the centuries-long side-by-side existence of people and mice as well as the unnoticed (or, sometimes, noticed) presence of mice in human homes and churches, which used to be commonplace when these expressions were coined.

The tacit, collectively shared knowledge that can be gathered by way of methodical lexical investigations, as proposed by Wierzbicka, is the knowledge that, together with the general encyclopaedic knowledge, constitutes culture-specific ICMs, in which metaphor and metonymy operate. Theoretically, a historical semanticist can assess the general level of encyclopaedic knowledge of the speaker from a given time on the basis of the content of the written records under analysis. However, in order to obtain the fullest possible picture of a generic ICM of a certain concept under investigation at a particular time of its existence, the researcher must widen the scope of their investigation to include not only the linguistic phenomena under scrutiny but also the lexical environment in which these phenomena were able to develop. An excellent example of this approach put to work can be witnessed in Kleparski's 2017 paper "The Semantics of Dog Revisited: In Search of Phraseologically Embedded Spectral Zoometaphors", in which the author methodically investigates phraseological units relating to the concept of *dog* in their diachrony and provides an exhaustive account of what he calls *spectral senses* of *dog* throughout the concept's historical development, substantiating his inferences by tangible lexical evidence. Kelparski's diachronical explorations together with Wierzbicka's theory of lexicon as an entity providing insights into the human mind both served as a source of inspiration and guidance for this study.

2.5.1. Methodology of the Study

The present investigation relied almost exclusively on the Oxford English Dictionary Online for the etymological and linguistic data, with a small addition of other historical and etymological dictionaries. In the initial phase of the investigation, 117 verbs identical

in form to animal nouns were gathered (the dataset also included 6 verbs derived from animal nouns by means of affixation with the help of the *-ize* suffix). After a preliminary etymological probe, 21 of the initial verbs were removed from the dataset on the grounds of them being either etymologically unrelated to the respective animals or classified as nonce-words in the OED, reducing the final dataset to 96 denominal zoosemic verbs.

In the second phase of the investigation, the semantics of the verbs were subjected to a thorough analysis. In verbs with multiple unrelated senses, the senses were tagged *verb*$_{V\_1}$, *verb*$_{V\_2}$, *verb*$_{V\_n}$ and analysed separately, in order to avoid idiosyncrasies in the semantic development of individual linguistic forms and facilitate classification (cf. Kiełtyka's approach discussed above). This separation increased the number of individual data points to 209. Each sense was investigated in relation to other items in the lexical field of the respective animal term, including (if available) related nouns, adjectives, adverbs, phraseological units, endonyms, and individual usage examples with the aim of establishing possible linguistic and extralinguistic factors influencing the verbalization of animal nouns, with particular attention being paid to uncovering the tacit linguistic knowledge in the spirit of Wierzbicka's theory.

Upon the completion of the analysis, a glossary, containing 96 denominal animal verbs subdivided into 159 primary and 50 secondary/tertiary (derivative) senses, which were tagged *verb*$_{V\_n.n}$ or *verb*$_{V\_n.n.n}$, was compiled (see Appendix 1[12]). Each glossary entry is structured as follows: block "Sense" contains the verb sense under investigation; block "First Attested" features the date of the verb's first appearing in the OED records with the given sense; block "Usage Examples" displays several dated usage examples without the original OED sources (for space considerations); block "Possible Sources Of Zoosemic Meaning" presents related items from the lexical field of the verb that precede the verb chronologically and might therefore have had an influence on the conversion of the animal noun (with additional information provided in square brackets); block "CMMT" features the researcher's conclusions as to the cognitive mechanism of semantic change in question; and block "Schematic Meaning" provides a generalised semantic structure of the meaning of the verb in relation to the parent noun. In case of multiple distinct senses tied to a single verbal form, the entry is subdivided into

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[12] This publication does not include Appendix 1 or Appendix 2, as they continue to be used by the author for further research at the PhD level.

subentries, each following the above layout. The division of the senses into primary and secondary/tertiary/etc. was based on the chronology of sense development as well as on the semantic contiguity between the derived senses and the primary sense. In most cases, the secondary/tertiary senses were considered a result of further semantic development of the primary verbal sense (as opposed to a separate case of conversion/novel meaning development), and therefore, they were not accounted for in the quantitative stage of the analysis.

In phase 3, the primary senses were entered into a table in a chronological order and tagged according to the respective conceptual mechanism of meaning underlying their creation, determined in phase 2 (see Appendix 2[13]). On the basis of the tagging, the senses were then grouped into categories, and a qualitative evaluation was carried out to determine the percentage share of each category in the total number of verbal senses under analysis.

The qualitative as well as quantitative data will be presented in detail in Chapter 3. The glossary can be found in Appendix 1. The table/timeline of senses can be found in Appendix 2.

2.5.2. Object of Study

To date, multiple definitions of verbal zoosemy have been put forward, ranging from Martsa's notion of verbal zoosemy as a group of verbs comprising metonymic and well as metaphorical denominal animal verbs to Kiełtyka's view on verbal zoosemy as composed of verbs converted from animal nouns via PEOPLE ARE ANIMALS metaphor and, therefore, only featuring human-specific meanings[14]. However, the determination of what can be considered "human-specific" proved to be challenging for this study, as some

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[13] This publication does not include Appendix 1 or Appendix 2, as they contain data that continue to be used by the author for further research at the PhD level. If desired, the data can be provided for review upon contacting the author.

[14] Kiełtyka's working definition of zoosemy is inconsistent with his own findings. His explication of the human-specific meanings of *horse*$_V$ includes *horse*$_{V\_4}$ 'to spend in a lottery', which, according to Kiełtyka's own explanation, originates from *horse*$_N$ 'a lottery ticket hired out by the day'. On the other hand, Kiełtyka's chart for the zoosemic meanings of *dog* does not include *dog*$_{V\_X}$ 'to fasten or secure by means of a dog', *dog*$_N$ in this context meaning 'a heavy clamp for supporting something'. Neither of the zoosemic verbs in question originated from an animal noun via the PEOPLE ARE ANIMALS metaphor. In my view, the cognitive side of their conversion process can be described as a metonymic expansion (INSTRUMENT/OBJECT INVOLVED IN THE ACTION FOR ACTION) of a metaphorical projection of the SD of *dog*/*horse* onto the TD of objects, viz. a lottery ticket or a clamp, not people. Therefore, it is difficult to see what makes the *horse*$_{V\_4}$ human-specific, while *dog*$_{V\_X}$ is not considered as such.

zoosemic verbs were found to simultaneously apply to people and animals as well as to inanimate entities, e.g. *porpoise*ᵥ 'to move through water alternately surfacing and submerging' (OED> *The Coxswain and the Second Coxswain had their work cut out to prevent the vessel [sc. a submarine] from 'porpoising'.* • *1976 From 500 feet there appeared an island full of seals and an ocean full of an enormous whale porpoising through his domain before diving out of sight.* • *2005 Holmes showed his surf skills by porpoising through the shallow water before catching a broken wave to give him a winning edge.*) The chronology of the usage examples suggests that the initial metaphor behind the verbalization of *porpoise*ₙ was COMPLEX OBJECTS ARE ANIMALS, i.e. A SUBMARINE IS A PORPOISE, as opposed to PEOPLE ARE ANIMALS. In the course of time, the metaphorical grounding of the denominal verb *porpoise*ₙ weakened (cf. Goatly 2005: 103 on the gradual weakening of the metaphorical grounding in lexicalised denominal verbs), which made it possible for the verb to be applied to another aquatic animal, viz. the whale (see quot. 1976). Only in 2005 do the OED records show the verb being used with a human-related meaning, which can be interpreted as a product of the PEOPLE ARE ANIMALS metaphor in the synchronic dimension. (see also *butterfly*ᵥ_1, *crab*ᵥ_2, *gander*ᵥ_1, *monkey*ᵥ_2, etc. in Appendix 1)

In my view, excluding verbs such as *porpoise*ᵥ from the list of zoosemic verbs on the basis of its many senses being not exclusively human-specific would be counter-productive to providing the fullest possible account of the workings of verbal zoosemy. Which is why this study operates on a broader definition of verbal zoosemy than the one suggested by Kiełtyka, namely one that encompasses denominal animal verbs which are metaphorically employed with reference to actions performed by people as well as other animate/inanimate entities.

Last but not least, it has to be noted that only the most central zoosemic senses of the verbs under scrutiny were considered in this study, while peripheral senses, such as technical jargon (e.g. *fish*ᵥ 'to pull (a wire) through a conduit or between floors or walls by means of a stiff looped wire or other device pushed in from the nearer end'), marginal slang that did not enter the common core (*fish*ᵥ '<Harvard College Slang> to curry favour, strive to ingratiate oneself with another') or senses not substantiated by usage examples in the OED (*cat*ᵥ 'to vomit') were excluded for space considerations.

3. Findings

Appendix 2 shows the chronology of the increase in the number of zoosemic verbal senses in English from 1374 to 1978. Between the 14th century and the 16th century, 16 zoosemic verbs out of the dataset for this study showed in the OED records, with 18 primary human-related senses in total. In the 17th and the 18th centuries combined, the number of primary zoosemic senses increased by 33, as 25 new animal verbs were identified in the OED corpus. By contrast, the 19th century alone saw 26 new animal verbs joining the ranks of English verbal zoosemy, with the total number of primary zoosemic senses rising by 52 and reaching 103 by the end of the 19th century. In the 20th century, another 29 newly converted animal terms entered the English lexicon; the development of the new zoosemic senses in the old verbs, however, continued to rise at almost double the rate and increased by 56, reaching the total of primary 159 zoosemic senses investigated in this study.

From the chronology of zoosemic developments in denominal English verbs it can be concluded that verbal zoosemy manifests not only in the numbers of newly formed verbs joining the English lexicon over time but also in the below-the-surface processes of semantic development of new primary meanings in the already lexicalised animal verbs. Consequently, one may argue that there is not just one element of an animal-frame that might give rise to verbal zoosemy but rather there is a constant process of re-evaluation and shifting of focus within the conceptual frames, concurrent with the general process of language change affecting the English language.

Overall, the composition of the dataset suggests that there is a tendency for native or "familiar" animal terms to undergo the process of verbal zoosemisation in the English language. Although the data collection stage for this study included examining world-wide bird/mammal/insect taxonomies for possible zoosemic verbs, very few "exotic" lexical items were found to develop zoosemic senses, the rare examples being *baboon* and *chameleon*.

3.1. Classification of Verbal Zoosemy

Following cognitive mechanisms underlying the conversion of animal nouns into verbs were identified:

1. metaphoric expansion of a metonymic target, i.e. *metaphor from metonymy*
   a. metaphoric expansion of an earlier metonymic verb

b. metaphoric projection of an element of the animal-ICM

2. metonymic expansion of the metaphorical target, i.e. *metonymy from metaphor*

    a. metonymic expansion of a zoosemic noun referring to a human agent

    b. metonymic expansion of a zoosemic noun referring to an object

    c. metonymic expansion of a fixed expression

3.1.1. Metaphor from Metonymy

This conceptual mechanism is by far the most represented one in the dataset, accounting with 100 cases for roughly 60% of all zoosemic verbal senses under analysis. According to the nature of the metaphoric target undergoing metaphoric expansion, it is further subdivided into "metaphoric expansion of an earlier metonymic verb" (13 senses) and "metaphoric expansion of an element of an animal-frame" (87 senses).

3.1.1.1. Metaphoric Expansion of an Earlier Metonymic Verb

The lexicalization of zoosemic verbs of this category seems to have been preceded in language history by well-established metonymic verbal derivations from the respective animal nouns. For instance, the earliest records of the verb *fish*$_{V\_0}$ go back to Old English, viz. ca. 888, when it was used with the sense 'to catch or try to catch fish; to use nets or other apparatus for taking fish' (OED > *Đonne ge fiscian willaþ.*). Since *fish* clearly belongs to the conceptual frame of fishing and the noun itself is attested earlier[15] than the verb (OED> *c825 Fuglas heofenes & fiscas saes.*), this semantic development can be interpreted as a case of the PATIENT FOR ACTION[16] metonymy. It is not until almost four hundred years later, around 1374, that the verb is first recorded with a zoosemic meaning 'get by artifice or patient effort; to ascertain, elicit (a fact or opinion)' (OED > *c1374 [Chaucer Troilus & Criseyde iii. 1113 (1162) He that nedis most a cause out fisch.]*). In the metaphorical reading, the image of a FISH that the fisher is trying to get out of the water by patient effort is projected onto the concept of the CAUSE that needs to be "pulled out of secrecy/the unknown", while the FISHER himself is mapped onto the INQUIRER. In the same poem by Chaucer, *fish*$_V$ is employed once again with the sense 'to lure, entice a person', as it occurs in the description of Diomede's intent to entice Criseyde (OED> *c1374 [Chaucer Troilus & Criseyde v. 777] To fisshen hire, he layde out hook and lyne.),*

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[15] According to the OED, the conversion must have happened in Old Germanic. (OED: fish, v.1)

[16] Alternatively, OBJECT INVOLVED IN THE ACTION FOR ACTION.

in which the DESIRED PERSON corresponds to the FISH, while the PERSON WORKING TO BRING THE DESIRED INDIVIDUAL INTO THEIR POSSESSION is linked to the image of the FISHER. Some 30 years later, this sense of the verb is further corroborated in the OED records, namely *c1400 [Rom. Rose 7494] To fisshen sinful men we go.*, which is undoubtedly an allusion to the Gospel of Mark's "'Come, follow me,' Jesus said, 'and I will send you out to fish for people.'" (Mark 1:17, New International Version).

Interestingly enough, it is only in the late 16th century that a less metaphorical (in terms of Degnan's metaphorical cline presented in Chapter 2.2.2 of this thesis) sense of *fish*ᵥ appears in the records, namely 'to take as fish are taken; to collect (corals, pearls) from the bottom of the sea' (OED> *1585 [T. Washington tr. N. de Nicolay Nauigations Turkie iv. vii. 118 b] The Misidan Sea..whereas are fished great quantitie of Pearles.*). This sense has a more material connection to the frame of FISHING, with pearls, corals, etc. being conceptualised as FISH, while the rest of the frame remains more or less the same. Another shift in the verb meaning occurs in the beginning of the following century, as its metaphorical grounding weakens and, as a result, not only fish-like goods start to be conceptualised as fish but generally anything that can be searched for and taken out of the water (OED> *1632 [J. Story tr. Short Surv. Sweden 21] The inhabitants fish out of the bottomes of their lakes a certaine rude matter.*)

Overall, two avenues of the metaphoric sense development in the metonymic verb *fish*ᵥ can be identified: a more metaphorical, i.e. less grounded in the real-world experience of fishing, sense of 'eliciting something from someone' or 'getting hold of a desired person/object' versus a less metaphorical sense of 'getting something out of the water', which was attested later chronologically. Logically, one might assume that the less metaphorical, more grounded sense should precede the more metaphorical, less rooted in the SD sense but there are several factors which might explain why this is not the case here. Firstly, the above Biblical refence points to language contact between Latin and Old English, as the earliest partial translations of the Vulgate came into circulation, limited as it was, around the 9th century. The OED suggests that the earliest metaphorical sense of *fish*ᵥ 'to ascertain, elicit' might be traced back to the Latin *expiscor*ᵥ, which, similarly to *fish*ᵥ, has the literal meaning of 'to catch fish' and is attested with the metaphorical sense 'to search, find out' (Lewis & Short 1879) in the writings of Marcus Tullius Cicero, who lived in the 1st century BC. Secondly, it needs to be borne in mind that the OED records do not reflect the spoken discourse of the time period in question,

which is why it is possible that the assumed chronology of the semantic development of the given verb is skewed due to the nature of the data available for research.

Another interesting example of the mechanism of metaphorisation of a metonymic verb is the verb *mouse*_{V_0}, which first appears in the records with the sense 'to hunt for or catch mice (esp. of cat, owl, fox); to claw at, tear, bite (as a cat/bird does a mouse)' (OED> a1275 Ofte mused [v.r. museþ] þe catt after þe moder. ● ▸ 1440 Mowsyn, or take myse, muricapio.). Similar to *fish*_V, the initial motivation behind the verb formation can be attributed to the PATIENT FOR ACTION metonymy. The first human-related usage of †*mouse*_{V_1} is attested in the early 16th century (OED> *1531 [Tyndale Answere Mores Dialoge] In the .xiij. [chapter]..he biteth, sucketh, gnaweth, towseth, and mowseth tindale.*), referring to a person attacking the position of their opponent in an argument. This particular sense of 'handling, tearing and biting as a predator does a mouse' did not survive the test of time and became obsolete in the late 19th century. However, another zoosemic application of the metonymic *mouse*_{V_0} 'to hunt, to catch mice' has persisted till nowadays, namely its metaphorical sense *mouse*_{V_1.1} 'to hunt or search industriously or cautiously'. Historical records show that early uses of *mouse*_{V_1.1} "seemed to suggest predatory behaviour (OED: mouse, v.; OED > *1575 When he [sc. a boar]..doth but a little turne vp the grounde with his nose, he seeketh for wormes. So may you say that he hath been mowsing*); whereas the later uses indicate a shift in the conceptual structure of the metaphor underlying *mouse*_{V_1.1} from MOUSE IS THE OBJECT OF THE SEARCH to MOUSE IS THE AGENT OF THE SEARCH (OED> 1885 *Maybe they peep and mouse into the tunnels and caves of worms*.) The old conceptualisation of *mouse* primarily as AN OBJECT OF PREY is still at work in present-day English in the form of such lexical items as *mouser*_N 'animal, esp. a cat or an owl, that catches mice', first attested in 1440 and used in PDE either literally (OED> *1989 Other mishaps included..a man who was bitten by a rat brought inside by the household mouser.*) or figuratively (OED> *1997 Tony Blair..could be the sort of feline that ends up with a pretty bow tied round its neck—but who is a ruthless mouser at night when no-one sees.*); as well as *mousing*_{AVJ} 'one that catches mice; *fig.* prying, prowling, inquisitive; rapacious' (OED> *1883 One Parker Noyes, a mousing, learned New Hampshire lawyer.*). The rise of the element of AGENCY in the ICM of *mouse* is substantiated by *mouse-like*_{ADJ/ADV} 'characteristic of or in the manner of mice', which first entered the lexicon in the early 19th century (OED> *1834 Querulous mouse-like Squeak and Nibble. ● 1874 She crept mouse~like to the bedside.*).

The verbal trinity †*hawk*$_V$, *hound*$_{V\_1}$ and *ferret*$_V$ are further examples of the metaphorical expansion of a metonymic animal verb. These three verbs entered the lexicon as a result of the metonymy INSTRUMENT FOR ACTION, since *hawk*, *hound* and *ferret* name animals that people have for centuries employed in hunting. For instance, the conceptual mappings underlying the metaphorical extension of *ferret*$_{V\_0}$ 'to hunt with a ferret; to take rabbits by means of a ferret; to drive with a ferret' (OED> *a1483 To geve any servaunts occasion to furett..any mannys warreynes.*) onto the domain of people, with the sense 'to search out, to discover; also, † to be restless, to worry' (OED> *1577 He were able to ferret out such barebrich brattes.)* are fairly obvious, especially considering the fact that the metonymic verb is over a hundred years older than its metaphorical counterpart. A similar trajectory can be observed in the semantic expansion of *hound*$_{V\_1}$ 'to incite or set (a person) at or on another' (OED> *1570 Nor ʒit haif hundit furth proud.. ʒoung men to herry, slay [etc.]*), whose metonymic precursor *hound*$_{V\_0}$ first appears in the records in 1528 with the sense 'to hunt, chase, or pursue with hound' (OED> *1528 Geue the wolffis cumis..Thame [the flokis] to deuore, than ar thay put to flycht, Houndit, and slane be thare weill dantit doggis.*) In case of †*hawk*$_V$ 'to hunt after, to endeavour to catch or gain' (OED> *c1510 All the aduauntage that ye hawke after, and all the fauour of the court.*) the respective metonymic verb *hawk*$_{V\_0}$ 'to chase or hunt game with a trained hawk; to engage in or practice falconry' (OED> *1340-70 For to hauke ne hunte haue we no leue.*) was recorded over a hundred years earlier than its metaphorical projection.

Other verbs/verbal senses attributed to this category include *ram*$_V$, *hog*$_{V\_1}$, *white-ant*$_V$, and *louse*$_V$ *(up)*. (see Appendix 1)

3.1.1.2. Metaphoric Projection of an Element of the Animal-ICM

This group of animal verbs is the largest in the dataset, as it accounts for 88 out 159 cases of verbal zoosemy under analysis. The underlying cognitive mechanism conditioning the formation of the verbs of this category seems to be as follows:

$$\underset{\text{metonymy}}{\underline{\text{ANIMAL FOR AN ATTRIBUTE OF THE ANIMAL}}} \Rightarrow \underset{\text{metaphor}}{\underline{\text{HUMANS ARE ANIMALS}}}$$

This contradicts the idea proposed by the previous studies on verbal zoosemy, namely the assumption that the only path that the metaphoric projection of animal attribute onto the TD *people* may take is the one of the activation of the HUMANS ARE ANIMALS metaphor in the initial phase of the metaphorical process, followed by metonymic expansion of the

metaphorical target as prescribed by the AGENT FOR ACTION metaphor (Gil Ruiz & Ruiz Herrero 2005; Kiełtyka 2016).

Lexical evidence suggests that the animal attributes that are metaphorically projected onto the TD *people* seem to be embedded in the conceptual frame of the respective animal, as opposed to these attributes arising first when the HUMANS ARE ANIMALS metaphor is triggered and then being metonymically extended to the verbs. Moreover, such attributes are not always encapsulated by the parent animal nouns themselves (among their literal or metaphorical senses). In a considerable number of cases, various lexical items related to the parent nouns seem to select certain attributes in the animal frame earlier than an animal verb with the corresponding sense is first formed.

An example of this metonymically motivated metaphorical process is the verb *cock*$_{V\_1}$ 'to play the 'cock', behave boastfully or defiantly; to swagger, strut; to brag, crow over', which appears in historical records for the first time in 1556 (OED> *1556 The spider and fly, that erst there bragde and cockt.*) According to the OED, the parent noun *cock*$_N$ does not feature a related sense 'someone who brags or behaves defiantly', in which case the notion of the zoosemic gap postulated by Kiełtyka would apply, with the speakers selecting the element of BOASTFULNESS directly from their encyclopaedic knowledge of the frame of *cock*. However, this element seems to have already been highlighted in the ICM of *cock* by the adjective †*cocket*$_{ADJ}$ 'proud, 'stuck up'; pert, saucy; brisk' (OED> *1537 As for my lord of Hayles, I fear he will be too cocket now with his great authority and promotion.),* first attested some 20 years earlier than the verb. The verb seems to also be preceded, albeit narrowly, by yet another adjective *cockish*$_{ADJ}$ 'like a cock in disposition; strutting, self-assertive, assuming, cocky' (*1551 Bryngyng with hym the metropolycall mantell of Anselme, to augment hys cockysh autoryte.).* Individual quotes from the OED corpus support the assumption that the quality of being boastful is, in fact, attributed to the animal itself (OED> *1565 [T. Harding Confut. Apol. Church of Eng. i. f. 17v] Gete ye now vp into your pulpettes, like bragging cockes on the rowst, flappe your winges, and crow out alowde.*), not to mention the fact another verb belonging to the lexical field of *cock*, namely the verb *crow*$_V$ 'utter the loud cry of a cock', developed the metaphorical meaning 'to exult loudly, boast, swagger; (with *over*) to triumph over' (OED> *a1529 Dicken, thou krew doutlesse.)* around the same time that the given attribute was isolated by †*cocket*$_{ADJ}$. It appears from the presented linguistic data that the semantics of *cock*$_V$ were not chosen by the speakers randomly at the time of the verb-formation but

rather they were pre-conditioned by the make-up of the semantic/lexical field at the point of conversion.

Another prominent example in this category is the verb *wolf*_{V_1} (*down*) 'to eat like a wolf, to devour ravenously', first attested in 1862 (OED> *1862 [She] used to..wolf her food with her fingers.*). Palmatier suggests that the verb is metaphorically grounded in the fact that "wolves are carnivores and when they (…) killed a wild (or domestic) animal, they devour it ravenously, probably because they could be scared off by a large carnivore." (Palmatier 1995) According to Kiełtyka's theory of zoosemic gaps, in the absence of the parent noun's metaphorical counterpart *wolf*_{N_GAP} 'a person who devours their food ravenously like a wolf', the element of GREEDY EATING is selected by the speakers at random from their encyclopaedic knowledge about wolves and metaphorically projected onto the human manner of eating by means of the zoosemic *wolf*_V (*down*). However, the lexical connection between *wolf* and *hunger* goes as far back as the 15th century, when *wolf*_N was used with the sense 'a ravenous appetite or craving for food' (OED> *1576 The water cureth that sore feeling, which most men name the <u>Wolfe.</u>),* and featured in such expressions as *to keep the wolf from the door* 'to ward off hunger or starvation' (OED> *That he or she should have wherwith to support both,..at least <u>to keep the Woolf from the door,</u> otherwise 'twere a meer madnes to marry.*). "The Routledge Dictionary of Historical Slang" features the expression *to have a wolf in one's stomach* 'to be famished', which supposedly was used starting from the late 18th throughout the 20th century. (Partridge & Simpson 1973: 1347). Finally, *wolfish*_{ADJ} meaning 'ravenously hungry' (OED> *1842 My appetite was growing decidedly <u>wolfish</u>. • 1848 [J. R. Bartlett Dict. Americanisms] <u>Wolfish</u>, savage, savagely hungry. • 1894 I'm <u>wolfish</u>.*) was in use some 20 years before the verb *wolf*_{V_1} (*down*) was first attested in 1862.

The presented lexical evidence does not confirm Kiełtyka's hypothesis of a zoosemic gap in the case of the denominal formation of *wolf*_{V_1} (*down*). On the contrary, it speaks to the fact that the sense eventually incorporated into *wolf*_{V_1} (*down*) had been anchored in the lexical field of *wolf*, before the verb entered the lexical scene (e.g. *wolfish*_{ADJ}, etc.) One may argue that in the course of language development the element of RAVENOUS EATING acquired special salience in the ICM of *wolf* not because it is an attribute unique

to the animal[17] but due to hunger itself being conceptualised as a wolf inside of person's body. Coupled with *wolfish$_{ADJ}$* gaining currency in the second half of the 19th century, and against the backdrop of a number of verbal constructions with similar meanings and high frequency in spoken discourse (e.g. *gobble up/down* 'to swallow hastily and noisily in large mouthfuls; to eat greedily' (first attested: 1583/1699), *gulp †up/down* 'swallow in large draughts or morsels hastily or with greediness' (first attested: 1538-†/1735), *guzzle up/down* 'to swallow (liquor, rarely food) greedily or to excess' (first attested: 1583/1609), *bolt down* 'to swallow hastily and without chewing, swallow whole or with a single effort' (first attested 1834)), the conversion of *wolf$_N$* into *wolf$_{V\_1}$* (*down*) was almost predestined to happen.

So far, it has been established that the semantics of zoosemic verbs belonging to this category derive from the salient elements of the conceptual frame of the respective animal and are, in fact, anchored in the lexical field around the animal noun in question. In keeping with Wierzbicka's theory of the structure of conceptual frames of animals[18], my analysis established that the following main meaning foci of animal-frames are selected by zoosemic verbs: BEHAVIOUR (56 out of 88 verbs of this category), MODE OF LOCOMOTION (19/88), and RELATION TO PEOPLE (7/88).

☛ BEHAVIOUR is the most common attribute selected in the animal frame in the process of verbal zoosemy. The two examples explicated above, viz. *cock$_{V\_1}$* and *wolf$_{V\_1}$* both highlight the main meaning focus BEHAVIOUR in their SD. It needs to be pointed out that there are two types of BEHAVIOUR that can be embedded in an animal-frame: (1) the actual instinctual behaviour that the animal performs and that in a number of cases is reinterpreted by people in anthropocentric terms and then projected back onto the TD of PEOPLE (see *Achilles is a lion* in Chapter 2.2.1.1. of this thesis); (2) the attributed behaviour that the animal does not perform but that is embedded into the respective conceptual frame by means of human story-telling (e.g. the myth that ostriches stick their head in the ground when they are scared of something).

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[17] Consider Palmatier's argument about wolves consuming their food hastily and ravenously. In fact, this description applies to all carnivores across-the-board, as carnivores do not possess the teeth necessary for grinding food and, therefore, by nature consume their food swallowing it down in chunks. Theoretically, had it not been for the lexical anchoring of *wolf*, the verb could have been *cat$_V$* (*down*).

[18] Described in in Ch. 2.4. of this thesis as the foundation for Martsa's (2013) classification of verbal zoosemy.

An example of the latter is the verb *grasshopper*ᵥ_1 (*away*) 'to live in a frivolous manner, without planning or preparing for the future' (OED> *1917 He wonders if he wasn't a fool not to have* grasshoppered *to the extent of having bought automobiles and bubble water with the money.*), which is an obvious allusion to Aesop's fable of a farsighted ant and an improvident grasshopper. The lexical anchoring of the attribute IMPROVIDENCE in the ICM of *grasshopper* is evidenced by the following items from the respective lexical field: *grasshopper*ₙ 'a person likened to a grasshopper, esp. in being destructive, inconstant, or (with allusion to the fable of the ant and the grasshopper) improvidently frivolous' [in use since 1556] (OED> *1788 In two minutes more he will be somewhere else, skipping backwards and forwards; what a* grasshopper *it is!*), and *grasshoppering*ₙ/₍ₐₜₜᵣ.₎ 'the practice of living in a frivolous manner, without planning or preparing for the future; the improvident passing or wasting of time' (OED> *1803 I thought it high time that your* grashoppering *system should be at an end, and that you should begin to collect a provision of corn against the winter.*) It could be argued that because there's an earlier zoosemic noun denoting a human being by virtue of the conceptualisation an IMPROVIDENT PERSON IS A GRASSHOPPER, this case of verbal zoosemy should be handled as a metonymic expansion of a metaphorical target. However, I would point to the semantic contiguity between *grasshopper*ᵥ_1, *grasshopper*ₙ and the behaviour of the fictional, personified grasshopper in the fable. In my opinion, the verb *grasshopper*ᵥ_ extracts the general structure of the behaviour of the fictional grasshopper and applies it to the structurally similar behaviour in humans, with *grasshopper*ₙ_HUMAN acting as a conduit but not the source of the metaphorical meaning.

☞ MODE OF LOCOMOTION is second most-utilised meanings focus in the SD of animals taking part in verbal zoosemy. This subcategory can be exemplified by the following:

> *snail*ᵥ 'to move, walk, or travel lazily or sluggishly; to go very slowly' (OED> *1628 You shall finde, that every thing, as farre as the Abilitie will giue it Line, does* Snaile *it after Deitie.*), which is lexically anchored in: *snail*ₙ 'used with reference or allusion to the exceptionally slow motion of the snail' (OED> *OE Nis zefferus, se swifta wind, þæt swa fremlice mæg feran æghwær; me is* snægl *swiftra, snelra regnwyrm ond fenyce fore hreþre.*); *snail's gallop, snail's pace* 'an excessively slow or tardy pace, rate of progress or motion, etc.' (OED> *a1400–50 Þan sny3es þar, out of þat snyth hill as with a* snayles pas, *A burly best.*); *snail-slow*ₐᴅᴊ/ₐᴅᵥ 'as slow as a snail; very

sluggish or tardy in motion, progress, etc.' (OED> *1600 The patch is..a huge feeder,* <u>*Snaile slow*</u> *in profit*.)

*crab*_{V_2} 'to move sideways' (OED> *1867 <u>Crabbing</u> to it, carrying an overpress of sail in a fresh gale, by which a ship crabs or drifts sideways to leeward. • 1962 He knows which [TV] cameras can be <u>crabbed</u> (moved sideways). • 1964 I <u>crabbed</u> in towards him, holding the knife low*.), whose anchoring in the lexical field is evidenced by: *crab-sidle*_V 'to sidle or shuffle sideways like a crab' (OED> *1803 They were obliged to walk..some backwards like lobsters, others <u>crabsidling</u> along*.); *crab-like*_{ADJ/ADV} 'like a crab, esp. in moving backwards or sideways' (OED> *1861 He crawls first backwards, then sideways, <u>crablike</u>..to the spot.*); *crabwise*_{ADV} '(moving) sideways or backwards like a crab' (OED> *1904 There are barges in the way, and these have to be coaxed aside before the Adler can approach <u>crabwise</u> to the wharf*.)

etc. (see Appendix 2 for further examples)

Interestingly, MODE OF LOCOMOTION seems to be so prominent in the ICMs of certain animals that roughly 40% of the verbal senses under analysis (8/19) did not show any significant evidence of lexical anchoring in the related lexical field (apart from individual quotations from the OED corpus), viz. *skylark*_{V_2} 'to leap over playfully' (first attested: 1825), *frog*_V 'to move quickly, to hurry, to leap or move like a frog' (first attested: 1833), *coon*_V 'to creep (along a branch, etc.), clinging close like a racoon' (first attested: 1834), *rabbit*_V, 'to move quickly or in the manner of a rabbit; to run away' (first attested: 1887), *swan*_V 'to swim like a swan' (first attested: 1893), *hare*_V 'to run or move with great speed' (first attested: 1908), *beetle*_V 'to fly off; to go, make one's way, move (like a beetle)' (first attested: 1919), *spider*_{V_2} 'to move in a manner suggestive of a spider, to cause to move or appear thus' (first attested: 1938), *wasp*_V 'to dart about in the manner of a wasp, in an irritating, noisy, or tenacious fashion' (first attested: 1967)[19]. Having originated in close succession in the 19th-20th century, the verbs testify to the fact that the metonymic

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[19] Given the fact that the verbs originated in the Modern English period and their respective senses bear an obvious relation to the present-day ICMs of the animals themselves, I did not refrain from judgement, placing them into the category (1b) metaphoric projection of an element of an animal-frame. However, the dataset featured some cases of verbal zoosemy not supported by lexical evidence, whose meanings did not seem to relate to the respective animal-frames in an obvious way, which were marked as "undetermined" and not accounted for in the quantitative analysis. (see Chapter 3.2.3.)

mapping ANIMAL FOR THE MODE OF LOCOMOTION OF THE ANIMAL was rather productive during the given time-period.

☛ RELATION TO PEOPLE is utilised as the main meaning focus in the zoosemisation of the following animal terms: *worm*_{V_2} (*out*) 'to thrust out, get rid of, expel by subtle and persistent pressure or undermining' (first attested: 1594), *pig*_{V_1.1} (*together*) '(now rare) to crowd (people) together like pigs' (first attested: 1745), *badger*_V 'to bait, hound; to subject to persistent harassment or persecution' (first attested: 1782), *snipe*_V 'to shoot or fire at (men, etc.), one at a time, usually from cover and at long range' (first attested: 1782), †*pussy*_{V_1,} 't to treat (a person) like a pet cat; to mollycoddle' (first attested: 1889), †*rabbit*_{V_2} (*together*) 'to crowd together like rabbits' (first attested: 1892), *sardine*_V 'to pack closely, as sardines in a tin; to crowd, cram, press tightly' (first attested: 1895), *buffalo*_V 'to overpower, overawe, or constrain by superior force or influence; to outwit, perplex' (first attested: 1903), *winkle*_V 'to extract or eject (as a winkle from its shell with a pin); to draw forth, find out or elicit' (first attested: 1942).

In this case the element of the-animal ICM that is highlighted by the animal name is the BEHAVIOUR OF PEOPLE TOWARDS THE ANIMAL, the general structure of which is mapped onto the target domain of people by the HUMANS/THINGS ARE ANIMALS metaphor. For instance, in the case of *worm*_{V_2} (*out*) 'to thrust out, get rid of, expel' the element of the *worm*-frame that is selected in the animal-frame is EXPELLING THE WORM FROM THE HUMAN BODY. A quick analysis of the related items from the lexical field of *worm* suggests that, in the 16th century, having parasitic worms in the body was an ordinary affair. So much so that people understood feelings and emotions associated with certain sensations in the body in terms of worms, as evidenced by the following *worm*-related lexical items:

†*worm*_N 'grief or passion that preys stealthily on a man's heart or torments his conscience (like a worm in a dead body or a maggot in food); esp. the gnawing pain of remorse' (OED> *1560 The worme of my conscience, that shall neuer dye, Accuseth me dayly more and more.*)

†*worm*_N 'a whim or 'maggot' in the brain; a perverse fancy or desire; a streak of madness or insanity' (OED> *1534 Our louer in whose hed By a frantyk worme his opinion is bred.*)

*†greedy worm*_N 'avarice or greediness as an itching passion in the heart' (OED> *1587 Thus we see..what occasion the emperour and duke did take, to inrich themselues by the meanes of the king, whome they forced not to impouerish, so their owne greedie worme were serued.*)

*†eye worm*_N 'a fantasy or whim which establishes itself through visual impression' (OED> *1591 Love is but an eye worme, which onely tickleth the head with hopes.*)

*†tongue-worm*_N 'a disease of the tongue (figurative)' (OED> *1645 Those tongue-wormes of swearing, blasphemy, and unreverent speaking of God.*)

The first example of the metaphorical application of *worm*_{V_2} (*out*) dates back to 1594 (OED> *1594 I haue tied vp the louing worme my daughter, and will see whether fansie can worme fansie out of her head.*) and is based on the metaphorical is mapping FANCY IS A WORM IN THE HUMAN BODY. In the course of time, the metaphorical grounding of the verb weakens, which goes hand in hand with the increasing number of possible contexts the verb can be used in. Consequently, some hundred years later, *worm*_{V_2} (*out*) is attested without any reference to the human body (OED> *1643 It is a riddle to me, how this story of Oracles hath not worm'd out of the World that doubtful conceit of Spirits and Witches. • a1662 He did not only stock his Colledge with such a generation of Non-conformists as could not be wormed out in many years after his decease, but (...)*).

Other examples of zoosemy in this subcategory as well as the first two subcategories can be gleaned from Appendix 1 and 2.

3.1.2. Metonymy from Metaphor

This type of verbal zoosemy is based on the metonymic expansion of a metaphorical target. The attributes building the basis for the semantics of the zoosemic verbs in this category do not come directly from the animal-frame but rather from the metaphorical projection of an animal noun onto a person, an object or a concept.

3.1.2.1. Metonymic Expansion of a Zoosemic Noun Referring to a Human Agent

In 25 of 159 verbs analysed in this study, the semantics of the zoosemic verbs seem to be rooted in the conceptual frame of the human beings referred to by the respective parent animal nouns. A telling example of this is the pair of verbs *rat*_{V_2} 'to act as a strike-breaker' (OED> *1837 Ratting, a modern term applied to persons working at less than the established prices.*) and *rat*_{V_5} 'to act as an informer, to betray to the police' (OED> *1925*

[E. Fraser & J. Gibbons Soldier & Sailor Words 236] <u>Rat</u>,..to betray or act the informer.). It is apparent at first glance that neither of these behaviours are performed by the animal itself, nor are they attributed to the animal by way of story-telling, as an analysis the lexical field of *rat* showed. However, both these verbs are preceded in the chronology of language development by the lexicalisation of the respective animal nouns metaphorically projected onto people, i.e. *rat*_{N_2} '<printing> a person who refuses to strike, or takes the place of a striking worker, a non-union worker; a person who works for lower wages than the usual or trade union rate' (OED> *1823 <u>Rats</u>, men, in trade, who undermine each other, and who are not true to the cause in which they have embarked.*) and *rat*_{N_5} 'a person who gives information, esp. of an incriminating nature, on another person to the police or other authority, an informer; spec. an informer in a prison' (OED> *1818 Give me the useful peaching <u>Rat</u>; Not things as mute as Punch, when bought. • 1859 [J. C. Hotten Slang Dict.] <u>Rat</u>, a sneak, an informer, a turncoat.*) It is, therefore, logical to assume that, since this knowledge is not embedded in the conceptual frame of the animal, the metaphorical animal nouns are not a conduit of the attributes being transferred onto the verb (as was the case in the verbs of the previous type), but rather they are the source of these attributes.

Hence, the general cognitive mechanism that underlies this type of zoosemy can be described as follows:

$$\underset{\text{metaphor}}{\underline{\text{PEOPLE ARE ANIMALS}}} \Rightarrow \underset{\text{metonymy}}{\underline{\text{AGENT FOR ACTION}}}$$

It needs to be mentioned that there was one exception to the conceptual mechanism outlined above, namely the verb *pigeon*_{V_1} 'to cheat, trick, or swindle, esp. at cards or another form of gambling; to steal' (OED> *1675 Of Lies, and Fables, which did <u>Pigeon</u> The Rabble into false Religion.*), which was formed via the PATIENT FOR ACTION metonymy from the zoosemic noun *pigeon*_{N_1} 'a naive or gullible person; a fool or simpleton; a person who is easily swindled, esp. in gambling' (OED> *1639 This <u>pigeon</u> being not of full age, could not contract it without the consent of his mother.*)

3.1.2.2. Metonymic Expansion of a Zoosemic Noun Referring to an Object

Similar to the previous type of zoosemy, the verbs in this category are formed as a result of the metonymic expansion of a metaphorical target, but in this case the metaphorical target refers to an object. The metonymic mechanism at work in most cases is OBJECT INVOLVED IN THE ACTION FOR ACTION. For instance, the verbal sense *rat*_{V_3} 'to

backcomb, tease (hair)' (OED> *1904 'Ratting' the hair backwards to make the pompadour higher tore the hair.*) originated by way of metonymisation of the metaphorical noun *rat*$_N$ 'a crescent-shaped pad, made of hair or a similar material, over which a person's hair is arranged to give the required volume in various hairstyles' (OED> *1863 The luminous tresses..rippled..after a style of their own, that in these later days Fashion and Art have striven hopelessly to achieve with crimping-pins and—'rats!'*)

Another example of the onosemasological developments of this type is the verb *pony*$_V$, which features two distinct senses, namely *pony*$_{V\_1}$ *up* 'to pay a sum of money' (OED> *1819 The afternoon, before the evening, the favoured gentlemen are walking rapidly into the merchant-tailors shops, and very slowly out, unless they ponied up the Spanish [i.e. money].*) and *pony*$_{V\_2}$ 'to prepare (a lesson, text, etc.) by means of a pony or crib; to memorize; plagiarize' (OED> *1847 The others are ponying most unmercifully.*), neither of which appear to relate directly to the ICM of *pony*. According to Partridge and Beale, between 1810 and 1840, *pony*$_{N\_1}$ was used with the sense 'money', which probably goes back to *pony*$_N$ as an item of the British slang meaning 'twenty-five pounds sterling; (also, occasionally) twenty-five guineas' (OED> *1797 There is no touching her even for a poney. [Note Half a rouleau or twenty-five guineas].*) The assumption that the verb *pony*$_{V\_1}$ *up* originated by way of metonymic conversion of animal-noun denoting 'money' is also corroborated by the earliest recorded usage example of the verb (see the example from 1819 cited above). The particle *up* seems to stem from the assimilation of the newly coined verb with the already established *pay*$_V$ *up* 'to come up with (money) in payment', in use since 1434. Similarly, the second sense of the verb *pony*$_V$, *pony*$_{V\_2}$, can be traced back to *pony*$_{N\_2}$ '<U.S. slang> a literal translation or summary of a text used as a short cut or study aid; a crib' (OED> *1827 I'll tell you what I mean to do. Leave off my lazy habits..and stick to the law, Tom, without a Poney.*)

It should be acknowledged that this type of verbal zoosemy is especially common in technical jargon, which was excluded from the dataset of this study from the outset. Given the pervasiveness of animal nouns referring to objects in technical jargon, nautical/military/aviation slang, etc. this mechanism of verbal zoosemy has the potential to be the most frequent in the English language.

3.1.2.3. Metonymic Expansion of a Fixed Expression

In 9 out of 159 cases of verbal zoosemy under investigation, the meaning of the zoosemic verb appears to match the meaning of a fixed metaphorical expression involving

the parent animal noun. For instance, the meaning of the verb *wolf*$_{v\_3}$ 'to delude with false alarms' (OED> *1910 Those whose interest it was to* <u>*wolf*</u> *the credulous public out of their pence.*) seems to be identical to the meaning of the expression *to cry wolf*, defined by the OED as 'to raise a false alarm (in allusion to the fable of the shepherd boy who deluded people with false cries of 'Wolf!')' (OED> *1858 She begins to suspect she is 'not so young as she used to be'; that after* <u>*crying 'Wolf'*</u> *ever since the respectable maturity of seventeen—..the grim wolf, old age, is actually showing his teeth in the distance.*). At the same time, the noun *wolf*$_N$ does not at all feature the sense of 'alarm' on its long list of literal and metaphorical meanings, which leads to the conclusion that the verb *wolf*$_{v\_3}$ is a result of the metaphorical sense of *to cry wolf* being metonymically projected in its entirety onto the zoosemic verb.

The same dynamics are at play in *dog*$_{v\_2}$ (*it*) '<orig. and chiefly U.S., now esp. in sporting contexts> to act lazily or half-heartedly; to slack, idle; (also) to hold back through fear or unwillingness to take a risk' (OED> *1905 I expected to see the youngster* <u>*dog it.*</u> • *1928 He hoped to goad me into action. 'Go ahead and use that shiv—don't* <u>*dog it*</u>— *come on and do something.'*). Before delving into the etymology of *dog*$_{v\_2}$ (*it*), it needs to be pointed out that the verb *dog*$_v$ has been in use in the English language since the early 16th century and has a much more established and dominant sense than the one under analysis, namely *dog*$_{v\_1}$ 'to follow closely and persistently; to pursue; to hound' (OED> *1519 Our ennemyes..* <u>*dogged*</u> *vs at the backe [L. a tergo instabat].)* Furthermore, the parent noun *dog*$_N$ does not feature any senses relating to the verbal sense of *dog*$_{v\_2}$ (*it*) at the time of its formation, nor have such senses been established anywhere in the lexical field of *dog*, apart from the fixed expression *to lie/play doggo*, which entered the English lexicon some 20 years earlier than the verb in question with the sense 'to lie flat, remain hidden; to lie quietly; also in extended use: to keep a low profile, lie low' and was initially common in sports contexts (OED> *1882 [Sporting Times 25 Mar. 5/3] He had been a guest, after* <u>*lying doggoh*</u> *for some time, at one of Blobbs' quiet little suppers.* • *1886 'Sharks abroad. Breakers ahead. Benjamins on the war-path.* <u>*Lie doggo.*</u> *Joe.'.. 'What's the meaning of it?..And what is "*<u>*lying doggo*</u>*"?'*). The fact that both the fixed expression and the verb stem from the same type of discourse further strengthens the argument that the earlier fixed expression is the source of meaning for the zoosemic verb that followed it chronologically.

This type of zoosemy is further exemplified by such verbal senses as †*ass*v_1 'to (cause a person to) appear absurd or foolish ' from *to make someone an ass* 'to cause (someone) to appear absurd or foolish'; *fox*v_2 'to intoxicate, befuddle, to get drunk' from †*to catch/hunt the fox* 'to get drunk'; *horse*v_7 (*around/about*) 'to make fun of, to 'rag', to ridicule; to indulge in horseplay; to fool about or around' from *to play horse* 'to act roughly or unceremoniously'; *stag*v_3 '(of a male) to attend a social function without a female' from *to go stag* (same meaning) ; *weasel*v_1 'to render ambiguous or equivocal' from *weasel word*N 'an equivocating or ambiguous word which takes away the force or meaning of the concept being expressed'; *goose*v_3 '(only in passive) to be finished, ruined' from to cook/do(rare) someone's goose 'to 'do for' a person or thing; to ruin or kill'; *bug*v_4 (*out*) 'to think or behave in an irrational, uncontrolled, strange, or erratic way; to panic or become hysterical' from *to go bugs* 'to turn insane, mad, crazy; out of control'. (for more detail, see Appendix 1)

3.2. Undetermined & Special Cases

The following is a discussion of the zoosemic verbal senses that evaded classification on the basis of their either obscure or one-of-a-kind etymology.

Unlike the zoosemic verbs in Category (1b), whose metaphorical senses showed no signs of anchoring in the lexical field but were clearly grounded in the respective animal's MODE OF LOCOMOTION, the verbal senses marked as "undetermined" in this study not only lacked linguistic anchoring but also bore little relation to the conceptual frame of the respective animal, which precluded me from making a substantiated conclusion about the conceptual mechanism underlying their origin. The list of 8 verbs whose zoosemic origins could not be determined by this study is as follows: *horse*v_1 'to raise or hoist up' (first attested: 1500); *bug*v_1 'to ruin, spoil' (first attested: 1790); *horse*v_6 '<workmen's slang> 'to work to death', to out-work (OED); to outdo another, esp. at a piece of work (Partridge & Beale 1984: 571)' (first attested: 1867); *goose*v_2 'to poke, tickle, etc., (a person) in a sensitive part, esp. the genital or anal regions; sometimes, more specifically to fuck' (first attested: 1879); *skunk*v_1 'to fail' also *skunk*v_1.1 ' to defeat, beat, or get the better of (another person, team, etc.); spec. to prevent (an opponent) from scoring a single point, (frequently in passive) to be utterly defeated, to be completely unsuccessful' (first attested: 1831/1832 respectively); *poodle*v_1 'to move or travel in a leisurely, indirect, or aimless manner; to potter' (first attested: 1938); *bug*v_2 '<orig. jazz slang> to annoy,

irritate; to bother, pester' (first attested: 1947); *bug*_{V_3} '<orig. military slang> run away, flee; to retreat hurriedly' (first attested: 1950). (see Appendix 1 for more information)

Furthermore, 4 out of 159 verbs in the dataset presented a more complicated conceptual background than expected. The first and most interesting of the four is the verb *cow*_V 'to 'depress with fear' (Johnson); to dispirit, overawe, intimidate' (OED> *a1616 Accursed be that tongue that tels mee so; For it hath Cow'd my better part of man*.), which on its face should be attributed to Category (1b) of the classification proposed by this thesis, namely metaphoric projection of an element of an animal-frame facilitated by the activation of the meaning focus RELATION TO PEOPLE. However, further investigation into the verb's diachrony produced another verb, similar in semantics and form to *cow*_V, viz. †*killcow*_V 'to terrify with threatening looks; to cow' (OED> *1593 A new Art to kill-cow men with peremptorie termes, and bugges-wordes*.), recorded ca. 20 years earlier than the verb in question. The verb †*killcow*_V is firmly anchored in its lexical field, featuring such related items as †*kill-cow*_{N_1} 'a swashbuckler, bully, braggadocio; a terrible or great person; a man of importance' (OED> *1590 What neede all this stir? this banding of kilcowes to fight with a shadow?*), †*kill-cow*_{ADJ} 'bragging, bullying; terrifying' (OED> *1589 The ingrafted ouerflow of some kilcow conceipt. • 1592 In this vayne of kilcowe vanitie*.), and †*kill-cow*_{N_0} '(rare) a nickname for a butcher' (OED> *[Old Ballad] I would not be a butcher..For..He shall be call'd Kill-cow, and so shall be named*.) On the basis of the chronology of the presented lexical items, one may speculate that the attribute INTIMIDATION goes back to the frame of †*kill-cow*_{N_0} 'a butcher', which in the course of language history gave rise to †*kill-cow*_{ADJ} 'terrifying' and, subsequently, lost its reference to the ICM of *butcher* by developing a more general meaning †*kill-cow*_{N_1} 'a bully, a terrible (or great) person', later encapsulated by †*killcow*_V 'to terrify with threatening looks; to cow'. From this perspective, the verb *cow*_V, which replaced the becoming obsolete †*killcow*_V and effectively took over its meaning, can be considered a clipping of †*killcow*_V. In this case, this would mean the relocation of the verb *cow*_V into the Category (2a) metonymic expansion of a zoosemic noun referring to a human agent, since the attributes transferred into the semantics of the verb via the metaphor-metonymy interaction would be judged as coming not from the conceptual frame of *cow*, but from the conceptual frame of *butcher*. It should be acknowledged that this tentative etymology of *cow*_V has not been corroborated by any other source, nor is it featured in the OED.

Another curious case is the verb *clam*_v *up* whose initial meaning upon lexicalisation was 'to shut up, to become silent' (OED> *1916 When I ask for details he just clams up. • 1926 Smiler had continually drummed it into me never to answer any questions in case we were arrested. 'Just clam up, kid.'*) According to Panther & Thornburg (2012), the ground for the metaphorisation in this case is the structural similarity between the mollusc snapping its shell shut and a person closing their mouth abruptly, with the particle *up* 'evoking vertical movement toward a completion point" (p. 78, cf. also Đurović 2010). However, from the point of view of language diachrony, the metaphorical link between the SD of *clam* and the TD of *people* is stronger than suggested, with *clam*_N being lexicalised with the sense 'the mouth' almost a hundred years earlier than the verb, as evidenced by the OED records, i.e. *1825 Shet your clam, our David. • 1848–60 There is a common though vulgar expression in New England, of 'Shut your clam-shell.* (OED: clam, n.) Therefore, *clam* in *clam*_v *up* not only bears similarity to a human mouth but it quite literally means 'mouth', which then poses the question of the meaning and the origin of the particle *up* in this combination.

From the point of view of Construction Grammar, "the form of the [phrasal] verb must be characterized as a stored pattern and not as a linguistic form (a word or phrase)" (Torres-Martínez 2017: 64), which means that verbs such as *shut up* 'to shut one's mouth, to stop talking' (first attested: 1840), *hush up* 'to become or be silent, quiet, or still' (first attested: 1860), *dry up* 'to stop the flow of words, cease talking' (first attested: 1853), *dummy up* 'to refuse to talk or give information; to keep quiet' (first attested:1926); *belt up* '<Brit./Austr.> to be quiet, stop talking, (freq.) in imperative' (first attested: 1949) can be viewed as a variation of the pattern _verb_*up* paired with the sense 'to stop talking'. It then becomes understandable how *clam* might have been paired with the particle *up* by analogy with the most prototypical verb of this series, i.e. *shut up*.[20] Interestingly, in around 1973, yet another zoosemic verb joined the group, namely *oyster*_v *up* 'to shut up, to become silent' (OED> *1973 Once they got him down the station he oystered up proper. Not another word.*), which was obviously a case of wordplay on *clam*_v *up*.

_____

[20] This is not the only case of an animal verb joining a series of phrasal-verb constructions with similar senses that was found in the data. Among zoosemic verbs with a similar development trajectory, there are †*horse*_{V_3} (*away*), *horse*_{V_7} (*around, about*), *jackass*_{V_2} (*around/abound*), *leech*_V (*on, off*), monkey_{V_2} (about *with, around with, with*), rat_{V_5.1} (*on*), etc. (see Appendix 1)

The last verb that deserves a special mention is *outfox*v 'to out-do in cunning to outwit' (OED> *1872 He might destroy every link of evidence, if he once knew that we were in chase of him; even as he could out-fox a fox*.), which is an example of another very productive construction *out-_verb_* paired with the sense 'to perform the action of the verb better than someone else, as exemplified by the following: *outdo*v 'to excel, surpass, beat; to be superior to'(first attested: 1616); *outwit*v 'to get the better of (a person) by superior skill, craft, or ingenuity; to prove too clever for' (first attested: 1630); *outthink*v 'to surpass in thinking; to think beyond; to overcome by thinking' (first attested: 1704); *outmanoeuvre*v 'to outdo in manoeuvring; to get the better of by superior skill or strategy' (first attested: 1796).

3.3. Quantitative Distribution of Zoosemy Types in the Dataset

The type of verbal zoosemy most represented in the dataset is (1b) *metaphoric projection of an element of the animal-ICM [subtype BEHAVIOUR]* (see Figure 2), which confirms Deignan's (2005) assumption about the tendency of metaphorical animal terms to be most frequently used as verbs to map animal behaviour onto human behaviour. This mechanism of verbal zoosemy can, therefore be considered prototypical in the English language.

Figure 2. Distribution of the Established Types of Verbal Zoosemy in the Dataset
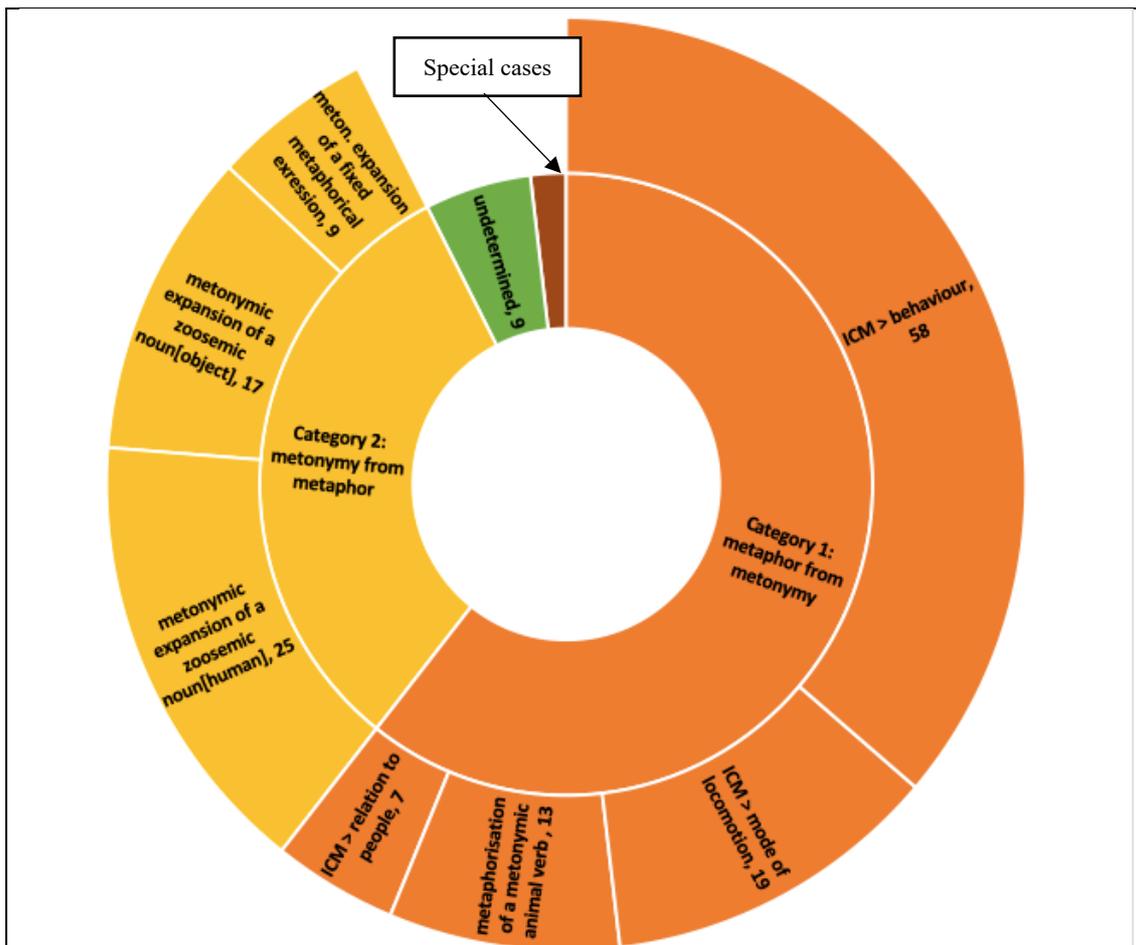
The second most represented category is (2a) m*etonymic expansion of a metaphorical noun referring to a human agent*, followed closely by (2b) *metonymic expansion of a metaphorical noun referring to an object*. It should be noted that this representation does not reflect the actual relation between these two types of verbal zoosemy in the English lexicon, since the dataset for this study did not include animal verbs used exclusively in the professional jargon and various slangs, such as military slang, nautical slang, etc. Had this been the case, the Category (2b) would potentially be the largest in the dataset.

The third most frequent type of verbal zoosemy is a subtype of Category (1b), namely *metaphoric projection of an element of the animal-ICM [subtype LOCOMOTION]*, which could be considered a type of BEHAVIOUR; HOWEVER, the verbal senses related to the given attribute were so numerous in the dataset that they had to be counted separately. Contrary to the rest of zoosemy patterns, almost 50% of the verbs of the subtype in question showed no anchoring in the lexical field, which could be attributed to special salience of this particular element in the ICMs of certain animals.

Among the marginal zoosemy types, (1a) *metaphoric expansion of a metonymic verb* was most productive in the beginning of the time-period under investigation, i.e. around the 16th century; it has not, however, been observed in significant numbers in Modern English. Finally, the types of verbal zoosemy that are most peripheral are (1b) *metaphoric projection of an element of the animal-ICM [subtype RELATION TO PEOPLE]* and (2c) m*etonymic expansion of a fixed expression,* the latter being a grammatical oddity in its own right since this particular type of metonymic projection could not be corroborated by previous research.

3.4. Further Semantic Development of Lexicalised Zoosemic Verbs

It is important to mention that, as acknowledged in Chapter 2.4.4., this study only dealt with the primary zoosemic senses of animal verbs recorded at the assumed point of conversion or further distinct senses developed by the verb as a result of a new round of zoosemisation occurring after the point of conversion, e.g. *squirrel*v_1 'to go round in circles like a caged squirrel; to run or scurry (round) like a squirrel' (first attested: 1921) vs. *squirrel*v_2 (*away*) 'to store away in the manner of a squirrel; to save, hoard; to cache' (first attested: 1939).

However, the glossary produced by the study (see Appendix 1) contains 50 additional zoosemic verbal senses that were considered derivative of the primary senses, e.g. *crane*v_1 'to stretch (the neck) like a crane' (first attested: 1799) → *crane*v_1.1 '<hunting> to pull up at a hedge or other obstacle and look over before leaping' (first attested: 1823) → *crane*v_1.1.1 '*figurative* to 'look before one leaps', hesitate at or shrink back from a danger, difficulty, etc.' (first attested: 1862). This pattern of continuing metonymisation/metaphorisation and weakening of the initial metaphorical grounding (i.e. the image of the crane) runs parallel to Deignan's (2005) argument about certain metonymic/metaphorical expressions moving down the metonymy-metaphor cline in their semantic development, namely from a more literal to a more abstract meaning. Deignan supports her theory by explicating the meaning of the expression *to keep an eye on* in the following set of sentences:

1. This means that while Julia is cooking she can still keep an eye on their two young children.
2. [The job] entails collecting the rent and keeping an eye on some housing association flats.
3. Often a scheme will need backing for several years. During this time the Field Director [will] keep an eye on its progress. (2005: 66)

Deignan points out that, in the first sentence, *to keep an eye* on is used with the sense 'to watch', with the notion of *caring* being additionally connoted by the expression and, therefore, its meaning can be considered metonymic in that particular context. The second and third examples, however, move further away from the initial domain of the WATCHING/SEEING, as their meaning becomes more abstract, hence, more metaphorical.

Similar metonymic/metaphoric mechanisms are at play in the secondary and tertiary meanings of *crane*$_{V\_1}$. The initial zoosemic sense of the verb can be characterised as (1b) metaphoric projection of an element of the animal-ICM [subtype BEHAVIOUR], with the animal noun standing metonymically for the behaviour of the animal, which is then projected metaphorically on to a human being (OED> *1799 A grotesque being, a little man who can..crane up his neck to the top-tower window*.) In case of the secondary sense, viz. *crane*$_{V\_1.1}$, the semantic element of STRETCHING THE NECK becomes secondary to LOOKING (OUT FOR POTENTIAL DANGER), which can be interpreted a metonymic shift of focus within the frame of *crane*$_{V\_1}$. (OED> *1823 He clear'd hedge, ditch, and double post, and rail, And never craned.*) The tertiary sense *crane*$_{V\_1.1.1}$ bears no reference to the actual act of stretching the neck/looking, with the action referenced by the verb happening outside of the initial physical frame of *crane*$_{V\_1}$ (OED> *1862 The American Executive appears to be feeling its way. In England it looks like craning. • 1892 Was he expected to 'crane' at the taxation of ground values?*), on the grounds of which it can be characterised as a product of further metaphorisation of *crane*$_{V\_1.1}$.

Other examples of the continuing processes of further metonymisation and metaphorisation of already lexicalised animal verbs can be gleaned from Appendix 1.

4. Discussion of Findings

The findings of this study appear to directly contradict the notion of zoosemic gaps introduced by Kiełtyka (2016), since it has been shown that zoosemic verbal senses can be semantically anchored not only in the respective parent animal noun but also in the related items from the lexical field around the given animal noun, which weakens the presupposed connection between the animal noun (as a metaphorical designation of a human agent) and its verbal counterpart. This, in turn, leads to the question: How "denominal" are denominal animal verbs? According to my analysis, metaphorical zoosemic verbs can derive their semantics from inter alia earlier metonymic verbs, fixed expressions as well as be semantically tied to earlier adjectives, adverbs and related

nouns, which are not necessarily metaphorical projections of the respective animal onto a human being. Hence, one has grounds to argue that English zoosemic verbs are certainly denominal in form but they are not always "denominal" in their semantics.

Consequently, the pattern of zoosemisation that has been suggested by previous studies, viz. *noun*$_{\text{ANIMAL}}$→*noun*$_{\text{HUMAN}}$→*verb*$_{\text{HUMAN}}$, has been proven to be one of 5 possible mechanisms of verbal zoosemy in the English language, the prototypical one being *[animal-ICM-element*$_{\text{BEHAVIOUR}}$*]* → *noun*$_{\text{ANIMAL}}$→ *verb*$_{\text{HUMAN/NON-HUMAN}}$.

Secondly, the widening of the scope of lexical items under analysis to include related lexical items showed that, in most cases, the verbalisation of animal nouns does not happen idiosyncratically as claimed in previous studies. For example, in case of the verbal sense in Category (1b) *metaphoric projection of an element of the animal-ICM*, related lexical items of the zoosemic verbs under analysis seem to point to certain elements of the respective animal-ICMs gaining salience around the time of the verb formation (see *cock*$_{\text{V\_1}}$, *wolf*$_{\text{V\_1}}$ *(down)*). Similarly, rearrangement of the salient attributes within an animal-frame can result in a change in the semantics of the respective verb (e.g. *mouse*$_{\text{V\_1.1}}$).

Furthermore, the separate handling of the distinct senses of multi-sense animal verbs as well as distinguishing between primary and secondary/tertiary senses brought to light the below-the-surface workings of verbal zoosemy in English. Specifically, it was established that individual animal terms can undergo multiple rounds of zoosemisation in the course of their semantic development, with their senses being produced by various mechanisms of zoosemy proposed in this thesis. On the other hand, the already lexicalised zoosemic senses can undergo further metonymisation/metaphorisation in the process of semantic change and give rise secondary/tertiary zoosemic senses (e.g. *crane*$_{\text{V\_1}}$). This once again highlights the importance of the diachronic approach to the study zoosemic verb senses in order to identify the cognitive mechanisms underpinning their formation.

5. Conclusion

This thesis is not the first attempt in the field of cognitive linguistics to classify the cognitive mechanisms of meaning transfer underlying English verbal zoosemy. Previous research has produced a number of classifications, but none of them fully accounted for the large and diverse menagerie of animal verbs inhabiting the English lexicon. Having identified the strengths and weaknesses of the previous classifications, this study set out

to harness the success of the previous researchers of verbal zoosemy by tying their most effective research strategies into a powerful methodological apparatus, while simultaneously widening the scope of the investigation to an unprecedented number of items under investigation, namely 96 animal terms. Operating within the framework of historical semantics, the investigation was able to gather 159 primary and 50 secondary/tertiary verbal senses of the given animal terms, which were integrated into a glossary of animal verbal senses, substantiated by the historical records made available by the OED Online. This method of data organisation revealed certain regularities in the metaphor-metonymy interaction underpinning the formation of animal verbs, on the basis of which a new, more comprehensive classification of zoosemic verbal senses in English was produced.

The main premise of this investigation was that words do not change meaning on their own, i.e. any semantic change must be motivated and it must make sense to the generic language user of the given time-period. Therefore, it was crucial for this study to approach the language phenomena under analysis with a mindset which would be as close as possible to the mindset of the language users who witnessed these phenomena. Therefore, the "road map" for the classification originally included two questions:

1. Where could the meaning of the verb in question come from?
2. How did the language users make sense of the given instance of semantic change? In other words, which cognitive mechanisms made this change possible?

Wierzbicka's theory of linguistic knowledge put into a diachronic perspective helped provide substantiated answers to the first question. Specifically, it has been established that zoosemic verbs rarely act as pioneers of semantic change, directly isolating pieces of the encyclopaedic knowledge available to the speakers and bringing them to the language surface. On the contrary, in most cases the semantics of zoosemic verbs were shown to be anchored in the chronologically earlier lexical items from the lexical field of the respective animal, such as related nouns, adjectives, verbs and fixed expressions. Effectively, that means that language users did not just choose random attributes from the ICM of a random animal and projected them onto a zoosemic verbs on the spur of the moment. In contrast, the salience of the attributes which eventually came to be encapsulated by zoosemic verbs must have been rising in the ICM of the animal before the verb entered the linguistic scene, which is evidenced by the composition of the lexical field around the time of conversion.

Determining whether the senses isolated by the zoosemic verbs originated in the ICM of the respective animal or in the ICM of the human/object that came to be known by the name of that animal cleared the path for unravelling the intricacies of metaphor-metonymy interactions underlying the formation of zoosemic verbs and, thus, answering the second question of the "road map". Specifically, it has been established that two major patterns or metaphor-metonymy interaction activated in the process of verbal zoosemisation of animal terms are *metaphor from metonymy* and *metonymy from metaphor*. In the former pattern, either an already existing metonymic animal verb is expanded to include the target domain *people*, or the animal name itself acts as a metonymic vehicle to a certain element of the animal-ICM, which is metaphorically projected onto people. In the latter mechanism, a metaphorical projection of an animal term initially enters the lexicon in the form of a metaphorical animal noun referring to a human/non-human entity, and later in the course of language development it comes to metonymically stand for the action, which the given entity either performs or is involved in. The study also uncovered a third, rather unusual source for the semantics of the zoosemic verbs within the *metonymy from metaphor* pattern, namely verbalisation of the metaphorical meaning of an established idiomatic expression, with the denominal verb standing metonymically for the whole expression. This mechanism of metonymic projection has not been corroborated by previous research and needs further investigation.

On the whole, the study has successfully answered the question of mechanisms underpinning verbal zoosemy in English. However, in the process, much deeper theoretical questions presented themselves. For example, the presented linguistic evidence seems to cast doubt on the assumed nature of the connection between the noun and the respective denominal verb, suggesting that the congruence of linguistic form does not equate to the congruence of semantical content. How "denominal" are metaphorical animal verbs that do not have a metaphorical nominal counterpart? How "denominal" are zoosemic verbs which originated from their metonymic forerunners by way of metaphoric expansion? How "denominal" are zoosemic verbs which metonymically stand for the semantical load of an idiomatic expression that they are part of? Although the label "denominal" certainly reflects the formal side of the formation of such verbs, it does a disservice to our general understanding of the mysterious ways in which semantic change works in real language.

This thesis also identified a number of issues, which unfortunately could not be addressed in detail as they lie outside of the scope of this particular investigation. These included: the issue of particles in those zoosemic verbs that acquired a particle in the process of their semantic development (briefly touched upon in Chapter 3.3.); the question of semantic derogation that is generally considered inherent in animal metaphors targeted at humans; the variety of metonymic animal verbs in the English lexicon (preliminary research shows that there at least two more types of such verbs than suggested by Martsa [2013]), the role of language creativity and metaphorical triggers in the process of zoosemisation. These and many further questions as well as the verbs from the glossary in Appendix 1, which could not be explicated at length (out of space constraints) and which hold a wealth of etymological information, would provide fertile ground for future research.

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Zusammenfassung

Diese Masterarbeit untersucht das Phänomen der verbalen Zoosemie im Englischen. Der Begriff verbale Zoosemie steht für Nullableitung von substantivischen Tiernamen zu Verben, die sich metaphorisch auf hauptsächlich von Menschen (aber zum Teil auch von nicht belebten Entitäten oder Tieren) ausgeführte Handlungen beziehen, z.B. von *beaver* ‚Bieber' zu *to beaver away* ‚fieberhaft an etwas arbeiten' oder von *horse* ‚Pferd' zu *to horse around* ‚rumalbern, rumblöden'. Das Ziel dieser Untersuchung ist es im Rahmen der kognitiven Linguistik, und insbesondere einer ihrer Tochterdisziplinen, nämlich historischer Semantik, zu bestimmen, welche kognitiven Mechanismen solche Phänomene des Sprachwandels für die Sprecher verständlich machen bzw. ermöglichen. Dafür wurden 96 zoosemische Verben, samt den vom *Oxford English Dictionary Online* angebotenen Definitionen und datierten Beispielsätzen, zusammengetragen und unter Anwendung der kognitiven Methapher- und Metonymietheorie analysiert. Im Anschluss wurde eine Klassifizierung der zoosemischen Verben im Englischen unternommen.

Die Ergebnisse zeigen, dass die Nullableitung von substantivischen Tiernamen zu Verben auf zwei grundsätzliche kognitive Mechanismen zurückzuführen ist, nämlich Metonymisierung gefolgt von Metaphorisierung oder Metaphorisierung gefolgt von Metonymisierung. Im ersten Fall wird entweder ein bereits lexikalisiertes metonymisches Verb oder der substantivische Tiername, der metonymisch für ein Attribut des Tieres steht, metaphorisch auf Menschenhandlungen projiziert, z.B. von *to hound* ‚etwas mithilfe eines Jagdhunds jagen' zu *to hound* ‚wie ein Jagdhund verfolgen' bzw. von *rabbit* ‚Karnickel' zu *to rabbit* ‚sich wie Karnickel vermehren'. Im zweiten Fall wird der Tiername zunächst als metaphorisches Substantiv, das sich auf eine Person oder einen Gegenstand bezieht, lexikalisiert, z.B. *rat* ‚Verräter, Petze' bzw. *pony* 'Spickzettel'. Im weiteren Verlauf des Sprachwandels wird dieses Substantiv durch die Metonymie AGENT FOR ACTION oder OBJECT INVOLVED IN ACTION FOR ACTION zum Verben abgeleitet, z.B. *to rat* ‚verpetzen, verpfeifen' bzw. *to pony* ‚spicken'. Zur Metaphorisierung gefolgt von Metonymisierung gehört eine weitere Subkategorie von zoosemischen Verben, nämlich die Verben die metonymisch für ganze metaphorische Redewendungen stehen, z.b. *to wolf* für *to cry wolf* ‚falschen Alarm geben'. Eine Erklärung zu dieser Art von metonymischer Verknüpfung zwischen der Semantik einer ganzen idiomatischen Redewendung und dem Bedeutungsinhalt eines ihrer substantivischen Elemente, das zum Verben konvertiert wird, konnte in der einschlägigen Literatur nicht gefunden werden.

Daher bedarf dieser Mechanismus metonymischen Bedeutungstransfers weiterer Forschung.

Die quantitative Analyse der identifizierten kognitiven Mechanismen im untersuchten Datensatz von 96 Tierverben hat ergeben, dass die metaphorische Projektion eines Tiernamens, der metonymisch für ein Attribut des Tieres steht, als der prototypische Mechanismus des Bedeutungstranfers der Englischen Zoosemie zu werten ist.

Selbstständigkeitserklärung

Hiermit versichere ich, dass ich die vorliegende Arbeit ohne Hilfe Dritter und ohne Zuhilfenahme anderer als der angegebenen Quellen und Hilfsmittel angefertigt habe. Die den benutzten Quellen wörtlich oder inhaltlich entnommenen Stellen sind als solche kenntlich gemacht.

Die „Richtlinie zur Sicherung guter wissenschaftlicher Praxis für Studierende an der Universität Potsdam (Plagiatsrichtlinie) - Vom 20. Oktober 2010", im Internet unter http://uni-potsdam.de/ambek/ambek2011/1/Seite7.pdf, habe ich zur Kenntnis genommen.

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