Research Article

Elsi Kaiser*

Effects of perspective-taking on pronominal reference to humans and animals: Logophoricity in Finnish

Abstract: This paper investigates the logophoric pronoun system of Finnish, with a focus on reference to animals, to further our understanding of the linguistic representation of non-human animals, how perspective-taking is signaled linguistically, and how this relates to features such as [+/-HUMAN]. In contexts where animals are grammatically [-HUMAN] but conceptualized as the perspectival center (whose thoughts, speech or mental state is being reported), can they be referred to with logophoric pronouns? Colloquial Finnish is claimed to have a logophoric pronoun which has the same form as the human-referring pronoun of standard Finnish, *hän* (she/he). This allows us to test whether a pronoun that may at first blush seem featurally specified to seek [+HUMAN] referents can be used for [-HUMAN] referents when they are logophoric. I used corpus data to compare the claim that *hän* is logophoric in both standard and colloquial Finnish vs. the claim that the two registers have different logophoric systems. I argue for a unified system where *hän* is logophoric in both registers, and moreover can be used for logophoric [-HUMAN] referents in both colloquial and standard Finnish. Thus, on its logophoric use, *hän* does not require its referent to be [+HUMAN].

Keywords: Finnish, logophoric pronouns, logophoricity, anti-logophoricity, animacy, non-human animals, perspective-taking, corpus

1 Introduction

A key aspect of being human is our ability to think and reason about our own mental states as well as those of others, and to recognize that others' perspectives, knowledge or mental states are distinct from our own, an ability known as Theory of Mind (term due to Premack & Woodruff 1978). Human language has a variety of devices that a speaker (or writer) can use to signal that what they are expressing is another individual's perspective or mental state, such as syntactic embedding under verbs of communication and mental state (e.g. *John said/thinks that he will win the race*). In some languages, morphologically distinct logophoric pronouns are used to indicate that the speaker is conveying some other person's speech, thoughts or feelings.

However, how do we refer to sentient non-human creatures who presumably also experience different mental states? Do we linguistically signal shifts in perspective to non-human animals' mental states as well? The way in which humans regard the distinction between humans and other animals is complex. On

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*Corresponding author: Elsi Kaiser, Department of Linguistics University of Southern California, Los Angeles, United States, E-mail: emkaiser@usc.edu

the one hand, humans tend to view some animals – especially household pets like cats and dogs – as being 'like us' and often attribute human-like mental states and abilities to them (e.g. Eddy et al. 1993, Epley & Waytz 2010; see also Heider & Simmel 1944, Sealey 2018). On the other hand, human societies often draw a sharp line between humans and (most) non-human animals: animals are not usually viewed as having legal rights in the way that humans are, for example (see e.g. Herzog 2010, Arluke & Sanders 1996 for discussion). Thus, in some contexts we seem very willing to view animals as sharing the human ability for mental states such as happiness, regret, guilt, responsibility, and so on, but in other contexts we avoid regarding animals as creatures capable of having inner lives (e.g. Herzog 2010). It is worth noting that the focus of this paper is *not* the question of whether animals *actually* experience the kinds of mental states that humans do – that is a question for researchers working in animal cognition. My focus instead is on how humans use language – especially features of language associated with key human abilities such as Theory of Mind – when talking about non-human animals, and what this can tell us about how perspective-taking is signaled linguistically, how it relates to features such as [+/-HUMAN], and more generally how language treats (relatively) fixed features such as [+/-HUMAN][1] relative to more changeable properties such as being the perspectival center at a particular point of the discourse or narrative.

Given that language offers us a tool for signaling reference to another person's mental state, namely logophoric pronouns (discussed in Section 2), the question arises of whether this tool can also be used for talking about animals' mental states. Logophoric pronouns are specialized forms that refer to the 'subject of consciousness', i.e. the person whose speech, thoughts or feelings are being reported (e.g. Hagège 1974, Clements 1975, Sells 1987, Culy 1994). Thus, we can ask whether logophoric pronouns seek a [+HUMAN] antecedent whose mental state or perspective is being conveyed – i.e., a [+HUMAN] referent who is also the logophoric/perspectival center? Or do logophoric pronouns simply seek to refer to the logophoric perspectival center, even in a context where that logophoric center is [-HUMAN]? Prior work on logophors has identified different perspectival components to which they can be sensitive (e.g. Sells 1987 on self, source and pivot; Charnavel & Zlogar 2015 on attitude holder, empathy locus and deictic center), but the question of whether logophors specifically target humans compared to non-human animals has not been systematically investigated from a crosslinguistic perspective (for Finnish, see Laitinen 2002, 2009, 2012; for related work, see Charnavel & Sportiche 2016 on inanimates which cannot be logophoric centers).

Finnish – a Finno-Ugric language – is especially well-suited for investigating this question because colloquial Finnish is claimed to have a pronoun with logophoric properties which – intriguingly – has the same form as the human-referring pronoun used in Standard Finnish, *hän* (she/he; Finnish pronouns are gender-neutral). Thus, Finnish allows us to ask whether a pronoun, *hän*, that at first glance is featurally specified to seek [+HUMAN] referents, can also be used for [-HUMAN] referents *when these referents are logophoric centers*. In other words, what matters more, being [+HUMAN] or being the logophoric center? This question also relates to broader issues concerning semantic and pragmatic features, such as the extent to which discourse-semantic features such as logophoricity can 'overpower' arguably more immutable semantic features such as the [+/-HUMAN] distinction.

Given that thinking, speaking and mentalizing are fundamentally human traits, it would not be surprising if logophoric pronouns were specialized for exclusively human reference. Many other aspects of grammar, much less closely related to human cognition, clearly track the human/nonhuman distinction (see e.g. Siewierska 2004).

When we consider reference to animals, it is important to address the phenomenon of anthropomorphism of (or personification of) animals. From a linguistic perspective, it is possible to have contexts where animals – referents that normally have the feature [-HUMAN] – are treated grammatically as being [+HUMAN] in all (if not most) syntactic, pragmatic and semantic respects. Building on de Swart & de Hoop (2018), such

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1 For present purposes, I assume that, on the grammatical level, [+/-HUMAN] is a binary feature – but this does not preclude gradience outside the grammar. Conceptually, the extent to which a particular entity is regarded as (non-)human may well be a gradient matter. Relatedly, on the topic of animacy more generally, de Swart & de Hoop (2018) state that "even though conceptually animacy may be a gradient notion, linguistically it manifests itself in a discrete (binary) way due to the fact that the phenomena in which animacy is involved are binary" (de Swart & de Hoop 2018:4, but see also Nelson & Vihman 2018 for evidence from languages with noun classes indicating that a purely binary approach in the grammar may not be sufficient).

referents could be regarded as having undergone a semantic type shift from one ontological entity subtype to another: from $e_{animate}$ (the entity type for non-human animals) to e_{human} (the entity type for humans). In cases where an animal referent has undergone this kind of type shift and is grammatically consistently treated as [+HUMAN], we cannot draw any conclusions about whether logophoric pronouns can refer to [-HUMAN] referents. This is because in these contexts, it is to be expected that even if logophoric pronouns are specified for [+HUMAN] referents, they could still be used to refer to these type-shifted animal referents. As a result, these are *not* the contexts that are of interest to us in this paper.

Crucially, there are also situations where animals have not been 'grammatically transformed' into [+HUMAN] referents, but are nevertheless represented as having mental states. Consider a text where a non-human pronoun is used for a particular animal nine times out of ten, except for one occurrence of a logophoric pronoun referring to that same animal, specifically in a context where the animal's thoughts are being reported. Here, the preponderance of non-human pronouns shows the animal is not treated as grammatically [+HUMAN], and so when we observe a logophoric pronoun being used for that same animal, this suggests that [-HUMAN] antecedents *are* allowed for logophoric pronouns. As I discuss in Sections 5 through 8, in this paper I focus on this second type of context, using only texts – specifically, children's and young adult books – where the default pronominal form for animals in Finnish is *se* 'it.' I use books written for children (and young adults) because they are more likely to have animal protagonists than novels written for adult readers. If we were to look at novels written for adults with animal protagonists, I would expect the same patterns to arise. The animal-referring phenomena reported in this paper should *not* be construed as a specialized property limited to children's literature.

On the basis of corpus examples, I compare two competing hypotheses about the logophoric system of Finnish. Crucially, I show how looking at reference to animals allows us a clearer view of the logophoric system of standard Finnish and colloquial dialects. This is because reference to animals allows us to better understand the behavior of logophoric *hän*: unlike reference to humans, which shows register variation in Finnish, the default form for animals does not change across registers and thus offers a clearer view of the *hän/se* alternation. In addition, investigating whether logophoric *hän* can be used with animals offers insights into the conceptualization of animals in language. I argue in favor of a unified logophoric system for both colloquial and standard Finnish. The data presented in this paper suggests that use of *hän* can be triggered in both colloquial and standard Finnish by the referent being the perspectival center, even if it is not [+HUMAN].

The structure of the paper is as follows. In Section 2 I briefly review logophoric pronouns crosslinguistically, and in Section 3 I turn my focus to human-referring logophoric pronouns in Finnish. I first discuss contexts involving reported speech or thought (syntactic embedding under attitude verbs) and then consider logophoric pronouns in unembedded contexts which can be analyzed as Free Indirect Discourse (FID). Section 4 reviews my prior work on the Finnish logophoric system, focusing on human referents, for both standard Finnish and colloquial Finnish. In Section 5, we shift our attention to animals, and address potential concerns about anthropomorphism or personification muddying the waters. Then, using corpus data, I first consider reference to animals both in embedded and main clause contexts (Sections 6-7), and then investigate whether the logophoric pronouns in Finnish need to be interpreted *de se* or also allow *de re* reference (Section 8). The results and their implications are discussed in Section 9.

2 Perspective-sensitivity in pronominal reference to humans

Some languages have a morphologically distinct class of logophoric pronouns that refers to the 'subject of consciousness', i.e. the person whose speech, thoughts or feelings are being reported (e.g. Hagège 1974, Clements 1975, Sells 1987, Culy 1994). In the words of Clements (1975), logophors refer to "….the individual (other than the speaker) whose speech, thoughts, feelings, or general state of consciousness are reported or reflected in the linguistic context in which the pronoun occurs" (Clements 1975:141). This individual is often referred to as the logophoric center. In recent work, Büring (2005:63) states that: "A logophoric pronoun can be used if it is embedded in a constituent *c* such that (i) *c* is embedded, (ii) *c* denotes a proposition *p*, which

(iii) can be paraphrased as a mental state or reported utterance of the pronoun's antecedent such that the paraphrase contains a first person pronoun in place of the pronoun."

In languages with lexically distinct logophoric pronouns[2], these specialized forms occur in the scope of predicates reporting speech, thoughts or mental states (e.g. *say, think, dream*), ex. (1) from Ewe (Clements 1975, Pearson 2015). The logophoric pronoun *yè* must be interpreted as referring to the subject of saying, and the embedded clause can be paraphrased with a first-person pronoun.

(1) *Kofi   be   yè   dzo.* (Ewe, from Pearson 2015:78)
     Kofi   say   LOG   leave
     'Kofi$_i$ said he$_{i/*j}$ left.' (Kofi said: "I left.")

Typological work has identified an implicational hierarchy of attitude predicates, indicating that if a language uses logophoric pronouns in coreferential configurations under predicates of perception, it also uses logophoric pronouns under verbs of thought (e.g. Culy 1994, Stirling 1993, 1994, Huang 2000). This in turn implies that the language also uses logophoric pronouns under verbs of saying/ communication.

Pearson (2015) notes that "Logophoric pronouns are traditionally defined as elements that (….) are obligatorily construed as referring to the bearer of the attitude, such as the subject of *believe* or *say*" (Pearson 2015:77-78), in line with ex. (1). However, it seems that non-logophoric pronouns can also corefer with the attitude holder, at least in some languages. Huang (2000:226, citing Hagège 1974) shows that in Tuburi, either a logophoric or non-logophoric pronoun in the embedded clause can corefer with the subject of 'think' in the main clause. Similarly, Pearson finds that some Ewe informants allow coreference in configurations such as (2), with a non-logophoric pronoun in the embedded clause:

(2) *Kofi   be   e   dzo.* (Ewe, from Pearson 2015:78)
     Kofi   say   she/he.3SG   leave
     'Kofi$_i$ said he$_{i/j}$ left.'

So far, we have been treating logophoricity in a unified way. However, Sells (1987) argues that it can be broken down into three primitives: SOURCE, SELF and PIVOT. He defines the SOURCE as "the one who makes the report (for example, the speaker)," the SELF as "the one whose 'mind' is being reported," and the PIVOT as "the one from whose point of view the report is made," in other words, the deictic center (Sells 1987:455). In recent work, Charnavel & Zlogar (2015) collapse SOURCE and SELF under 'attitude holder,' a perspectival center involving an intellectual/cognitive perspective, and I follow their approach. As will become clear, for the sake of brevity, in this paper I often use the feature [SELF] when referring to the 'attitude holder'. Thus, my use of the label [SELF] is essentially synonymous with the term 'attitude holder.'

2.1 Can animals antecede logophoric pronouns?

So far, in our discussion of prior work on logophoricity, we have been implicitly assuming that the referents whose mental states are being described are human. What about non-human animals? It is clear that humans regard at least some non-human animals as capable of experiencing mental state, which raises the question of whether humans use logophoric pronouns when referring to these animals. Specifically, in contexts where animals are not anthropomorphized and are treated grammatically as [-HUMAN], does the linguistic system still allow us to treat them as entities with the ability to experience mental states and attitudes (i.e., as entities that can be the [SELF]), despite the fact that the ability to experience various mental states (to have a 'rich inner life') is often viewed as a defining part of being *human*?

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2 Some languages do not have lexically distinct logophoric pronouns but use other forms such as reflexive anaphors in logophoric contexts (e.g. Icelandic); see Huang 2000 for further crosslinguistic discussion.

As we will see, in Finnish the pronoun that has been argued to be logophoric (*hän*) has the same form as the pronoun that, in Standard Finnish, is the default form for humans but not for animals. This might lead us to expect that animals (unless type-shifted from $e_{animate}$ to e_{human}, see de Swart & de Hoop 2018) are excluded from anteceding logophoric pronouns. To the best of my knowledge, there is very limited (if any) discussion of logophoric pronouns being used to refer to animals in prior typological/crosslinguistic work, except for Laitinen's seminal work on Finnish and related languages such as Sami (see Sections 5-7). In particular, prior crosslinguistic work has not systematically investigated whether and in what syntactic (and semantic) configurations logophoric pronouns can be used for sentient thinkers or 'mental state experiencers' that are otherwise grammatically consistently treated as being [-HUMAN] – for example, that are otherwise by default referred to with a non-human pronoun. As I discuss below, to explore this question it is important to look at contexts where the animals are still grammatically of type $e_{animate}$ and have not been type-shifted to eh_{uman}, using the terminology of de Swart & de Hoop (2018).

3 Perspective-sensitivity in pronominal reference to humans: logophoric pronouns in Finnish

In this section, I review prior work showing that reference to humans in Finnish exhibits a pattern of pronoun alternations that in many ways resembles the logophoric patterns described in Section 2. Some of these logophoric properties were already noted in descriptive work on Finnish as early as 1883 by Setälä, and investigated more recently by Laitinen (2002, 2005, 2009, 2012), Mikkola & Laitinen (2013), Nau (2006), Priiki (2016, 2017), Kaiser (2018), and others.

3.1 Finnish pronominal paradigms

A brief review of the pronominal paradigms of present-day Finnish, in particular the distinction between standard and colloquial Finnish, is necessary as a starting point. Standard Finnish is used in formal writing (e.g. newspapers, textbooks, some fiction) and public/official speech (e.g. television news). However, in casual writing and speech, people use dialects of colloquial Finnish.[3] These diverge from standard Finnish in terms of their lexicon, morphology, syntax and phonology/phonetics (e.g. Karlsson 1999 and many others). For example, in colloquial Finnish as spoken in the greater Helsinki area, the final [-i] of diphthongs (e.g. ai, oi) is omitted in unstressed syllables (e.g. Standard Finnish *sanoi* say.PST.3SG becomes *sano*), and first and second person pronouns are shortened (Standard Finnish *minä* 'I,' *sinä* 'you' become *mä, sä*). Colloquial Finnish has a number of regional variants, but the logophoric patterns discussed in this paper can occur in the majority of dialects. Generally speaking, Finnish speakers are fluent both in standard Finnish and at least one dialect of colloquial Finnish.

One of the most striking asymmetries between standard Finnish and many dialects involves the pronouns used for human referents on the one hand, and animals and inanimates on the other hand. Present-day standard Finnish makes a clear distinction between humans and non-humans: the gender-neutral personal pronoun *hän* 'she/he' (ex.3a' and 3a'') is used for human referents (e.g. the neighbor),

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3 It is worth noting that 'standard Finnish' and 'colloquial Finnish' should not simply be equated with 'written Finnish' and 'spoken Finnish'. For example, informal/casual written communication – such as internet discussion boards – often uses colloquial Finnish. The reader should also be warned that, for purposes of expository clarity, this paper is written as if the two registers are fully distinct – but given that register variation is encoded morphologically, lexically, phonologically and in other ways, there can be gradations and hybrids that may resemble colloquial Finnish on one level and standard Finnish on another level. Importantly, this is not a problem for the key claims of the present paper, for two main reasons. First, in the case of reference to humans, I focus on source texts where the default pronominal form is known or can be clearly identified, and thus provides an indication of whether the source text patterns like standard Finnish or colloquial Finnish in terms of its default pronoun use. Second, in the case of reference to animals, we can sidestep complications stemming from register variation, because the default form for referring to animals does not change across registers.

whereas non-human animals and inanimates (e.g. the cat) are referred to with *se* 'it' (ex.3a' and 3a'').[4] This distinction largely mirrors 'she/he' vs. 'it' in English. Laitinen (2009, 2012) notes that this human vs. non-human division in the use of *se* and *hän* was established in written (standard) Finnish by the early 1900s.

(3) [Standard Finnish]
    a) *Naapuri-ni_i   hoita-a   kissa-a-ni_j, kun   ole-n matko-i-lla.*
       Neighbor.NOM-1Px[5] cares.for-3SG cat-PAR-1Px, when be-1SG trip-PL-ADESS
       'My neighbor_i takes care of my cat_j when I am traveling.'
    a') *...Onneksi se_j   ei   enää   pelkä-ä   hän-tä_i.*
       Fortunately it.NOM neg.3SG anymore fear-3SG she/he-PAR
       'Fortunately it_j no longer fears him_i/her_i.'
    a'') *...Onneksi hän_i   ei   enää   pelkä-ä si-tä_j.*
       Fortunately she/he.NOM neg.3SG anymore fear-3SG it-PAR
       'Fortunately she_i/he_i no longer fears it_j.'

The anaphoric paradigms in dialects of colloquial Finnish are quite different. In the majority of dialects, *se* is the default form for both human *and* non-human referents, with the exception of some south-eastern and south-western dialects (e.g. Vilppula 1989).[6] Indeed, Kallio (1978:65, cited by Suonperä 2012) states that the use of *se* when referring to human referents is so frequent in colloquial language, excepting only the most formal settings, that no specific evidence is needed to support this observation. Thus, in colloquial Finnish, *se* can refer to humans, non-human animals (ex. 3b) as well as inanimates. This renders the pronouns in the second clause of ex. (3b) more ambiguous than those in (3a'-3a''): at least in principle, it could be that the cat no longer fears the neighbor or the neighbor no longer fears the cat.

(3) [Colloquial Finnish]
    b) *Mun naapuri_i   hoitaa   mun kissa-a_j, ku   mä   o-on   matkoilla.*
       My neighbor.NOM cares.for-3SG my   cat-PAR, when I.NOM be-1SG trip-PL-ADESS
       'My neighbor_i takes care of my cat_j when I am traveling.'
    b') *Onneks se_{i/j}   ei   enää   pelkä-ä si-tä_{j/i}.*
       Fortunately it.NOM neg.3SG anymore fear-3SG it-PAR
       'Fortunately {it / she/he}_{i/j} no longer fears {it / him/her}_{j/i}.'

In sum, there is a tension between the default forms used in the pronominal systems of standard Finnish and colloquial Finnish: whereas standard Finnish uses *hän* 'she/he' for humans and *se* 'it' for animals (and inanimates), many colloquial dialects use *se* 'it' as the default for both. In the following sections, I turn to the non-default pronominal options and the referential properties and contexts that motivate their use.

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4 For ease of presentation, I translate *se* as 'it'. However, *se* is often regarded as a hybrid that has properties of both anaphoric and demonstrative pronouns (e.g. Larjavaara 1990). In contrast to the proximal demonstrative *tämä* 'this' and the distal demonstrative *tuo* 'that', *se* has been analyzed as placing the referent in the addressee's sphere and being unmarked/neutral with respect to the speaker (see Laury 2005). *Se* can also occur on its own or as a prenominal modifier, in which case its meaning is similar to English 'the' or 'that', e.g. *se kissa* 'the cat/that cat' (see Laury 1997). *Se* is also used for discourse deixis (Hakulinen & Karlsson 1989:316). Furthermore, even in standard Finnish *se* can refer to humans in certain contexts, e.g. in otherwise 'headless' relative clauses (ex.i).
  (i) Pekka   on   se,   jo-ta   etsi-t.
     Pekka.NOM be.3SG it.NOM, who-PAR look.for-2SG
     'Pekka is the one you are looking for.' (Sulkala & Karjalainen 1992:120)
5 In Standard Finnish, possession is marked with possessive suffixes, abbreviated Px, that agree with the possessor in person and, in some persons, also in number. Genitive pronouns are used if the possessor does not locally c-command the possessive construction. As will become clear later on, possessive constructions without overt possessive pronouns do not distinguish between humans and animals, between *hän* and *se*, as both use the same 3rd person possessive suffix. Colloquial Finnish often only uses genitive pronouns, without possessive suffixes (see e.g. Hakulinen et al. 2005).
6 As regards reference to animals, see also Laitinen (2009:120-121) on dialectal variation and non-logophoric uses of *hän* in some dialects. I focus here on colloquial dialects where the default form (for humans and animals) is *se*, as my focus is on the question what motivates the use of *hän*.

3.2 Logophoric pronouns in reported speech/thought contexts in Finnish

In addition to the default form *se* 'it', many colloquial dialects also use the standard Finnish human pronoun *hän* 'she/he' in a specific context – namely in embedded clauses that convey reported speech/thought (e.g. Setälä 1883, Kuiri 1984, Ylikahri 1996, Laitinen 2002, 2009, see also Priiki 2016, 2017, Kaiser 2008, 2018, inter alia). Specifically, Laitinen (2002) notes that the pronoun *hän* "appears in reported speech or thought and is coreferential with the subject of the speech act or mental verb used to introduce it" (Laitinen 2002:327). This sounds very similar to what we saw above with the logophoric pronouns in Ewe and other languages (see also Nau 2006 on the links between Finnish *hän* and logophoric pronouns in African languages). For example, in (4a), *hän* 'she/he' is used in a clause embedded under the verb 'say' and is coreferential with the matrix subject (realized with default *se* 'it'): *hän* refers to the person whose speech is being reported. In the English translations, I will typically use *she/he* to indicate an occurrence of *hän* in the Finnish original, and English *it* to indicate an occurrence of *se* in the Finnish original. I will also use subscripts to indicate coreference.

The same pattern can be seen in (4b). These examples are all from colloquial Finnish (signaled by morphological patterns and other grammatical cues, as well as use of *se* as the default pronoun for humans). See Kaiser (2018) for further discussion; these examples are from Kaiser (2018:83).

(4) a) [Context: talking about good fishing spots]
    Kundi$_i$ *luule-e*   *omista-va-nsa*   *se-n*   *paika-n,*
    Guy.NOM think-3SG own-PTCP-3PX the-ACC   place-ACC,
    vaikka   *mä*   *ol-i-n*   *aamu-lla*
    although I.NOM be-PST-1SG morning-ADESS
    jo   *tunti-a*   *ennen **si-tä**$_i$ *si-llä*   *paika-lla.*
    already hour-PAR before **it**-PAR that-ADESS place-ADESS
    Se$_i$ *sano,*   *että **hän**$_i$ *on*   *tän*   *paikan*   *alun perin löytänyt.*
    It.NOM say.PST.3SG that he.NOM be.3SG   this-ACC place-ACC originally find-PTCP
    (www.jippii.fi/jsp/forum/thread.jsp?b=kalastus&t=570)
    '**The guy**$_i$ thinks he owns the place, although I was already there in the morning an hour before **it**$_i$. **It**$_i$ said that **he**$_i$ had originally found this place.'

  b) [Context: talking about good places to use a metal detector to find jewelry]
    Kerro-i-n   ***kouluttaja-lle***$_i$, *että* *on*   *tosi*   *huono-ja*   *ranto-ja*
    Tell-PST-1SG trainer-ALL,   that be.3SG really bad-PL.PAR beach-PL.PAR
    kun *on*   *vaan yksi*   *kulta*   *löytynyt*
    when be.3SG only one.NOM gold.NOM find-PTCP
    ni *se*$_i$ *sano,*   *että **hän**$_i$ *tietä-ä*   *yhde-n*   *hyvä-n*   *ranna-n*
    so it.NOM say.PST.3SG that he.NOM know-3SG one-ACC   good-ACC   beach-ACC
    mi-ssä   *käy*   *usein rikka-i-ta*
    where-INESS go.3SG often rich-PL-PAR
    (http://www.aarremaanalla.com/foorumi/viewtopic.php?t=6722, May 2012)
    'I told **the trainer**$_i$ that these are really bad beaches since only one gold object has been found so **it**$_i$ said that **he**$_i$ knows a good beach where rich people often go'

Given the striking parallels between this use and the examples considered in Section 2, Laitinen (2002, 209, 2012) calls this a logophoric use, and I follow her in using this term (see also Nau 2006, Priiki 2016, 2017). The use of *hän* in these contexts is not required, however. Hakulinen et al. (2005) present the example in (5) to show that *se* can be embedded under a verb of saying and can still be coreferential with the subject of saying (see Hakulinen et al. 2005:1409 for a similar example with a verb of thinking). Use of *se* in the Finnish is indicated in the English translation with *it*. This echoes Pearson's (2015) observation that, at least for some speakers of Ewe, the use of a logophoric pronoun is not required in these kinds of contexts.

(5) **Se**$_i$ *katsoi vettä ja siltaa ja sanoi että* **se**$_i$ *yöpyy usein tässä hotellissa työreissulla.*
     (Hakulinen et al. 2005, p.1409, example from a novel using 'se' as default)
     '**It**$_i$ looked at the water and at the bridge and said **it**$_i$ often stays in this hotel on business trips.'

The kinds of attitude predicates under which logophoric *hän* occurs in colloquial Finnish closely resemble those predicates that have been associated with logophoric pronoun use in West African languages (Section 2) – further suggesting that this use of *hän* is logophoric. In addition to speech act predicates, other predicates are also possible (e.g. *ajatteli*, 'thought' in ex. (6a,b), see also Laitinen 2005 for examples of direct perception, Priiki 2016, 2017 for quantitative analyses, Setälä 1883 for discussion of other contexts). The default pronoun for humans is *se* (as can be seen in the examples), but *hän* can be used in the embedded clause under a mental state predicate when referring to the person whose thoughts/speech/mental state is being expressed.

(6) *Thought predicates*
    a) [Context: Interview with a World War 2 pilot, talking about his experiences]
        Venäläinen$_i$ *lähti kotiin, se*$_i$ *ajatteli että* hän$_i$ *lopettaa koko homman ja* se$_i$ *lähti Merkinon kentälle* (http://www.virtualpilots.fi/en/hist/WW2History-ViljoLehtinen.html)
        'The **Russian**$_i$ left to go home, **it**$_i$ thought that **he**$_i$ will stop the whole thing and **it**$_i$ left to go to Merkino airfield'
    b) [Context: The speaker has a colleague hoping to renovate his/her patio but in need of a work crew][7]
        Niin ne vaan aamukahvilla tuolla puhu ku **se**$_i$ *mietti, että* ***hän***$_i$ *ei saa aikaseksi, ku* ***hänellä***$_i$ *ei oo työmiehiä eikä kavereita ja* ***hän***$_i$ *tarvis apuvoimia...* (from an interview with a speaker from Oulu, reported by Iinatti 2015:38)
        'so they were talking over morning coffee when **it**$_i$ was pondering that **she/he**$_i$ won't be able to get (it) done, as **she/he**$_i$ has no workmen or friends and **she/he**$_i$ needs help'

In sum, the data presented in this section suggests that *hän* signals reference to the attitude holder. As I mentioned in Section 2, I will often simply use the label SELF, which I intend to mean attitude holder: the person whose speech, thoughts or attitudes are being conveyed. Further, the examples in this section show that the use of *hän* is not obligatory when referring to the attitude holder/SELF: Reference to SELF can also be accomplished with *se*, the form that is the default in colloquial Finnish.

3.3 Perspective-sensitivity in main clauses: free indirect discourse and reference to humans

Based on the data so far, viewing *hän* as a logophoric pronoun that occurs embedded under attitude verbs provides a promising account of the *se/hän* alternation in colloquial Finnish. However, what about contexts such as ex. (7a,b) (Kaiser (2018:76)? In (7a), Tiina is referred to with *hän*, but in (7b) she is referred to with *se*. In both cases, the pronoun is the subject of a matrix clause and is not embedded under a mental state or speech verb. These are both examples from a novel written in standard Finnish, where *hän* is the default for humans and *se* for non-human animals and inanimates.

(7) a) ***Tiina***$_i$ *juoksi kotiin niin nopeasti kuin jaloillaan pääsi.* ***Hän***$_i$ *hengitti puuskuttaen...* (Polva 2011:7)
        '**Tiina**$_i$ ran home as fast as her legs would carry her. **She**$_i$ was out of breath...'
    b) *Sekasotkua* se$_i$ *joka tapauksessa oli saanut aikaan, kuten tavallisesti.* (Polva 2011:29)
        'In any case, **it**$_i$ had made a mess of things, as usual.'

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7 The thought predicate *miettiä* 'to ponder' is used here, but the context strongly implies that the person doing the pondering also articulated their thoughts aloud to the person they were having coffee with.

In standard Finnish, what could be triggering use of *se* in some contexts and *hän* in others, in main clause contexts with no attitude verbs? It's worth acknowledging right away that the use of *se* to refer to a human in standard Finnish (ex.7b) may seem unexpected, in light of the preceding discussion. Pre-empting the subsequent sections somewhat, the claim is that in (7b) we are dealing with a case of Free Indirect Discourse (FID) and that *se* 'it', when used inside FID, can be used even in standard Finnish for the NON-SELF, i.e. a referent other than the attitude-holder. (In this case, the attitude-holder is Tiina's mother, who is thinking about her daughter.)

Free Indirect Discourse (FID) is a means of conveying a character's speech or thoughts without using a direct quote or an embedding speech or mental state verb. In direct speech, e.g. *Peter said, 'I will go home tomorrow'*, first-person pronouns are used to refer to the character who is speaking. In indirect speech/ reported speech, e.g. *Peter$_i$ said that he$_i$ would go home tomorrow*, the speaker/character is referred to with a third person pronoun. In free indirect discourse, there is no matrix clause with a verb of speaking/thinking, and instead the text represents a character's speech or thoughts directly. A third-person pronoun can be used to refer to the SELF: *Peter$_i$ was tired of sleeping on Tim's couch. How could anyone sleep on that old thing, with a mattress as hard as a brick? He$_i$ would go home tomorrow. No one was going to make him change his mind about that.*

More specifically, in Kaiser (2018), I build on prior work and analyze examples like (10b) as involving Free Indirect Discourse (FID). In that work, I propose a unified account of the *hän/se* alternation in colloquial Finnish (reported speech/thought) and standard Finnish (Free Indirect Discourse) for reference to humans. I briefly present the relevant background and data in this section, and then summarize and extend my prior proposal in Section 4, as it is relevant for my claims about animal reference patterns in the subsequent sections.

As Saukkonen (1967) notes, in Finnish *hän* is used in FID to refer to the speaker/thinker/attitude holder, who I refer to as the SELF. More specifically, my corpus data show the following basic patterns: (i) inside free indirect discourse, the SELF (the person whose mental state or speech is being conveyed) is referred to with *hän* 'she/he' and (ii) *se* 'it', when used inside FID, refers to the NON-SELF, i.e. a referent other than the attitude-holder (see also Saukkonen 1967, Hakulinen 1988, Rivinoja 2006, Kaiser 2008, 2018).

This pattern is exemplified in ex. (8) from a novel by Joensuu (1983). In this extract, one of the characters, Mikael, is coming downstairs from his bedroom and listening to find out who is home. Mikael – the SELF, from whose perspective we see and hear things – is referred to with *hän* 'he', and his mother with *se* 'it'.[8] Unlike the reported speech examples in the preceding sections where *se* was in a matrix clause with a speech/thought verb and *hän* was in the embedded clause, *se* and *hän* both occur in matrix clauses (ex.8).

(8) ***Mikael**$_i$ tuli portaat alas niin hiljaa kuin osasi.*
   *Eteisessä oli hämärää. **Hän**$_i$ seisoi aloillaan, pidätti henkeä ja kuunteli.*
   ***Äiti**$_j$ oli keittiössä. **Se**$_j$ silitti pyykkiä. Hajusta sen tiesi – ilmassa oli kiva, lämmin haju – ja siitä että **äiti**$_j$ hyräili hiljaa.* (Joensuu 1983:31)

   '***Mikael**$_i$ came downstairs as quietly as possible.*
   The foyer was dark. **He**$_i$ stood still, held his breath and listened.
   Mother$_j$ was in the kitchen. **It**$_j$ was ironing. One could tell from the smell – there was a nice, warm smell in the air – and from **mother**$_j$'s quiet humming.'

Use of *se* in free indirect discourse for the NON-SELF referent is not obligatory; *hän* can also be used (see Rouhiainen 2000). In (9), which comes from a longer extract of the Finnish translation of *Women in Love* by D.H. Lawrence discussed by Rouhiainen (2000:118), we hear the thoughts of one of the protagonists, Gudrun, about her lover Gerald, and *hän* refers to the NON-SELF referent Gerald. The larger context of this extract makes it clear that we are hearing Gudrun's thoughts, that she is the SELF.

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8 The translation of *se* as 'it' in ex.8, when referring to a human, may sound jarring to English speakers. As mentioned above, I translate Finnish *se* as 'it' in English to distinguish it from *hän*, which I translate as 'she/he' in English. In colloquial Finnish, *se* can be used for human referents without any rude or derogatory undertones.

(9)   Geraldin$_i$ *pitäisi päästä sellaiseen asemaan, missä* hän$_i$ *tahdonvoimallaan ja ylivertaisella käytänöllisellä älyllään voisi ratkaista nykyajan teollisuuden pulmat.* (Lawrence 1980:541)
     '**Gerald**$_i$ should achieve a position where **he**$_i$, with his force of will and supreme practical intelligence, would be able to solve the problems of modern industry.'

In sum, we see that in FID contexts, *hän* can be used to refer to SELF (8) or to NON-SELF (9) and *se* is used to refer to NON-SELF (7b) but not to SELF. It is worth noting that these examples are from standard Finnish, where *hän* is the default for human antecedents.

3.4 Logophoric pronouns and Free Indirect Discourse in other languages

In the preceding sections I discussed the idea, not specific to Finnish, that free indirect discourse and embedding under attitude predicates resemble each other but differ in the scope of the logophoric/ perspectival domain (e.g. Kaiser 2018, see also Section 4). This view receives further support from observations made in prior work about seemingly 'unexpected' uses of morphologically distinct logophoric pronouns (though the phenomenon is not normally described in these prior papers as involving FID).

For example, Pearson (2015) notes that in Ewe, the logophoric pronoun *yè* is normally ungrammatical in simple matrix clauses, in contrast to the regular pronoun *e* (ex.10) but, as already noted by Clements (1975) and also discussed by Pearson, *yè* can occur in a matrix clause when preceded by a sentence containing an attitude predicate, "in which it case it [*yè*, EK] must denote the attitude holder associated with the predicate in this earlier sentence" (Pearson 2015:96). This is shown in (11).

(10)   * *Yè*   /   *ok e*   *dzo.*
     LOG   /   she/he.3SG leave
     'She/he left.'

(11)   *Kofi koudrin be*   *yè*   *bidzi. Marie zu*   *yè.*
     Kofi dream COMPL LOG angry. Mary insult LOG.
     'Kofi$_i$ dreamed that he$_i$ was angry. Mary insulted him$_i$.'

According to Pearson (2015:96), her native speaker consultants draw the inference that the insult took place in the dream or that this is a report of Kofi describing the dream to Mary – in other words, they interpret yè as occurring in the scope of an attitude. This fits with Clements's (1975:17) observation that Ewe logophoric pronouns can refer to antecedents in preceding sentences, in situations where the point-of-view has shifted from the narrator to another individual. Related data from Tamil, for the anaphor *taan,* is discussed by Sundaresan (2012:41). When *taan* occurs in matrix subject position, its antecedent is "has a psychological/ mental attitude with respect to a proposition in which the anaphor is a participant" (Sundaresan 2012: 45).

In sum, from a crosslinguistic perspective, it appears that logophoric pronouns can be used (i) inside a 'perspectival domain,' e.g. when embedded under explicit perspective-signalling verbs (e.g. verbs of saying and verbs of mental state) or (ii) in cross-sentential contexts when inside the domain of free indirect discourse.

4 Kaiser's (2018) analysis for human reference

When it comes to a human referent conceptualized as the SELF, the speaker/thinker, in Sections 3.2 and 3.3 we saw that (i) in colloquial Finnish, the default *se* can refer to NON-SELF or SELF, whereas *hän* is used to refer to SELF. On the other hand, (ii) in standard Finnish, the default *hän* can refer to NON-SELF or SELF, whereas *se* is used for NON-SELF human referents. In Kaiser (2018) I argue that we can derive these patterns from the register-based defaults when combined with the association between *hän* and the attitude

holder/SELF. I also argue that there is no need to posit an additional association between *se* and NON-SELF. However, in the case of human reference, the claim that *hän* potentially has a logophoric interpretation (in both standard and colloquial Finnish) is complicated by the fact that *hän* is also the register default for humans in standard Finnish. Before considering this complication in more detail, let us consider the properties of the proposed system in more depth, especially as they relate to the [+/- HUMAN] property.

From a speaker-oriented production perspective, in standard Finnish, [+HUMAN] reference is accomplished with *hän*, and [-HUMAN] reference with *se*, while in colloquial Finnish, both [+/- HUMAN] reference is done with *se*. In addition, to capture the data in Sections 3.2 and 3.3, Kaiser (2018) hypothesized that reference to logophoric SELF referents is accomplished with *hän* in both standard and colloquial Finnish. This account is summarized in (12) under the label Hypothesis 1.

(12) **Hypothesis 1** (logophoric pronoun is the same in both registers)
    (a) Register-based default mapping:
        Standard Finnish: [+HUMAN] => hän   [-HUMAN] => se
        Colloquial Finnish: [+/- HUMAN] => se
    (b) Perspective-based mapping:
        [logophoric/SELF] => hän

Crucially, this specific association between *hän* and SELF must be able to take priority over register-dependent default mappings. This is needed to explain the use of *hän* for [+HUMAN] SELF referents in colloquial Finnish (Section 3.2), since otherwise only *se* would be used. However, the priority cannot be absolute, since – as we saw above – whatever is *the default form in a register* can also be used for SELF referents. In the case of Standard Finnish, with human referents, we face the challenge of *hän* being *the register default for humans*. Thus, from a morphological perspective, using *hän* to refer to the SELF is vacuous in standard Finnish. Reference to animals offers a situation where this issue of vacuity is not present.

In general terms, the patterns discussed by Kaiser (2018) – at least in the case of colloquial Finnish – can be captured with Horn (1984)'s division of pragmatic labor (13). For colloquial Finnish, the idea is that, from the hearer's perspective, the speaker's use of *hän* (the more marked option) – in a context where *se* (the unmarked option) is also available – signals a marked message to the hearer, namely that *hän* refers to the SELF.

(13) Division of pragmatic labor: "The use of a marked (relatively complex and/or prolix) expression when a corresponding unmarked (simpler, less 'effortful') alternative expression is available tends to be interpreted as conveying a marked message (one which the unmarked alternative would not or could not have conveyed) (Horn 1984:22)

With human reference in standard Finnish, however, the situation is more complex due to *hän* being both the marked option (SELF referring) and the unmarked/default option. As will become clear below, in the current paper I show that looking at reference to animals crucially sidesteps this complication and thus allows us to assess the referential properties of the pronouns more directly.

Alternatively (and relatedly), by focusing on the production side and how the speaker chooses which form to use, one could capture the Finnish patterns by means of Heim's Maximize Presupposition principle: "Make your contribution presuppose as much as possible" (Heim 1991:28). Thus, if there are two (or more) expressions that mean the same thing, the speaker should use the one with more presuppositions. In other words, a speaker should use the expression that is associated with the strongest presupposition compatible with the speaker's knowledge. Chemla (2008:142) formulates Maximize Presupposition as follows: "Among a set of alternatives, use the felicitous sentence with the strongest presupposition."

In the case of pronouns, the standard view is that gender, person and number features are presuppositional (e.g. Cooper 1983, Heim & Kratzer 1998, but see also Yanovich 2012 and Sudo 2012). Since Finnish does not mark gender on pronouns, let us put aside gender features for now. In Heim's system (1991), third person pronouns only carry the presupposition of 'non-participant' (i.e., that the referent is

not the speaker or the addressee). From a semantic perspective, they are less marked than first or second person pronouns – indeed, third-person pronouns have been argued to be featurally unmarked (e.g. Sauerland 2008). Thus, in *colloquial Finnish*, *se* is presumably featurally unmarked (indeed, it is arguably even less marked than English *she/he*, because in colloquial Finnish *se* can refer to humans, non-humans and inanimate things). In contrast, *hän* in colloquial Finnish refers to a SELF referent: although it is a third person pronoun, it is clearly not featurally unmarked. Following prior work on gender, number and person, let us assume that logophoric reference is also presuppositional. This yields a situation where, in a SELF-referring context, a sentence with *hän* is felicitous and presupposes more than a sentence with *se*, and so Maximize Presupposition states that *hän* is the form the speaker should use.

Thus, when a Finnish speaker utters a colloquial Finnish sentence where they refer to a third person human referent who is the SELF, they could use *se* (as a register default) or *hän* (as a SELF referring pronoun), but due to Maximize Presupposition we expect them to prefer *hän*. So, we can use Maximize Presupposition to explain why the specific association between *hän* and SELF is able to trump the register default of colloquial Finnish – though it is less clear how this approach could capture the fact that in colloquial Finnish, the register default *se can* nevertheless also occur in logophoric contexts (see footnote 10 for discussion).

Furthermore, just as with Horn's division of pragmatic labor, things become more complex when we turn to Standard Finnish.[9] When a Finnish speaker produces a standard Finnish sentence and they refer to a third person human referent who is the SELF, both the register-based default and perspective-based mapping point to *hän*: in standard Finnish the default form for humans and the form that has been analyzed as logophoric look the same. Thus, the claim that *hän* can be a logophoric pronoun is less evident in standard Finnish than in colloquial Finnish, because there is no *se/hän* form alternation for human referents. However, in Kaiser (2018) I discuss several examples involving the interpretation of subjective adjectives indicating that *hän* has logophoric properties in Standard Finnish.[10] Nevertheless, the fact that the default human pronoun looks the same as (what I claim to be) the logophoric pronoun makes the patterns harder to detect than in colloquial Finnish. One might thus wonder about the validity of the claim that *hän* is logophoric in *both* colloquial and standard Finnish.

In fact, an alternative interpretation of the data in Sections 3.2 and 3.3 is to say that the two registers have different logophoric systems, as illustrated in (12') under the label Hypothesis 2. Hypothesis 2 states that, in contrast to colloquial Finnish where *se* is the default form for humans and *hän* is logophoric/refers to the SELF (12'b), in standard Finnish *hän* is the default form for humans (unmarked for logophoricity) and *se* is *anti-logophoric* and cannot refer to the SELF (12'a). Under this view, colloquial Finnish has a logophoric pronoun (*hän*) and standard Finnish has an anti-logophoric pronoun (*se*), rather than both registers having an association between *hän* and logophoricity.

(12') **Hypothesis 2** (logophoric system is different in the two registers)
    (a) Standard Finnish: [+HUMAN] => hän
                                      [-HUMAN] => se
                                        [anti-logophoric/-SELF] => se

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9 I present Maximize Presupposition and Horn's division of pragmatic labor as two means of capturing some aspects of the Finnish pronoun patterns – the aim of the present paper is not to argue for one over the other. Horn's approach is more oriented towards a comprehender's interpretation of pronouns whereas Maximize Presupposition is more oriented towards a speaker's choice of which form to use. Crucially, both run into complications when trying to capture the patterns we observe with human reference in Standard Finnish, due to the register default for [+HUMAN] referents and the logophoric form being the same form.
10 A question that is not yet resolved that I leave for future work concerns the felicity of using *se* in SELF-referring contexts in colloquial Finnish. As mentioned above, *se* is not ungrammatical or strongly infelicitous in such contexts, though it is clearly less informative than hän. Depending on how we construe Maximize Presupposition, we may end up incorrectly predicting use of *se* to be infelicitous in these contexts. Thus, what may be needed is a defeasible form of Maximize Presupposition, which is in fact in line with Heim's suggestion that Maximize Presupposition could be a *defeasible* conversational maxim in the sense of Grice (1975) – namely a behavioral tendency motivated by broad considerations about cooperativeness in communication (see e.g. Lauer 2016 for related discussion).

(b) Colloquial Finnish: [+/- HUMAN] => se
                          [logophoric/SELF] => hän

To evaluate these competing hypotheses – Hypothesis 1: *hän* is logophoric in both registers in Finnish and Hypothesis 2: the two registers have different logophoric pronoun systems – we can look at **reference to animals**, because the default form for animals in both registers is *se*. Thus, looking at animal reference allows us to test more directly whether *hän* is logophoric (used to refer to the SELF) in *both* standard Finnish and colloquial Finnish. Let us consider the predictions for animal referents in more depth.

Given that the default form for animals in both registers is *se*, any occurrences of *hän* with an animal, [-HUMAN] antecedent can be used to test the possibility that *hän* is logophoric: these animal-referring *hän* occurences cannot be attributed to register defaults. Crucially, according to **Hypothesis 1**, we predict that – if animals can be conceptualized as SELF – *hän* should be used for animals that are SELF referents. This is because the association we have posited between *hän* and [SELF] does not make reference to [+/- HUMAN]. Thus, we predict that use of *hän* for [-HUMAN] animals that are [SELF] should be possible even in a context where the default form for [-HUMAN] animals is *se*. In other words, in both standard and colloquial Finnish, in a context where the default pronoun used for a particular animal is *se*, the prediction is that *hän* can be used to refer to that same animal only in contexts where the animal is the SELF. Note that this is crucially not the same prediction as personification / anthropomorphism, as will be discussed in the next section.

In contrast, **Hypothesis 2** predicts a stark asymmetry in terms of what pronouns can be used for animals in standard vs. colloquial Finnish. Specifically, it predicts that in colloquial Finnish, *hän* can be used for [-HUMAN] animals if they are [SELF] – similar to Hypothesis 1. Crucially, Hypothesis 2 also predicts that in standard Finnish, *hän* can*not* be used for [-HUMAN] animals, even if they are [SELF], because under this view standard Finnish only has an antilogophoric pronoun (*se*).

In sum, prior work on logophoric pronouns in Finnish has mostly focused on reference to humans (with the exception of Laitinen's work, which I discuss below), but the issue is complicated by the fact that the default human-referring pronoun in standard Finnish is the same as the form that is hypothesized to be logophoric. In order to better assess the logophoric pronoun systems of standard and colloquial Finnish (and to distinguish between Hypotheses 1 and 2 above), we can turn to reference to animals, which sidesteps the 'same form' problem that we encounter with human reference.

5 Reference to animals

Unlike reference to humans, which shows register variation in Finnish, the default form for referring to animals does not change across registers and thus offers a clearer view of the *hän/se* alternation. Since *se* is the default form for animals, then as long as we eliminate texts where animals are treated grammatically as [+HUMAN] (or, borrowing terms from de Swart de Hoop 2018, typeshifted from $e_{animate}$ to e_{human}), any occurrences of *hän* with animals can safely be regarded as logophoric. This allows us to get a clearer picture of the behavior of logophoric *hän* and to assess whether Hypothesis 1 or 2, as described above, better describes the Finnish logophoric system. In addition, investigating whether logophoric hän can be used to refer to animals also offers a way to gain insights into the conceptualization of animals in language. Specifically, we ask whether referents that are treated by the linguistic system as [-HUMAN, +ANIMATE] can also be conceptualized as the attitude holder/SELF, as diagnosed by the use of logophoric pronouns, or whether the use of logophoric pronouns is reserved only for SELF referents that are also [+HUMAN].

Before continuing, we need to discuss the distinction between (i) situations involving anthropomorphism – specifically, the treatment of animals linguistically (and otherwise) as if they were human – and (ii) situations where an animal is clearly an animal in terms of its categorical features (i.e., [-HUMAN]) but is nevertheless the attitude holder/SELF.

5.1 Dissociating anthropomorphic uses from logophoric uses

When investigating reference to animals, one concern that immediately comes to mind has to do with personification and anthropomorphism. In English, for example, people can refer to their pets with 'he' and 'she' instead of 'it' (see Guzmán-González 2013, Gardelle 2013, 2012, Sealey & Oakley 2013, Teterina 2012). If our aim is to sidestep the complications that arise with human referents due to the register default in standard Finnish (*hän*) being the same as the logophoric pronoun by investigating reference to animals, we want to avoid contexts where animal referents also have *hän* as their default form. In this section, I argue that in Finnish, use of *hän* for animals is dissociable from anthropomorphism, and show that we can avoid complications by focusing on texts where animals clearly have *se* as the default form.

Let us start by briefly reviewing the notion of anthropomorphism. It is well-known that humans have a tendency to attribute humanlike attributes to nonhuman things – in other words, to anthropomorphize[11] (see e.g. Waytz et al. 2010 for recent discussion). As noted by Turner, "We are people. We know a lot about ourselves. And we often make sense of other things by viewing them as people too" (Turner 1987:21, cited by Guthrie 1993:129). This attribution of human characteristics may involve (i) physical features that are characteristic of humans (e.g. seeing faces in clouds) and (ii) human mental attributes (e.g. attributing intentions or emotions to nonhuman things, such as computers). The presence of humanlike faces or movements usually implies the presence of humanlike mental attributes. As noted by Waytz et al (2010), anthropomorphism is not just animism (defined as attributing life to a nonliving thing), but rather involves the attribution of distinctly human characteristics – especially *mental capacities* such as intentions and emotions – to nonhuman things.

One might thus be concerned that looking at reference to animals does *not* offer a means of testing whether [-HUMAN] referents can nevertheless be antecedents of logophoric pronouns and the 'human-associated' *hän* form in particular, if speakers/writers anthropomorphize animals and in particular if they treat them linguistically as [+HUMAN]. However, I argue that this concern is misplaced, for two main reasons: First, as illustrated by examples (14-15), in Finnish one can describe animals engaging in human-like activities and exhibiting human-like mental attributes and felicitously use the pronoun *se*. The novels that I analyzed (children's books and young adult fiction, listed in (16) below, written in standard Finnish) contain many contexts similar to those in ex. (14-15), showing animals acting like humans but nevertheless referred to with *se* (indicated in the English translations as *it*).[12] Thus, if we regard animals that think, plan, prepare speeches in their head while showering, etc. as being anthropomorphized, then we can conclude that in Finnish, anthropomorphizing animals is not sufficient to trigger use of *hän*.[13]

(14)   *'Se' used for Bernie the dog with verbs of mental state*
   Bernieᵢ *meni suihkuhuoneeseen ja väänsi veden täysillä valumaan. Mielessään* **se**ᵢ *jo suunnitteli puhettaan koko koirayleisön edessä.* **Se**ᵢ *mietti myös millainen tarinan loppu voisi olla…* (Kukkanen, p.50)

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11 Anthropomorphism is sometimes regarded as a synonym for *personification*, but the term personification is also used in a more specific way: Personification is often regarded as a specific kind of literary device (e.g. Guthrie 1993:124), specifically for situations where inanimate objects and especially abstracts (e.g. liberty, truth) are represented in human form, as is often done in poetry or art.

12 The aim of these examples is to show that in standard Finnish, use of *se* is not precluded with verbs that normally select for human subjects. I.e., an animal engaged in human-like activities can be referred to with *se*. Thus, a claim that '*hän* must be used when the animal is anthropomorphized' is not correct. Note also that the occurrence of *se* in these examples is (i) not in the scope of Free Indirect Discourse, and is (ii) not embedded under a verb of communication or thought. Thus, these contexts are distinct from the kinds of contexts I discussed in 3.2 and 3.3. As we will see later on, different patterns emerge when an animal is referred to in the scope of FID or a verb of communication/thought.

13 From the perspective of de Swart & de Hoop's (2018) work on animacy type-shifting, contexts like (14-15) are interesting, because while the verbs' selectional restrictions may lead us to assume a conceptual shift to e_{human}, the use of *se* in these standard-Finnish contexts argues against this. In the present paper, the main cue that is relevant for us is the default pronoun used in standard Finnish text for reference to the animal in question. If it is *se*, I assume that the animal has not been typeshifted into e_{human}. This is because in standard Finnish, humans are not referred to with *se*.

'**Bernie**$_i$ went into the shower room and turned the water on full. Mentally, **it**$_i$ was already planning its speech in front of the whole dog community. **It**$_i$ also wondered about how everything would turn out...'

(15) '*Se' used for Pate the reindeer with a mental state description*
*Apeana **Pate**$_i$ pureskeli jäkälää. Vielä apeammaksi **sen**$_i$ mieli kävi, kun aatonaattona Joulupukki lähti kierrokselleen.* (Kanto, p.14)
'**Pate**$_i$ glumly chewed on some lichen. **Its**$_i$ mind became even more glum when Santa Claus departed for his rounds the day before Christmas.'

So far, we have been focusing on animal examples from books written originally in (standard) Finnish. Interestingly, there are also cases of books originally written in English that used *she/he* for animals in the English original that are translated into Finnish with *se* as the default animal form (e.g. *Olga da Polga* by Michael Bond, about a guinea pig, translated into Finnish by Eila Kivikkaho). This is further evidence for the observation that anthropomorphized, protagonist animals can be felicitously referred to with *se* in Finnish. This idea that the use of *hän* alternation for animals *cannot* be explained away simply as anthropomorphism has also been mentioned in earlier work on Finnish (e.g. Laitinen 2002, 2005, 2009, 2012, Siitonen 2008), although use of *se* for anthropomorphized vs. non-anthropomorphized animals has not been systematically investigated.

There is also a second reason why potential complications about authors treating animals as [+HUMAN] (typeshifting from $e_{animate}$ to e_{human}) need not concern us here. This is because of the nature of the corpus that I used: to ensure that the cases of *hän* that we consider in this paper are not cases of animals being treated as featurally [+HUMAN] – i.e., being typeshifted to the ontological subtype e_{human} – in the texts, I excluded all books from the corpus analysis that used *hän* as the regular/default form for animals. The sources of corpus examples used in the current work are listed in (21). All of the examples that I analyzed are from books where *se* is clearly the unmarked form for animals throughout the text. Texts where *hän* is the default form for animal reference (e.g. the Finnish translation of Michael Bond's *Paddington Bear*) are excluded.[14]

(16) *Novels used for corpus study*
– Kanto, Anneli. 2015. *Radio Korvatunturi*. Hämeenlinna, Karisto Oy. [a reindeer is the main character]
– Hytönen, Ville. 2014. Ötökkämaan tarinat. Helsinki, Tammi. [various insects]
– Huovi, Hannele. 2000. *Suurkontio Tahmapää*. Helsinki, Tammi. [a bear, a moose and a hedgehog]
– Kukkanen, Liisa. 2014. *Koiraenkelit 1 - Bernie ja Tiina*. SudenHenki. [a dog]
– Huovi, Hannele. 2016. *Urpo, Turpo ja Ihanaa*. Tammi. [three toys: two bears and a horse]
– Bond, Michael. 1974.[15] *Olga da Polga*. Helsinki, Weilin & Göös. (translated into Finnish by Eila Kivikkaho, original title *Olga da Polga*) [a guinea pig]
– Bond, Michael. 1974. *Olga ja Vasili Vaski*. Helsinki, Weilin & Göös. (translated into Finnish by Eila Kivikkaho, original title *Olga da Polga meets her match*) [a guinea pig]

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14 Relatedly, as my focus is on the *hän/se* alternation, my corpus differs from the 18th century Finnish classic *Seitsemän veljestä* ('Seven brothers', by Aleksis Kivi), discussed by Laitinen (2009, see also Mikkola & Laitinen 2013), where animals are consistently referred to with *hän*. As Laitinen (2009) notes, at that point in time writers varied in how they used pronouns to refer to animals in written Finnish.
15 The English originals (originally published in 1971 and 1973 by Penguin Books (*Olga da Polga*) and Longman Young Books (*Olga da Olga meets her match*) consistently use *she* and *he* for animals. For example, the main character, a guinea pig called Olga da Polga, is consistently referred to with *she* in the English-language original, not with *it*. The Finnish translator, however, uses *se* ('it') as the default form for Olga and the other animals.

5.2 Predictions for reference to animals

As we saw above, the default form for referring to animate [-HUMAN] referents (animals) in both standard and colloquial Finnish is *se*. Thus, one of the basic empirical questions I investigate is whether *hän* is also used for [-HUMAN] animal referents in linguistic contexts where the animals are still grammatically [-HUMAN] – i.e., have not been transformed such that *hän* would become the default form. If we do find *hän* being used for animals in texts where *se* is still the 'animal default,' we can then ask what linguistic contexts trigger the use of *hän*.

Let us consider what Hypotheses 1 and 2, sketched out in Section 4, would predict. According to Hypothesis 1, the association between *hän* and SELF exists in both standard and colloquial Finnish and takes priority over register defaults, and thus we expect to see use of *hän* for [-HUMAN] animals only in the specific contexts where that animal is SELF. Although the prediction is the same for colloquial and standard Finnish, standard Finnish is the more informative case. This is because, as shown in (12), colloquial Finnish does not distinguish [+HUMAN] and [-HUMAN] referents. Thus, this system allows *hän* to refer to animals that are attitude holders/SELF referents in colloquial Finnish without any kind of [-HUMAN]/[+HUMAN] clash: The register default does not pose any kind of featural conflict to this.

Unlike the colloquial Finnish system, by default the standard Finnish system uses *hän* for [+HUMAN] referents. Let us now consider what happens when an animal is the SELF/the attitude holder in standard Finnish. If the register default is to realize [-HUMAN] referents with *se*, then the more specific association between *hän* and SELF requires a violation of the register default. Thus, standard Finnish offers an ideal context in which to test the strength of the association between SELF and *hän* that has been posited based on prior work with human referents. The key question is whether speakers use *hän* for animal [-HUMAN] referents in standard Finnish that are [SELF], thereby violating (i) the register default which states that [-HUMAN] referents are realized with *se* and also (ii) the register default that states that [+HUMAN] referents are realized with *hän*? If yes, this would provide strong evidence in favor of the claim that *hän* is indeed a logophoric pronoun in standard Finnish (in addition to the evidence we already have from colloquial Finnish, see e.g. Laitinen 2002, 2009, 2012, Mikkola & Laitinen 2013), and that its logophoricity is separable from the [+/- HUMAN] feature.

Recall that based on human referent data, we also considered Hypothesis 2 (12'), which posits different logophoric systems for colloquial and standard Finnish. According to this approach, in (i) standard Finnish, the register defaults state that *hän* is only used for [+HUMAN] referents and *se* only for [-HUMAN] referents, and that *se* has an additional perspectival *anti-logophoric* [-SELF] function. In contrast, in (ii) colloquial Finnish, the default form *se* refers to [+/-HUMAN] referents, and *hän* to logophoric [SELF] referents. In sum, under this view, colloquial Finnish has a logophoric pronoun (*hän*) and standard Finnish has an anti-logophoric pronoun (*se*).

Hypothesis 2 predicts a clear asymmetry in terms of which forms are used for animals in standard and colloquial Finnish: like Hypothesis 1, it predicts that in colloquial Finnish, *hän* can be used for [-HUMAN] animals if they are [SELF]. Crucially, it also predicts that in standard Finnish, *hän* canno*t* be used for [-HUMAN] animals, even if they are [SELF], because standard Finnish only has an antilogophoric pronoun (*se*). This prediction of Hypothesis 2 seems to be in line with a comment made by Laitinen (2009:125) that the logophoric use of *hän* for either humans or animals did not become an established part of standard Finnish, though she notes that some 19th century authors used it in stream-of-consciousness contexts and when reproducing colloquial speech (Laitinen 2009:125).

In sum, the forms used to refer to animals in standard Finnish are the crucial test case to distinguish between two competing analyses of logophoric pronouns in Finnish (Hypothesis 1 vs. Hypothesis 2), and more specifically to test the strength of the association between *hän* and SELF. To assess what forms are used for referring to animals that are logophoric SELF referents, in the following sections, we first consider animal-referring pronouns embedded under attitude verbs (Section 6), then turn to Free Indirect Discourse contexts (Section 7) and finally consider the use of pronouns in *de re* contexts (Section 8).

6 Animals: perspective-sensitivity under attitude verbs

In this section, we turn to naturally-occurring examples from colloquial dialects and standard Finnish to test whether attitude verbs with animal subjects can license the use of *hän* in the embedded clause. We only consider texts where the default form for animals is clearly *se*.

In colloquial Finnish, in contexts where it is clear that *se* is the default form that is normally used to refer to an animal, *hän* can nevertheless be used to refer to that same animal under a variety of attitude predicates. The colloquial examples in (17-18), referring to animals, are from Laitinen (2002:333). Ex. (17) is about a magpie[16], ex. (18) about a dog. As above, I translate Finnish *hän* as 'she/he' in English and Finnish *se* as 'it' in English, in order to make the alternation between the different forms easier to see.

(17) *En   tiet   tiennöö-kö   **tuo**ᵢ   sitte ite-kkääm   mihinkä   **häv**ᵢ   vei   se*
Neg.SG1 know knows.POT-CL **it.NOM**ᵢ   then self-CL   where   **she/he.NOM**ᵢ took   it.ACC
'I don't know if **that**ᵢ itself (the magpie) even knows where **she/he**ᵢ took it (the spoon)'

(18) *Mut **koera**ᵢ   jos otta-a   ni   **se**ᵢ   tietä-ä   että   mihinkä   **hän**ᵢ   viep*
But **dog.NOM**ᵢ if   take-3SG so   **it.NOM**ᵢ know-3SG that   where   **she/he**ᵢ take.3SG
'But if the **dog**ᵢ takes something, **it**ᵢ knows where **she/he**ᵢ takes (it)'

Crucially, my corpus data shows that the same kind of *se...hän* pattern is present with animals in standard Finnish, with a variety of attitude predicates, as illustrated in ex. (19-22). Again, I translate Finnish *se* into English as *it*, and Finnish *hän* into English as *she/he*. Examples (19-21) are from books written in standard Finnish. Example (22) is from the internet, where the register may be less 'standard' than in novels. Nevertheless, the verb morphology uses standard Finnish forms and the sentence structure (e.g. participial constructions) is in line with standard, not colloquial, Finnish.

These are all contexts where (as the examples show), *se* is the default form used for the animal referent. Thus, the use of *hän* cannot be attributed to a register default.[17]

(19) thought predicate
[Context: Tiina tells Juppe to not lick her; she does not realize Juppe is a 'reincarnation' of her dog Bernie]
*Eihän kielto oikeastaan edes koskenut **sitä**ᵢ, koska Tiina kielsi jotakin Juppea nuolemasta itseään. Mutta samalla sekunnilla **Bernie**ᵢ tajusi, että kyllä kielto koski juuri **häntä**ᵢ...* (Kukkanen, p.39)
'Actually the prohibition did not even refer to **it**ᵢ, because Tiina was telling some Juppe to stop licking her. But in that same moment **Bernie**ᵢ understood that the prohibition did apply precisely to **him**ᵢ'

(20) thought predicate
[Context: A woman tries to convince a squirrel (called Tamppi) to come eat some of the nuts she is offering.]
***Orava**ᵢ mietti, miksi täti tahtoi antaa **hänelle**ᵢ pähkinöitä.* (Huovi, p.30)
'The **squirrel**ᵢ pondered, why the lady wanted to give **him**ᵢ/**her**ᵢ nuts.

(21) Example showing that the default form for the squirrel in (20) is 'se':
[Context: Tamppi, the squirrel, startles the woman by jumping onto her arm, so that the woman accidentally drops the bag of nuts.]
***Tamppi** juoksi tätiä pitkin maahan. **Se** nappasi pähkinän, loikkasi pensaaseen ja katosi.* (Huovi, p.32)
'**Tamppi** ran down along the woman. **It** grabbed a nut, jumped into a bush and disappeared.'

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16 In this example, the pronoun in the matrix clause is the distal demonstrative *tou* rather than *se*. What is most relevant for our purposes is the use of (a dialectal form of) *hän* in the embedded clause.
17 As discussed in Section 1, morphological properties independent of *hän* and *se* can also be used to determine whether a certain text is in standard or colloquial Finnish.

(22) knowledge predicate
[Context: Pet owners writing about dog behavior]

*Mutta kuitenkin miten **koiraan**ᵢ **sen**ᵢ muristessa siihen on suhtauduttu, on voinut myös edellisessä perheessä pahentaa **sen**ᵢ oloa. Esim jos **sitä**ᵢ kovasti pelätään, **se**ᵢ tietää että **hän**ᵢ voi murisemalla saada asioita läpi. Samalla ihmisestä riippuen, ja ehkä pentuaikana kun **se**ᵢ on pieni ja alkaa osoittaa ensimmäiset murinansa, **sitä**ᵢ vielä siinä vaiheessa retuutetaan ja uhataan....*

http://www.koiraneuvola.fi/keskustelu/viewtopic.php?p=60474 (4/7/2010)

'But nevertheless, the way that **the dog**ᵢ was treated when **it**ᵢ growled may have, in its prior family, made **it**ᵢ feel worse. For example if **it**ᵢ is badly feared, **it**ᵢ knows that **she/he**ᵢ can get things by growling. Also, depending on the person (owner) and maybe when **it**ᵢ was a puppy and started to growl, if **it**ᵢ was still dragged around and threatened...'

In sum, we find that in both colloquial and standard Finnish, in contexts where *se* is the standard form for animals, *hän* can be used when embedded under a range of attitude predicates including thought and knowledge. The fact that *se* is still the default form for the animal referent in these contexts signals that the animals have not been typeshifted and are still featurally [-HUMAN]. Thus, we have evidence that *hän* can be logophoric when embedded under attitude verbs in *both* colloquial and standard Finnish. The finding that *hän* can be used for [-HUMAN] referents in standard Finnish as well as colloquial Finnish goes against the predictions of Hypothesis 2 and is in line with Hypothesis 1. More specifically, the fact that *hän* can be used to refer to [-HUMAN] referents as long as they are [SELF] referents suggests that, at least on its logophoric use, *hän* does not require its referent to have a [+HUMAN] feature. In other words, the specific mapping between [SELF] and *hän* can override the register default.

7 Animals: perspective-sensitivity in main clauses in free indirect discourse

The presence of the *hän/se* alternation with reference to animals is not limited to contexts of embedding under attitude verbs: examples in this section show that it also exists in matrix clauses. Examples (23) and (24), from a children's book by Ville Hytönen, show that the same animal character (a spider called Hämämäkämäkki) is normally referred to with the default form *se*, even in mental state contexts as in ex. (23) – i.e., anthropomorphic behavior is not enough to trigger use of *hän*. At the same time, we see that *hän* is used to refer to the spider even when it is not syntactically embedded under an attitude verb (ex.24), if the context involves FID from the animal's perspective. Similarly, in a book about a guinea pig called Olga by Michael Bond, the default form used by the Finnish translator for the guinea pig is *se* (ex.25) – but *hän* is also used, even in unembedded main-clause contexts (ex.26). (The English translations are by the present author; they are not the sentences from the English original.)

These unembedded contexts where *hän* is used can be characterized as presenting the thoughts of the animal character: the author gives the reader a glimpse inside the mind of the animal, the SELF. In other words, these contexts involve Free Indirect Discourse (FID).[18] For example, in ex. (24), use of the wh-exclamative provides a strong indication that the sentence conveys the spider's thoughts (see also Banfield (1973:10-11) on exclamatives as cues for FID). Similarly, in ex. (26), use of the sentence-initial combination of the copular verb and the discourse clitic *-pa* ('was+clitic') provides affective/expressive information which signals FID (see also Banfield 1973, McHale 1978, Fludernik 1993 on properties of FID). Furthermore, it is worth noting that in contexts where animals are described, from an external observer's perspective, as engaging in mental acts (e.g. feeling sad in ex.29), the non-human pronoun *se* can still be felicitously used. It is specifically in contexts that are construed as being in the scope of FID (i.e., where the text conveys the animal's thoughts, without embedding under an attitude verb) that we find use of *hän* with SELF antecedents that are animals.

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18 See also discussion in Laitinen (2009:125) on pronoun use in Finnish novels of the late 1800s and early 1900s, though she concludes that a logophoric use of *hän* is not established in standard Finnish.

(23) *Se* is the default from used to refer to the animal in question
[Context: A spider called Hämämäkämäkki feels bad about eating other insects]
Hämämäkämäkilleᵢ *oli kuitenkin opetettu, että **sen**ᵢ täytyi syö*dä muita ötököitä.... (...)
Hämämäkämäkilläᵢ *oli huono mieli koska **se**ᵢ oli taas syönyt jonkun metsän ötököistä*. (Hytönen, p.40)
'**Hämämäkämäkki**ᵢ had been taught that **it**ᵢ needed to eat other bugs [...] **Hämämäkämäkki**ᵢ was sad because **it**ᵢ had again eaten one of the forest's bugs'

(24) *Hän* used to refer to the same animal in an FID context
[Context: An insect gets caught in the spider Hämämäkämäkki's web, and begs not to be eaten, explaining that it is endangered and expected home for dinner]
*Nälkäinen **Hämämäkämäkki***ᵢ *oli ymmällään. Kuinka **hän**ᵢ voisikaan syödä tuon uhanalaisen pikku perhosen, varsinkin kuin sen pitäisi itse lentää kotiin illalliselle*. (Hytönen, p.40)
'The hungry ***Hämämäkämäkki***ᵢ was confused. How could **she/he**ᵢ eat that endangered little butterfly, especially since it itself needed to fly home for dinner.'

(25) *Se* is the default form used to refer to the animal in question
[Context: Olga, a guinea pig, watches a toad jump across the yard and decides to try to imitate it]
Olgaᵢ *vilkaisi, ettei ketään ollut lähellä, sitten **se**ᵢ kokeili osaisiko loikkia samalla tavoin, mutta hyppyyn ei ensinnäkään tullut tarpeeksi pituutta ja sitten **se**ᵢ vielä törmäsi päistikkaa mökkinsä seinään.* (Bond/ Kivikkaho, Olga da Polga ja Vasiki Vaski, p.91)
'**Olga**ᵢ glanced to make sure no one was nearby, then **it**ᵢ tried jumping the same way, but the jump was not long enough and then **it**ᵢ also crashed directly into the wall of its little house.'

(26) *Hän* used to refer to the same animal in an FID context
[Context: Olga hears the mother of the family express her disapproval at the presence of a toad in the backyard, which the mother says had been attracted by an outdoor pool set up by the father]
Olgaᵢ *nyökytteli hyväksyvästi. Olipa joku samaa mieltä kuin **hän**ᵢ.* (Bond/Kivikkaho, Olga da Polga ja Vasiki Vaski, p.90)
'**Olga**ᵢ nodded approvingly. For once someone had the same opinion as **she**ᵢ did.'

Ex. (27) illustrates that not only can *hän* be used to refer to an animal that is SELF, but that in such contexts we also see *se* being used to refer to the non-SELF. This is the same pattern that obtains when both the SELF and the non-SELF are human (see Kaiser 2018 for examples).

(27) [Context: The guinea pig Olga is still in the pet shop at the start of the story, and thinks about another guinea pig who has been returned to the pet shop and who has told scary stories about people and how strict they are]
*Vai on pihlajanmarjat happamia, ajatteli **Olga***ᵢ*, sillä **hän**ᵢ luuli **kanta-asukkaan**ⱼ olevan nyrpeä siksi, että **se**ⱼ oli joutunut tulemaan takaisin kauppaan.* (Bond/Kivikkaho, Olga da Polga, p.11)
'Sour grapes, thought **Olga**ᵢ, because **she**ᵢ thought that the reason that **Long-Term Inhabitant**ⱼ was grumpy was because **it**ⱼ had been forced to come back to the (pet) shop.'

Additional examples showing use of *hän* in FID contexts come from a young adult novel called "Bernie ja Tiina" (Kukkanen, 2014). The story is about a dog, Bernie, that is sent down from "dog heaven" to help a young girl convince her parents that she should have a dog. The novel is written in standard Finnish, so – just like in the case of the other novels mentioned above – the default pronoun for humans is *hän* and the default for animals, including Bernie, is *se*. Ex. (28) (originally presented as ex.14) shows that even in contexts where Bernie is personified and engaging in mental activities (e.g. thinking and planning an upcoming speech), the nonhuman pronoun *se* is used. Thus, as we already discussed in Section 5.1, anthropomorphism, in the absence of FID or an embedding attitude verb, does not trigger use of *hän*.

(28) ***Bernie***_i *meni suihkuhuoneeseen ja väänsi veden täysillä valumaan. Mielessään **se**_i jo suunnitteli puhettaan koko koirayleisön edessä. **Se**_i mietti myös millainen tarinan loppu voisi olla...* (Kukkanen, p.50)

'**Bernie**_i went into the shower room and turned the water on full. Mentally, **it**_i was already planning its speech in front of the whole dog community. **It**_i also wondered about how everything would turn out...'

Nevertheless, there are numerous examples of *hän* being used for Bernie inside FID contexts, as in (29-30) below. However, the default *se* can also be used in FID for SELF referents, as in ex. (31):

(29) [Context: Tiina's mother had commented on the odd size relation between Bernie, who is very big, and the size of his dog food bag, which is rather small]

*Taas **Bernietä**_i ihmetytti. Mitä suhdetta siihen tarvittiin? Ei muuta kuin ruoka kuppiin, niin kyllä **hän**_i sille suhteita osoittaisi. Suorinta tietä vatsaan ja sillä hyvä* (Kukkanen, p.23)

'***Bernie***_i was confused again. What kind of relation did that need? Just put the food in the cup, and **he**_i would show it the right kind of relation. Straight to the stomach and that's it.'

(30) [Context: Bernie has been locked into the kitchen to sleep at night]

*Huokaisten **Bernie**_i istahti miettimään. Ei ollut ollenkaan mukavaa nukkua yksin keittiössä. Mikä kyökkipiika **hän**_i muka oli?! Iso ja komea berninpaimenkoira poika...* (Kukkanen, p.35)

'With a sigh, **Bernie**_i sat down to think. It was no fun to sleep alone in the kitchen. What kind of scullery maid was **he**_i? A big and handsome Bernese mountain dog...'

(31) [Context: Tiina's father and brother find an announcement for a dog that went missing in Lahti, and think that maybe Bernie is that missing dog]

Berniekin_i *ihmetteli. Miten ihmeessä* se_i *olisi voinut kadota Lahdessa perjantaina, kun **se**_i oli poistunut vasta sunnuntaina Koirien Taivaasta?* (Kukkanen, p.40)

'**Bernie**_i was surprised too. How on earth could **it**_i have disappeared in Lahti on Friday, when **it**_i had only left the Dogs' Heaven on Sunday?

In sum, similar to what we see in reported speech/thought contexts, the corpus data show that *hän* can be used in standard Finnish in Free Indirect Discourse (FID) contexts to refer to the logophoric SELF, even if it is an animal.[19] This provides clear evidence than *hän* can refer to SELF even in standard Finnish – something that was hard to see with reference to humans because *hän* is the register default for humans. This again supports Hypothesis 1 and goes against Hypothesis 2. This finding also corroborates my earlier observation (Section 6) that use of *hän* for a [-HUMAN] SELF referent is possible despite the register-default link between [+HUMAN] and *hän*.

Nevertheless, the fact that *se* can also be used in FID contexts for SELF referents (ex.31) shows that it is still the default form for non-human animals. So, we have seen that with non-human referents, *se* – which is the default – can be used in non-logophoric/non-SELF as well as in logophoric/SELF-referring contexts, but the non-default human pronoun *hän* is only used when referring to SELF, in FID or reported speech contexts.

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19 As discussed by Mikkola & Laitinen (2013) historical varieties of Finnish (before the modern standard Finnish conventions stabilized) could use *hän* to refer to animals when they were conceptualized as beings whose motives/thoughts/feelings could be understood and who engaged in meaningful interactions with humans (see also Laitinen 2009, 2012). Mikkola and Laitinen cite ex. (i) from an advice book for children (late 1800s), and note that *se* is used when the animal is simply the target of observation but *hän* is used when the animal is viewed as a 'persona' that understands interactions and has feelings. The present paper focuses on present-day Finnish but it is clear that the use of *hän* for animals that are presented as the SELF is not a new phenomenon.

(i) *Jos kohtaat wihollises eläimen eksyksissä: niin johdata **hänet** isännällensä. Älä katsele **sitä** langenneena tiellä; wan auta kuorman edessä wäsynyttä* (cited by Mikkola & Laitinen 2013:485) 'If you meet your enemy's **lost animal**_i, lead **him**_i back to his owner. Do not look at it_i fallen on the road but help the one tired by the heavy load' (my informal translation)

8 De se and de re reference to animal antecedents

It is often suggested in prior work that logophoric pronouns are obligatorily interpreted *de se* (i.e., the antecedent is aware that she/he is the referent of the pronoun) in Ewe and in other languages (e.g., Schlenker 1999, Stephenson 2007, see also von Stechow 2003), and cannot receive a *de re* interpretation (where the antecedent is not aware that she/he is the referent of the pronoun). Initial empirical evidence that supports this, at least for some languages, comes from Bafut (Kusumoto 1998, see ex.32), Yoruba (Anand 2006), and Tangale (Haida 2009). Schlenker (2003) provides the example in (32) from Bafut and notes that use of the logophoric pronoun *yu* is ungrammatical in a *de re* context, when John does not realize that the man whose pants are on fire is him. However, the view or assumption that logophoric pronouns are universally obligatorily *de se* is challenged by Pearson (2015), based on data from Ewe. Based on fieldwork, Pearson shows that Ewe logophors are not obligatorily *de se* and also allow *de re* readings.

(32) Situation (Kaplan 1977): John is looking at a mirror from a distance and sees a man in the mirror. He notices that the man's pants are on fire. In fact, the man he sees in the mirror is John himself, but he doesn't realize it.
   a. John believes that his pants are on fire
   b. *John wà?àt∂   m∂   { *yu /   à }   ká   khi* (Bafut; P.Tamanji, p.c to Kiyomi Kusumoto)
      John thinks   that { LOG /   he } FUT burn
      'John thinks that he is going to get burnt'

Investigating whether Finnish *hän* can be used in both *de re* and *de se* contexts or only in *de se* contexts provides another way to probe its logophoric properties. As in the preceding sections, we focus here on reference to animals, since with humans use of *hän* could be triggered by its being the default form. Recall, though, that as we saw in Section 3.3, in standard Finnish Free Indirect Discourse with humans, *se* is used for the non-SELF and *hän* for the SELF. Based on those patterns, we might expect that (i) *hän* is used only for *de se* readings and (ii) *se* is used for *de re* readings.

For Finnish, my corpus data shows that in mistaken identity contexts with animals, (i) logophoric *hän* is used for *de se* reference and (ii) *se* is used for *de re* or *de se* reference. The examples from my corpus do not involve embedding under attitude verbs but rather are contexts with Free Indirect Discourse. Consider examples (33-34) below. Ex. (33) is from a book about a reindeer, Pate, who is normally referred to with *se*. This extract describes a context where Pate sees his reflection in a window, but does not realize that it is him (or his reflection), and thinks it is a monster. When referring to the 'monster' in Pate's belief world, the author uses *se* in the third sentences (de re), and when referring to Pate, the author either uses *se* (sentence 2) or *hän* (sentence 5) in an FID context where Pate is the perspectival center. Immediately after this extract, the author goes back to referring to Pate with *se*.

(33) **Pate** *veti henkeä* _{sentence1}. *Ikkunan toisella puolella* **se** *näki häijysti irvistelevän, sarvipäisen kammotuksen, jonka musta silmät olivat suuret kuin teevadit* _{sentence2}. *Tonttu* **se** *ei ainakaan ollut, ei edes kiukkuinen tonttu* _{sentence3}. **Pate** *älähti kauhistuneena* _{sentence4}. <u>*Hirviö*</u> *vastasi* **hänelle** *ulahtamalla* _{sentence5}. **Pate** *heilutti korviaan* _{sentence6}. *Hirviö heilutti myös* _{sentence7}. (Kanto, p.81-82)
   '**Pate** took a breath _{sentence1}. On the other side of the window **it** saw a nastily grimacing, horned dreadful creature, whose black eyes were as big as tea-saucers _{sentence2}. **It** definitely was not an elf, not even an angry elf _{sentence3}. **Pate** let out a terrified yelp _{sentence4}. The monster answered **him** with a yelp _{sentence5}. **Pate** waggled his/its ears _{sentence6}. The monster did too _{sentence7}.'

Similarly, in ex. (34), we have another mistaken identity scenario from a different book. Here, the moose Iiro sees his reflection in the window of the shopping center but does not realize it's him, and instead thinks it is another moose. Similar to ex. (33), in this context the default form for Iiro is *se*, as the first few sentences show. As in ex. (33), there is no embedded verb, and both *hän* and *se* occur inside the FID domain. When

Iiro is the SELF, *hän* is used (sentence 5), and at same time, *de re* reference (sentence 8) is done with the default form *se*.[20]

(34) **Iiro** *lähti ostoskeskukseen*_{sentence1}*. **Se** kulki kävelytietä aivan sääntöjen mukaan…*_{sentence2} *(….) Ostoskeskuksessa* **Iiro** *katsoi kaupan ikkunaa*_{sentence3}*. **Se näki** hirven*_{sentence4}*! **Iiro** näki suuren ja komean* <u>*hirven*</u>*, joka tuijotti **häntä** näyteikkunassa*_{sentence5}*. **Iiro** näytti hirvelle sarviaan*_{sentence6}*. Myös toinen hirvi näytti **Iirolle** sarviaan*_{sentence7}*. **Se** oli ajettava pois*_{sentence8}*. Tämä oli Iiron ostoskeskus*_{sentence9}*,* (Huovi, p.63-64)
'**Iiro** headed towards the shopping center_{sentence1}. **It** walked along the pedestrian route exactly as   the rules stated…._{sentence2} (…) In the shopping center, **Iiro** looked at a store window_{sentence3}. **It** saw a moose_{sentence4}! **Iiro** saw a big and handsome moose who stared at **him** from the window_{sentence5}. **Iiro** showed the moose its/his horns_{sentence6}. The other moose showed **Iiro** its/his horns too_{sentence7}. **It** must be chased away_{sentence8}. This was **Iiro's** shopping center_{sentence9}.'

It is worth emphasizing that that these 'mistaken identity' contexts differ in a meaningful way from the standard FID examples we considered in Section 7. In ex. (34), in the 'actual world' of the narrative, both *hän* and *se* actually refer to the moose, Iiro. (The same logic applies to ex.(33)). This differs crucially from regular FID examples, where *hän* and *se* – when inside the FID domain – refer to fully distinct entities. Thus, the mistaken identity examples highlight that the 'non-SELF' is *based on the epistemic state of the SELF*. What matters for use of *se* is not that it has to refer to an entity that is not coreferential with the SELF, but rather that the SELF does not recognize the other referent as being coreferential with the SELF. The idea that what matters is the epistemic state of the SELF is in line with Kaiser (2018)'s claim – based on other evidence – that the logophoric SELF use of *hän* is the fundamental property that also drives the association of *se* with the non-logophoric SELF.

In sum, with animals, *hän* is used for *de se* reference, and *se* (the default) for *de re* or *de se*. I found no corpus examples of *hän* being used in a *de re* context. This observation receives further support from native speaker judgements of pronouns embedded under attitude verbs, which suggest that logophoric *hän* cannot be felicitously used in a *de re* context with animal antecedents. To see this, consider a constructed example where Iiro tells other animals about his experience with the 'interloper' moose (ex.35a) and then one of the animals reports to someone else what Iiro had said (ex.35b,c). Use of the default form *se* is fine (ex.35c), but use of *hän* in the embedded clause in (35b) is infelicitous, indicating that it cannot be used felicitously in *de re* contexts.

(35) a) *Iiro kertoi hirvestä toisille eläimille. Se oli ihan tohkeissaan siitä, että vieras hirvi oli ollut Iiron ostoskeskuksessa. "Se hirvi oli väärässä paikassa!", Iiro selitti.*
'Iiro told the other animals about the moose. It was all wound up about (the fact that) the strange moose had been in Iiro's shopping center. "The moose was in the wrong place!" Iiro explained.'
    b) Later on, one of the animals explains to someone else what Iiro_i had said:
    *Se sanoi, että # **hän** oli väärässä paikassa.*
    '**It** said that #**she/he** was in the wrong place.'
    c) Later on, one of the animals explains to someone else what Iiro_i had said:
    *Se sanoi, että **se** oli väärässä paikassa.*
    '**It** said that **it** was in the wrong place.'

9 Conclusions

This paper set out to gain insights into our linguistic conceptualization of non-human animals, what this can tell us about how perspective-taking is signaled linguistically, and how this relates to features such as [+/-HUMAN]. Empirically, the question I investigated is whether, in contexts where animals are clearly

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20 When Finnish uses only a possessive suffix without an overt possessive pronoun, human and non-human animal reference is not morphologically distinguished. These 'uninformative' occurrences are denoted with 'it/he' or 'it/she' in the translations.

grammatically [-HUMAN], the linguistic system of Finnish still allows us to treat animals grammatically as entities with the ability to experience mental states and attitudes. I probed this by exploring whether animals can be referred to with logophoric pronouns in different linguistic contexts and registers. Finnish is especially well-suited for this investigation because it has a pronoun with logophoric properties which is the same form as the human-referring pronoun used in standard Finnish, *hän* (she/he). This allows us to test whether a pronoun, *hän*, that may at first blush seem featurally specified to seek [+HUMAN] referents, can nevertheless be used for [-HUMAN] referents, animals, when these referents are logophoric centers, in both standard and colloquial Finnish. In related work, Peltola (this issue) investigates Finnish constructions often viewed as grammatically requiring [+HUMAN] referents, namely the zero person construction and the impersonal passive, to see whether they can be used for non-human animals, and if so, when.

Given that thinking, speaking and mentalizing are fundamentally human traits, it might not be surprising if logophoric pronouns were only restricted to humans. To the best of my knowledge, prior crosslinguistic and typological work on logophoric pronouns has not systematically investigated whether these forms can be used for sentient thinkers or 'mental state experiencers' that are still grammatically clearly [-HUMAN], except for Laitinen's (2002, 2009, 2012) work on historical Finnish and dialects of colloquial Finnish (see also Mikkola & Laitinen 2013). This question also relates to broader issues concerning semantic and pragmatic features, such as the extent to which discourse-semantic features such as logophoricity – which can change over the course of a narrative – can 'overpower' arguably more immutable semantic features such as the [+/-HUMAN] distinction.

Furthermore, investigating logophoric reference to animals allows us to shed light on questions left open by prior work on human reference with logophoric pronouns (see e.g. Kaiser 2018). When investigating the Finnish logophoric system by looking at reference to humans, complications arise from differences between standard and colloquial Finnish; specifically, it is hard to detect whether *hän* 'she/he' is logophoric not only in colloquial but also in standard Finnish. Indeed, Laitinen (2009) suggests that *hän* is widely used logophorically in colloquial but not in standard Finnish.

In the present paper, I focus on reference to animals because, unlike reference to humans, which shows register variation in Finnish, the default form for animals does not change across registers and offers a clearer view of the logophoric system. Based largely on corpus data, supplemented by native speaker intuitions, I investigated use of *se* 'it' and *hän* 'she/he' in reference to animals both in contexts where the forms are embedded under attitude verbs as well as main clause contexts. My discussion is also informed by additional corpus data and discussion from Laitinen (2002) (see also Laitinen 2009, 2012; Mikkola & Laitinen 2013 for historical data on animal reference). I use this data to assess the validity of two competing hypotheses: (i) the view that *hän* is logophoric in both registers in Finnish vs. (ii) the view that the two registers have different logophoric pronoun systems. I argue that the data points towards the former, i.e., a unified system where *hän* is logophoric in both standard and colloquial Finnish. Furthermore, I conclude that *hän* can be used to refer to [-HUMAN] referents – in both standard and colloquial Finnish, in both embedded and main clause contexts – as long as they are logophoric [SELF] referents. This suggests that, at least on its logophoric use, *hän* does not require its referent to have a [+HUMAN] feature. I conclude that the specific mapping between [SELF] and *hän* can override the register default that would otherwise associate *hän* with [+HUMAN] referents in standard Finnish.

Further evidence in line with the idea that perspectival factors can 'overcome' associations with [+HUMAN] referents comes from Peltola (this issue). Peltola investigates two Finnish constructions traditionally viewed as requiring [+HUMAN] referents, namely the zero person construction and the impersonal passive. Using corpus data, she shows that these constructions (as well as modals) can be used to refer to animals in contexts where the event is construed from the point-of-view of the non-human animal and where the speaker/writer "seek[s] to make sense of the animal referent's behavior" (Peltola, this issue).

The findings discussed in this paper have consequences for our view of semantic and pragmatic features, in particular the extent to which discourse-semantic features such as logophoricity can overpower more immutable semantic features such as the [+/-HUMAN] distinction. If one wants to regard *hän* as being specified as [+HUMAN], then the results presented in this paper for animal reference suggest that being the

logophoric SELF is able to 'override' the [+HUMAN] specification of the pronoun. Whether such a view of feature override is on the right track – or, alternatively, perhaps the feature specification of *hän* is different from what is often thought – is an important question for future work.

Abbreviations used

ACC accusative case
ADESS adessive case
ALL allative case
CL clitic
COMPL complementizer
INESS inessive case
LOG logophoric pronoun
NEG negation
NOM nominative case
PAR partitive case
PL plural
PST past
PTCP participle
PX possessive suffix
SG singular

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