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published in
Linguistics in the Netherlands
2019

document version
Peer reviewed version

Link to publication in KNAW Research Portal

citation for published version (APA)
Cornips, L. (2019). The final frontier: non-human animals on the linguistic research agenda. *Linguistics in the Netherlands*, *36*(1), 13-19.

The final frontier

Non-human animals on the linguistic research agenda

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1.   Introduction

The aim of this paper is to address the question as to why in (socio)linguistics we draw an a-priori basic distinction, claimed to be universal, between humans and other animals as language users (Pennycook 2018). I will make a plea for an *inclusive* linguistics, in which research of non-human animal languages and/ or our interactions with them may become common practice. On the one hand my plea stems from my growing concern regarding the current anthropocentric era in which "human destructiveness, environmental degradation, diminishing resources and our treatment of animals" (Pennycook 2018:3) is of an unprecedented scale. Current human-animal and other animal relations have become so profoundly unequal that they call for inter- and multi-disciplinary research in which ethical and sustainability-oriented questions should and could be(come) the focus of attention (Cederholm et al. 2014:5). On the other hand my concern is with linguistics. What is the effect on linguistics of our assumption that the way we humans communicate is profoundly and significantly different from the way in which other animals communicate? Could we get a better understanding of language by not restricting it to humans?

In developing such an enterprise I draw my inspiration from Eva Meijer (2017:13), a philosopher who with arguments appropriate to that discipline, phrases the urgency of an inclusive linguistics as follows: "Challenging an anthropocentric view of language formed by power relations can help humans to see animals of other species, and their languages, differently, and to study non-human animals as co-beings instead of resources" (Meijer 2017:30). This, in my view, is a necessary perspective on caring for the planet and significant other sentient beings in the decades to come.

To this end, I will first sketch which ideologies erased animal languages from the linguistic research agenda. Second, I will sketch some possible ways to traverse if one wishes to achieve an inclusive linguistics.

2.   The final frontier: "Language is what makes us human"

"Language is what makes us human"[1] is an adage in linguistics. The statement goes back to Aristotle's Book I of *The Politics*, as phrased eloquently by Meijer (2017: 14):

> Aristotle defines man as political animal and the only animal that is endowed with speech, or rather: *logos*, which here refers to rational speech, and more specifically the ability to distinguish between right and wrong in a speech act (Aristotle 1253a:10–18, Derrida 2011:348). This capacity is necessary for being part of the political community. By attributing *logos* only to humans, he draws a line between humans and other animals. This line functions as a border around the political; only humans can be political animals. It also defines political speech: *logos*, meaning speech informed by reason, is contrasted with *phonè*, the sound of the voice, which can express pain or pleasure. Non-human animals have voices and express themselves, but they cannot speak in the proper sense because they cannot use their voices to decide between just and unjust; they do not have *logos*. What is furthermore important to note is that this move is made inside human language – Aristotle is using human words to argue that using human words is what draws the line between who can speak and who cannot, and between who can be a political actor and who cannot.   (Meijer 2017: 14)

This adage ensconces (socio)linguistic research so deeply that it a-priori defines *language* as *human* language. Moreover, it takes human language superiority for granted, as neutral and as natural (Meijer 2017; Pennycook 2018). Any such conception of language stereotypes non-human animals as per definition (more) mute and (more) dumb (than us) (Meijer 2017: 24), instead of viewing them as sentient beings who perceive and experience the world (Francione & Charlton 2017: 29). This could aptly be illustrated by a farmer of a Dutch intensive dairy farm who informed me at first that cows are smart since they very rapidly learn how to be milked during their first lactation. Ten minutes later he asked me in all sincerity if a cow has brains.[2,3]

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1. https://www.ru.nl/cls/our-research/about-our-research-0/ (accessed 21-09-2018)

2. Field work notes, 18 December 2018.

3. See Andrews (2016): "the cognitive scientists studying animals largely accept that animals are minded, cognitive systems. As demonstrated by the 2012 Cambridge Declaration on Consciousness, many scientists also accept animal consciousness." (accessed 21-01-2019)

Aristotle's distinction between *logos* and *phonè* is still holding ground in concepts of language as either a *mental* or *social* construct in the two dominant linguistic theories halfway into the 20th century, namely generative grammar (cf. Chomsky 2002) and (variationist) sociolinguistics (cf. Labov 1994, 2001), respectively. In the generative framework, language is taken to be a human mental construct where processes of thinking and knowledge about abstract symbols, that is, sentences as mental objects, are generated. As Chomsky puts it: "If one person suddenly got the language faculty, that person would have great advantages; the person could think, could articulate to itself its thoughts, could plan, could sharpen, and develop thinking as we do in inner speech, which has a big effect on our lives. Inner speech is most of speech. Almost all the use of language is to oneself" (2002: 148). The categorical distinction between *logos* and *phonè* is further constructed within the generative framework, where language is solely defined by the concept of universal grammar (UG) (instead of by reference, for instance), which expresses mental representations in the form of conceptual structure as the core (see Pinker & Jackendoff 2005). The logical consequence of UG was/is the search for language-related genes (phenotypic identifications) that would set humans and other animals, in particular, chimpanzees apart (Fitch 2017: 455). UG is thought of as an autonomous computational system that works independently from phonology.

In contrast to syntax as a mental representation, phonetics or the speaking voice (*phonè*) is assigned to language-in-use which is the domain of sociolinguistics. In the sociolinguistic framework, language is theorized as a social construct stemming from the need to contextualize how (groups of) speakers use their language in interactions between humans only, aiming to find out how and why languages vary and change, and how human speakers linguistically draw boundaries between them in (dis)identification processes. Neither generative (Chomsky 2002) nor sociolinguistic theory (Labov 1994) questioned the legitimacy of each other's discipline but attempts at integrating the two have not been successful (Cornips & Gregersen 2016).

However, there are good reasons why human relations and interactions with other animals and/or animal languages should be on the sociolinguistic research agenda. In 60 percent of the Dutch households in a total of 7.6 million (17 million inhabitants) in 2017, humans live together with a companion animals: 18 million fish, 5 million racing pigeons, 3.9 million other birds, 2.6 million cats, 1.5 million dogs, 1.2 million rabbits, 650,000 reptiles and 500,000 rodents,[4] and with farm animals: 97 million chickens,[5] 12.5 million pigs, 4 million cows and 500,000 goats

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4. https://www.sevendays.nl/nieuws/zo-veel-huisdieren-wonen-er-nederland (accessed 29-01-2019)

5. http://www.kipinnederland.nl/feiten-en-cijfers (accessed 29-01-2019)

in 2018[6] and 450,000 horses in 2016.[7] On the one hand, humans may identify with companion animals and experience meaningful and valuable relations with them. They talk about them, voice their dog (Tannen 2004), talk to their companion animals, dogs talk back to their human family members (Meijer 2017: 87) and dairy cows may greet the farmer (Cornips 2018) while on the other hand humans exploit and kill prematurely the virtually blotted out farm animals for food and/or identify with killing other animals for hunting, leisure, cultural and religious practices. But, in general we have no clue as to how humans and non-human animals interact and communicate with each other since non-human animals are speakers and interactants who have been linguistically marginalized most, absolutely and categorically.

3.   Cognition – body fluidities

Sociosyntactic knowledge (cf. Cornips & Corrigan 2005) shows the permeability of the assumed boundary between *knowledge* of language (I-language) and language *use* (E-language). Methodological practices in generative grammar, for example, show that native-speaker introspection (intuitions) which 'accesses' an individual's knowledge of language may become – as phrased by syntacticians – 'polluted', since studying so-called ungrammatical constructions over a longer stretch over time results in grammaticality as a habituation effect (Cornips & Poletto 2005). Muysken argued a long time ago (1999: 72) that the cognitive abilities shaping the I-language determine the constraints found in E-language, and that the norms created within E-language make I-language coherent. The more recent *usage-based* framework (latter half of the 20th century) hypothesizes "that linguistic knowledge is built up on the basis of language use, this term referring to both *active* usage and *passive* exposure." (Blommaert & Backus 2011: 5 and references cited therein). All these insights align with a language evolution perspective in which it is argued that thought and grammar have been gradually evolving out of needs for cooperative social interactions in situated contexts (Tomasello 1999; Pinker & Jackendoff 2005).

　　Vallée-Tourangeau and Cowley (2013) conclude that by the 1990s the assumption that "thinking goes on 'in the head'" had changed; since then it is "increasingly recognised that action, perception and attention affect language and thinking"

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6. https://www.cbs.nl/nl-nl/nieuws/2018/26/opnieuw-minder-koeien-en-meer-geiten (accessed 29-01-2019)

7. https://www.knhs.nl/kennisbank/publicaties/brochure-nederland-paardenland/ (accessed 29-01-2019)

(2013:1, for grounded cognition, see also Barsalou 2008: 618). Thus, new and varied cognitive models emerged which widened the focus from just one or two – as happened in the past – to more interconnected and interdependent cognitive abilities, in particular sensation, perception and perceptual memory, declarative memories (episodic – remembering, and semantic – knowing memory), working memory (which includes Chomsky's inner speech), selective attention, action selection and procedural memory, and action execution (D'Mello & Franklin 2011: 501–502).

Unlike in generative grammar, language in these frameworks is hypothesized to be both dependent on cognition and interconnected with culture, which was also recognized by Lenneberg in 1967 (Fitch 2017: 445). It converges with the view on language as embodied (Bucholtz & Hall 2016) and multimodal, including verbal speech and gesturing. Bodies are part of the semiotic landscape. Co-verbal gestures may show properties of form and meaning which provide clues about cognitive processes that govern speaking (Müller et al. 2013: 711), but gestures are, like speaking, also a form of social action which may have a referential content (Kendon 2017). The recent developments in cognitive and sociolinguistic theories are promising for an inclusive human – non-human animal linguistics since they challenge the view that innate knowledge is completely autonomous, is inaccessible 'from outside the mind', and hence fixed and/or permanent in character. Instead, linguistic knowledge is more and more hypothesized to be grounded in the body's action, perception and attention, and is seen as a multimodal capacity. These theoretical views abolish the philosophical dichotomy between *logos* and *phonè*.

4.   Conclusion: A research programme

An inclusive linguistics allows for new perspectives on other animals and allow us to approach their languages with an open eye instead of superimposing human language and cognition as the norm on other species. As far as I know, there are no experimental or naturalistic studies showing that humans were successful in acquiring the language of chickens, whales, cows or blue tits as a first or second language.

Research into other animal languages challenges what may count as language: it may include movement, position and facial expressions (kinesics), touch (haptics), space (proxemics) and various different creations of meaning through capacities like smelling, seeing and hearing, changing skin colours etc. So, instead of defining which species have language, we had better ask how language actually works (De Waal & Ferrari 2010: 201). I conclude with a proposal for a research programme for an inclusive linguistics:

– Research into interspecies communication (how is that at all possible?)
– Research into intraspecies communication (how do other animals do what humans do, or do they do something completely different?)
– Research into acquisition in the wild and in the various humanly restricted arenas (how do other animals acquire communication systems and how can we account for variation and change?)
– Research into community building and communities of practice through inter- and intraspecies identification processes (dairy calves form a distinct community of practice from dairy cows etc.)

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