# From Linguistics to Animal Communication and Back
*Call for Abstracts*
Workshop at SLE 2025

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## Workshop Description

There is a long history of inter-connectivity between the study of human language and the study of non-human animal communication. This relationship may have been somewhat contentious during the 20th century. Recent decades have seen a resurgence of interest of a more bidirectional nature between animal communication research and linguistic research (Fitch 2020, Hauser et al. 2002, Schlenker et al. 2016, Townsend et al. 2017, Zuberbühler 2020, Tomasello 2008). We hope to contribute to a growing exchange between animal communication researchers and linguists by hosting an interdisciplinary workshop bringing together researchers from both sides of the aisle.

**We invite submission of abstracts pertaining but not limited to:**

**Combinatoriality in non-human animals:** Language, among other things, has been argued to be inherently based on structural patterns (e.g. Hockett 1960). As such, it is not surprising that the ability to combine calls to form larger sequences has become a topic of vast interest in the fields of non-human animal communication. Research into animal communication systems have discovered a complex variety of combinatorial patterns (e.g. Sainburg et al. 2019, Kershenbaum et al. 2014, Suzuki 2021). In addition, research in recent years has probed the propensity for non-human animals to combine context-specific call units into larger, potentially meaningful compositional structures, suggesting that language and non-human animal communication might have more similarities than previously thought (e.g. Townsend et al. 2018, Schlenker et al. 2023, Engesser et al. 2024). We invite abstracts of a similar nature that investigate potential combinatoriality in animals.

**Semantics and Meaning in non-human animals:** Semantics relates to the meaning conveyed by a signal. As such, semantics is a powerful tool in

language. However, when it comes to non-human animals and their communication systems, semantics has often posed a challenge both conceptually (what is a meaningful call?) and empirically (how can we investigate animal meaning?). In recent years researchers have been challenging the notion of what it means for a signal to be semantic in addition to developing methods to validate the meaning-bearing nature of animal signals (Berthet et al. 2023). One promising approach to explore the concept of meaning in animal communication is to define meaning in a broad sense by not limiting the investigation to semantic symbols alone (Schlenker et al. 2016). Moreover, researchers have concentrated on different aspects connected to meaning such as the intentionality of a given signal or the notion of arbitrariness (Townsend et al. 2017, Watson et al. 2022). Any abstracts dealing with semantics and meaning in animal communication are welcome.

**Analytical Methods of non-human animal communication systems:** Methods for analyzing animal communication have been derived from numerous disciplines. Early work in logical analysis of language interpretation by Morris 1946 was used to expand upon the semiotic framework originally developed by Charles Sanders Peirce. Morris' tripartite model of signs—encompassing syntax, semantics, and pragmatics—not only influenced linguistic theory but also provided tools for studying non-human communication systems (Marler 1961). However, researchers studying animal communication have implemented a host of techniques that are not historically associated with linguistics. Reinforcement learning techniques have been used to model how juvenile zebra finches are "rewarded" for matching syllables similar to the sound of a tutor (Toutounji et al. 2024). Work involving cross-species communication has highlighted the role of eavesdropping for predator avoidance (Magrath et al. 2015) among species with common predators, raising intriguing questions regarding the evolution of inter-species signaling. In this category we are interested in providing exposure to analytical methods that have not yet been widely adopted by those studying animal communication as well as novel applications of known methods.

**Application of methodology/hypotheses from non-human animal communication within linguistic research:** While many researchers study animals as a goal in and of itself; research with animals may lead to developing methodologies and hypotheses for human studies as well. Work conducted with juvenile zebra finches on the ontogenetic origin of vocal combinatorics has demonstrated similarities with pre-linguistic human children (Lipkind et al. 2013) during vocal learning. Further experimental results have provided insights into strategies used by juvenile zebra finches during vocal learning that prioritize acquisition of syllable vocabulary at the cost of slower acquisition of syntax (Lipkind et al. 2017). These results may provide insights into the babbling stage of language acquisition in human infants. We are interested in similar work where discoveries in animal communication can potentially inform ongoing debates and methodological advances in linguistics.

**Other work of potential interest:** We invite work that investigates other potential parallels between non-human animal communication and human language, *including negative results*. We also welcome work that discusses the ontogony of various animal communication systems especially considering its relationship to language. Further, we welcome papers that discuss potential insights and research directions for the intersection between animal communication and linguistic research.

# Abstract Submission

Abstracts should be 500 words excluding references. We ask that abstracts are submitted at: https://societaslinguistica.eu/members/login/ before January 15, 2024.

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# Abstracts