Taking time seriously: The temporal dynamics of language

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Keywords: temporal dynamics; timing; language production; cognitive processes; repeated linguistic behavior

Abstract submission:

We invite provisional abstract submissions of 300 words (excluding references) for the proposal of a workshop, "Taking time seriously: The temporal dynamics of language", to be organized at the 58th Annual Meeting of the Societas Linguistica Europaea (26–29 August, 2025), University of Bordeaux Montaigne.

Abstracts can be submitted to Guido Linders, <u>guido.linders@uzh.ch</u>, by **November 17**. Any enquiries can be directed to Guido Linders (<u>guido.linders@uzh.ch</u>), Catalina Torres (<u>catalina.torres@ivs.uzh.ch</u>), or Stefan Schnell (<u>stefan.schnell@uzh.ch</u>).

If the workshop proposal gets accepted, authors will be invited to submit an extended abstract (500 words excluding references) by January 15. More details can be found on the conference website: <u>https://societaslinguistica.eu/sle2025/second-call-for-papers/.</u>

Workshop description:

Language is planned, produced, comprehended, and learned within the time constraints of everyday communication. Time pressure ultimately shapes the way languages are used and their structures evolve (Christiansen & Chater, 2016; Jaeger and Buz, 2017). Studying the temporal dynamics of language from a cross-linguistic perspective is crucial for understanding language and cognition. Yet, time is neglected in most of comparative linguistics, focusing on written and transcribed language where the temporal information is not typically annotated with great detail. Conversely studies with a focus on timing have mostly dealt with single languages (Fletcher, 2010) leaving out the possibility of targeted cross-linguistic comparison. An increasing number of corpora where language is time-aligned (e.g., DoReCo, Seifart, Paschen & Stave, 2022, VoxClamantis, Salesky et al., 2020) allow for larger-scale and cross-linguistic investigations of temporal patterns in language production. At the same time, new methods for studying temporal patterns are developed and applied to language, for example to measure temporal patterns of repeated linguistic behavior using burstiness (Abney et al., 2018; Slone et al., 2023) or cross-recurrence quantification analysis (Louwerse et al., 2012).

There is large diversity of methods and approaches to studying time in linguistics. Oft-used measures are speech duration and speech rate. For example, Blum et al. (2024) investigated the segment duration of phones demonstrating that consonant lengthening is indicative of word onsets across a corpus of typologically diverse languages, suggesting that this is a common strategy to mark word boundaries. Similarly, the speech rate slows down before nouns, when compared to verbs, suggesting increased speech planning cost for nouns (Seifart et al., 2018).

Pauses, hesitations and disfluencies have been frequently used to study the temporal dynamics of language, as these can serve as approximations of cognitive effort (Betz et al., 2023) or planning difficulty (Watson & Gibson, 2004, Krivokapić et al., 2020). Moreover, pauses can be used to mark syntactic boundaries in speech (e.g., Frazier et al., 2006; Peck & Becker, 2024). Finally, the temporal patterns of disfluencies have been used to explain a preference for languages to develop suffixing, as opposed to prefixing (Himmelmann, 2014).

One major area where time is studied is in interaction. Utterances are planned, spoken and comprehended, all within short time windows, posing significant cognitive demands on the interlocutors (Pickering & Garrod, 2004, 2013). Yet, timings between turns in conversation (and also signed conversation, De Vos et al., 2016) are surprisingly universally short (Stivers et al., 2009), leading to the question how this is achieved by the language users (Holler et al., 2016). Moreover, interlocutors coordinate their interaction (Shockley et al., 2009), leading to temporal synchronies in linguistic behavior, possibly to alleviate the cognitive demands (Holler & Wilkin, 2011; Louwerse et al., 2012).

Time is also extensively studied in child language acquisition, for example by quantifying the amount of child-directed speech (Bunce et al., 2024; Schneidman & Goldin-Meadow, 2011) or the repetition of references in child-directed speech over time, which impacts learnability of word-meaning mappings. (Slone et al., 2023).

In this workshop, we seek to bring together scholars from different disciplines whose research highlights the importance of time in studying language and cognition. We are broadly interested in questions, such as:

- What kind of temporal patterns can be observed in language and how can they be explained by cognitive or linguistic processes?
- What factors influence observable temporal patterns and why?
- How is repeated linguistic behavior distributed/correlated in time?

We are moreover interested in the wide array of methods used to quantify and study time in language science, for example using large cross-linguistic corpora, computational/statistical techniques for quantifying the amount and temporal distribution of language, time series analyses, and analyses of temporal patterns, such as speech rates, disfluencies, hesitations and pauses. We especially welcome contributions on:

- Computational methods investigating temporal patterns in language
- Corpus-based research, especially with a cross-linguistic perspective
- Cross-linguistic commonalities/differences in timing
- Significance of timing in usage-based typological work
- Time series analyses
- Methodological issues regarding the studies of time
- Child language acquisition
- Multimodal language
- Sign language

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