Linguistic and co-speech gestural patterns of spatiotemporal metaphors in Indonesian

^a Gede Primahadi Wijaya Rajeg & ^b Poppy Siahaan ^a Universitas Udayana, Indonesia & ^b University of Cologne, Germany ^a primahadi wijaya@unud.ac.id & ^b poppy.siahaan@uni-koeln.de

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The construal of TIME has received a lot of attention in cognitive linguistics, and cognitive science in general, as a test case for a broader inquiry of how people talk about, and conceptualise, an abstract domain in terms of another embodied concept. Previous works have shown that a wide range of languages and cultures construe TIME using concepts and vocabularies from the domain of SPACE (Sweetser & Gaby, 2017). Yet, only two studies have attempted to investigate this topic for Indonesian (Casasanto et al., 2004; Prayogi, 2013). Our project builds on these works to investigate the spatial construal of TIME in Indonesian language and co-speech gesture.

Linguistic evidence based on the *Indonesian Leipzig Corpora* suggests that Indonesian exhibits the two dominant models of TIME where Ego acts as the reference point (Sweetser & Gaby, 2017). These models are referred to as (i) *Ego-Reference Point* (Ego-RP) *Moving Ego* (e.g., *kita sudah melewati <u>zaman</u> Order Baru* 'we already *passed* the New Order <u>era</u>'), and (ii) *Ego-RP Moving Time* (e.g. <u>masa panen tiba</u> 'harvest <u>period</u> arrives'; <u>masa lalu</u> 'passing time'; <u>masa yang</u> akan datang 'time that will come'). The Ego-RP models also concern how deictic times (i.e. future and past) are positioned relative to Ego. Indonesian shows similar patterns with most of the studied languages whereby the FRONT space of Ego is mapped onto the FUTURE (e.g., <u>masa</u> *depan* 'future; lit. *front* time') while PAST is located BEHIND Ego (e.g., *kita harus optimis, jangan menoleh ke belakang* 'we must be optimistic, do not *look back* [i.e. dwell on the past]').

Evidence from co-speech gestures, sourced from five episodes of a talk show, reflect and extend the patterns observed from linguistic data for the spatial construal of TIME. We found evidence for gestures along sagittal (frontward-backward) axis for describing deictic timelines: backwards gestures may accompany past time expressions relative to speakers' 'Now', which is co-located with the speakers (as evidenced by a clip showing a speaker points down to her feet when saying <u>tahun</u> *ini* 'this <u>year</u>'). Lateral (leftward-rightward) gestures are also found when speakers describe a temporal succession of events, whereby earlier events are placed to the left of the later events in the gestural space. Speakers also tend to gesture from the left to the space in front of them when describing progression of events from the past to the present.

References

- Casasanto, D., Boroditsky, L., Phillips, W., Greene, J., Goswami, S., Bocanegra-Thiel, S., ... Gil, D. (2004). How deep are effects of language on thought? Time estimation in speakers of English, Indonesian, Greek, and Spanish. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 26(26).
- Prayogi, I. (2013). Bentuk-bentuk metafora temporal Bahasa Indonesia (Tinjauan Awal). *Prosiding seminar internasional studi bahasa dari berbagai perspektif*, 776–784. Retrieved from http://kenallinguistik.com/metafora-temporal/
- Sweetser, E., & Gaby, A. (2017). Linguistic patterns of space and time vocabulary. In B. Dancygier (Ed.), *The Cambridge handbook of Cognitive Linguistics* (pp. 625–634). https://doi.org/10.1017/9781316339732.039