

How tenselessness interacts with modality: A case study on *paleng* in Javanese

Jozina Vander Klok (University of British Columbia)

It has been claimed by many that epistemic modals do not allow past temporal perspectives (i.e., the time at which the modal base is calculated cannot be past) (e.g., Groenendijk and Stokhof 1975; Cinque 1999; Drubig 2001; Condoravdi 2002; Stowell 2004; Hacquard 2006; Borgonovo and Cummins 2007; Demirdache and Uribe-Etxebarria 2008; Laca 2008). For instance, Cinque (1999:79) argues that since epistemic modals are syntactically above T(past) and T(future), they are outside the scope of absolute tense. However, others argue that past temporal perspectives exist with epistemic modals in different languages (e.g., Eide 2003; Boogaart 2007; von Stechow and Gillies 2008; Homer 2010; Martin 2011; Matthewson and Rullmann 2012).

In this paper, I provide evidence from Javanese (Western Malayo-Polynesian, Austronesian) that the epistemic possibility modal *paleng* ‘EPIS.POS’ allows for past temporal perspectives, adding to the literature with data from an unrelated language. The data presented are based on fieldwork on a dialect of East Javanese spoken in Paciran, East Java, Indonesia. Under the hypothesis (inspired by Condoravdi 2002) that temporal perspective is provided by tense, depending on how tense is encoded in Javanese, we may or may not see an overt distinction between past and present temporal perspective with *paleng* ‘EPIS.POS’.

In order to properly address this interaction between modality and temporality, I first establish how tense is encoded in Javanese. It is known that verbs are not marked for tense or aspect (Horne 1961; Robson 2002), but whether Javanese has a grammaticalized tense system has not addressed in the literature. I show that both stative and eventive predicates are compatible with past, present, or future reference times. I also argue that the one possible marker of tense as a future marker (*ape*) is best analyzed as a prospective aspect. Therefore, I propose that Javanese clauses are tenseless—only context and overt non-grammaticalized temporal expressions such as *sesok* ‘tomorrow’ serve to restrict the temporal reference (in matrix clauses) (cf. Tonhauser 2011 for Paraguayan Guaraní).

Since Javanese does not distinguish past from present tense, we expect *paleng* to show systematic ambiguity with respect to its temporal perspective. In other words, we expect that *paleng* will be compatible in contexts with a past or present temporal perspective (without overt temporal expressions). This is borne out, as shown in (1) and (2).

- (1) **Context:** *When you looked outside earlier this morning, the ground was wet. But later, you found out that Bunga was playing with water. You thought before that:*

Paleng mari udan

EPIS.POS finish rain

‘It might have rained.’

(PAST TEMPORAL PERSPECTIVE)

- (2) **Context:** *You were watching the football game with Surabaya Muda but you fell asleep when the game was tied 2:2. They might have won (but you’re not sure).*

Surabaya Muda *paleng* sing menang (tapi aku durung weroh)

Surabaya Muda EPIS.POS REL win (but 1SG not.yet know)

‘Surabaya Muda might have won.’

(PRESENT TEMPORAL PERSPECTIVE)

Therefore, Javanese is an additional, unrelated language to those researched which provides evidence that epistemic modals allow for a past temporal perspective, but how this interaction between modality and temporality is represented depends on how tense is marked. Time permitting, I discuss *iso*, a circumstantial possibility modal and *oleh*, a deontic possibility modal. I show that these modals interact with temporality as expected under a tenseless analysis of Javanese, like discussed for *paleng*.

How tenselessness interacts with modality: A case study on *paleng* in Javanese

Jozina Vander Klok (University of British Columbia)

- Boogaart, Ronny (2007). 'The Past and Perfect of Epistemic Modals', in L. de Saussure, J. Moeschler and G. Puskas (eds.), *Recent Advances in the Syntax and Semantics of Tense, Aspect and Modality*. Berlin: Mouton de Gruyter, 47-70.
- Borgonovo, Claudia and Sarah Cummins (2007). 'Tensed Modals', in Luis Eguren and Olga Fernández Soriano (eds.), *Coreference, modality, and focus*. Amsterdam: John Benjamins, 1-18.
- Cinque, G. 1999. *Adverbs and Functional Heads*. New York: Oxford University Press.
- von Fintel, K., and Gillies, A. 2008. An opinionated guide to epistemic modality. In *Oxford Studies in Epistemology*, eds. Tamar Szabó Gendler and John Hawthorne, 32-62. Oxford: Oxford University Press.
- Condoravdi, C. 2002. Temporal interpretation of modals: Modals for the present and for the past. In *The construction of meaning*, eds. David Beaver, Stefan Kaufmann, Braady Clark and Luis Casillas, 59-88. Stanford: CSLI Publications.
- Demirdache, Hamida and Myriam Uribe-Etxebarria (2008). 'Scope and anaphora with time arguments: The case of 'perfect' modals', *Lingua* 118: 1790–1815.
- Drubig, Hans Bernhard (2001). 'On the syntactic form of epistemic modality', Ms., Universität Tübingen.
- Eide, Kristin (2003). 'Modals and tense', in Weisgerber, Matthias (ed.), *Proceedings of Sinn und Bedeutung 7*. Konstanz Universität, 120-135.
- Groenendijk, Jeroen and Martin Stokhof (1975). 'Modality and conversational information', *Theoretical Linguistics* 3:64-154.
- Hacquard, Valentine (2006). *Aspects of Modality*. Ph.D. dissertation, Cambridge: Massachusetts Institute of Technology.
- Homer, Vincent (2010). 'Epistemic Modals: High ma non troppo', in *Proceedings of NELS 40*.
- Horne, E. 1961. *Beginning Javanese*. vol. 3: Yale Linguistic Series. New Haven, London: Yale University Press.
- Laca, Brenda (2008). 'On modal tenses and tensed modals', in Chiyo Nishida et al. (eds.), *Proceedings of CHRONOS 2008*.
- Martin, Fabienne (2011). 'Epistemic modals in the past', in Berns, Janine, Haike Jacobs and Tobias Scheer (eds.), *Romance Languages and Linguistic Theory*. Amsterdam: John Benjamins, 185-202.
- Matthewson, L. and H. Rullmann (2012). Epistemic Modality with a Past Temporal Perspective. Paper presented at the Modality @ Ottawa U. workshop, April 2012.
- Robson, S. 2002. *Javanese Grammar for students, 2nd edition*. Glen Waverley: Monash Papers on Southeast Asia.
- Stowell, Tim (2004). 'Tense and modals', in Jacqueline Gueron et al. (eds.), *The Syntax of Time*. Cambridge: MIT Press, 621-636.
- Tonhauser, J. 2011. Temporal reference in Paraguayan Guaraní, a tenseless language. *Linguistics and Philosophy* 34:257-303.