On the syntax of TAM markers in East Javanese Jozina Vanderklok McGill University

The verb in Javanese is described as bare (Robson 1992), devoid of any information about tense, aspect, or modality (TAM). While Javanese often makes use of context to convey TAM information, there are many overt markers [Table 1]. In this paper, I explore the syntactic behaviour of TAM markers as spoken in the dialect of Paciran, Lamongan, East Java, a dialect which has not previously been discussed. Specifically, I first establish the grammatical status of these markers and their relative order. Secondly, I discuss how these markers may be divided into two types, based on their ability to front in yes/no questions, occur sentence-initially, and occur as a one-word answer. This work fits as part of emerging research on TAM markers in Austronesian languages, such as on Peranakan Javanese (Cole et al 2008), Tengger Javanese (Conners 2008), and Kelantan Malay (Kim 2010).

It is first important to establish whether a TAM marker is an auxiliary, verb, noun, or adverb. Based on a number of tests following Cole et al (2008) and Kim (2010), all **low** TAM markers in Paciran Javanese appear to be auxiliaries. These tests are illustrated with *iso* 'can'. First, they are not nouns, as none occur with *dudu*, negation that only modifies nouns (Horne 1961). Instead, all occur with *ora*, negation that modifies verbal predicates, as in (1). Secondly, these TAM markers are distinguished from verbs, as none can occur with verbal morphology such as the passive I prefix *di*-, or causative/applicative suffix *-no*, as in (2). Further, a subset of TAM markers must occur in a fixed relative order, correlating to Cinque's (1999) proposed hierarchy (this order is represented in Table 1 by thick border lines). These tests strongly suggests that all low TAM markers are auxiliaries.

All **high** TAM markers, however, appear to be adverbs. A first clue is that they all share the same suffix -e, such as *koyoke* 'it seems'. They all can occur in variable positions besides directly modifying the verb, such as sentence-initially or sentence-finally. Then, based on a test in Cole et al (2008) in forming yes/no questions, all high TAM markers do not block movement of a lower TAM marker, just like other adverbs such as *wingi* 'yesterday', such as in (4). Assuming that auxiliaries are heads, X^0 , while adverbs are located in Specifiers, only a higher auxiliary would block movement of a lower auxiliary by the head movement constraint (Travis 1984). This test provides strong evidence that all high TAM markers are adverbs. Also, with certain markers such as with *wes* 'completive past', they can have free word order. They are not nouns or verbs, as these markers share the same negation and verbal morphology facts as low TAM markers.

Concerning different types of TAM markers, I also show that there are two types in Paciran Javanese similar to Peranakan Javanese (Cole et al 2008) and Kelantan Malay (Kim 2010): (i) ones that can front in yes/no questions, and (ii) ones that cannot. However, in investigating a wider range of TAM markers, an important distinction from data in Peranakan Javanese and Kelantan Malay are brought to light. Not only the syntactically lowest TAM markers can front, but also the syntactically highest TAM markers can in Paciran Javanese [Table 1]. I propose that because the high TAM markers are adverbs, they can front in yes-no questions just like other adverbs such as *wingi* 'yesterday'; moreover, these are all markers that can also occur sentence-initially [Table 1]. The class of movable low TAM markers does not correlate with their ability to occur sentence-initially, or as a one-word answer. It remains

unclear whether the fact that only low TAM markers can front is a purely syntactic phenomenon or it can be correlated with other properties.

<u>Selected References</u>. Cole, P., Hara, Y., and Yap, N.T. 2008. Auxiliary Fronting in Peranakan Javanese. *Linguistics* 44:1-43. Conners, T. J. 2008. Tengger Javanese, Yale University: PhD. Kim, L. 2010. Modals and Aspect Markers in Kelantan Malay. *Handout, ISMIL 14*.

(1) TAM markers do not occur with dudu 'NEG.NOM', but with ora 'NEG.VBL'.

Mbak Supri **ora** /*dudu **iso** ngelangi. miss Supri NEG.VBL / NEG.NOM can swim 'Supri cannot swim.'

(2) TAM markers do not occur with verbal morphology.

*wong wadon **di**-iso (**di**-)demok karo wong lanang. person female PASS-can PASS-touch.by.hand with person male ('A woman can be touched by a man.')

- (3) <u>A subset of TAM markers can front in yes/no questions, but main verbs cannot.</u>
 - a. **Iso** Cak Kholiq gotong truck? can Mr Kholiq lift truck 'Can Kholiq lift the truck?'
 - b. * **Ngomong** Pak Khoim boso Inggris? speak Mr Khoim language English ('Does Khoim speak English?')

(4) Movement of a low TAM marker is not blocked by a high TAM marker in yes/no questions.

Iso Bu Maula **koyoke** gawe sego goreng? can mrs. Maula seem make rice fried 'Does it seem that Bu Maula is able to make fried rice?'

Table 1. Properties of TAM markers in Paciran Javanese.

	TAM marker	Sentence Intial	Front in Y/N Questions	1 word answer
Η	watake 'perceived evidential'	\checkmark	\checkmark	\checkmark
Ι	jegene 'perceived evidential'	\checkmark	\checkmark	\checkmark
G	koyoke 'it seems'	✓	\checkmark	~
Η	<i>ketoke</i> 'it seems'	✓	\checkmark	✓
	bonake 'inferential evidential'	\checkmark	\checkmark	\checkmark
	mesthine 'must, should'	✓	\checkmark	✓
	kudune 'should'	✓	\checkmark	✓
	mesthi 'epistemic must'	\checkmark	-	\checkmark
L	kudu 'deontic must'	×	×	\checkmark
0	wes 'completed action in past'	×	×	✓
W	durung 'not yet'	×	×	\checkmark
	arep 'FUT, want'	×	×	×
	ape 'FUT'	×	×	×
	lagek 'PROG, just a moment ago'	×	×	\checkmark
	ewoh 'busy'	×	×	×
	tau 'ever, once'	×	\checkmark	\checkmark
	oleh 'deontic may'	×	\checkmark	\checkmark

iso 'can'	×	\checkmark	\checkmark