Investigations on prosodic focus marking in Indonesian

Earlier studies have argued that Indonesian does not mark stress at the word level (e.g. van Zanten et al 2003), but only marks phrase-final boundaries by pitch accent (Goedemans and van Zanten 2007). Accordingly, Goedemans and van Zanten (2007) posit that the only element that can be focused is the phrase-final element. Indonesian must therefore use syntactic means to place an element in focus (e.g. Suparno 1993) as it cannot contrast between non-phrase-final words, such as in (1). Here, Goedemans and van Zanten (2007) postulate that the accent can only be on *coffin* in Indonesian. Because of these properties, these authors "firmly believe that contrastive accents on the phrase level are impossible".

In this paper, I further investigate whether or not Indonesian can mark information status (whether an element is new, contrastive, or old information) on the phrase level through three basic experiments that include two types of focus: contrastive focus and corrective focus. It is important to define the types of focus, as languages such as French still can mark information status in corrective focus contexts (e.g. Féry 2001), but generally does not otherwise. I look at both the contrastive/corrected element and the given element, as languages may differ in which element is marked by prosody. Whether or not accent has shifted is tested by extracting measurements of the prosodic correlates pitch, duration and intensity in Praat. Preliminary results from impressionistic work support Goedemans and van Zanten's speculations, and specifically, do not occur in contrastive or corrective focus contexts.

Since Indonesian is predicted not to be able to shift the accent to a non-phrase-final word to indicate focus, all three experiments test this by forcing the participant to utter contrastive or corrective elements without changing the syntax. All participants are of the same language stratum (East) in Indonesia (Prentice 1994). **Experiment 1** tests whether Indonesian marks information status in **contrastive focus**. Participants (17 total) utter chess instructions, as in (2). There are four conditions: condition 1, (2a), where the target elements are both the same as the antecedent; condition 2, (2b), where the first target element is different and the second is the same as the antecedent; condition 3, (2c), where the first target element is the same and the second is different as the antecedent; and condition 4, (2d), where both target elements are different from the antecedent. The key condition in this experiment is 2, where in languages such as English, a shift in accent would take place. However, for Indonesian, the prediction is that the accent marking will be constant across all four conditions.

Experiment 2 (11 participants) tests whether Indonesian marks information status in **corrective focus**. In this experiment, Speaker A (a research assistant) first utters a chess move, and then Speaker B (the participant) responds with the 'correct' chess instruction, as in (3). The utterances are parallel to Experiment 1, in order to facilitate direct comparison. However, the antecedent of the 'corrected' target element is not in the same string, but in Speaker A's utterance. Because of this, different conditions arise: condition 2A, where the corrected antecedent of the target element is *different-same* but the antecedent within the same string is *same-same*, and condition 3A, where the corrected antecedent of the target element is *same-different*, but the antecedent within the same string is *same-same*. In all other conditions, the corrected antecedent as well as the antecedent within the same string has the same characteristics. The aims of this experiment are to understand if (i) meta-linguistic correction (Ladd 1996) plays a role in the use of prosody in Indonesian, and (ii) if it matters if the antecedent is in the same string or not. To get a clearer picture of (ii), I conducted a third experiment.

Experiment 3 also investigates how Indonesian uses prosody in **corrective focus**. This experiment, however, the participant (9 total) directly self-corrects the chess instruction, such as in (4), so the antecedent is in the same string. There are 3 conditions (*different-same, same-different, different-different*), corresponding to the previous experiments. In this experiment, a different type of negation is used as well: *bukan*, which negates nominal predicates and corresponds to narrow focus in this case. As it appears that Indonesian does not shift prominence in both contexts, results from prosody correlates may shed light on how it is different from languages like English or French.

Investigations on prosodic focus marking in Indonesian

Selected References:

Goedemans, Rob and Zanten, Ellen van. 2007. 'Stress and Accent in Indonesian.' In Vincent van Heuven and Ellen van Zanten, eds. *Prosody in Indonesian languages*, 35-62.

Féry, C. 2001. Focus and Phrasing in French. In: *Audiateur Vox Sapientiae: A festschrift for Arnim von Stechow*. Berlin: Akademie Verlag, 153-181.

Zanten E. van, R.W.N. Goedemans & J.J.A. Pacilly. 2003. The status of word stress in Indonesian. In J. van de Weijer, V.J. van Heuven & H.G. van der Hulst, eds. *The phonological spectrum, Volume II: Suprasegmental structure*. Amsterdam/Philadelphia: John Benjamins, 151–175.

(1) Q: Did he make a wooden coffin or an iron one?
A: He made a [WOODen]$_{+F}$ coffin (Goedemans and van Zanten 2007:58)

(2) Experiment 1. Contrastive Chess Instructions

a.	Pindahin C2 ke **C2**	Cond.1: *same-same*
b.	Pindahin C2 ke *D***2**	Cond.2: *different-same*
c.	Pindahin C2 ke **C***4*	Cond.3: *same-different*
d.	Pindahin C2 ke *D4*	Cond.4: *different-different*

'Move XX to XX.'

(3) Experiment 2. Interactive corrective Chess Instructions

a.	Pindahin B7 ke **D7**	
	Jangan! Pindahin B7 ke *G***7**	Cond.2: *different-same*
b.	Pindahin G7 ke **D7**	
	Jangan! Pindahin G7 ke *G***7**	Cond.2A: *different-same*
c.	Pindahin G5 ke **G3**	
	Jangan! Pindahin G5 ke **G***7*	Cond.3: *same-different*
d.	Pindahin C2 ke **C5**	
	Jangan! Pindahin C2 ke **C***2*	Cond.3A: *same-different*
e.	Pindahin D5 ke **F5**	
	Jangan! Pindahin D5 ke *B8*	Cond.4: *different-different*

'Move XX to XX'
'Don't! Move XX to XX.'

(4) Experiment 3. Corrective chess instruction

a.	Bukan ke C2, pindahin ke *D***2**	Cond.2: *different-same*
b.	Bukan ke C2, pindahin ke **C***4*	Cond.3: *same-different*
c.	Bukan ke C2, pindahin ke *D4*	Cond.4: *different-different*

'Not XX, move to XX.'