

The Number System in Indonesian, Radical Underspecification, and Interface Disambiguation

This paper proposes a new account of the number system in Indonesian. I propose that Indonesian has {neutral} as the only value for the Number head in the syntax, unlike other languages such as English, which set the range of its values as {singular, plural, neutral}, as shown in Table 1. The apparent individuation effect of a bare nominal in Indonesian is an epiphenomenal consequence of the syntax-external substantiation disambiguation strategy at the conceptual/morphological interfaces. Among many favorable empirical results, this analysis correctly captures the previously unnoticed observation that Indonesian does not have any noun whose count/mass denotation cannot be predicted from its prototypical conceptual manifestation in light of our real world knowledge.

English grammaticalizes the mass count distinction (1-2): *oat* is count while *wheat* is mass, even though conceptually they both denote a grain of cereal. English also encodes the singular vs. plural distinction syntactically by means of *a/an* vs. *-s*. Thus, English encodes {singular, plural, neutral} for the number. Carson 2000 and Chung 2000 show that Malay/Indonesian selects *neutral* as a possible value for the Num head. Thus, (3a, b) show that *kuda* ‘horse’ can denote either singular or plural instances of the horse kind whereas its reduplicated variant specifically denotes plural. The question then arises as to how individuation effects can be expressed in Indonesian since examples like (4a, b) doubtless exist that require individuation of a bare noun (Carlson 1977, Chierchia 1998).

I propose that, in Indonesian, individuation via the {singular, plural} values does not exist in syntax *per se*; its effects are nothing but a consequence of the syntax-external substantiation at the morphological/semantic interface(s). This idea brings a number of favorable consequences that are otherwise hard to obtain. First, it captures the observation that a bare noun in Indonesian can be interpreted as singular or plural unless special morphological processes such as reduplication or contextual considerations tell us otherwise. This freedom is unavailable in English, which grammatically encodes the distinction in the syntax. The present analysis also solves problems with Chierchia’s 1998 Nominal Mapping Parameter. Chierchia proposes that languages can be classified as one of the three types depending on the denotation of their bare nominals; for present purposes, what he calls [+arg, -pred] languages map bare nominals onto kinds and have two morphosyntactic properties; allow bare nominal arguments, and they lack plural morphology. Indonesian does not fit into this type of language since it allows bare nominals but it does have plural morphology via reduplication, as in (3). Our analysis solves this problem. Indonesian allows bare nominals because their extension is a self-saturated mass (as in *I need water* in English) due to the neutral specification. Indonesian also develops reduplication to derive plurality in the morphological component. Finally, the underspecification-based analysis predicts that Indonesian should have no nouns whose mass/count property cannot be predicted exclusively from its prototypical conceptualization since the decision is made by semantics. This prediction is indeed borne out from (5a, b). (5a) shows that *furniture* is grammatically a mass noun in English. (5b) shows that *perabotan* ‘furniture’ is countable.

Table 1: Number Values in Indonesian/Japanese vs. English

Languages	Grammatically Encoded Num Values
Indonesian	{neutral}
English	{singular, plural, neutral}

- (1)a. David did not eat many oats. (2)a. * David did not eat many wheat(s).
b. * David did not eat much oat. b. David did not eat much wheat.
- (3)a. kuda sedang makan. b. Kuda-**kuda** sedang makan.
horse Prog eat horse-**Red** Prog eat
'A horse is eating./Horses are eating.' '*A horse is eating./Horses are eating.'
- (4)a. Ali tidak jadi membeli **tiga buku**. 'There are three books that Ali failed to buy.'
Ali Neg finished buy **three book** [three books>Negation]
a.' Ali tidak jadi membeli **buku**. 'Ali did not buy any book.'
Ali Neg finished buy **book** [Negation>book, * a book>Negation]
- (5)a. * Bob bought three furnitures at the store.
b. Bob membeli tiga perabotan di toko.
Bob bought three furniture in store
'Bob bought three pieces of furniture at the store.'

References

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