

The Emergence of the Unmarked in Standard Malay Partial Reduplication

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ABSTRACT

This paper analyses the process of partial reduplication in standard Malay. It has widely been claimed by previous Malay scholars that partial reduplication is a process of copying the initial syllable of the base. This paper argues that copying the initial syllable of the base is not actually how the reduplicative morpheme is copied. Based on the previous data from Farid (1980), Asmah (1981) and Zaharani (2000), this paper claims that partial reduplication is a process of copying the first onset in the initial syllable of the base, while the vowel is a reduced vowel [ə], whatever the vowel of the base is. Thus, the size of the reduplicative morpheme is a light syllable. The reduced vowel [ə] and the CV reduplicative morpheme emerge in SM partial reduplication can be accounted for by proposing the idea of the emergence of the unmarked, which is developed within Optimality theory (Prince & Smolensky, 1993).

Keywords: Partial reduplication, Malay, the emergence of the unmarked, Optimality theory

INTRODUCTION

Malay reduplication has long received much formal attention, particularly from Malay scholars such as Asmah (1986, 1993), Abdullah (1974), Arbak (1981), Farid (1980), Ajid (1981), Nik Safiah *et al.*

(1994), Nik Safiah (1995), Zaharani (2000, 2005) and Tajul (2005). According to these previous studies, partial reduplication in standard Malay (henceforth, SM) is a process of copying the initial syllable of the base into the reduplicative morpheme. How and what determines the size of the reduplicative morpheme, however, was not discussed in those studies. This implies that the size of the reduplicative morpheme of SM partial reduplication is depending on the size of the initial syllable of the base. If

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the initial syllable of the base consists of C and V elements, the size of the reduplicative morpheme would then be light syllable. If CVC is the size of the initial syllable of the base, heavy syllable would be the size of the reduplicative morpheme. In addition, it is worth mentioning that the size of the reduplicative morpheme in SM partial reduplication consists of only CV elements, i.e. light syllable, regardless of the number of elements in the initial syllable of the base. We exemplify some of the relevant examples:

- a. [bu.daʔ] ‘child’ [bə-budaʔ]
RED-child ‘all kinds of children’
- b. [bo.la] ‘ball’ [bə-bola]
(round object) RED-ball ‘ball’ (foods e.g. fishball)
- c. [taŋ.ga] ‘stairs’ tə-taŋgə
RED-stairs ‘neighbours’
- d. [ram.but] ‘hair’ rə-rambut
RED-hair ‘small hairs’

It is clear from the above examples that reduplicative morpheme in SM partial reduplication consists of CV elements only, regardless of what the size of the initial syllable of the base is. Apparently, the definition of partial reduplication in SM, as described by the previous scholars, can only hold for CV initial bases as the reduplicative morpheme also contains CV elements. However, the definition fails to account for the copying process for CVC initial bases. Observe that the V element in the reduplicative morpheme is not the same as the vowel in the initial syllable of the base. The V element in the reduplicative morpheme is always realised as a schwa,

regardless of what the vowel in the initial syllable is.

In short, the way that partial reduplication is described in the previous studies is inadequate. With the transformation and innovation occur in the world of phonology, this paper thus intends to reanalyse the process of partial reduplication by adopting the idea of the emergence of the unmarked (henceforth, TETU), which is developed within Optimality theory (after this, OT). This paper argues that copying the initial syllable of the base is not actually how the reduplicative morpheme is copied in SM, as claimed by some previous scholars. Instead, only the initial onset of the root is copied into the reduplicative morpheme, while the vowel is always a schwa [ə], regardless of what the vowel in the initial syllable of the base is.

DATA

This study is based on secondary data that are available in the literature. In order to analyse the issue concerned in this study, works like Farid (1980), Asmah (1981) and Zaharani (2000) were used¹. The data were categorized into two groups, namely, (1) open initial syllable bases, and (2) closed initial syllable bases. Below, the relevant data of each group are exemplified as:

Open initial syllable bases - CV		Closed initial syllable bases – CVC	
Bases	Reduplicated words	Bases	Reduplicated words
a. laki	ləlaki	tanga	tətanga
b. kuda	kəkuda	səndi	səsəndi
c. siku	səsiku	rambut	rərambut
d. lanjit	ləlanjit	pəŋdʒuru	pəpəŋdʒuru
e. surjut	səsurjut		

In the following discussion, we will show how the two groups can satisfactorily be accounted for by employing the idea of TETU in OT.

PROPOSED ANALYSIS: THE EMERGENCE OF THE UNMARKED (TETU) IN OT

In sound systems, there are certain types of structure such as segments, a combination of segments or prosodic structures which are favoured over others (Kager, 1999, p. 5). For example, front unrounded vowels are unmarked as compared to front rounded vowels, and open syllables as compared to closed syllables (Ibid). In Ilokano reduplication, the reduplicative morpheme disfavours a light syllable (monomoraic), i.e. CV (Downing, 2006, p. 11). In the sound system of Malay, however, CV syllable is favoured over CVC and schwa is preferred over other vowels like front high vowels. This means that CV and schwa are the unmarked syllable size and vowel in Malay, respectively.

In SM partial reduplication, the V segment in the light reduplicative morpheme is a reduced segment i.e. a schwa. The V segment surfaces as schwa regardless of what vowel in the base is. Before we offer an OT analysis to explain the process of partial reduplication, it is worth discussing how the correspondence relation between the segments involved when words are reduplicated. In OT, the correspondence relation is discussed under Correspondence theory. This theory provides a general framework for defining faithfulness

constraints (McCarthy & Prince, 1995, 1999, cited in McCarthy, 2008, p. 195). It proposes that each candidate supplied by GEN includes an output representation and a relation between the input and the output (ibid.). This is called the correspondence relation and is conventionally indicated by \mathfrak{R} . The formal definition of the Correspondence theory is given below:

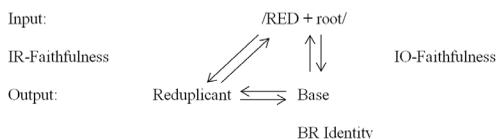
Correspondence theory

(McCarthy & Prince, 1995, p. 262)

Given two strings S_1 and S_2 , correspondence is the relation R between the elements of S_1 to those of S_2 . Elements $\alpha \in S_1$ and $\beta \in S_2$, are referred to as correspondents of one another when $\alpha R \beta$.

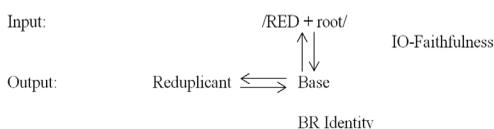
S_1 is the input, while S_2 is the output. The relation between S_1 and S_2 is called IO-correspondence relation. In base and reduplicant (BR) correspondence, S_1 is the base while S_2 is the reduplicant. The correspondence relation between input/output (IO) and base/reduplicant (BR) can be illustrated in two models: (1) Full Model, and (2) Basic Model (McCarthy & Prince, 1995b; McCarthy, 1995). In the Full Model, reduplication involves three directions between the correspondence, i.e. between (i) the input/root and the base/output (IO-Faithfulness), (ii) between the base and the reduplicant (BR-Faithfulness) and, (iii) between the root/input and the reduplicant (IR-Faithfulness). The following diagram illustrates the relation of the three directions:

Full Model (McCarthy & Prince, 1995b)



Unlike the Full Model, there are only two faithfulness constraints contain in the Basic Model. The faithfulness constraints are IO-Faithfulness and BR-Faithfulness constraints. In the Basic Model shown below, the R reduplicant, which is the output for the morpheme /RED/ is underspecified. The morpheme /RED/ gets its phonological specification from the base (B) via copying.

Basic Model (McCarthy & Prince, 1995b)



In this analysis, the interaction between the partial reduplication and the faithfulness constraints in the Basic Model, i.e. (1) IO-Faithfulness and (2) BR-Faithfulness will be discussed in this section. The works by McCarthy and Prince (1994a, 1994b, 1999), Steriade (1998) and Alderete (1999) claim that marked structure, which is optimal in the base output, is not optimal in the reduplicative morpheme is what we call as the Emergence of the Unmarked (TETU). As proposed by McCarthy and Prince (1999), this tendency is formalised by the following constraint ranking schema in OT:

TETU constraint ranking (adapted from McCarthy & Prince 1999, p. 261):

IO-Faithfulness >> Markedness constraints >> BR-Faithfulness

We should now begin the OT analysis. In this analysis, the Basic Model is used to account for the issue under discussion. The general idea of TETU is that the unmarked structure is visibly active in the reduplicant, but not in the input base. For instance, Malay can have the CVC syllable structure in the input but not in the reduplicant. In this case, NOCODA is the markedness constraint which can be violated in the reduplicant but it must be satisfied in the input base.

NOCODA

*C]_σ (syllables are open)

As the reduplicative morpheme in the SM partial reduplication consists of CV elements, a constraint which only allows the reduplicative morpheme to be of that size is crucially needed in the constraint ranking. The constraint that plays a crucial role here is RED=σ, as defined below:

RED=σ

Reduplicative morpheme is a syllable.

The second constraint, which is crucial to account for the data, is REDUCE. As we observed, a vowel in the two patterns of the reduplicative morpheme is a reduced vowel that is schwa, regardless of what the vowel in the base is.

REDUCE

Vowels lack quality.

In works such as that of Alderete *et al.* (1999), McCarthy and Prince (1994a, 1999) and Steriade (1988), it is said that reduplicative morphemes always illustrate unmarked structure, or what we call the

Emergence of the Unmarked (TETU). Those previous works claim that a marked structure is optimal in the base output, and is non-optimal in reduplicative morphemes. In OT, a marked structure in the base can be prevented from occurring in the reduplicative morpheme by ranking the relevant B-R faithfulness constraint beneath (some) markedness constraints (ibid.). We shall demonstrate shortly that this solution works well to produce unmarked structures in light reduplicative morphemes in Malay.

As discussed above, NOCODA is the markedness constraint. We shall now discuss the relevant faithfulness constraints to account for the data. In the SM partial reduplication, two faithfulness constraints (MAX-IO and MAX-BR) are needed to show the correspondence relation between S1 (input) and S2 (base/reduplicant).

MAX-BR

All the segments of the base are contained in the reduplicative morpheme (no partial reduplication).

The faithfulness constraint, MAX-BR, requires that every element in the base has a correspondent in the reduplicative morpheme. This means that this constraint is violated as only a few segments of the base are copied into the reduplicative morpheme. This constraint therefore must be ranked beneath the IO-faithfulness constraint, i.e. MAX-IO, in the constraint ranking.

MAX-IO

Every segment in the input must have a correspondent in the output.

The constraint above requires every segment in the input to have its correspondent in the output. Thus, segmental deletion in the base will violate MAX-IO, which is highly ranked in the TETU constraint ranking. As MAX-IO dominates MAX-BR in the constraint ranking, a coda segment in the reduplicant is allowed to be deleted rather than in the base. Bringing all the constraints we have discussed thus far, I now establish the following tableau for SM partial reduplication. The constraint ranking is:

MAX-IO >> RED= σ >> NOCODA >> REDUCE >> MAX-BR:

/RED-siku/	MAX-IO	RED= σ	NOCODA	REDUCE	MAX-BR
a. si-siku				*!	**
b. ʔ so-siku					**
c. siku-siku		*!		**	

The above tableau shows that candidate (c) with the total reduplication is ruled out. This candidate violates RED= σ as the reduplicative morpheme is larger than the size, i.e. one syllable. In contrast to candidate (c), candidate (a) does not violate RED= σ . This candidate however violates REDUCE as the vowel in the reduplicative morpheme is a high quality vowel, i.e. [i] which the tongue is positioned high in the mouth. Since two candidates, (a) and (c), have been ruled out, the remaining candidate, i.e. candidate (b), therefore emerges as the winner.

In addition to the above candidates, there is another candidate that should also be considered in the constraint ranking of the SM partial reduplication. As the C element in the light reduplicative morpheme copies

next constraint, LEFT ANCHOR-BR. Candidate (d) violates LEFT ANCHOR-BR as the leftmost segment in the reduplicant does not coincide with the leftmost segment in the base. Thus, Candidate (b) is the optimal candidate as it does not violate LEFT ANCHOR-BR.

The analysis presented above is focusing on open initial syllable bases. In what follows, we demonstrate how closed initial syllable bases are reduplicated. With the same set of constraints ranking, we establish the following tableau for the word /tanja/ → [tə-tanja].

MAX-IO >> RED=σ >> NOCODA >> REDUCE >> MAX-BR >> LEFT ANCHOR-BR.

/RED-tanja/	MAX-IO	RED=σ	NO CODA	REDUCE	MAX-BR	LEFT ANCHOR-BR
a. tanj-tanja			**!		**	
b. ɤtə-tanja			*		***	
c. tən-tanja			**!	*		
d. gə-tanja					***	*!
e. tə-taga	*!					
f. ta-tanja			*	*!		
g. tanja-tanja		*!	**			

As can readily be seen in the above tableau, MAX-IO is a highly ranked constraint. Candidate (e) therefore is ruled out as one of the segments in the base is deleted. Candidate (g), with the total reduplication, is also ruled out as the reduplicative morpheme contains more than a syllable. The presence of the coda segments in the reduplicative morpheme and in the base in candidates (a) and (c) causes the candidates to violate NOCODA twice. Since the vowel [a] in the reduplicative morpheme in candidate

(f) is not a reduced vowel, the candidate thus violates REDUCE. Candidates (b) and (d) are not violating REDUCE, since the vowel in the reduplicative morpheme in both candidates is a reduced vowel, [ə]. These candidates however, violate MAX-BR since the reduplicative morphemes are not totally reduplicated. Therefore, they violate MAX-BR three times. Since candidates (b) and (d) are now in a tie situation, the evaluation passes on to the next constraint. Since candidate (g) is ill-anchored, candidate (b) is chosen as the winner.

CONCLUSION

The above discussion clearly shows that partial reduplication in SM is not a copying process of the initial syllable of the bases, as claimed by previous Malay scholars. In this OT analysis, it is shown that the claim could not hold for closed initial syllable bases as the reduplicative morpheme for SM partial reduplication consists of light syllable. As demonstrated above, the light reduplicative morpheme is controlled by the markedness constraint, NOCODA. This constraint will rule out the candidate, in which the reduplicative morpheme is larger than the light syllable. Meanwhile, the V element in the CV reduplicative morpheme is a reduced vowel (i.e. a schwa), while REDUCE is the constraint which plays a role in ruling out the candidate with other types of vowel. To sum up, both the light reduplicative morpheme and the reduced segment (i.e. schwa) are the unmarked syllable structure and segment, respectively, which emerge in the SM partial reduplication. Both the

unmarked cases occurred in the SM partial reduplication could adequately be accounted for by adopting the constraint ranking of TETU: IO-faithfulness >> markedness constraints >> BR-faithfulness, in the analysis.

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ENDNOTE

¹It should be mentioned that the data presented here are all from the previous scholars mentioned above. Note that the data above given by those scholars are all nouns alone. There might be other types of word that can also be partially reduplicated like adverbs (e.g. /kadaŋ/ - [kəkadaŋ]).

