A usage-based account of verbal reduplication in Taiwan Southern Min

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Abstract

Verbal reduplicative construction (VRC) in Taiwan Southern Min (TSM) is highly productive and is manifested in its own fashion in prosodic/phonology, syntax, semantics and pragmatics. Under the framework of construction grammar, we propose that TSM VRC forms a family of constructions, comprising various subtypes of VRCs, which are linked up by inheritance relations. Further, we claim that the XX le^0 VRC is the most prototypical construction, and others inherit the schema from it. Finally, building on a usage-based account, we show some evidences that XX le^0 VRC occurs the most frequently and, thus, the most entrenched among other TSM VRCs.

Keywords: verbal reduplicative construction, Taiwan Southern Min, construction grammar, a usage-based account

1. Introduction

Reduplication is a commonly seen linguistic phenomenon across different language families, such as Sino-Tibetan, Indo-European, Australasian families and many others. As a morphological process, reduplication operates cross-linguistically on nouns, verbs, adjectives, adverbs, and classifiers. The worldwide distribution of reduplication also shows diversity of meanings. Meanings expressed by the reduplicated forms, as suggested in previous studies (Haiman 1980, Moravcsik 1987, Tai 1993, Huang 1996, Regier 1998, and Zhang 1999), are enveloped in the meanings of "repetition" (e.g., Mongolian *bayn bayb* 'often, constantly' (Regier 1998)), "plurality" (e.g., Tagalog *araw^c áraw* 'every day' (Blake 1917)) (cite from Moravcsik 1987: 318), distributivity (Mandarin *renren* 'everybody' Tai (1993)), "intensity" (e.g., Thai *dīdii* 'to be extremely good' (Haas1946)) (cite from Moravcsik 1987: 321), "attenuation" (e.g., Swahili *maji-maji* 'somewhat wet' (Ashton 1952)) (cite from Moravcsik 1987: 323), and so forth. Although the reduplications are varied in forms and meanings, they are, however, triggered by different iconicity motivations. (Haiman 1980).

The purpose of this paper is to identify different types of verbal reduplication

found in Southern Min (a Chinese dialect/language) as spoken in Taiwan. It will be shown that verbal reduplications in Taiwan Southern Min (TSM) correspond to different but related iconic motivations, and can be construed as related constructions. Furthermore, based on the frequency count of the five types of verbal reduplications in TSM, it is to be demonstrated that these verbal reduplication constructions also link up as a family.

2. Verbal reduplication in Taiwan southern Min

It is proposed by Tang (1992) that reduplication can be divided into two types. One type of the reduplication is called "morphological reduplication", in which the reduplication is unproductive, irregular and unpredictable. The reduplication for this type is obligatory since the reduplicated part together with its non-repeated part can be taken as a lexical word. In TSM, some adjectives and verbs as well, fall under this category (e.g., $ang^5 ki^3ki^3$ 'very red', $kik^4thui^5thui^5$ 'pretend dull'). The other type of reduplication, on the contrary, is productive, regular and predictable. This type of reduplication is subject to syntactic regulation, also called "syntactic reduplication", which will be dealt with in this paper. In TSM, verbs can be simply grouped in a general way by the number of syllables, monosyllabic and disyllabic. For monosyllabic verbal reduplications, five types of postverbal elements are taken after the reduplicated verbs, as shown below.

(1) cau^2cau^2 **le^0**   (final particle le^0)
      run-run   PTC
      'to run for a little while'

(2) $ciah^8ciah^8$ **$tiau^7$**   (phase complement)
      eat-eat   away
      'to eat up (something)'

(3) $iong^7iong^7$ **hai^7khi^3**   (resultative complement)
      use-use   break-away
      'to be broken because of over use'

(4) se^2se^2 **hoo^7**   **$ching^1$-khi^3**   (causative complement)
      wash-wash   CM   clean
      'cause (something) to be clean by washing'

(5) cu^{2}cu^2 **cit^8-tua^7-tui^1**   (quantifier complement)

      cook-cook   one-big-heap

      'cook (something) overmuch'

As shown in (1)-(5) examples, monosyllabic verbs in TSM, can be followed by five types of postverbal elements: final particle *le^0*, phase complement, resultative complement, causative complement and quantifier complement. There are four types of disyllabic verbal reduplications. They involve compound verbs, verb-object phrases, verb-complement phrases, and coordinate compound verbs, as illustrated in the following examples.

(6) a. siu^{1}li^2 a'. siu^{1}li^{2}li^2 le^0

        fix   fix-fix   PTC

        'to fix'   'to fix (something) a little'

(7) a. lau^{5}kuann^7 a'. kuann^7 lau^{5}lau^5 le^0

        run-sweat   sweat   run-run   PTC

        'to sweat'   'make yourself sweat for a little while'

(8) a. li^{3}phua^3 a'. li^{3}li^3 phua^3

        tear-break   tear-tear   break

        'tear up'   'to tear up thoroughly'

(9) a. chut^{4}jip^8 a'. chut^{4}chut^{4}jip^{8}jip^8

        exit-enter   exit-exit enter-enter

                                         'in and out'

These four types of verbal reduplication exhibit different reduplication patterns, such as XYY in (6a'), YXX in (7a'), XXY in (8a') and XXYY in (9a').   Although these four types of disyllabic verbal reduplications are regular, productive and predictable, they are, however, less productive than monosyllabic verbal reduplications. Hence, this paper will mainly focus on monosyllabic verbal reduplications, and more in-depth discussion will be presented in the following sections.

3. Verbal reduplication in TSM as construction

Verbal reduplication in TSM should not be treated simply as the formation of a lexical word under morphological processes. As pointed out by Cheng (1988), it also involves the semantic properties of aspect and phase. It can be taken as a construction

from the perspective of construction grammar (Goldberg 1995, 2006) since it has phonological, syntactic, semantic, and pragmatic characteristics which are absent in non-reduplicative counterpart. Below, we briefly discuss these characteristics of the verbal reduplicative construction (VRC) in TMS.

3.1 Phonological properties

Cheng (1988) maintains that in TSM, those reduplicative verbs that need to take postverbal elements (see section 2) are separated from their postverbal elements by pauses. Furthermore, the second syllable of the reduplicative verbs remains juncture tone while the first syllable shifts to context tone in terms of the Taiwanese tone sandhi rules.

3.2 Syntactic properties

The syntactic behaviors of VRCs in TSM are quite different from their non-reduplicative counterparts. The differences have to do with verbs, arguments and scope of negation. First, the direct object must be placed before the verb but not after the verb as illustrated below.

(10) a. li^2 $ciah^8$ png^7 $liau^2$ $chiah^4$ khi^3
      you   eat   rice   finished   then   go
      'You must finish the meal and then you can go (somewhere).'
   b. li^2 png^7 $ciah^8 ciah^8 le^0$ $ciah^4$ khi^3
      you   rice   eat-eat   PTC   then   go
      'Finish eating your meal and then you can go (somewhere).'
  *c. li^2 $ciah^8 ciah^8$ le^0 png^7 $ciah^4$ khi^3
      you   eat-eat   PTC   rice   then   go
  *d. li^2 $ciah^8 ciah^8$ png^7 le^0 $ciah^4$ khi^3
      you   eat-eat   rice   PTC   then   go

In (10a), the direct object png^7 'rice' follows the transitive verb $chiah^8$ 'eat'. But (10b) shows that when the transitive verb reduplicates itself to be $chiah^8 chiah^8$ 'eat-eat', the direct object precedes the reduplicated verb. Moreover, the ungrammaticality of (10c) and (10d) shows that the direct object can only precede the reduplicative verb. Next, in terms of referentiality, the direct arguments of VRCs, can be either nonreferential, or definite referential, but not indefinite referential as shown below.

(11) a. ka7   png7   ciah^{8}ciah^8 le^0

     OM   rice   eat-eat   PTC

     'Finish eating your meal.'   (nonreferential)

  b. li^2 cit^4 uann^2 png^7 chiah^{8}chiah^8 le^0

     2sg   this   CL   rice   eat-eat   PTC

     'Finish eating this bowl of rice.'   (definite referential)

 *c. li^2 cit^8 uann^2 png^7 chiah^{8}chiah^8 le^0

     2sg   one   CL   rice   eat-eat   PTC

     'Finish eating one bowl of rice.'   (indefinte referential)

  d. li^2 cit^4 nng^7 uann^2 png^7 chiah^{8}chiah^8 le^0

     2sg   this   two   CL   rice   eat-eat   PTC

     'Finish these two bowls of rice.'   (definite referential)

Last, the reduplicated verbs cannot be negated in TSM. This is evidenced by the ungrammaticality of (12b).

(12) a. i^1 bo^5 kong^{3}phua^3 pue^{1}a^2

     3sg   NEG   strike-break   cup

     'He did not break the cup.'

 *b. i^1 pue^{1}a^2 bo^5 kong^{3}kong^{3}phua^3

     3sg   cup   NEG   strike-strike-break

3.3 Semantic properties

Cheng (1988) categorizes two types of verbs to account for the semantic properties of the reduplicative verbs in TSM. The first type consists of semantic feature [+ volitional] and [+ durable], i.e., *ciah^8* 'eat' and *kong^7* 'say' ; the second type, of semantic features [빈 volitional] and [빈 durable], i.e., *si^2* 'die' and *phua^3* 'broke'. However, verbs such as *ho^2* 'good', *uai^1* 'crooked', *oo^1* 'black' and so forth, with the features [빈 volitional] and [+ durable] are unaccounted for by Cheng's classification.

(13) chiu^2 bong^1 liau^2 oo^{1}oo^1 khi^3

  hand   touch   finish   black-black   away

  'Hands are all dirty by touching (something).'

For a more comprehensive and systematic account, we adopt Van Valin's (2005) classification of verb types to show the range of semantic properties exhibited in reduplicated verbs in TSM. Van Valin' verb classes are state, activity, achievement,

semelfactive, accomplishment, active accomplishment verbs. As shown in Table 1 below, all five types of verbs can be reduplicated in TSM, yielding different but related meanings.

Table 1 Verb classes for TSM VRCs

Verb type	Reduplication	Meaning
Activity	$be^2 be^2 le^0$	'buy (something) for a little while'
Active accomplishment	$mia^5 chiam^1 chiam^1 le^0$	'Sign your name.'
State	$bai^2 bai^2 khi^3$	'cause to be ugly'
Achievement	$si^2 si^2 khi^3$	'cause to become dead'
Semelfactive	$sau^3 sau^3 le^0$	'cough for a little while'

3.4 Pragmatic properties

Verb reduplications in TSM are often used to soften the imperative speech act. (14a) is a blunt and direct command, but (14b) is a mild request or suggestion.

(14) a. li^2 chiu^2 se^2 liau^2 chiah^4 ciah^8

     you   hand   wash   finished   then   eat

     'Before you eat (something), you must wash your hands.'

   b. li^2 chiu^2 se^{2}se^2 le^0 ciah^4 ciah^8

     you   hand   wash   PTC   then   eat

     'Wash your hands before you eat (something).'

4   A usage-based account

A usage-based approach to linguistic analysis and explanation has been proposed by a number of cognitive linguists (Langacker 1987, 1988, Bybee 1995, Goldberg 1995, 2006, Croft 2001). The essential spirit of a usage-based account is that grammatical knowledge is not merely a structural representation in the mind of a speaker as assumed in the paradigm of structuralist-generative grammar, it also contains the knowledge of the use of utterances in communication. Thus, in a usage-based account, frequency of occurrence of particular grammatical constructions with their associated meanings also plays a central role. The account is largely experience-driven rather than given a priori in the mind of human beings. Frequency would, therefore, be a prime factor in examining the degree of entrenchment. Hence,

we propose a usage-based approach to account for how TSM VRCs are used. More specifically, we propose that they form a "construction family". It is maintained by Goldberg and Jackendoff (2004) that the "family" of constructions is defined as that they co-exist important properties but can be differentiated from certain specifics, containing their degree of productivity (e.g., the English resultatives). In the following paragraphs, we will show that TMS VRCs form a "construction family" with a hierarchy of subconstructions.

As mentioned in section 2, TSM monosyllabic verbs can take five types of postverbal element when undergoing reduplicate process. As discussed in section 3, this type of VRCs is a highly productive construction, and exhibits its unique properties in phonology, syntax, semantics and pragmatics. Therefore, from the perspective of Construction Grammar, we consider TSM monosyllabic verbal reduplication as a schematic construction, and the schema can be generalized as [XX *postverbal element*]. In the schema [XX *postverbal element*], the *XX* represents the reduplicative verbs which is fixed, while the variant item *postverbal element* represents an open slot that any equivalent grammatical item can fit in this slot, (e.g., final particle le^0 'PTC', *phase complements*, *resulative complements*, hoo^7 *complements or clauses*, and *quantifier complements*). The [XX *postverbal element*] schema can be divided into two subconstructions: [XX le^0] and [XX *C*]. For the [XX *C*] VRC, it is further categorized into four different subtypes of complements that follow the reduplicative verb XX: [XX *PC*], [XX *CC*], [XX *RC*] and [XX *QC*].

Goldberg (1995:67) indicates that "constructions form a network and are linked up by inheritance relations, which motivate many of the properties of particular constructions". She proposes four inheritance links: polysemy links, metaphorical extension links, subpart links, and instance links. The motivation of inheritance links is described by Goldberg (1995: 72) as that "construction A motivates construction B iff B inherits from A". Accordingly, we would propose that in the [XX *postverbal element*] VRC, there exists an inheritance relation among the subconstructions: XXle^0 and XX*C*.

Croft and Cruse (2004) also propose that every time a word or a construction is employed, a node or pattern of nodes is activated in the mind, and frequency of activation affects the establishment of that information, which brings its ultimate storage as an idiomatic unit in grammar. The storage is referred to as "entrenched". In terms of entrenchment, if a word form is frequently enough in use, it will be stored independently (Langacker 1987). Based on the usage-based model, we count the tokens that co-occur with the reduplicative verbs. The data source is from the Taiwanese Spoken Corpus directed by Jane Tsay and James Myers at National Chung Cheng University. From this corpus, two different live broadcasts, totally around 35

hours, are selected. The result of frequency count is shown in table 2.

Table 2 Token that co-occur with [XX *postverbal element*] VRC

Type of construction	Token
XX *le^0*	86
XX *phase complement*	6
XX *resultative complement*	10
XX *causative complement*	8
XX *quantifier complement*	1

As the result shown above, the XX *le^0* construction occurs most frequently and perhaps also most prototypical among the [XX *postverbal element*] VRCs. As addressed earlier, in a usage-based account, the more frequent or productive word token or construction tends to be more entrenched or to be listed as a grammatical unit. The XX *le^0* construction has a high type frequency which is listed in the mental lexicon. Therefore, it is predicted to be applied or inherited by the subtypes of VRCs or other newly [XX *postverbal element*] VRCs. As pointed out (Goldberg 1995), "in a type of link that recurs often throughout the grammar can be said to have a high type frequency and is therefore predicted to be productively applied to new cases which share the relevant factors associated with the existing cases" (ibid: 77).

5   Conclusion

The VRCs examined in this paper are found only in TSM, but not in Mandarin. In this paper we have uncovered their characteristics in phonology, syntax, semantics, and pragmatics. We propose to account for their usages and occurrences in the framework of construction grammar. Built on a usage-based account (Langacker 1987, 1988), we provide some evidence that the XX *le^0* construction among the family of TSM VRC is the most frequent and productive, thus, the most entrenched. Other less frequent and productive subconstructions inherit from it in terms of the concept of "link" proposed by Goldberg (1995).

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