ON THE MORPHOSYNTAX OF THE NEW EXPRESSION *BUCUO V* IN TAIWAN MANDARIN: A CASE STUDY OF RULE BORROWING[*]

Jen Ting
National Taiwan Normal University

ABSTRCT

We study the morphosyntactic properties of the new expression *bucuo*-V 'good to V' in Taiwan Mandarin (TM) and argue that it results from borrowing of a word formation rule in Taiwan Southern Min (TSM) in the context of language contact. We first show that the *bucuo* V 'good to V' sequence is a word and not generated in the syntax proper. Then we demonstrate that the morphological structure of *bucuo*-V 'good to V' is unique for the grammar of TM in patterning more with that of its equivalent(s) in TSM than with that of any other existing word in TM. We move on to argue that a morphological rule that generates *bebai/bephai*-V 'good to V' in TSM is responsible for deriving *bucuo*-V 'good to V' in TM when the rule is borrowed or transferred from TSM to TM via language contact. The results of this study lend support to Thomason's (2006, forthcoming) theory of rule borrowing as well as provide evidence for the view that syntactic change may result from syntactic borrowing.

Key words: morphosyntactic, *bucuo*-V, Taiwan Mandarin, Taiwan Southern Min, language contact, rule borrowing

1. INTRODUCTION

Contact-induced structural change has long been an area of heated debate in contact linguistics. It is traditionally assumed (e.g., Lass 1980) that language change is caused by internal evolution and thus rule-governed and regular. Under this assumption, systematic changes induced by language contact are unexpected because externally-motivated changes would be unpredictable (Poplack and Levey 2010). Even if one adopts the view that contact-induced change may affect the structural (e.g., morphological and syntactic) domains, whether such change comes about as an indirect consequence of lexical borrowing (King 2000; Sankoff 2002) or results from application of morphosyntactic rules (Thomason 2006, forthcoming) or mechanisms (e.g. Harris and Campbell 1995; Campbell 1998) remains unsettled. In this article, we use the new expression *bucuo* V 'good to V' in Taiwan Mandarin (henceforth TM),[1] illustrated in (1), as a case study to show that it serves as an instance of rule borrowing, thus in support of direct involvement of morphosyntactic rules in contact-induced change.

(1) a. Zhege   xingren bing   <u>bucuo   chi</u>. (Tseng 2003:105)
       this.CL almond cake   not.bad eat
      'This almond cake tastes good.'
   b. Zhengbu dianying zhende shi hen <u>bucuo   kan</u>. (Tseng 2003:105)
      whole.CL movie   really SHI very not.bad see
      'The whole movie is indeed really very good to see.'
   c. Zheben shu   kanqilai   <u>bucuo   du</u>. (Kao 2008:224)
      this.CL book read.QILAI not.bad read
      'This book appears to be fun to read.'

The *bucuo*-V 'good to V' sequence is unique or even considered as deviating from the grammar of TM (Kao 2008) in that while *bucuo* 'good'[2] may occur in an attributive position (2a), a predicative position

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[1] We assume with Her (2009, 2010) that TM is a variety of Mandarin spoken in Taiwan, distinct from Beijing Mandarin or Peking Mandarin spoken in Mainland China.
[2] *Bucuo* is a word composed of the morphemes *bu* 'not' and *cuo* 'bad, wrong'. When used to evaluate something, the word *bucuo*, according to Shang (2006), is nearly

(2b) or a postverbal position (2c-d) in Mandarin Chinese (cf. Kao 2008 and references cited therein), it does not commonly occur in a preverbal position as illustrated in (1).

(2) a. hen <u>bucuo</u>   de yijian
    very not.bad   DE opinion
    'a very good opinion'.
  b. Weidao   <u>bucuo.</u>
    taste   not.bad
    The taste is good.'
  c. Nin de ke   jiang de <u>bucuo</u>. (Shang 2006)
    you DE class say   DE not.bad
    'You lectured well.'
  d. Zhe chi-qilai   <u>bucuo.</u>
    this eat-QILAI not.bad
    'This tastes good.'

According to Tseng (2003), *bucuo* V 'good to V' is used only in the spoken register. Kao (2008:215) calls it a "new structure" in TM and describes it as popular among young people. The emergence of this new expression has overwhelmingly been pointed out in the literature (Tseng 2003; Kao 2008; Lien 2008; Cheng 2014) to be due to the influence of Taiwan Southern Min (henceforth TSM), a language[3] spoken by most of the bilinguals in Taiwan. However, most, if not all, of the scant literature on this expression merely presents description of the facts but no discussion of its morphosyntactic properties and in what mechanism this new expression arises in TM if its emergence is indeed motivated by

synonymous with *hao*, differing only in that the latter expresses high degrees of approval while the former expresses lower degrees of approval. We thus gloss *bucuo* as 'not.bad' and translate it as 'good' throughout this article. The same consideration will apply to the near synonyms *bebai* and *bephai* in TSM.
[3] We assume with Her (2009:383) and the references cited therein that what are called dialects of China should be languages.

language contact. The purpose of this article is thus also to fill these important gaps in the existing research.

The article is organized as follows: Section 2 examines the morphosyntactic properties of the sequence *bucuo* V 'good to V' and argues that the expression is a word and is not generated in the syntax proper. Then we demonstrate in Section 3 that the morphological structure of *bucuo*-V 'good to V' (more specifically the syllable structure) is unique for the grammar of TM in not patterning with that of any other existing word in TM, thus suggesting that the new expression is unlikely to be internally motivated. Section 4 shows that *bucuo*-V 'good to V' share the same morphological structure with its TSM equivalent(s), and thus its emergence is more likely to be externally caused by language contact with TSM. We then argue that a morphological rule that generates *bebai/bephai*-V 'good to V' in TSM is responsible for deriving *bucuo*-V 'good to V' in TM when the rule is borrowed or transferred from TSM to TM via language contact. More specifically, the rule deriving an adjective by merging a disyllabic adverb with a verb is transferred from TSM to TM, giving rise to the new expression *bucuo* V 'good to V'. The results of this study lend support to Thomason's (2006, forthcoming) theory of rule borrowing as well as provide evidence for the view that syntactic change may result from syntactic borrowing. Section 5 discusses the mechanism underlying the rise of *bucuo* V 'good to V' in TM. We argue that its emergence is due to a word formation rule borrowed from TSM and that rules transferred from one language to another may be subject to language-specific constraints. Section 6 concludes the article and provides implications for the role played by syntactic borrowing in the theory of syntactic change.

2. *BUCUO* V 'GOOD TO V' AS A WORD

In this section, we argue that sequences like *bucuo* V 'good to V' are not generated in the syntax proper, but rather are generated as a word in the morphology component. It will be further argued in Section 3 that the word *bucuo*-V 'good to V' has a morphological template [adv-V]$_{adj}$ with the first component being disyllabic. A priori, there are at least three

possible structures for the *bucuo* V 'good to V' sequence. First, as adverbs often occur in the position immediately before the verb as shown in (3), it appears natural that *bucuo* 'good', being in a preverbal position, is an adverb.

(3) a. Ta <u>xingfen-de</u>   pao-jin-lai. (Li and Thompson 1981:323)
        he excited-DE run-enter-come
        'He excitedly ran in.'
    b. Wo <u>yanli-de</u>   zebei   ta   le. (Li and Thompson 1981:323)
        I   stern-DE reproach he LE
        'I sternly reproached him.'

  Under this approach, Tseng (2003:105) claims that *bucuo* 'good' in this construction is an adverb, but not clarifying whether *bucuo* 'good' is a phrase or part of a word. Kao (2008:227) points out that *bucuo* 'good' is an adverbial in the *bucuo* V 'good to V' sequence, just like its TSM counterpart *bebai* 'good' in the *bebai* V 'good to V' construction (see Lien 2011 for a similar approach). One could further claim that with *bucuo* 'good' being adverbial, the sentence can be analyzed as a middle sentence on a par with middle constructions in English (4) (e.g., Keyser and Roeper 1984; Stroik 1992, 1995, 1999):

(4) The bread cuts easily.

  As illustrated in (4), the grammatical subject of an (English) middle sentence is interpreted as a theme argument of the verb and the verb is often modified by an adverb. If *bucuo* 'good' is an adverb, then the *bucuo* V 'good to V' construction appears analogous to a middle sentence in that its grammatical subject apparently receives a theme interpretation and *bucuo* 'good' serves as the licensing adverb in a middle sentence.

  Another possible approach is that since *bucuo* 'good' alone can be an adjectival predicate as in (2b), the *bucuo* V 'good to V' construction apparently resembles complement object deletion (COD) constructions in English (5a) (cf. Lasnik and Fiengo 1974), where an adjectival predicate takes a complement clause with an object gap. The object gap *e*

in (5b) may be derived by null operator movement as proposed by Chomsky (1982) or by A'-binding as proposed by Cinque (1990) depending on what theory one adopts.

(5) a. The article was too long for us to read *e*. (Cinque 1990:98)
    b. The article was too long [O_i for [us to read e_i]] (Cinque 1990:99)

   Under this approach, the *bucuo* V 'good to V' construction like (1) would have a structure as in (6) (with irrelevant details omitted).

(6) Zhege   xingrenbing [$_{VP}$ bucuo   [$_{CP}$ …chi   *e*]]
    this.CL almond.cake   not.bad   eat
    'This almond cake tastes good.'

   Despite the initial plausibility of the above two syntactic approaches to the structure of *bucuo* V 'good to V', we argue for an approach where the *bucuo* V 'good to V' sequence is analyzed as a word that is generated in the morphology component and not in the syntax proper. For the sake of concreteness, we assume with Lieber and Scalise (2007) that the principles needed to construct complex words are distinct from principles needed to construct phrases and sentences. We further assume with researchers embracing a lexicalist theory (e.g., Chomsky 1995; Li 2005) that the former principles operate in the lexicon while the latter in the syntax proper.[4]

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[4] It is necessary to note that even if one assumes the view that 'Chinese word formations mirror the language's syntactic phrasal structures to a great extent' quoted from an anonymous reviewer, the rules responsible for word formation are not identical to those responsible for constructing syntactic phrases. Consider the following examples from Duanmu (2000):

(i) a.   xin shu
        new book
        'a new book'
   b. *hen xin shu
        very new book
        'a very new book'

To argue for the wordhood of *bucuo* V 'good to V', we apply two tests that Wei (2005) provides in support of his analysis of *rongyi* V 'easy to V' and the synonymous *hao* V 'easy to V'. He claims that the former has a structure where the "*tough*" predicate *rongyi* 'easy'[5] is a free morpheme taking a complement clause while the latter is a word.

The first test Wei (2005) provides is that parts of a word cannot be separated by a syntactic element such as a PP. According to him, this is because the intervention of the PP would induce violation of the Lexical Integrity Hypothesis (or LIH), according to which rules that apply in syntax to phrases cannot affect the internal structure of words (Jackendoff 1972; Huang 1984). We find that independently words in Chinese are inaccessible to syntactic operations whatever theory this fact is captured by (e.g. the Limited Access Principle, together with the statement of Morphological Merge as suggested by Lieber and Scalise 2007). To illustrate, a subordinative compound with an adv-V template in the sense of Chao (1968) such as *bei-ming* 'sadly honk' from L. Liu (2010) does not allow a PP occurring between the two components of the lexical compound.[6]

(ii) a. xin   de   shu
      new DE book
      'a new book'
    b. hen xin de   shu
       very new DE book
      'a very new book'

Hen 'very' may precede *xin* 'new' in (iib), but not in (ib). A simple and reasonable explanation is that *xin* 'new' in (i) is part of a word but in (ii) is a syntactic phrase. As a result, the former cannot be modified by *hen* 'very' but the latter can. If principles operating in the morphology are identical to those operating in the syntax proper, then we would lose this simple account for the contrast between (ib) and (iib).

[5] Wei (2005) does not spell out the syntactic category of a "*tough*" predicate like *rongyi* 'easy'. We assume that it is an adjectival predicate whether it is analyzed as a verb or an adjective (see Huang, Li and Li 2009 for relevant discussion).

[6] Wei (2005) provides the contrast in (i) to show that *hao* V 'easy to V' cannot be intervened by prepositional phrases, but *rongyi* V 'easy to V' can.

(7) *Da yan   bei <u>zai kong-zhong</u> ming.
     big wild.goose sadly at air-middle honk
     Intended: 'Big wild geese were honking in the air.'

When we apply this PP intervention test to *bucuo*-V 'good to V', we find that *bucuo* 'good' and the following verb cannot be separated by prepositional phrases as shown by the contrast in (8).

(8) a. Zhurou-xian <u>zai tiaowei   shang</u> hai   bucuo   chi.[7]
         pork-filling at seasoning top   rather not.bad eat
         'The pork filling tastes good in terms of seasoning.'
    b. *Zhurou-xian hai   bucuo   <u>zai tiaowei   shang</u> chi.
         pork-filling rather not.bad at seasoning top   eat
         'The pork filling tastes good in terms of seasoning.'

This acceptability contrast would be left unexplained if *bucuo* 'good' is an adverbial adjunct modifying the predicate as under a syntactic middle analysis, or is an adjectival predicate taking a clausal complement as under a COD analysis. On the other hand, facts like (8) follow from the word approach to *bucuo* V 'good to V' given whatever approach that accounts for the LIH effects illustrated by (7).

(i) Zhezhong shi   hen rongyi/*hao yong qian   jiejue. (Wei 2005)
    this.Cl   matter   very easy   easy with money settle
   'This matter is very easy to settle with money.'

   However, as pointed out by an anonymous reviewer, some speakers may find (i) with *hao* 'easy' acceptable. Then for those speakers, *hao* 'easy' must ALSO be able to serve as a tough predicate like *rongyi* 'easy' in such examples, contra Wei's specific analysis of *hao*-V 'easy to V'. Nevertheless, the word analysis of *hao*-V 'easy to V' may still be necessary in order to explain the contrast in (i) for some speakers and the contrast involving the phase marker in (9).

[7] http://blog.xuite.net/ca062/blog/200120990-
%E3%80%90%E9%A3%9F%E8%A8%98%E3%80%91%E4%BA%94%E6%9F%B3%
E9%A3%9F%E5%A0%82

Another test for wordhood Wei (2005) provides is based on the distribution of phase markers like *wan* 'finish' and *hao* 'good'. Assuming with Tang (1992), phase markers are semi-affixes that lexically combine with morphemes (or roots) to form compounds or complex verbs. As shown in (9), the verb following *rongyi* 'easy' is a proper host for the phase markers to attach to, but the verb following *hao* 'easy' is not. This contrast is used by Wei to argue for the proposal that the verb following *rongyi* 'easy' is a free morpheme, but that following *hao* 'good' is part of a word.

(9) a. Zhejian   shi   hen rongyi/*hao zuo-<u>wan</u>. (Wei 2005)
        this.Cl   matter   very easy   easy do-finish
        'The thing is very easy to finish.'
   b. Yingwen hen rongyi/*hao   xue-<u>hao</u>. (Wei 2005)
        English very easy   easy   learn-good
        'English is very easy to learn well.'

Turning to *bucuo* V 'good to V', we find that the verb in the *bucuo* V 'good to V' sequence cannot be followed by a phase marker such as *wan* 'finish' in (10).

(10) *Zhepian wenzhang bucuo   du-<u>wan</u>.
         this.Cl   article   not.bad read-finish
         'This article is good to finish reading.'

If *bucuo* 'good' is an adverbial adjunct or an adjectival predicate, it is not clear what renders (10) unacceptable (cf. acceptability of cases involving *rongyi* 'easy' in (9)). On the other hand, *bucuo* V 'good to V' patterns with *hao* V 'easy to V' in being incompatible with a phase marker. Facts like (10) thus pose a serious challenge to the syntactic approaches whether it is a syntactic middle analysis or a COD analysis,[8] but favor a lexical word approach to *bucuo* V 'good to V'.

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[8] An anonymous reviewer suggests providing "good examples with adverbial adjunct or adjectival predicate which are compatible with a phase marker." It is, however, not clear whether Chinese has any constructions on a par with English middles that generally require an adverb licensor. The V-*qilai* construction is under debate regarding whether it

It is necessary to note that although the *bucuo* V 'good to V' sequence is generated as a word like *hao*-V 'easy to V', yet unlike *hao*-V 'easy to V' it does not involve what is termed "lexical middle formation" by Wei (2005). According to him, the word *hao*-V 'easy to V' in (11a) has a lexical middle structure as in (11b).

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can be treated on a par with English-type middles (see e.g., Sung 1994, Shyu et al. 2013). Therefore, we assume with Universal Grammar that a verb in a syntactic middle should possibly be modified by a PP, as shown by the English middle in (ia), or modified by a phase marker, as shown by the English middle in (ib) where we assume that the particle *out* in the phrasal verb denotes a similar function like that of phase markers in Chinese:

(i) a. The book reads easily in less than 1 hour.
       http://www.amazon.in/Advanced-Macking-Seduction-Course-
       Edition/dp/8589992020
   b. The book sells out easily. (Iwata 1999)

As for the COD construction in Chinese, its structure is akin to that of *tough* constructions in that in both constructions, an adjectival predicate takes a complement clause with an object gap. As shown by Wei (2005) in (i) of note 6 and in (9), repeated here as (ii) and (iii) respectively, the *tough* predicate *rongyi* 'easy' indeed can take a complement clause hosting a PP modifying the predicate or hosting a predicate with a phase marker:

(ii) Zhezhong shi   hen rongyi/*hao   yong qian   jiejue. (Wei 2005)
       this.Cl   matter very easy   easy   with money settle
       'This matter is very easy to settle with money.'
(iii) a. Zhejian   shi   hen rongyi/*hao zuo-wan. (Wei 2005)
          this.Cl   matter very easy   easy do-finish
          'The matter is very easy to finish.'
    b. Yingwen hen rongyi/*hao   xue-hao. (Wei 2005)
       English   very easy   easy   learn-good
       'English is very easy to learn well.'

(11) a. Zheben shu   hen   hao-du.
        the.CL   book very easy-read
        'The book is very easy to read/ The book reads easily.'
     b. [Zheben shu]$_i$ hen hao-du t$_i$.

In (11), *hao-du* 'easy to read' is a lexically derived compound, where the external theta-role, coming from the head *du* 'read', is saturated, not realized syntactically; only the internal theta role remains and maps to the theme argument in the grammatical object position. Since no external theta-role is assigned by the verbal compound, given Burzio's (1986) generalization, there is no accusative Case assigned to the grammatical object. The object *zheben shu* 'this book' then raises to the grammatical subject position to receive Case. Wei claims that this process is analogous to what happens in middle constructions as in (12), the difference being that the adverb *easily* in English (12) is a syntactic adjunct, whereas the adverb *hao* 'easy' in Chinese (11b) modifies the head in the compound.

(12) [Bureaucrats] $_i$ bribe easily t$_i$.

Turning to *bucuo*-V 'good to V', at first blush it appears feasible to treat it on a par with the lexical middle *hao*-V 'easy to V' given that the subject of a *bucuo*-V 'good to V' sentence, like that of *hao*-V 'easy to V', is apparently interpreted as a theme argument of the verb. In the literature (e.g. Tseng 2003), the *bucuo* V 'good to V' sequence (e.g., (1a)) is often paraphrased as a V-*qilai* 'V-QILAI' sentence as in (13), which generally receives a (syntactic) middle structure analysis (e.g. Sung 1994, but see Shyu et al. 2013 for a different account).

(13) Zhege xingren bing chi-qilai   bucuo.
      this.CL almond. cake eat-QILAI not.bad
      'This almond cake tastes good.'

We argue that *bucuo*-V 'good to V' sentences do not have a structure of the lexical middle constructions. If a *bucuo*-V 'good to V' sentence involves (lexical) middle-like formation, then irrespective of whether

one assumes that middles sentences are derived syntactically (Keyser and Roeper 1984; Stroik 1992, 1995, 1999) or presyntactically (e.g. Fagan 1988, 1992; Zribi-Hertz 1993; Ackema and Schoorlemmer 1994, 1995), in this structure the external theta-role of the compound word is suppressed and the grammatical subject receives an internal theta-role from the compound. However, while most *bucuo*-V 'good to V' sentences do have grammatical subjects that are construed as a theme argument receiving an internal theta-role which presumably percolates from the head of the compound, there are instances like *bucuo-xiao* 'good-laugh: funny' in (14) and *bucuo-wan* 'good-play: fun' in (15) that cannot be analyzed in this fashion.

(14) a. Jintian zhe ji   sihu   hai   bucuo-xiao.[9]
      today   this episode seem tolerably not.bad -laugh
      'The episode today seems to be funny.'
    b. … geren   juede   ye hai   bucuo-xiao.[10]
       myself think   also still   not.bad -laugh
      'I myself think it's also pretty funny.'
    c. Zang hua   hen duo   ye   shi laogeng, danshi
      dirty word   very many   also be   cliché   but
      bucuo-xiao.[11]
      not.bad –laugh
      'Most of the dirty words are also clichés but are funny.'

(15) Han feifu   nanzi liaotian qishi   bucuo-wan.[12]
     and not.rotten man   chat   actually not.bad-play
     'It is actually fun to chat with men who are not readers of boys' love.'

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[9] https://www.ptt.cc/bbs/ComeHere/M.1162477165.A.B0B.html

[10] https://tw.movies.yahoo.com/movieinfo_review.html/id=2173ando=1

[11] http://forum.u-car.com.tw/thread.asp?forumid=173939

[12] http://sll23581317.pixnet.net/blog/post/138929063-%E5%92%8C%E9%9D%9E%E8%85%90%E7%94%B7%E5%AD%90%E8%81%8A%E5%A4%A9%E5%85%B6%E5%AF%A6%E4%B8%8D%E9%8C%AF%E7%8E%A9(%E6%88%96%E6%98%AF%E6%8C%87%E4%BB%96%E5%BE%88%E5%A5%BD%E7%8E%A9%3F!

In these examples, the grammatical subject is not the object of being laughed at in (14) or the object of being played in (15), thus not behaving like a theme argument as Wei (2005) argues for the subject of the lexical middle *hao*-V 'easy to V'. We thus conclude that the word formation process of *bucuo*-V 'good to V' is not analogous to that of the lexical middle word *hao*-V 'easy to V'.

In this section, we have argued that the sequence *bucuo* V 'good to V' is a word, and is not generated in the syntax proper. In the next section, we will consider the issue of whether the emergence of this new expression is internally or externally motivated and reach the conclusion that the emergence of *bucuo*-V 'good to V' is not likely to be internally caused.

3. THE RISE OF *BUCUO*-V 'GOOD TO V' BEING INTERNALLY CAUSED?

In the literature on language change, a distinction is often drawn between internally and externally motivated change (Milroy 1992; Campbell 1998; Croft 2001). Internally caused change is any change that can be traced to structural properties of a language while externally caused change is triggered by sociolinguistic factors such as language contact and social differences between speakers (Hickey 2012). Regarding the motivation of the new expression *bucuo*-V 'good to V', we argue that the emergence of *bucuo*-V 'good to V' is not so likely to be internally motivated by showing that it has a unique morphological structure (more specifically the syllable structure) in comparison to the morphological structure of other words in TM in general.

We shall start with discussing the morphological template of *bucuo*-V 'good to V'. The word is formed by merging *bucuo* 'good' with a V on its right to form an adjective. Given that *bucuo* 'good' is disyllabic, it is not plausible to treat it as a prefix because prefixes in Mandarin Chinese are generally monosyllabic, (e.g., some common prefixes including *lao*- 'added to a surname, usually showing respect', *ke*- '-able', etc. (Chao 1968; Li and Thompson 1981). If *bucuo* 'good' is a prefix, it

would not pattern with other members in the class of prefixes in Mandarin Chinese. We thus do not analyze *bucuo* 'good' as a prefix attached to V. Judging from the relation between the first and second component of the word, *bucuo*-V 'good to V' falls into the type of modifier-head compound under Chao's (1968) typology of compounds in Chinese. The morphological template of *bucuo*-V 'good to V' can thus be represented as [adv-V]$_\text{adj}$.

It is necessary to note that the V part of *bucuo*-V 'good to V' is claimed to be subject to a monosyllabicity constraint in the literature (Tseng 2003; Kao 2008). This constraint, however, as pointed out by Cheng (2014), appears to be getting relaxed. According to Cheng (2014), based on corpus results obtained from a Google search, the verbs following *bucuo* 'good' can now be disyllabic, including *wanle* 'have fun', *wanshua* 'play', *youwan* 'play' and *chuli* 'handle', etc. But still, if we consider the 260 tokens in her corpus, we find that 237 of them (91.1%) are monosyllabic and that only 23 of them (8.9%) are disyllabic, suggesting that although the monosyllabicity constraint on the syllable length of the verb part in *bucuo*-V 'good to V' is getting relaxed, it still plays a role in regulating the pattern of *bucuo*-V 'good to V'.

Now we argue that the syllable structure of *bucuo*-V 'good to V' is quite unique and that it is this uniqueness that renders it unlikely to be motivated by language-internal properties because there may be no other word in TM that has the same syllable structure. Recall that in this template [adv-V]$_\text{adj}$, the first component *bucuo* 'good' is disyllabic and the second component is mainly monosyllabic but can be disyllabic; the resulting word is an adjective. For ease of discussion, we represent the syllable number of the morpheme by Arabic numbers and consider both the [2+1] and [2+2] combinations of morphemes within the word in turn.

Regarding the [2+1] combination, we compare a trisyllabic *bucuo*-V 'good to V' with other trisyllabic compound words in TM. Dong (2014) points out that Mandarin compound words composed of a disyllabic and a monosyllabic morpheme are nouns, such as in (16).

(16) a. youyong-chi
    swim-pool
    'swimming pools'

    b. dengshan-xie
      climb.mountain-shoe
      'mountain-climbing shoes'
   c. sushi-mian
      speed.eat-noodle
      'instant noodles'

Pan (2010) also observes that a trisyllabic adjectival compound with a modifier-head structure must be composed of a monosyllabic and a disyllabic morpheme, as illustrated in (17).

(17) a. bu-mingyu
      not-reputation
      'infamous'
   b. bu-rendao
      not-humane
      'inhumane'
   c. da-wuwei
      big-dauntless
      'of great bravery'

Taken together, the generalizations from the above two works indicate that TM in general does not have trisyllabic [2+1] adjectives of a modifier-head structure with the trisyllabic *bucuo*-V 'good to V' being an exception.[13]

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[13] An anonymous reviewer raises a question concerning the status of words like *yaoyan ju* ('glaring orange') or *tiankong lan* ('sky blue'). We argue that they are not (simple or complex) adjectives, but nouns, conforming to Dong's (2014) analysis. Such words can occur in argument positions.

(i) a. Ruhe xiuchu   baohe piaoling de tiankong-lan.(Google search)
     how modify.out rich   beautiful DE sky-blue
     'How does one modify (a picture) and get a rich and beautiful sky blue?'
    b. Women jueding qu biede zhaopian tou   tiankong-lan. (Google search)
      we   decide go other photo   steal sky-blue
      'We decided to go to other photos and steal sky-blue.'

Turning to the [2+2] combinations, TM also does not have [2+2] adjectives of a modifier-head structure in general except for *bucuo*-V 'good to V'. According to Wei (2012:58-60), among the 90 four-syllable words collected in a dictionary, only 12 of them have a [2+2] syllable structure and none of them have a modifier-head relation between the two components of the word. This finding clearly distinguishes a four-syllable *bucuo*-V 'good to V' from other four-syllable words in TM.

Having considered the structure of both trisyllabic and four-syllable words in TM, we conclude that *bucuo*-V 'good to V' has a fairly unusual syllable structure in comparison to other existing words in TM,[14] and

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According to Huang (2006), simple adjectives like *ganjing* 'clean' do not appear in predicate position unless they have a contrastive reading (see also C. Liu 2010), but complex adjectives like *bing-liang* 'ice-cold' are not so constrained.

We find that with a neutral reading, *tiankong-lan* 'sky blue' (iia) behaves like the noun *lanse* 'blue color' (iib), but unlike either the simplex adjective *ganjing* 'clean' (iic) or the complex adjective *bing-liang* 'ice-cold' (iid).

(ii) a. *Zhege fangjian (hen) tiankong-lan.
        this.CL room   very sky-blue
        'This room is sky blue.'
    b. *Zhege fangjian lanse.
        this.CL room   blue.color
        'This room is blue.'
    c. Zhege   fangjian *(hen) ganjing.
        this.CL room   very clean
        'This room is clean.'
    d. Zheping shui   bing-liang.
        this.bottle water ice-cold
        'This bottle of water is icy-cold.'

[14] An anonymous reviewer suggests that the sequence *bu nan* V in TM challenges our conclusion because it is a word with a syllable structure on a par with *bucuo*-V. If *bu nan* V is a word, then one would have a hard time explaining why *bu nan* V as a word cannot be modified by degree adverbs as shown in (ia), but *bucuo* V can as in (ib).

(i) a. *feichang/ hen bu nan chi
        unusually very not bad eat
        'extremely/very bad to eat'

thus that its emergence in TM is rather unlikely to be motivated by language-internal properties.

Before we move on to Section 4 to discuss the issue of external motivation of the rise of *bucuo*-V 'good to V', some remarks concerning *hao*-V 'good to V' are necessary so as to cast doubt on its being considered a possible (major) motivation of the rise of *bucuo*-V 'good to V' as occasionally suggested in the literature (e.g. Tseng 2003).

The word *hao*-V 'good to V' may be a word that is the closest to *bucuo*-V 'good to V' in meaning and structure in TM. Both *bucuo* 'good' and *hao* 'good' have similar meanings, only differing in that the latter expresses a high degree but the former a lower degree of appraisal (Shang 2006). Like *bucuo* 'good', *hao* 'good' can also occur in an attributive position (18a), a predicative position (18b) or a postverbal position (18c) in TM.

(18) a. hen <u>hao</u> de   yijian
        very good DE   opinion
        'a very good opinion'
     b. Zhedao cai weidao hen <u>hao.</u>
        this.CL dish taste   very good
        'The taste of this dish is good.'
     c. Wo de zi   xie   de   <u>hao</u>
        I   DE word write DE   good
        'I write well. '

Like *bucuo* 'good', *hao* 'good' can also merge with a V on its right to form a word, the category of which is generally assumed to be an

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   b. feichang/ hen bucuo chi
      unusually very not.bad eat
      'extremely/very good to eat'
A simple and reasonable explanation is that in the sequence *bu nan chi* in (ia), *nan chi* is a word and *bu* negates it in the syntax. Since the sequence *bu nan chi* is not a word, it cannot be modified by degree adverbs.

adjective (Chao 1968; Li and Thompson 1981). Chao (1968:212) claims that *hao* is a prefix in a broad sense but is in fact the first morpheme, i.e. an adverb, in the compound *hao*-V 'good to V'. The derived word is an "adjectival expression" (Chao 1968:747). Li and Thompson (1981:38) analyze *hao* 'good' as a prefix added to verbs to form adjectives. If this is the case, then *hao* ' good' must be a derivational affix, which turns the whole word into an adjective.

Abstracting away from the issue whether *hao* 'good' is a prefix or the first morpheme in a word, it is clear that *hao*-V 'good to V' is distinct from *bucuo*-V 'good to V' in terms of syllable structure. The adjective *hao*-V 'good to V' has a [1+1] syllable structure while *bucuo*-V 'good to V' has a [2+1] or [2+2] structure. They do not have the same syllable structure. This sole difference suffices to set them apart. Such constraints on syllable structure of words are commonly imposed on the morphology of Chinese. Consider the constraints on syllable count on NN compounds in TM as pointed out by Duanmu et al. (2015). Specifically, the length combinations [2+2], [2+1], and [1+1] are good, but [1+2] is bad (1 and 2 indicating syllable counts).

(19) Length Chinese | Gloss
Length	Chinese	Gloss
2+2	mei-tan shang-dian	'coal-(charcoal) (business)-store'
2+1	mei-tan dian	'coal-(charcoal) store'
*1+2	mei shang-dian	'coal (business)-store'
1+1	mei dian	'coal store'

We believe that [adv-V]$_{adj}$ compounds, like NN compounds in (19), are also subject to constraints on syllable structure.[15] We therefore claim that despite some close similarity in meaning and structure shared by *bucuo*-V 'good to V' and *hao*-V 'good to V', the latter is unlikely to be

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[15] An anonymous reviewer misunderstood and took the facts in (19) we cited from Duanmu (2015) as challenging our claim that there are no other adjectives in TM that have a [2+1] or [2+2] syllable structure. Notice that the compounds in (19) are nouns, whereas *bucuo*-V 'good to V' and *hao*-V 'good to V' are adjectives. Nouns may have [2+1] and [2+2] length combinations, but adjectives do not.

the motivation, or at best may not be the major motivation of the rise of the former.[16, 17]

If the rise of *bucuo*-V 'good to V' is unlikely internally motivated, a legitimate question naturally arises: what caused the emergence of this 'anomalous' expression in TM? In the next section, we will argue that the rise of *bucuo*-V 'good to V' is best treated as being externally motivated by language contact, confirming the claims made in the literature (Tseng 2003; Kao 2008; Lien 2008; Cheng 2014).

4. THE RISE OF *BUCUO*-V 'GOOD TO V' AS EXTERNALLY CAUSED

In this section, we argue that while the morphological structure of *bucuo*-V 'good to V' (more closely the syllable structure) is unusual for the grammar of TM, it shares the same morphological structure with its TSM equivalents *bebai/bephai*-V 'good to V'. Therefore, it is fairly reasonable to claim that the emergence of *bucuo* V 'good to V' in TM is motivated by expressions like *bebai/bephai*-V 'good to V' in TSM.

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[16] It has been pointed out that a purely exclusive dichotomy between internal vs. external motivation fails to capture the complexity of linguistic reality of language change (Dorian 1993; Thomason 2001; Hickey 2012). Examples where a mixture of motivations can be provided to show the interrelationship of the two sources of change. Given that *bucuo*-V 'good to V' and *hao*-V 'good to V' share close similarities in meaning and structure, we acknowledge and do not rule out the possibility that while the rise of *bucuo*-V 'good to V' is mainly motivated by language contact with TSM, it may also be reinforced by *hao*-V 'good to V' in TM.

[17] An anonymous reviewer suggests the possibility that rather than undergoing rule borrowing via language contact, *bucuo*-V 'good to V' may be coined by modelling after *hen hao* + V 'very good to V'. There is evidence showing that unlike *hao* V 'good to V', *hen hao* + V is not a word, and should be generated in the syntax proper. This is because *hen hao* 'very good' and V can be intervened by a PP, illustrated in (i).

(i) Jiaotong jingcha hen hao yong qian dafa.
   traffic   police very good use money dismiss
   'Traffic police officers are easy to dismiss with money.'
   https://tw.answers.yahoo.com/question/index?qid=20051125000014KK07626

   Most (if not all) of the previous research on the sequence *bucuo* V 'good to V' agrees that the emergence of this new expression is due to influence from corresponding expressions in TSM; however, there is no consensus on whether *bebai* V (Kao 2008; Lien 2008) or *bephai* V (Tseng 2003) is the TSM equivalent. We assume with Cheng (2014) that both *bebai* V and *bephai* V in TSM may be equivalents of *bucuo* V in TM because the use of *bebai* V and *bephai* V is merely a variation of different dialect varieties of TSM in Taiwan. We will thus refer to the TSM (near-)synonyms of *bucuo*-V 'good to V' as *bebai/bephai*-V 'good to V'.[18]

   We shall start with showing that *bucuo*-V 'good to V' shares the same morphological structure with its TSM equivalents *bebai/bephai*-V 'good to V'. There is evidence that the sequence *bebai/bephai* V 'good to V' in TSM, like *bucuo*-V 'good to V', is a word and is not generated in the syntax proper. Parallel to the behaviors of words such as *bei-ming* 'sadly honk' in TM as in (7), *bebai/bephai* V 'good to V' does not allow elements to be inserted between *bebai/bephai* 'good' and V as in (20a); furthermore, *bebai/bephai* 'good' cannot combine with a verb carrying a phase marker as in (20b) (cf. ex. (9)). Unacceptability of examples like (20) indicates that *bebai/bephai* V 'good to V' is best analyzed as a word, rather than as a structure where *bebai/bephai* modifies a VP in a syntactic middle construction (cf. (4) in English) or takes a VP complement in a complement object deletion (COD) construction (cf. (5) in English).

(20) a. *Tshaua te bebai/   bephai <u>di   tua juah tinn</u> im.
        herb tea not.bad not.bad on big   hot   day   drink
        'The herb tea is good to drink on a hot day.'

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[18] *Bephai* independently can be used by some speakers to mean 'good, not bad' in addition to meaning '(someone is) not bad/mean or (something is) not broken':

(i) Tso gikang   kisit   ma   bephai.
     be volunteer   actually   also   not.bad
    'Being a volunteer is actually good.'
    http://163.32.159.5/teachergroup/chinese/951208new/41.htm

Thanks to Yi-Hsin Cheng for pointing this out to me.

    b. *Tsittiau kua bebai/ bephai tian <u>liau</u>.
      this.Cl song not.bad not.bad listen finish
      'This song is good to finish listening.'

We thus conclude that *bebai/bephai* V 'good to V' in TSM, like *bucuo*-V 'good to V' in TM, is also a word, with the morphological template [adv-V]$_{Adj}$.

If we consider the syllable structure of *bucuo*-V 'good to V' in TM and *bebai/bephai* V 'good to V' in TSM, we find that both have the same syllable structure. As pointed out by Kao (2008), the V part of *bebai/bephai*-V 'good to V' can be monosyllabic or disyllabic as illustrated by *tautin* 'be together' and *phue-png* 'to go with rice'. Although it is claimed by Tseng (2003) and Kao (2008) that the V part of *bucuo*-V 'good to V' must be monosyllabic, as mentioned in Section 3, we assume with Cheng (2014) that the monosyllabicity requirement on the V part of *bucuo*-V 'good to V' is getting relaxed because disyllabic verbs, despite a small portion (8.9 %), can now occur in the V part of *bucuo*-V 'good', including *wanle* 'have fun', *wanshua* 'play', *youwan* 'play' and *chuli* 'handle', etc. We thus conclude that *bucuo*-V 'good to V' in TM and *bebai/bephai* V 'good to V' in TSM not only share the same morphological template [adv-V]$_{Adj}$, but also the same syllable structure.[19]

In summary, given that *bucuo*-V 'good to V' in TM and *bebai/bephai* V 'good to V' in TSM share the same morphological template [adv-V]$_{Adj}$ and syllable structure, it is fairly plausible to claim

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[19] Nevertheless, we find that the intuition reported in the literature appears to be correct, namely that the V part in *bucuo*-V 'good to V' is less likely to be disyllabic if compared to that in *bebai/bephai*-V 'good to V'. *Bebai/bepahi*-V 'good to V' seems to more readily allow disyllabic verbs to occur in the second component of the word as shown by the fact that instances such as *bebai/bephai-suihok* 'good to convince', *bebai/bephai-tsingli* 'good to tidy up', *bebai/bephai-hiangsiu* 'good to enjoy', *bebai/bephai-tsohue* 'good to be together with', *bebai/bephai-phuepng* 'good to go with rice', etc. are acceptable but their *bucuo*-V 'good to V' counterparts are not. This suggested difference between *bucuo*-V 'good to V' and *bebai/bephai*-V 'good to V' regarding the monosyllabicity tendency on the V part clearly needs more evidence from statistics as suggested by an anonymous reviewer, which we consider is not directly relevant to the purpose of this research and will be left to future studies.

that the emergence of the former is externally motivated by the latter via language contact.

5. THE MECHANISM OF EMERGENCE OF *BUCUO*-V

The previous studies in the literature (Tseng 2003; Kao 2008; Lien 2008; Cheng 2014) all point to the influence of TSM on TM for the emergence of *bucuo*-V 'good to V' in TM. While concurring with this view, we would like to argue that the previous works do not fully explicate what mechanism underlies the emergence of the new expression in the context of language contact. In this section, we will first point out that *bucuo*-V 'good to V' in TM and *bebai/bephai* V 'good to V' in TSM behave differently in allowing different inventories of verbs as the second component of the word. We then evaluate the previous analyses of this issue, concluding that none of them satisfactorily account for the emergence mechanism of *bucuo*-V 'good to V'. Finally, we argue that the expression of *bucuo* V 'good to V' arises from borrowing of a morphological rule from the source language, and therefore involves a process of rule borrowing as proposed by Thomason (2006, forthcoming).

5.1 Different Morphosyntactic Behaviors of *Bucuo*-V 'Good to V' and *Bebai/Bephai* V 'Good to V'

To facilitate the evaluation of the previous proposals for the emergence mechanism of *bucuo*-V 'good to V', it is instructive to consider the different behaviors of *bucuo*-V 'good to V' in TM and *bebai/bephai*-V 'good to V' in TSM. In Section 4, we pointed out that *bucuo*-V 'good to V' in TM and *bebai/bephai* V 'good to V' in TSM share the same morphological template [adv-V]$_{Adj}$ and syllable structure. Nevertheless, we would like to point out that it is not the case that they have identical morphosyntactic behaviors. In fact, *bucuo* 'good' and *bebai/bephai* 'good' allow different classes of verbs to merge with them to form an adjective. According to Cheng (2014), TM has examples like

bucuo-chuli 'good to handle' as in (21), but the TSM counterpart is not attested.

(21) a. Di yin   jiu   yong   AiPlayer. Ge ge yinyu   dou
       bass sound   simply use   AiPlayer each Cl register all
       hen   <u>bucuo   chuli</u>   de.[20]
       very   not.bad   deal with DE
       'Simply use AiPlayer to play the bass sound; all registers are
       very good to deal with.'
    b. A: Yong dan qing jiu   neng chu diao PU jiao haiyo
         use egg white simply able rid fall PU glue moreover
         qingchu san   miao   jiao yong bingtong.
         clean.rid three second   glue use   acetone
         'Simply use egg white to get rid of PU glue; moreover, use
         acetone to get rid of three second glue.'
     B: Xiexie ni. Man <u>bucuo   chuli</u>   de.[21]
        thank you very not.bad deal with   DE
        'Thank you. Very good to deal with.'

Similarly, we find that acceptable instances in TSM such as *bebai/bephai-suihok* 'good to convince', *bebai/bephai-tsingli* 'good to tidy up', *bebai/bephai-hiangsiu* 'good to enjoy', *bebai/bephai-tsohue* 'good to be together with',[22] *bebai-phuepng* 'good to go with rice' (cf. Kao 2008), etc. cannot find equivalents in TM.[23]

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[20] https://translate.google.com.tw/translate?hl=zh-TWandsl=zh-
CNandu=http://bbs.xiaomi.cn/thread/index/tid/6858669andprev=search
[21] The webpage where this example was first elicited has been removed. The examples in (21) are all we can find which contain words formed by *bucuo* 'good' and a disyllabic verb *chuli* 'handle'. In response to a reviewer's question, we do not have an account for why both examples containing *bucuo-chuli* 'good to handle' are followed by a sentence-final particle *de*. Scarcity of such examples and the mysterious fact of carrying a sentence-final particle *de* may suggest that *bucuo*-V 'good to V' with a disyllabic verb is still heavily constrained (see note 19).
[22] Thanks to Bo-fan Andrew Syue for providing these TSM data for me.
[23] We claim that the acceptable *bebai/bephai-tautin* 'good to be together with' in TSM (Kao 2008) does not have an acceptable counterpart in TM and that this fact is not, as suggested by an anonymous reviewer, due to *tautin* 'be together with' in TSM not having

Given the above discussion, we conclude that *bucuo*-V 'good to V' in TM and *bebai/bephai*-V 'good to V' in TSM, though having the same morphological template and the same types of verbs as the V part in the compound, behave differently with respect to the inventories of verbs participating in the patterns. This conclusion will help us evaluate the previous proposals regarding the mechanism underlying the rise of *bucuo*-V 'good to V'.

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a TM counterpart. The TSM verb *tautin* 'be together with' has a nearly synonymous TM equivalent *zaiyiqi* 'be together with'.

(i) a. Kah pingiu taotin   tioh ai   singkhun.
       with friend together just want sincere
       'When being together with friends, just be sincere.'
       http://twblg.dict.edu.tw/holodict_new/result_detail.jsp?n_no=6879andcurpage=1ands
       ample=%E4%B8%80%E8%B5%B7andradiobutton=1andquerytarget=2andlimit=20a
       ndpagenum=1androwcount=8
    b. Gen pengyou zaiyiqi yao   chengken.
       with friend   together want sincere
       'When being together with friends, just be sincere.'

There is evidence that *zaiyiqi* 'be together with' in TM, like its TSM counterpart *taotin* 'be together with', is a verb. As shown in (ii), *zaiyiqi* 'be together with' can be affixed with aspect markers such as *guo* for indicating experiential aspect as is the case for regular verbs (see e.g. Huang, Li and Li 2009).

(ii) Shegong   yu laogong qishi   congwei zaiyiqi-guo.
     social.worker and laborer actually never   together-EXP
     'social workers and workers actually have never been together.'
     https://translate.google.com.tw/translate?hl=zh-TWandsl=zh-
     CNandu=http://www.ngocn.net/column/361479.htmlandprev=search

Given that *zaiyiqi* 'together' can be a verb, it is then not clear why it cannot form a word with *bucuo* 'good' if the V part in *bucuo*-V 'good to V' and *bebai/bephai*-V 'good to V' can be equivalent counterparts of each other.

5.2 The Calque Approach

As a first step to evaluate the previous proposals, we argue that the emergence of *bucuo*-V 'good to V' does not involve a process along the lines of calques (i.e. loan translation). Kao (2008) suggests that TM speakers unconsciously or intentionally translate the TSM *bebai* V 'good to V' into the corresponding *bucuo* V 'good to V'. Similarly, Tseng (2003) conjectures that the expression of *bucuo* V 'good to V' in TM is copied from the TSM *bephai* V. These two views can be treated along the lines of calques or loan translation.

Calques are defined by Thomason (2001:260) [24] as "a type of interference in which word or sentence structure is transferred without actual morphemes…typically a morpheme-by-morpheme translation of a word from another language". We find that examples of calques from TSM to TM can be illustrated by instances like *deng wu ren* 'wait for no one' in TM, which is a borrowing of *tan bo lang* (lit. 'wait for no person') in TSM (cf. Yen 2008). If *bucuo*-V 'good to V' is coined by morpheme-by-morpheme translation of *bebai/bephai*-V 'good to V', then we would expect that every instance of *bucuo*-V 'good to V' would have a TSM *bebai/bephai*-V 'good to V' counterpart, contra fact. This is evidenced by the fact discussed in Section 5.1; that is, instances of *bebai/bephai*-V in TSM such as *bebai/bephai-suihok* 'good to convince', *bebai/bephai-tsingli* 'good to tidy up', *bebai/bephai-hiangsiu* 'good to enjoy', *bebai/bephai-tsohue* 'good to be together with', *bebai-phuepng* 'good to go with rice', etc. cannot find equivalents in TM.

5.3 The Pattern Replication Approach

Next, we argue against Cheng's (2014) claim that *bucuo*-V 'good to V' in TM is an instance of what is labelled by Matras and Sakel (2007) as pattern replication borrowing from TSM.

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[24] Similar definitions in the literature include the following. According to Crystal (2003), in loan transition, the morphemes in the borrowed word are translated literally or item by item. Likewise, loan translation is defined by Backus (2010) as involving words or phrases that are reproduced as more or less literal translation from one language into another.

According to them (2007:841), pattern replication is "replication of usage patterns (organisation, distribution, and the mapping of grammatical or semantic meaning) from a model language" and does not involve transferring the phonological shape and morphological form from one language to another. More specifically, pattern replication "involves identifying a structure that plays a pivotal role in the model construction, and matching it with a structure in the replica language, to which a similar, pivotal role is assigned in a new, replica construction…. The replica construction evolves around the new pivot in a way that generally respects various constraints of the replica language" (Matras and Sakel 2007:830). [25]

To illustrate, in the Macedonian dialects of Turkish, the infinitive in modal constructions has been replaced by a finite structure, just like its potential model languages (the contiguous languages of the Balkan):

(22) istiyor   git-sin
     want.3sg go-3sg.subj
     'He wants to go.'

In the potential model languages, the modal construction is introduced by a modal complementizer. The Macedonian Turkish modal construction, however, uses the historical optative ending as in Standard Turkish *git-sin* 'may he go!'. This state of affairs can be analyzed as follows: The pivotal feature of the regular Balkan modal construction is the finite expression of the target action, combined with the modality of
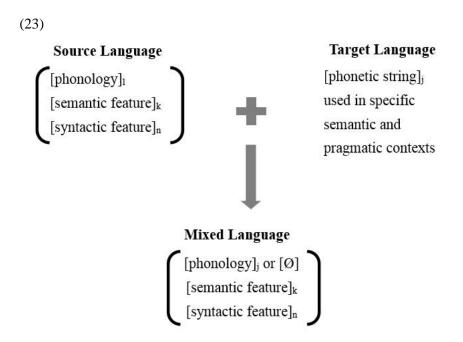
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[25] Under the analysis of Matras and Sakel (2007), pattern replication is distinguished from matter borrowing, where both the form and pattern are copied. To illustrate, an instance of matter borrowing from TSM to TM can be found in words like *qiachamo* 'a hot-tempered woman' in TM, both meaning and (modified) form of which are taken over from *tshatsaboo* in TSM (cf. Yen 2008). Obviously, *bucuo*-V 'good to V' does not result from copying the phonological shape or morphological form of *bebai/bephai*-V 'good to V', and thus is not a matter borrowing.

dependency. When this pivotal feature is mapped to Macedonian Turkish, the language employs the Ottoman Turkish optative mood to serve the function of encoding both finiteness and dependency on the main verb, which is expressed by the modal complementizer in the model languages. Note that this usage of historical optative ending respects various constraints of the replica language Macedonian Turkish (see Matras and Sakel 2007:835-836 for discussion).

Turning to the case of *bucuo*-V 'good to V', if it is borrowed into TM by pattern replicating *bebai/bephai*-V 'good to V' in TSM as argued by Cheng (2014), then we expect that when the pivot feature of the structure from TSM is mapped to TM, the result should respect various constraints in TM. However, as shown in Section 3, the syllable structure of *bucuo*-V 'good to V' does not correspond to any other existing word in TM. This thus casts serious doubt on analyzing the rise of *bucuo*-V 'good to V' along the lines of pattern replication.

5.4. The Relexification Approach

Another view of the emergence mechanism of *bucuo*-V 'good to V' is provided by Lien (2008), who claims that this new expression is a result of relexification (cf. Lefebvre and Lumsden 1994; Lefebvre 2001) in the lexicon of TM. According to him, when two languages come into contact, new lexical items can be built by copying the semantic and syntactic features from the source language and the phonological features from the target language. The semantic and syntactic representations of source and target language entries need to only partially overlap. This is shown in the representation as in (23) (see Lien 2008, slide 8):

(23)

Source Language

$$\begin{bmatrix} [\text{phonology}]_l \\ [\text{semantic feature}]_k \\ [\text{syntactic feature}]_n \end{bmatrix}$$

Target Language

[phonetic string]$_j$
used in specific
semantic and
pragmatic contexts

+

Mixed Language

$$\begin{bmatrix} [\text{phonology}]_j \text{ or } [\varnothing] \\ [\text{semantic feature}]_k \\ [\text{syntactic feature}]_n \end{bmatrix}$$

Regarding the case of *bucuo*-V 'good to V', it is pointed out that, the lexical entry *bucuo* 'good' in TM is selected to undergo "relexification", as a result of which *bucuo* 'good' acquires the features of *bebai/bephai* 'good' and the new expression *bucuo*-V 'good to V' is coined. Under this approach, we may assume that first of all, the semantic and morphosyntactic features of the lexical entry *bebai/bephai* 'good ' are copied from TSM and the phonological features of *bucuo* 'good ' are copied from TM. The resulting new entry has semantic and morphosyntactic features from TSM and phonological features from TM. Now *bucuo* 'good', endowed with the morphosyntactic features of *bebai/bephai* 'good', is capable of merging with a verb to form an adjective.

To explain why this may not be a plausible analysis, we would first like to spell out how *bucuo* 'good' in TM or *bebai/bephai* 'good' in TSM merges with a verb to form an adjective. As shown in Section 5.1, it is a

fact that neither *bucuo* 'good' nor *bebai/bephai* 'good' is allowed to merge with ANY verb, but rather there are constraints on what verb they can merge with. For example, while *bucuo-chi* 'good to eat' (cf. *chi-qilai* 'eat-QILAI) is acceptable, the nearly synonymous *bucuo-chang* 'good to taste' (cf. *chang-qilai* 'taste-QILAI') is not. We assume that *bucuo* 'good' in TM or *bebai/bephai* 'good' in TSM must have some sort of intrinsic requirement on what verb it is compatible with whatever the ultimate account will be. Presumably, such requirement is akin to some specification in a lexical entry, which ensures that *tsiah* 'eat' in TSM can take an NP/DP complement *te* 'tea', *tsiu* 'liquor', *khitsui* 'soda water' and *kapi* 'coffee',[26] but *chi* 'eat' in TM cannot.

Coming back to the relexification account of the rise of *bucuo*-V 'good to V', recall that, as reviewed earlier, for a new entry in the mixed language, the semantic and syntactic features are copied from the source language and the phonological features from the target language. Since the semantic and morphosyntactic features of the new *bucuo* 'good' solely come from *bebai/bephai* 'good' in TSM, the new entry *bucuo* 'good' should be subject to the same intrinsic selectional requirement on the V part of the word as *bebai/bephai* 'good' in TSM, and is expected to be able to merge with the TM counterparts of the TSM verbs that can be merged with *bebai/bephai* 'good' in TSM. This prediction is not borne out. As discussed in Section 5.1, instances of *bebai/bephai*-V 'good to V' in TSM such as *bebai/bephai-suihok* 'good to convince', *bebai/bephai-tsingli* 'good to tidy up', *bebai/bephai-hiangsiu* 'good to enjoy', *bebai/bephai-tsohue* 'good to be together with', *bebai-phuepng* 'good to go with rice', etc. are acceptable but their *bucuo*-V 'good to V' counterparts are not in TM. We thus conclude that the relexification approach cannot satisfactorily account for the mechanism of the rise of *bucuo*-V 'good to V' in TM.

5.5 The Rule Borrowing Approach

Having argued against the approaches of calques, pattern replication and relexification, we now argue for an approach of rule borrowing to

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[26] Thanks to Bo-fan Andrew Syue for providing these TSM data for me.

account for the mechanism underlying the emergence of *bucuo*-V 'good to V'. Thomason (2006, forthcoming) argues against a traditional view that rules cannot be borrowed; she further argues for the proposal that grammatical rules can be transferred from one language to another. Following Trask (1993:245), a rule is defined as 'any statement expressing a linguistically significant generalization about the grammatical facts of a particular language, especially when formulated within the formalism of some particular formal description'. Clear examples of rule borrowing, she argues, involve 'a contact-induced change in which an innovative generalization in the receiving language A matches a pre-existing rule in the source language B, but in which no morphemes have been transferred from B to A' (Thomason forthcoming:12). She further points out two good places to look for such clear examples: one is language shift, where "the receiving language is altered as a result of imperfect learning of its structures by shifting speakers, … lexical transfer may be minimal" (Thomason 2006); the other is interference between dialects of the same language and in closely-related languages because such languages overlap a lot in their lexicon and structure, thus making it easier to transfer structure (but not the morphemes) from one language to another. The case of *bucuo*-V 'good to V' conforms to the latter contact situation in that the interference is from TSM to TM, the two languages (or dialects as considered by some researchers) being typologically closely related. Crucially, there is no transfer of actual morphemes from TSM to TM and therefore *bucuo*-V 'good to V' quite perfectly fits Thomason's description of a good candidate of rule borrowing.

If *bucuo*-V 'good to V' is indeed an instance of rule borrowing, then what is the rule that gets transferred from TSM to TM? We propose that it is a morphological rule that merges a disyllabic modifier with a verb on its right to form an adjectival compound. The disyllabic modifiers that can undergo this rule include *bebai/bephai* 'good' in TSM and its equivalent *bucuo* 'good' in TM when the rule has been borrowed from TSM into TM. Under this approach, *bebai/bephai* 'good' in TSM and *bucuo* 'good' in TM would merge with verbs that they are compatible with as intrinsically licensed by individual languages. We claim that

when rules are transferred from one language to another, they may still be subject to different constraints imposed by the individual languages.

This claim is not at all outrageous if we consider other instances of syntactic borrowing cross-linguistically. Take the NV compounds in Spanish as an example. Varela and Feliú (2003) discuss the new compounds in Spanish with an NV structure as in (24a), which contrast with native Spanish compounds with a VN structure as in (24b).

(24) a. *ruidofabricante* 'noise maker', *euroconversor* 'euroconverter'
    b. *escurreplatos* 'dish rack' (lit. 'drains dishes')

According to Varela and Feliú (2003), the new compounds are coined by structural borrowing of an order manifested in English synthetic compounds such as *taxi driver*. Such N + V compounds must have an overt suffix, such as *-or* as in *euroconversor* 'euroconverter' and *-ente* in *radioyente* 'radio listener' in (25a). If the compound noun does not carry an affix, then the internal order for this type of compound is V + N as in (25b).

(25) a. N+Vsuf$_N$: *euroconversor* 'euroconverter' vs. **conversoreuros* (lit. 'convertereuros'); *radioyente* 'radio listener' vs. **oyenterradios* (lit. 'listenerradios').
    b. Vø$_N$+N: cubrecama 'bedspread' (lit. 'covers bed') vs. **camacubre* (lit. 'bedcover'); *guardabosques* 'forest ranger' (lit. 'guards woods') vs. **bosqueguarda* (lit. 'wood guards').

We can take these facts as indicating that Spanish borrows a rule of forming synthetic compounds from English as in (26) (see e.g. Fabb 1984; Lieber 1983):

(26) [X V affix], where X is interpreted as an argument of V.

Varela and Feliú (2003) point out that most of these English-style compounds have a disyllabic noun as the first component or contain the binding or concatenating vowel [o] characteristic of learned compounds in Spanish. Given this restriction, we know that when the rule of forming

synthetic compounds in (26) is borrowed into Spanish, it is not the case that a verb can merge with any element interpreted as its complement to form a compound; rather, the compound formation must be subject to constraints specific to Spanish, which do not apply to English.

Just like what we see in the constraints on syllable length of the second component of the compound *bucuo*-V 'good to V' in TM, Spanish, when making English-style synthetic compounds, tends to use a disyllabic noun as the first component of such compounds. Similarly, just as *bucuo*-V 'good to V' is coined by a rule that derives *bebai/bephai*-V 'good to V' in TSM but the rule may not apply to the equivalent verbs in both languages, we find that the new compounds in Spanish, which are derived by the rule borrowed from English, may not have English equivalents. One such example can be illustrated by *digitpuntor* 'massager' (lit. 'finger pointer')[27] (as seen in Varela and Felíu 2003), which has no English counterpart. In other words, the rule applies to *digit* 'finger' and *puntor* 'pointer' in Spanish, but not to their equivalents in English. We take these parallel behaviors of *bucuo*-V 'good to V' and the English-style synthetic compounds in Spanish as supporting evidence for our claim that rules transferred from one language to another may be subject to language-specific constraints.

Summarizing, in this section, we have argued that the new expression *bucuo*-V 'good to V' in TM, emerges as a result of borrowing of a word formation rule from TSM, and that the results of rule application may be subject to language-particular constraints.

6. CONCLUDING REMARKS

In this article, we have studied the new expression *bucuo*-V 'good to V' in TM and argued that it results from borrowing of a word formation rule in TSM in the context of language contact. We first showed that the *bucuo* V 'good to V' sequence is a word and is not generated in the syntax proper. Then we demonstrated that the morphological structure of *bucuo*-V 'good to V' (more specifically the syllable structure) is unique

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27 Thanks to Bo-fan Andrew Syue for providing glosses of the morphemes.

for the grammar of TM in patterning with that of its equivalent(s) in TSM, but not with that of any other existing word in TM. Thus the emergence of this new expression is unlikely to be motivated by language-internal properties but rather more likely externally caused by language contact with TSM. We then argued that a morphological rule that generates *bebai/bephai*-V 'good to V' in TSM is responsible for deriving *bucuo*-V 'good to V' in TM when the rule is borrowed or transferred from TSM to TM via language contact. Based on the fact that *bucuo*-V 'good to V' and *bebai/bephai*-V 'good to V', though sharing the same morphological structure, still exhibit differences with respect to the inventories of verbs they are compatible with, we argued that rules transferred from one language to another may be subject to language-specific constraints.

The results of this study lend support to Thomason's (2006, forthcoming) theory of rule borrowing. Given that no actual lexemes are transferred from TSM to TM, we can be sure that the shared morphosyntactic properties of *bucuo*-V 'good to V' in the recipient language and *bebai/bephai*-V 'good to V' in the source language do not result from lexical borrowing, which one may argue enables the speakers to abstract a rule from the enriched lexicon. The findings of this study also provide evidence for the view that syntactic change may result from syntactic borrowing (Harris and Campbell 1995; Thomason 2006, forthcoming, Bowern 2008), contra the view that interference should be excluded as a possible explanation for syntactic change (Longobardi 2001:278; cf. Chomsky and Halle 1968). Given that TM exhibits many distinctive linguistic properties due to intensive interference from TSM (see Tseng 2003; cf. Cheng 1985; Kubler 1985), we hope that this study will invite more works devoted to the area of research on contact-induced language change.

REFERENCES

Ackema, Peter, and Maaike Schoorlemmer. 1994. The middle construction and the syntax-semantics interface. *Lingua* 93:59-90.

Ackema, Peter, and Maaike Schoorlemmer. 1995. Middles and nonmovement. *Linguistic Inquiry* 26:173-197.

Backus, Ad. 2010. The role of codeswitching, loan translation and interference in the emergence of an immigrant variety of Turkish. *Working Papers in Corpus-based Linguistics and Language Education* 5:225-241.

Bowern, Claire. 2008. Syntactic change and syntactic borrowing in generative grammar. In *Principles of Syntactic Reconstruction*, eds. by Gisella Ferraresi, and Maria Goldbach, pp.187-216. Amsterdam and Philadelphia: John Benjamins.

Burzio, Luigi. 1986. *Italian Syntax.* Dordrecht, Holland: D. Reidel Publishing Company.

Campbell, Lyle. 1998. *Historical Linguistics. An Introduction*. Cambridge, MA: MIT Press.

Chao, Yuen-Ren. 1968. *A Grammar of Spoken Chinese*. Berkeley: University of California Press.

Cheng, L. Robert. 1985. A comparison of Taiwanese, Taiwan Mandarin, and Peking Mandarin. *Language* 61:352-377.

Cheng, Yi-Hsin. 2014. On the sequence of *bucuo* V in Taiwan Mandarin. Paper presented at the 15th National Conference on Linguistics (NCL-15), May 23-24, 2014, Tunghai University, Taichung, Taiwan.

Cinque, Guglielmo. 1990. *Types of A'-Dependencies*. Cambridge, Mass.: MIT Press.

Chomsky, Noam. 1982. *Some Concepts and Consequences of the Theory of Government and Binding*. Cambridge, Mass.: MIT Press.

Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.

Chomsky, Noam, and Morris Halle. 1968. *The Sound Pattern of English.* New York: Harper and Row.

Cinque, Guglielmo. 1990. *Types of A'-Dependencies*. Cambridge, Mass.: MIT Press.

Croft, William. 2001. *Explaining Language Change. An Evolutionary Approach.* London: Longman.

Crystal, David. 2003. *A Dictionary of Linguistics and Phonetics*. Fifth edition. Oxford: Blackwell.

Dong, Xiufang. 2014. Some Issues in Constructing Trisyllabic Compounds in Chinese(2 + 1 shi san yinjie fuheci goucheng zhong de yixie wenti). *Hanyu Xuexi* 2014(6):3-10.

Dorian, Nancy C. 1993. Internally and externally motivated change in contact situations: doubts about dichotomy. In *Historical Linguistics: Problems and Perspectives*, ed. by Charles Jones, pp.131-155. London: Longman.

Duanmu, San. 2000. Wordhood in Chinese. In N*ew Approaches to Chinese Word Formation*, ed. by J. Packard, pp.135-196. Mouton de Gruyter.

Duanmu, San, Yahong Xue, and Feng Qi. 2015. The phonology and morpho-syntax of AN in Chinese. Paper presented at MidPhon 20, September 11-13, 2015, Indiana University.

Fabb, N. 1984. *Syntactic Affixation*. Cambridge: MIT dissertation.

Fagan, Sarah. 1988. The English middle. *Linguistic Inquiry* 19:181-203.

Fagan, Sarah. 1992. *The Syntax and Semantics of Middle Constructions.* Cambridge, Mass.: Cambridge University Press.

Harris. Alice C. and Lyle Campbell. 1995. *Historical Syntax in Cross-Linguistic Perspectiv*e. Cambridge, Mass.: Cambridge University Press.

Her, One-Soon. 2009. Language and group identity: On Taiwan mainlanders' mother tongues and Taiwan Mandarin (Yuyan yu zuqun rentong: Cong taiwan waisheng zuqun de muyu yu taiwan huayu tanqi). *Language and Linguistics* 10:375-419.

Her, One-Soon. 2010. On the Indigenization of Taiwan Mandarin (Lun taiwan huayu de zaidihua). *Journal of Macau Linguistics Association* 35:19-29.

Hickey, Raymond. 2012. Externally and internally motivated language change. In *The Handbook of Historical Sociolinguistics*, eds. by Juan Manuel Hernández-Compoy and Juan Camilo Conde-Silvestre, pp.401-421. Malden, MA: Wiley-Blackwell.

Huang, C.-T. James. 1984. Phrase structure, lexical integrity, and Chinese compounds. *Journal of the Chinese Language Teachers Association* 19:53-78.

Huang, C.-T. James, Y.-H. Audrey Li and Yafei Li. 2009. *The Syntax of Chinese*. Cambridge, Mass.: Cambridge University Press.

Huang, Shizhe. 2006. Property theory, adjectives, and modification in Chinese. *Journal of East Asian Linguistics* 15:343-369.

Iwata, S. 1999. On the status of implicit arguments in middles. *Journal of Linguistics* 35:527-553.

Jackendoff, Ray. 1972. *Semantic Interpretation in Generative Grammar*. Cambridge, Mass.: MIT Press.

Kao, Wan-yu. 2008. On new structure "bucuo V" (Lun xinxing jiegou "bucuo V"). *Cheng Ta Zhongwen Xuebao* 9:213-234.

Keyser, S., and T. Roeper. 1984. On the middle and ergative constructions in English. *Linguistic Inquiry* 15:381-416.

King, Ruth. 2000. *The Lexical Basis of Grammatical Borrowing*. Amsterdam: John Benjamins.

Kubler, Cornelius C. 1985. *The Development of Mandarin in Taiwan: A Case Study of Language Contact*. Taipei: Student Book.

Lasnik, Howard, and Robert Fiengo. 1974. Complement object deletion. *Linguistic Inquiry* 5:535-571.

Lass, Roger. 1980. *On Explaining Language Change*. Cambridge, Mass.: Cambridge University Press.

Lefebvre, Claire. 2001. Relexification: A process available to human cognition. In *The Proceedings of the 27th Annual Meeting of Berkeley Linguistic Society*, eds. by Charles Chang, Michael J. Houser, Yuni Kim, David Mortensen, Mischa Park-Doob, and Marzia Toosarvandani, Berkeley: University of California. pp. 125-139.

Lefebvre, Claire and John S. Lumsden. 1994. Relexification in creole genesis. Paper presented at the MIT Symposium on the Role of Relexification in Creole Genesis: The case of Haitian Creole.

Li, Yafei. 2005. X^0: *A Theory of the Morphology-Syntax Interface*. Cambridge, Mass.: MIT Press.

Li, Charles N. and Sandra A. Thompson. 1981. *Mandarin Chinese: A Functional Reference Grammar*. Berkeley and Los Angeles: University of California Press.

Lieber, Rochelle. 1983. Argument linking and compounds in English. *Linguistic Inquiry* 14:251-285.

Lieber, Rochelle and Sergio Scalise. 2007. The lexical integrity hypothesis in a new theoretical universe. In *On-line Proceedings of the Fifth Mediterranean Morphology Meeting*, eds. by Geert Booij, Bernard Fradin, Angela Ralli,and Sergio Scalise. (http://mmm.lingue.unibo.it/proc-mmm5.php)

Lien, Chin-fa. 2008. The attraction of language instinct: Easier to speak than to know: To begin with *bucuo chi* 'good to eat' (Yuyan benneng de meili: Zhi nan yan yi: Cong *bucuo chi* tan qi). Paper presented at the NSC Lecture Series on Mass Science Education, Feb 24, 2008, Kaohsiung, Taiwan. (http://science.nchc.org.tw/science/science2007/master/07mas.htm)

Lien, Chin-fa. 2011. Aspects of contact-induced changes: Interaction between TM and TSM. Yuan Zhi University Workshop on Language Structure and Language Learning, Dec. 3-4, 2011. (http://fl.hs.yzu.edu.tw/WLSLL/ppt/10.pdf)

Liu, Chen-Sheng Luther. 2010. The positive morpheme in Chinese and the adjectival structure. *Lingua* 120:1010-1056.

Liu, Li. 2010. *Multi-perspective Study on Modern Chinese Three-syllable Combinations (Xiandai Hanyu Sanyinjie Zuhe Duojiaodu Kaocha)*. Wuhan, China: Central China Normal University MA thesis.

Longobardi, Giuseppe. 2001. Formal syntax, diachronic minimalism, and etymology: the history of French *chez*. *Linguistic Inquiry* 32:275–302.

Matras, Yaron, and Jeanette Sakel. 2007. Investigating the mechanisms of pattern replication in language convergence. *Studies in Language* 31:829-865.

Milroy, James 1992. *Linguistic Variation and Change*. Oxford: Blackwell.

Pan, Yan. 2010. The analysis of the structure of trisyllabic words in Modern Chinese (Xiandai hanyu san yijie ci jiegou fenxi). *Yuyan Yanjiu Ban* (*Xiandai Yuwen)* 2010 (11):48-50.

Poplack, Shana and Stephen Levey. 2010. Contact-induced grammatical change: A cautionary tale. In *Language and Space: An International Handbook of Linguistic Variation (Vol. 1: Theories and Methods)*, eds. by Peter Auer, and Jürgen Erich Schmidt, pp. 391-419. Berlin: Mouton de Gruyter.

Sankoff, Gillian. 2002. Linguistic outcomes of language contact. In *The Handbook of Language Variation and Change*, eds. by Jack Chambers, Peter Trudgill, and Natalie Schilling-Estes, pp. 638–668. Oxford: Blackwell.

Shang, Guowen. 2006. "Good" and "not bad" ("Hao" yu "bucuo"). *Yuwen Xuekan* 2006(5):102-103.

Shyu, Shu-ing, Yu-Fang Wang and Zhi-jie Lin. 2013. An approximation of secondary predication structure: A case of V-qilai in Mandarin Chinese. *Language and Linguistics* 14:701-736.

Stroik, Thomas. 1992. Middles and movement. *Linguistic Inquiry* 23:127-137.

Stroik, Thomas. 1995. On middle formation: A reply to Zuibi-Hertz. *Linguistic Inquiry* 26:165-171.

Stroik, Thomas. 1999. Middles and reflexivity. *Linguistic Inquiry* 30:119-131.

Sung, Kuo-Ming. 1994. *Case Assignment under Incorporation*. Los Angeles: UCLA dissertation.

Tang, Ting-Chi. 1992. *Linguistic analysis and English instruction (Yuyan fenxi yu yingyu jiaoxue)*. Ms. National Tsing Hua University.

Thomason, Sarah G. 2001. *Language Contact: An Introduction.* Edinburgh and Washington, DC: Edinburgh University Press and Georgetown University Press.

Thomason, Sarah G. 2006. Rule borrowing. In *Encyclopedia of Language and Linguistics,* Second edition, volume 10, ed. by Keith Brown, pp.671-677. Oxford: Elsevier.

Thomason, Sarah G. Forthcoming. Can rules be borrowed? In *Festschrift for Terrence Kaufman*, eds. by Thomas Smith-Stark, and Roberto Zavala.

Trask, R. L. 1993. *A Dictionary of Grammatical Terms in Linguistics*. London: Routledge.

Tseng, Hsing-Yi. 2003. *The Syntax Structures of Contemporary Taiwanese Mandarin (Dandai Taiwan Guoyu de Jufa Jiegou).* Taipei, Taiwan: National Taiwan Normal University MA thesis.

Varela, Soledad and Elena Felíu. 2003. Internally motivated structural borrowing in Spanish morphology. In *Theory, Practice, and Acquisition: Papers from the 6th Hispanic Linguistics Symposium and the 5th Conference on the Acquisition of Spanish and Portuguese*, eds. by Paula Kempchinsky, and Carlos-Eduardo Piñeros, Somerville, MA: Cascadilla ,pp. 83-101.

Wei, Minghua. 2012. *The Research on the Three-word and Four-word Form in Modern Chinese Dictionary (The Fifth Edition) ("Xiandai Hanyu Cidian" (Diwu Ban) Sanzi Ge yu Size Ge Yanjiu)*. Hangzhou, China: Zhejiang University MA thesis.

Wei, Ting-Chi. 2005. Middle *hao* as the lexicalization of tough *rongyi*. *TELL Journal*: *Teaching of Languages, Linguistics, and Literature* 2:17-34.

Yen, Hsiu-shan. 2008. A Study of Southern Min Words in Taiwan Mandarin (Taiwan huayu zhong de minnan fangyan ci chu tan). *Xinzhu Jiaoyu Daxue Renwen Shehui Xuebao* 1:49-68.

Zribi-Hertz, A. 1993. On Stroik's analysis of English middle constructions. *Linguistic Inquiry* 24:583-589.

Jen Ting

Jen Ting
Department of English
National Taiwan Normal University
Taipei, Taiwan 106, ROC
ting@ntnu.edu.tw

論台灣華語新興用語"不錯-V"的句法構詞特性：一個規則借用的個案研究

丁仁
國立台灣師範大學

本文研究台灣華語新興用語"不錯-V"的構詞句法特性，由此論證它是在語言接觸的情境下，由台灣閩南語中借用構詞規則所造成。我們首先證明這個用語不是在句法層次生成，而應分析為詞，並進而論證它的構詞表現與台灣華語其他詞彙皆不相同，而與台灣閩南語的構詞較為一致。本文結論同時也為句法借用可以造成句法變化的觀點提供了支持。