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## Durative Event: A Comparison of 趕 *gan3* and 搶 *qiang3*

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**Abstract.** Construction grammar [1] or compositional semantics [2] are two important approaches to lexical semantics. This study provides a fine-grained comparison of 趕 *gan3* and 搶 *qiang3* through examining both their compositional meanings and their constructional patterns. Using Chinese WordSketch [3], [4] to extract collocational generalizations, we detail the contrasts and similarities of the uses of these two verbs based on the one billion word Chinese Gigaword Corpus 1.0. Our analysis is also facilitated by the sense inventory of both words based on the Chinese WordNet (CWN). In this study, we show that the durative meanings of 趕 *gan3* and 搶 *qiang3* can be extended to the nouns following these two verbs, and that individual lexical meanings of the constructions [*gan3/qiang3*+noun] can be decomposed from the constructions. We also show that both these verbs have related meanings even if their core meanings do not seem to be related.

### 1 Introduction

Comparisons of near synonyms can be carried out in both descriptive and quantitative ways. In this study, we compare two polysemous Mandarin verbs 趕 *gan3* and 搶 *qiang3*, each has a sense synonymous to ‘to rush.’ Unlike other synonymous words such as ‘tall’ and ‘high’ in Taylor (2002) [5] or ‘request’ and ‘ask for’ in Church et al. (1994) [6], 趕 *gan3* and 搶 *qiang3* are far from being identified as synonymous pairs. This is because these two verbs are substitutable only in limited use, particularly in durative events, as identified in this paper (most near synonyms can substitute one another in more than one context.). Even so, we will show in this paper that these two verbs are not entirely the same when used in the durative events. We compare 趕 *gan3* and 搶 *qiang3* by examining their compositional meanings as well as constructional patterns. Through the interface provided by the Chinese WordSketch [3], [4], we extract collocational patterns of these two verbs used in the Chinese Gigaword Corpus [4]. We also use the distinguishing senses provided by CWN for the analyses

In the *Proceedings of the Chinese Lexical Semantic Workshop 2008 (CLSW2008)*, Singapore, July, 14-16. pp. 42-50.

of these two verbs.<sup>1</sup> The following section will first outline the senses identified for these two verbs by the CWN group.

### 1.1 趕 *gan3* and for 搶 *qiang3* in CWN

According to the definitions from the CWN group, 趕 *gan3* has thirteen senses. These thirteen senses are outlined in (1) below. Example sentences and their translated English senses (mostly from the English WordNet) are given. However, if there is no equivalent sense found (e.g., (1b); (1e)-(1h)), its hypernym or related sense will be given. In this paper, we focus on the senses related to ‘to rush,’ as in (1f), (1g), (2d) and (2f).

(1) (a) *overtake (transitive verb)*

夏然走走跑跑地跟著，還是<趕>不上。「唉，等等我，你走太快啦！」

“Xiaran followed from behind, half walking and half running, yet she still could not catch up with him. She sighed, “Please wait for me, you walk too fast!”

(b) *drive (things) (hypernym) (transitive verb)*

你<趕>鴨，我餵雞，人人的心裡都藏著無限歡喜。

“You drive out the ducks, I feed the chickens. There is unlimited happiness hidden in everybody’s heart.”

(c) *drive (car, vehicle, etc.) (transitive verb)*

過城牆前，駕駛們只要遇到任何阻礙，無論是挑菜的老太太、<趕>牛車的大叔，全都毫不客氣地以喇叭示意讓路。

“Before entering the city wall, whenever the drivers were faced with obstacles, be they old women with shouldered baskets of vegetables or male folks driving carts, they would mercilessly horn them to clear up the road.”

(d) *chase away (transitive verb)*

我是哈薩克人，族裡<趕>了我出來，永遠不許我回去。

“I am a Kazakhstan, chased out by my tribe and I can’t return any more.”

(e) *catch (hyponym) (transitive verb)*

以前一天可以<趕>三場電影，現在是約好明天要看電影，今天就開始累了。

“I used to catch three movies in a row. But now, if I plan to go for a movie the next day, I will start feeling tired today.”

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<sup>1</sup> Chinese WordSketch is available at <http://wordsketch.ling.sinica.edu.tw/> while CWN website is available at <http://cwn.ling.sinica.edu.tw/>.

In the *Proceedings of the Chinese Lexical Semantic Workshop 2008 (CLSW2008)*, Singapore. July, 14-16. pp. 42-50.

(f) *rush (hyponym) (transitive verb)*

有個公司曾因連續的<趕>貨而忙碌，其中有位姓韓的廠長，雖身瘦如柴，卻忙著搬東西，指揮員工。

“Once, a company was rushing to deliver merchandize in time, and there was this factory director with the surname of Han. Although he was skinny, he was busy lifting goods and directing his staff.”

(g) *rush (synonym) (transitive verb)*

有人懷疑<趕>結婚的人是否已認真想清楚，他們結婚的理由是否正確。

“Some people suspect whether or not those who rush to get married have thought twice and whether they know what their reason for getting married is.”

(h) *attend (hypernym) (transitive verb)*

這起事故發生在今天下午四時至五時間，當時群眾正在<趕>廟會，人比較多。

“This incident happened between 4 to 5p.m. today, while the people were rushing to attend the temple gathering. There was a large crowd.”

(i) *press (intransitive verb)*

親子旅遊的行程強調內容活潑，行程不要太<趕>，以免對小孩的體力造成太大的負擔。

“Parent-child tours emphasize on liveliness. The schedules cannot be too packed, so as not to burden the kids.”

(j) *take advantage of (adverb)*

<趕>大清早前往哈雷亞卡拉山欣賞日出成為茂宜島的觀光重點。

“One of the important features of visiting the Maui Island (or the Valley Isle) is to take advantage of the early morning to go to the Haleakala Crater to see the sun rising.

(k) *meet (transitive verb)*

科技變化一日千里，現行法令與各種條文往往<趕>不上技術實際層面的需求。

“Technology changes swiftly. The present ordinance and laws usually cannot meet the needs of technology.”

(l) *catch (transitive verb)*

今年適逢內宮鎮座兩千年，有心的遊客不妨<趕>一下熱潮。

“This year happens to be the two-thousand-year celebration of the laying of inner sanctuary of the temple, interested tourists can catch some of the season’s heat.”

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(m) *catch up with* (transitive verb)

夏揮凱在下一場開球洗袋，老神在在的瑞斯連<趕>兩局，戰成6平。

“Xia Huikai washed pocket when he opened next. As a consequence, the battle-tested Rodney won the next two games and caught up with him at 6 all.”

Comparatively, 搶 *qiang*<sup>3</sup> has eight senses, given in (2) below.

(2) (a) *rob* (transitive verb)

海盜除了<搶>錢，也<搶>美嬌娘。

“Pirates not only rob money, but also beautiful delicate ladies.”

(b) *snatch* (synonym) (transitive verb/adverb)

布料已<搶>購一空，明日再行進貨。」

“All fabrics have been snatched (by buyers). Tomorrow (we) will import more stock.”

(c) *compete* (hypernym) (transitive verb)

這是很典型壞女人不擇手段<搶>男人的伎倆。

“This is the typical unscrupulous tactic how bad women snatch their men.”

(d) *rush* (synonym) (adverb)

在藍綠激辯的政論節目進行時，<搶>發言是常有的。

“In this political show where the two political parties were debating, it was normal to see (the politicians) competing to voice their opinions.”

(e) *compete* (hypernym) (transitive verb)

大環境裡充滿排華情緒，因為經濟不景氣，美國工人擔心華工<搶>他們的飯碗。

“Due to economic downturn, there was anti-Chinese in the environment. The American workers were worried that the Chinese would snatch their job.”

(f) *rush* (synonym) (adverb)

現在檯面上很風光的企業，有誰知道四十年前，他們也有過那段<搶>三點半的日子。

“For those enterprises which are now prosperous, who would know that, forty years ago, they might have gone through the time where they were constantly rushing to complete transactions by bank closing time so that their checks will not bounce.”

(g) *hijack* (transitive verb)

當晚主角雖是兩位笛王，指揮羅徹特倒也<搶>了不少風采。

“Although the key players for the night were the famous flutists, the director Rochat had also snatched some attention.”

In the *Proceedings of the Chinese Lexical Semantic Workshop 2008 (CLSW2008)*. Singapore. July, 14-16. pp. 42-50.

(h) *leap out (intransitive verb)*

Eryn 送我那個唇膏顏色很<搶>，我會多用。

“The lipstick that Eryn gave me has a color that leaps out. I will use it more often.”

As mentioned, both verbs can be related to the meaning of ‘to rush’ ((1f),(1g),(2d) and (2f)) although they do not seem to be related from their core meanings of ‘to overtake’ and ‘to rob.’ In addition, we claim that the eventive reading of ‘to rush’ refers particularly to actions to be accomplished before a certain deadline. Examples can be seen in both 趕貨 *gan3huo4* ‘to hurry up the speed of preparing goods’ and 趕結婚 *gan3jie2hun1* ‘to rush to get married’ in (1f) and (1g) respectively; as well as 搶發言 *qiang3fa1yan2* ‘to rush to give an opinion’ and 搶三點半 *qiang3san1dian3ban4* ‘to rush to complete transaction by bank closing time (used to be three thirty)’ in ((2d) and (2f)) respectively. Examples (1f) and (1g) are distinguished by the emphasis of ‘speed’ in (1f) while the emphasis of (1g) is on the ‘deadline.’ In (2d), the emphasis is on ‘competing within a durative time’ while in (2f) the emphasis is also on the ‘deadline’ (as in (1g)).

In Liu’s (2005: 310) [7] analyses of 趕 *gan3* ‘rush’ and 追 *zhui1* ‘chase,’ she argued that [*gan3* + noun] is “constructionally coerced” and the meaning brought out by the construction “cannot be directly derived from the lexical meaning of either the verb or the object NP.” In this paper, however, we show that constructional information can still be derived from their core lexical meaning in both these verbs. Our analyses of the two verbs are shown below.

## 2 Our Analyses

In Table 1 below, we show the total number of instances as well the normalized number of instances per 100 million words for both verbs in the two sub-corpora of Chinese Gigaword: Taipei’s Central News Agency (CNA) and Beijing’s Xinhua News Agency (XIN). The most striking fact is the substantially higher number of instances of 搶 *qiang3* being used in XIN.

**Table 1: Number of Corpora Instances of in Chinese Gigaword Corpus 1.0.<sup>2</sup>**

	Central News Agency (CNA)		Xinhua News Agency (XIN)	
	Total	per 100 mil- lion words	Total	per 100 mil- lion words
趕 <i>gan3</i>	6,211	1,448	3,270	1,374
搶 <i>qiang3</i>	8,210	1,914	5,524	<b>2,321</b>

<sup>2</sup> CNA comprises 429,094,907 words and XIN comprises 238,403,435 words [8].

In the *Proceedings of the Chinese Lexical Semantic Workshop 2008 (CLSW2008)*, Singapore, July, 14-16. pp. 42-50.

From Table 1, we can see that 趕 *gan3* is found almost equally many in CNA and in XIN. However, for 搶 *qiang3*, its corpora instances are found more in XIN than in CNA, indicating that 搶 *qiang3* is used more often in China than in Taiwan. For example, the occurrences of the subject 農民 *nong2min2* ‘the farming folk’ with 搶 *qiang3* is only 4 in CNA, but the same subject appears 41 times in XIN with 搶 *qiang3*. Examples of these are given in (3) below.

(3) (a) 在農民搶收的情況下菜價蠢蠢欲動。(CNA)

“While the farming folks are rushing to reap, the price of vegetables is becoming unstable.”

(b) 記者看到許多農民搶到手的油桃、奈李等果樹苗也是皮破枝斷。(XIN)

“The reporters saw that many of sprouts for fruit trees such as the nectarines and plums that the farming folks were fight for, were broken and hardly in one whole piece.”

In addition, in order to compare how the patterns of both verbs differ, we examine their collocational patterns extracted through the Chinese WordSketch. The overall comparisons show that 趕 *gan3* collocates with objects while 搶 *qiang3* does not. The following Table 2 shows the top five most salient objects or [*gan3* + noun] in CNA and XIN.

**Table 2: Comparisons of the Top Five Objects or [*gan3* + noun] in CNA and XIN in Chinese Gigaword Corpus.**

CNA			XIN		
[ <i>gan3</i> + noun]	Frequency	Saliency	[ <i>gan3</i> + noun]	Frequency	Saliency
廟公	43	65.66	浪頭	13	39.69
通告	69	53.48	工期	27	36.1
<b>鴨子</b>	<b>43</b>	<b>51.29</b>	廟會	22	35.88
<b>進度</b>	<b>73</b>	<b>39.82</b>	<b>進度</b>	<b>38</b>	<b>30.44</b>
業績	22	26.88	<b>鴨子</b>	<b>12</b>	<b>30.05</b>

In the case of 趕 *gan3*, the deadline event is represented by a noun, which in turn denotes an event with a bounded temporal point. All collocates in Table 2 show the use of 趕 *gan3* with a noun. For instance, 趕通告 *gan3 tung1gao4* ‘*gan3*-notice’ means to rush to accomplish an action stated in a notice before a certain deadline. In addition, we have also heard of examples such as 趕三點半 *gan3 san1dian3ban4* ‘*gan3*-three thirty,’ which involves the closing time of bank hours; as well as 趕火車 *gan3 huo3che1* ‘*gan3*-train,’ which involves the scheduled departure of a train. In the data from CNA and XIN in Table 2 above, we can see that collocating object of the

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'to rush' meaning are more salient in the XIN data from the PRC. Of these salient objects, only two have idiomatic meaning and not durative meaning: 廟公 *miao4gong1* 'abbot, Buddhist or Taoist' 鴨子 *ya1zi3* 'duck.'<sup>3</sup> What is interesting is that in the PRC XIN data, the top four salient objects belong to the durative meaning, while the CNA Taiwan data has only three durative objects, ranked second, fourth, and fifth. Perhaps it is the clear prominence of the durative use in XIN account for their higher frequency.

Compared to 趕 *gan3*, 搶 *qiang3* typically takes a deverbal noun as its argument. In this case, the deadline event is not explicitly expressed, but is implied by the pre-supposed limit supply, as in 搶掛號 *qiang3 kua4hao4* 'qiang3-register.' In other words, the competition and resistance aspects of the activity meaning of 搶 *qiang3* are preserved, i.e., the original meaning of 掛號 *gua4hao4* 'register' does not entail competition and resistance. However, when we say 搶掛號 *qiang3 kua4hao4* 'qiang3-register,' the competition meaning is brought into the deverbal noun 掛號 *gua4hao4* 'register.' Hence, contrary to Liu (2005) [7], we show in this analysis that the core lexical meaning can be extended to the constructional meaning. Most other examples falling into the durative events of 趕 *gan3* and 搶 *qiang3* also show this characteristic.

Another evidence to support the existence of durative events in both these verbs is the use of post-verbal 在 *zai4* 'at' PP to indicate a deadline for both 趕 *gan3* and 搶 *qiang3*. Nouns that follow the construction [*gan3/qiang3+zai4*] are such as 節前 *jie2qian2* 'before the season' and 期限 *qi3xian4* 'due date.' These examples clearly indicate the durative event denoted by both verbs. By comparing durative events as such, we can see how aspect can be represented in Chinese through constructions. This study will contribute not only to theoretical linguistics but also will also unify corpus-driven work with existing linguistic theories.

### 3 Interaction of Constructional and Lexical Meaning

Based on the above analysis and data, we can represent the constructional meaning of 趕 *gan3* and 搶 *qiang3* as following:

(4) Construction Meaning of 趕 *gan3*:

趕 X: Rush\_to\_do\_X because event X expires unless completed before deadline

(5) Construction Meaning of 搶 *qiang3*:

搶 Y: Rush\_to\_obtain\_Y because there is only a small number of object Y available

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<sup>3</sup> The two idioms are 乞丐趕廟公 *qi3gai4gan3miao4gong1* 'A beggar drives an abbot away from his temple, to usurp,' 趕鴨子上架 *gan3ya1zi3 shang4jia4* 'to drive a duck up to a shelf, to force someone to do things unwillingly.'

In the *Proceedings of the Chinese Lexical Semantic Workshop 2008 (CLSW2008)*. Singapore. July, 14-16. pp. 42-50.

The representation of the constructional meaning can be further explicated to show that their constructional meanings are extended from their core lexical meaning. The core meaning of 趕 *gan3* is 'to do something in a fast manner,' which of course can be extended to expedite in terms of deadline time, as in (4). On the other hand, the core lexical meaning of 搶 *qiang3* is 'to obtain against resistance,' hence can be extended to the condition where the scarcity of obtainable objects is the resistance. It should be clear that 搶 *qiang3* cannot have the constructional meaning of (4) while 趕 *gan3* cannot have the constructional meaning of (5). In other words, we show that core lexical meaning does play a deciding role in the constructional meaning.

#### 4 Conclusion

This study compares the uses of 趕 *gan3* and 搶 *qiang3* and argues that both these verbs share a related meaning of 'to rush' even though the core meanings of both these verbs do not seem to be related. We also show in this work that the durative meanings of both these verbs can be extended to the nouns that follow these verbs. This observation is made different from the analysis of Liu (2005: 310) [7] which stated that the meanings of [*gan3* + noun] "cannot be directly derived from the lexical meaning of either the verb or the object NP." Furthermore, this study also provides a comparison of data from Taiwan and China based on the collocates of these two verbs. The study stated herein has theoretical contribution toward the [verb+noun] constructions of Mandarin, particularly in cases where individual lexical meanings are hard to be distinguished among each lexical item than from the whole construction. This study also differs from near-synonymous studies by examining two verbs which are not immediately associated in meanings, but are associated through their shared relations (hypernym and synonym) of 'rush.'

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