

MARKET Metaphors: Chinese, English and Malay

Siaw-Fong Chung

Institute of Linguistics
National Taiwan University
No. 1, Sec 2, Roosevelt Road
Taipei 106, Taiwan
f91142002@ntu.edu.tw

Abstract

In this paper, MARKET metaphors used by different communities (Chinese, Malay and English) are laid out based on the frequency counts of these metaphors and their occurrences in different syntactic positions. The results show that certain types of metaphors have preferences for different syntactic positions for 'market.' For instance, MARKET IS A PERSON in all three languages prefers to place 'market' in the subject position. In addition to this finding, the choice of metaphor types by different speech communities may also reflect their perspectives regarding their country's economy. This is evidenced by the fewer instances of MARKET IS COMPETITION in the English data. The instances that describe how the market falls (*plunges* and *crashes*) may reflect the speakers' concerns with the maintenance of their power in the market rather than the competitiveness of their market. Therefore, through using quantitative data, this paper is able to infer the economic status of these speech communities. This can be done not only through analyzing the semantic meanings of the metaphors but also their interface with syntax.

1. Introduction

Since Lakoff and Johnson's (1980) Contemporary Theory of Metaphor (CTM), many metaphor analyses have based their framework on this model. The CTM treats metaphors at the semantic level, i.e., a majority of the metaphorical instances such as *He produces new idea at an astounding rate* and *His intellectual productivity has decreased in recent year* (IDEAS ARE PRODUCTS) are understood based on the meanings of the mapped concepts (*produces* and *productivity* to IDEA) (Lakoff and Johnson, 1980:47). The syntactic functions of the words *produces* (verb) and *productivity* (noun) are not their major concerns in this model.

Studies have been suggested to treat these lexemes more carefully at the syntactic level. Both Ahrens (2002) and Su (2000) suggested that the metaphorical instances can be viewed at three levels, i.e., entity (noun), quality (adjective) and function (verb). This is one approach that attempted to incorporate grammar into the CTM framework. Further research by Ahrens et al (2003) and Chung et al. (2003) worked around economy metaphors but their approach is still lexeme-based. In both these works, they searched for economy metaphors through identifying keywords surrounding the target term (such as *growth* for the target term *economy*) and calculated the frequency of these keywords in each conceptual metaphor. Although they separated the lexemes according to entity, quality and function, no much analysis was carried out towards the relationship between these grammatical roles and the lexemes.

Work that concerns the most with metaphors and grammar was suggested by Halliday in 1985. In Halliday's model, the concept of grammatical metaphor was introduced. Metaphors are divided into two types -- ideational and interpersonal grammatical metaphors. Ideational grammatical metaphor is concerned more with analyzing the transitivity of metaphors and whether these metaphors are congruent. For instance, *Mary came upon a wonderful sight* and *a wonderful sight met Mary's eyes* are both metaphors but they differ in transitivity congruency (the former is congruent while the latter is not) in relation to the meaning *Mary saw something wonderful*.

Interpersonal metaphor, on the other hand, is pragmatics-based in which phrases such as *I think* and *I don't think* can also carry metaphorical meanings in expressing congruency of ideas (such as *I think* will be congruent with *probably*). Compared to the model by Lakoff and Johnson, Halliday's grammatical metaphor seems to appear at the other end of the continuum between semantics and syntax. The relationship between conceptual metaphors and syntax was never mentioned especially when more than a language is involved.

The aims of this work, therefore, are a) to try to extend the analysis of conceptual metaphors by Ahrens et al. (2003) and Chung et al. (2003) so that the grammatical aspect can be included in the analysis; and b) to find out the relationship between the MARKET metaphors and the syntactic positions in which MARKET occurs. This is because how much 'market' is a subject or object may reflect how a speech communities view the position of 'market' in the world. The conceptual metaphors from three languages (Chinese, Malay and English) are examined and the roles of 'market' are analyzed cross-linguistically. Our research questions are as follow: Are the conceptual metaphors shared by these languages are similar? Are the syntactical positions of the target word 'market' similar across these languages and what do the differences in (a) and (b) say about the three speech communities? By answering these three questions, it is hoped that the steps in identifying cultural differences can be operationalized.

2. MARKET metaphor

Charteris-Black and Ennis (2001) examined metaphors in financial reporting in English and Spanish based on the market crash in 1997. Their analysis showed that THE ECONOMY IS AN ORGANISM has the highest frequency in financial reports, followed by MARKET MOVEMENTS ARE PHYSICAL MOVEMENTS and MARKET MOVEMENTS ARE NATURAL DISASTER. Within these metaphors, there are sub-metaphors. For instance, examples that refer to both physical conflict and state of health fall under the source domain of ORGANISM.

Chung, Ahrens and Sung (2003) also carried out an analysis of STOCK MARKET metaphors in Chinese and English and they compared specifically STOCK MARKET IS OCEAN WATER to Charteris-Black and Ennis's MARKET MOVEMENTS ARE NAUTICAL OR ARE WAYS OF MOVING IN THE WATER (under MARKET MOVEMENTS ARE PHYSICAL MOVEMENTS). They criticized that the source domains are not that clear. For instance, the source domain of ORGANISM is too general because it may refers to plants, animals and any aspects of organisms. The question regarding identifying source domains is discussed in Chung, Ahrens and Huang (In Press). Therefore, for Charteris-Black and Ennis's metaphor MARKET MOVEMENTS ARE NAUTICAL OR ARE WAYS OF MOVING IN THE WATER, Chung et al. (2003) suggested that the metaphorical instances can be sub-divided into OCEAN WATER and BOAT. This again showed the over-general source domains in the work of Charteris-Black and Ennis. In addition, this paper will only focus on the target word 'MARKET' (although not as narrow as STOCK MARKET, JOB MARKET and other types of markets) and exclude the interference of target such as TRADING.

3. Methodology

For Chinese, Malay and English, they are all spoken by the author and the data were analyzed manually by the author. Even though these three languages are distant in their origins (in terms of language family), all these three languages share similar word order of SVO, as shown in (1) below, in which the sentences with the same meaning of 'the market enters the century of war.'

- (1) Chinese: 市場_{Subject} 進入_{Verb} 戰國時代_{Object}
Malay: pasar_{Subject} masuk_{Verb} masa perjuangan_{Object}
English: the market_{Subject} enters_{Verb} the century of war_{Object}

Among all the structures examined in this paper, the Malay has a different noun-modifier position in which the noun comes before the modifier as in *kehendak pasaran* ‘the needs of the market (or market’s needs)’ and *strategi pasaran* ‘market strategy.’

Three sets of data were extracted for the analysis of this paper. The Chinese data was taken from the Academia Sinica Balanced Corpus of Mandarin Chinese (available at <http://www.sinica.edu.tw/SinicaCorpus/>). Before the search was carried out, the setting was set to search for the keyword 市場 *shichang* ‘market’ in newspapers and magazines only. The search yielded 1775 instances and the only the first 300 were analyzed for the purpose of this work.

For the Malay data, a corpus was compiled based on selected articles from the Malay newspaper *Utusan Malaysia* ‘Malaysian Messenger’ (available through <http://www.utusan.com.my/>). Using the webpage search archives system, the keyword *pasaran* ‘market’ was entered and this yielded 200 news articles from the systems. The first 139 news articles were collected and a concordance was made using Wordsmith Tool (Scott, 1999). This produced 285 concordance lines with the keyword *pasaran* ‘market’ and all these instances are analyzed.

For the English data, 300 instances were taken from the total of 2726 instances of ‘market’ from the New York Times corpus compiled by the American National Corpus. The data comprises over 4000 articles collected for each of the odd-numbered days in July 2002. From these 2726 instances, only the first 300 were taken. This is to control the same amount of data across three languages (with Malay slightly lower in number). The analysis of these three sets of data involved three steps. First, all metaphorical instances were extracted from the corpora and the respective source domains are determined manually (as in Ahrens, Chung and Huang 2003 and Chung, Ahrens and Huang 2003). For instance, the following phrases were found to contain metaphorical uses.

- (2) (a) Chinese: 被市場淘汰出局 ‘to be kicked out by the market’
- (b) Malay: *apabila pasaran bermaharajalela* ‘when the market rules (as King)’
- (c) English: ‘as market plunges’

In 2(a), the Chinese metaphor was accorded the source domain of COMPETITION manually; the Malay metaphor in 2(b) was accorded KINGSHIP and English (2(c)) SUBMARINE. For discussion on how to determine source domains, see Chung et al. (In Press). To answer the first research question (i.e., whether the conceptual metaphors shared by these languages are similar), the frequency and percentages of the different metaphors were collected. In step one, the literal meanings of the ‘market’ will not be considered. Examples such as *he entered the market to check on the hawkers* will not be considered as MARKET IS A CONTAINER. This is because this market refers to the literal marketplace as a building (though a metonymic one) not the abstract concept of ‘market’ (as in the abstract ‘place’ for business exchanges to take place).

Second, once all the instances in both corpora were analyzed, the instances were categorized according to the syntactic positions of the target term “market.” The types of syntactic positions identified are as (3) below:

- (3) (a) Subject (including grammatical subject of passive, i.e., the patient of the passive form)
- (b) Adverbial (only those that indicate location are found)
- (c) Modifier
- (d) Noun phrase (especially the use of noun phrase in the dependent clause such as ‘during the bull market,’ which is part of a complex sentence)
- (e) Object (including grammatical object, i.e., the agent, of the passive form)
- (f) Others (including oblique uses of ‘market’ other than the locative ones such as *berpandukan kepada pasaran* ‘with the guidance of the market’)

All instances were then grouped according to these syntactical categories. In order to see the terms used with these syntactic categories, the collocates of each syntactic category were constructed. This way of treating the collocates is in some way similar to Kilgarriff and Tugwell's (2001) WORD SKETCH, which is a collocation-based resource that can tally the collocation for different grammatical relations. This part of the analysis answers the second research question (i.e., whether the syntactical positions of the word "market" are similar across these languages). The frequency and percentages of collocations for the different syntactic positions were compared across the three languages.

The third research question is an interpretative question in which differences of the three speech communities are discussed in order to interpret the differences in terms of metaphor types and syntactic positions (of the target word 'market'). It also tries to find out whether these say something about the three speech communities in terms of the attitudes and the cognitive motivations behind the use of conceptual metaphors.

4. Results

4.1. Metaphor Types

In terms of metaphor types, the results in Table 1 were obtained.

Table 1: Frequencies of Metaphor Types in Chinese, Malay and English MARKET Metaphors

Chinese			Malay			English		
Metaphors	Tokens	%	Metaphors	Tokens	%	Metaphors	Tokens	%
COMPETITION	56	36.60	COMPETITION	29	41.43	ANIMAL	23	20.18
PERSON (METONYMY)	29	18.95	PERSON (METONYMY)	23	32.86	PERSON (METONYMY)	23	20.18
POSSESSION	11	7.19	FOREST	8	11.43	IMAGE	21	18.42
CHANGEABLE ENTITY	5	3.27	MOVEABLE ENTITY	4	5.71	COMPETITION	6	5.26
LAND	4	2.61	OCEAN	2	2.86	AIRPLANE	8	7.02
CONTAINER	4	2.61	DIRECTOR	1	1.43	SUBMARINE	6	5.26
DIRECTOR	2	1.31	KINGSHIP	1	1.43	MOVEABLE ENTITY	4	3.51
MACHINE	2	1.31	SPONGE	1	1.43	OCEAN	5	4.39
PLAY	2	1.31	WATER	1	1.43	TRANSPORTATION	3	2.63
FIRE	1	0.65				POSSESSION	1	0.88
TRANSPORTATION	1	0.65				CONTAINER	1	0.88
WATER	1	0.65				MACHINE	1	0.88
Non-Classified	35	22.88				BUILDING	1	0.88
						Non-Classified	11	9.65
Total	153	100.00	Total	70	100	Total	114	100

Chinese and Malay seem to show similar patterns in terms of the most prototypical metaphors found. The metaphors that occurred frequently in both these languages are MARKET IS COMPETITION and MARKET IS A PERSON (METONYMY). The metonymic use of MARKET was included in the PERSON domain because some of the instances such as 在藥材市場需求飽和後 'after the needs of the medicine market is filled,' the 'needs' is a metonymic extension of the needs of the people rather than the market being a person. However, in other examples such as 市場正在衰退 'the market is deteriorating (physically),' the MARKET can be interpreted as a PERSON rather than a metonymic extension of a PERSON. Nevertheless, these two kinds of uses were hard to separate from one another. Therefore, they are combined under PERSON and METONYMY in Table 1 for the three languages. In English, MARKET IS A PERSON is as frequent as MARKET IS AN ANIMAL (20.18% each). Compared to Chinese and Malay, English has a slightly different pattern. MARKET IS COMPETITION in English does not appear as frequent as does the ANIMAL metaphor (such as *the bull market*). Comparatively, Charteris-Black and Ennis (2001) cannot outline the differences between MARKET IS A COMPETITION (PHYSICAL CONFLICT) and MARKET IS A PERSON (ORGANISM) as such demonstrated in Table 1 because their MARKET IS AN ORGANISM encompassed these two metaphors, resulting in an over-general source domain.

Table 1 also shows image metaphors such as *market swings* are more only found in English. Chinese does not see the market as something that ‘swings’ but one that ‘keeps changing’ as in 瞬息萬變的市場. Both Malay and English see market as MOVEABLE ENTITY as in *mengerakkan pasaran* ‘move the market’ (means ‘encourage the market’) and *the fickle market*. On the other hand, only the Malay data show to have metaphors such as MARKET IS A FOREST (*menerokai pasaran* ‘exploit the market’). This metaphor (although not frequent) are particularly referring to nature of the ancient Malay society, which might involve moving to new areas of the forest as a way to exploit new land in the forest. In the Chinese data, the similar view is expressed through MARKET IS A LAND in which examples such as 開拓國內的市場 ‘exploit the local market,’ 開拓 *kaituo* ‘exploit’ is mapped from the LAND domain to the MARKET domain. Interestingly, none of the English MARKET metaphors show the need to exploit new market and this is interpreted as a way the Western society conceptualizes their power to control the world economy. In fact, most of the English MARKET metaphors refer to the market as something that is negative (*being crushed, falling, plunges* and *crash*). This again may show the market of the States which had been established before and most conceptual metaphors are used to refer to describe its falling and rather than its ability to compete. This is one way to explain why MARKET IS COMPETITION is not as frequent in the English data as in the Chinese and Malay data.

In addition, Malay also uses the metaphor MARKET IS KINGSHIP (*pasaran bermaharajarela* ‘the market rules’) in which the ‘kingship’ concept originates from the sultanate system of the Malay society. Another example that shows the ancient Malay origin is that of MARKET IS OCEAN in which its use is different from that of English (in *the market bottomed out* and *the market hit bottom*). The Malay instance *melayari pasaran* ‘sail through the market’ is also another indication that refers to the ancient Malay society which depends on the ocean for trading and for earning a living. Comparatively, the Chinese society shows a preference for the metaphor MARKET IS A POSSESSION in which occupying a place in the market is seen as the major activity of the people in the market (佔有市場 ‘to possess the market’). The Chinese also talks about the market in terms of a pie chart and to possess a big portion of the pie chart is success. This conceptualization is not seen in Malay and there is only one instance in the English data (*who had the market all to themselves*). The reason behind the high frequency of the POSSESSION metaphors in Chinese may be attributed to the attitudes of the different communities toward competition in the market. As discussed earlier, the controlling power of economy is in the hand of the Western society and therefore they do not see possession is as important as in the newly emerged Chinese market (especially that of Taiwan). The lack of such instances in the Malay data may also due to its economic status which is at the stage of competing for possession in the pie chart yet. However, these are only personal interpretations of the data collected.

In addition to the above differences, both Chinese and English data have metaphors related to TRANSPORTATION (and SUBMARINE and AIRPLANE for English). However, this use of transportation is not seen in the Malay data. English, especially, depends heavily on the ‘transportation’ domain (including forms such as ‘submarine’ and ‘airplane’) to refer to the movement of the market (*crash, turmoil, reeled, plunges, put brakes, and turned around*). The movement of the MARKET in Malay is not represented using the same metaphors. The movement in Malay often appears when the market is a person (when it is a subject) and when the market is a moveable entity (when it is an object). Due to this phenomenon observed that might have contributed to the differences in the three languages observed, this paper further analyzes the syntactic positions of the target word ‘market’ in the three languages. The following section will deal with this issue.

4.2. Types of Metaphors versus Syntactic Positions

The interaction between the most frequently occurring metaphor types and the syntactic positions of ‘market’ for the three languages are given in Tables 2 to 4. These tables show percentages according to the syntactic positions of ‘market.’ Comparing Tables 2 and 3, MARKET IS COMPETITION in both Chinese and Malay has preferences for modifiers and objects. Examples are given in (4) below.

- (4) Chinese (COMPETITION x Modifier) 增強市場競爭力
 ‘to improve the market’s competitive power’
 Chinese (COMPETITION x Object) 進軍大陸及國際市場
 ‘to lead the army into the Mainland China and international market’
- Malay (COMPETITION x Location) *boleh bersaing dalam pasaran*
 ‘can compete in the market’
 Malay (COMPETITION x Object) *memonopoli pasaran*
 ‘to monopolize the market’

COMPETITION in English (see Table 4) does not have preferences for any particular syntactic position because its occurrence is low.

All three languages show similar patterns in terms of MARKET IS A PERSON (METONYMY) – this metaphor has a preference for the subject positions for the target word ‘market.’ Examples of the three languages are given in (5) below.

- (5) PERSON(METONYMY) x Subject
 Chinese 市場、銀行看在有錢可賺的份上
 ‘markets and banks saw the changes of gaining profits..’
 Malay *pasaran menyaksikan dua penyertaan baru*
 ‘the market saw two new listings’
 English American market was not going to rally

Table 2: Most Frequently Occurring Chinese MARKET Metaphors and Syntactic Positions (Percentages According to Syntactic Positions)

	Subject	Adverbial (Location)	Modifier	Noun phrase	Object	Others	Total
COMPETITION	8 (14.29%)	11 (19.64%)	13 (23.21%)	10 (17.86%)	14 (25%)	0 (0%)	56 (100%)
PERSON (METONYMY)	14 (48.28%)	3 (10.34%)	4 (13.79%)	8 (27.59%)	0 (0%)	0 (0%)	29 (100%)
POSSESSION	0 (0%)	0 (0%)	7 (63.64%)	1 (9.09%)	3 (27.27%)	0 (0%)	11 (100%)

Table 3: Most Frequently Occurring Malay MARKET Metaphors and Syntactic Positions (Percentages According to Syntactic Positions)

	Subject	Adverbial (Location)	Modifier	Noun phrase	Object	Others	Total
COMPETITION	1 (3.45%)	12 (41.38%)	3 (10.34%)	1 (3.45%)	12 (41.38%)	0 (0%)	29 (100%)
PERSON (METONYMY)	12 (52.17%)	1 (4.35%)	4 (17.39%)	2 (8.7%)	4 (17.39%)	0 (0%)	23 (100%)

Comparatively, only Chinese and English data have more instances of MARKET IS A PERSON (METONYMY) as a noun phrase.

- (6) PERSON (METONYMY) x Noun Phrase
 Chinese 今天臺灣資金市場的病症是多發性的
 ‘Today, the symptoms of Taiwan’s investment market are multiple.’
 English Buyers’ sentiment holds fate of market

Table 4: Most Frequently Occurring English MARKET Metaphors and the Syntactical Positions for MARKET (Percentages According to Syntactic Positions)

	Subject	Adverbial (Location)	Modifier	Noun phrase	Object	Others	Total
ANIMAL	10 (43.48%)	3 (13.03%)	0 (0%)	7 (30.43%)	2 (8.7%)	1 (4.35%)	23 (100%)
PERSON (METONYMY)	7 (30.43%)	2 (8.7%)	4 (17.39%)	5 (21.74%)	2 (8.7%)	3 (13.04%)	23 (100%)
IMAGE	6 (28.57%)	0 (0%)	13 (61.9%)	2 (9.52%)	0 (0%)	0 (0%)	21 (100%)

The results in this section shows one important point – the relationship between the types of metaphors and syntax is inseparable. When the source domain PERSON is chosen, most of the times the target term will appear at the subject position than at the object position. This appears true for all three languages investigated. In other words, when personification takes place, it is likely that ‘market’ is the personified subject rather than the object. On the other hand, when COMPETITION is concerned, ‘market’ in this domain usually takes the locative position, followed by the object position. This is, however, found only in Chinese and Malay, as COMPETITION is not as frequently found in English as in the other two languages.

The overall frequency for each syntactic positions shows that different languages show preferences for different syntactic positions. Chinese prefers to place ‘market’ at the subject position (24.18%) and modifier (24.18%) and object (21.57%). Malay prefers the object position (42.86%) and English prefers the subject position (38.60%). This, again, indicates that even if the two languages share similar metaphors, their structuring of the MARKET metaphors may differ. For instance, Chinese treats ‘market’ equally as the doer of the action, the modifier to a noun and the receiver of the action. Malay, on the other hand, prefers to treat ‘market’ as the receivers of the action while English provides more ‘doer’ meaning to ‘market,’ as if the ‘market’ is able to carry out an action by itself. This may explain the attitudes of the English speaker as seeing the market as something that can fall and rise by itself. This can explain examples such as *the market plunges*, *the market swings*, and *the market falls*. In Malay, in particular, these uses are rare and most of the time, people are the ‘doer,’ as in *menceburi pasaran* ‘to dive (into) the market’ and *menembusi pasaran* ‘to break through the (wall of the) market.’ Chinese, contrastively, uses both of these structure in referring to market, as in 市場缺乏競爭性 ‘the market lacks competition’ and 掌握市場 ‘to handle the market well.’ To look at the data differently, Table 5 shows the analysis according to the selectional preferences of the syntactic positions.

Table 5: MARKET Metaphor and Syntactic Positions (Percentages according to Types of Metaphors)

		Subject	Adverbial (Location)	Modifier	Noun phrase	Object	Others	Total
Chinese	COMPETITION	8 (21.62%)	11 (61.11%)	13 (35.14%)	10 (38.46%)	14 (42.42%)	0 (0%)	56 (36%)
	PERSON (METONYMY)	14 (37.84%)	3 (16.67%)	4 (10.81%)	8 (30.77%)	0 (0%)	0 (0%)	29 (18.95%)
Malay	COMPETITION	1 (6.67%)	12 (92.31%)	3 (37.5%)	1 (33.33%)	12 (40%)	0 (0%)	29 (41.43%)
	PERSON (METONYMY)	12 (80%)	1 (7.69%)	4 (50%)	2 (66.67%)	4 (13.33%)	0 (0%)	23 (32.86%)
English	ANIMAL	10 (22.73%)	3 (21.43%)	0 (0%)	7 (43.75%)	2 (18.18%)	1 (25%)	23 (20.18%)
	PERSON (METONYMY)	7 (15.91%)	2 (14.29%)	4 (16%)	5 (31.25%)	2 (18.18%)	3 (75%)	23 (20.18%)
	IMAGE	6 (13.64%)	0 (0%)	13 (52%)	2 (12.5%)	0 (0%)	0 (0%)	21 (18.42%)

From this table, one can see that ‘subject’ in Chinese and Malay is highest in the PERSON (METONYMY) metaphor than the other metaphors, but in English, ‘subject’ in PERSON is at the second place (after the ANIMAL metaphor). ‘Locative adverbial’ is found highest in the COMPETITION metaphor in both Chinese and Malay. In fact, all the syntactic categories in Chinese data seem to have reached a ceiling effect where COMPETITION is concerned, i.e., almost all

categories under COMPETITION show the highest percentages in Chinese. ‘Modifier’ in Chinese is highest in the COMPETITION metaphor; in Malay for both COMPETITION and PERSON; and in English it is highest in the IMAGE metaphor. Examples of the modifiers are given in (7) below.

(7) Chinese 市場競爭力的保障

‘the safeguard of the market’s competitive power’

Malay *strategi pasaran masing-masing*

‘the respective markets’ strategy’

memenuhi kehendak pasaran pekerjaan

‘to fulfill the needs of the job market’

English ‘All Weather’ funds are not always impervious to market swings

In order to see the patterns of the instances more clearly, the collocations according to the different syntactic positions were created, as shown in Tables 6 to 8 below. In these tables, the patterns of words that collocate with each syntactic position are presented.

In Table 6, the collocations when ‘market’ is a subject are presented in all three languages. In Chinese, 37 verbs that take *shichang* ‘market.’ Compared to Malay and English, the patterns of each language differ. Chinese often describes *shichang* ‘market’ as *appearing, becoming, lacking of something, and happening* (middle voice), etc. Malay often describes ‘market’ as *seeing something, and grow*. Interestingly, in Ahrens, Chung and Huang (2003) and Chung, Ahrens and Huang (2003), they found that the Chinese and English often refer to the ‘economy’ as *growing*, but not the ‘market’ in this case. The Malay, however, can describe the market as *something that grows*. The English subject ‘market’ often takes the verb *plunges, rally, and crashes*. These uses of the verbs to describe the market action are not seen in Chinese and Malay.

Table 6 Collocations for ‘market’ as Subjects

Chinese				Malay		English			
Collocates	T	Collocates	T	Collocates	T	Collocates	T	Collocates	T
出現 ‘materialize’	2	取向 ‘have tendency’	1	<i>menyaksikan</i> ‘see’	3	plunges	4	have lived	1
成爲 ‘become’	2	受限於 ‘to be restricted by’	1	<i>tumbuh</i> ‘grow’	3	was not going to rally	3	heavily influenced by	1
缺乏 ‘lack’	2	很常 ‘often’	1	<i>beralih</i> (position) ‘move’	1	crash	2	hit bottom	1
發生 ‘happen’	2	是 ‘is’	1	<i>bergerak</i> ‘move’	1	began	1	is a moving target	1
進入戰國時代 ‘enter the century of war’	2	看在 ‘see (the profits of)’	1	<i>bermaharaja</i> ‘rule’	1	bottomed	1	is declining	1
經歷 ‘experience’	2	首當其衝 ‘to lead in the attack’	1	<i>dikongkong</i> ‘controlled by’	1	collapses	1	is vulnerable	1
運作 ‘function’	2	衰退 ‘to deteriorate’	1	<i>lemah</i> ‘weak’	1	doesn’t emerge	1	looked bleaked	1
促使 ‘cause to become’	2	朝..方向走 ‘walk toward’	1	<i>menuntut</i> ‘claim’	1	doesn’t straight up go	1	loses	1
變 ‘change into’	2	飽和 ‘filled’	1	<i>menyerap</i> ‘absorb’	1	drags on	1	may be getting crushed	1
需求 ‘need’	2	仍有 ‘still have’	1	<i>SVI</i> ‘SVI’	1	ended	1	May put brakes	1

變成 'to become'	1	歷經 'experience'	1	tunduk kepada 'bow to'	1	fall	1	reached	1
平衡 'balance'	1	成熟 'to ripe'	1			falling	1	reel	1
未見蕭瑟 'not bleaked'	1	紊亂 'in a mess'	1			fell	1	should be higher	1
在 'at'	1					had bottomed out	1	showed no signs of cooling	1
						has been damaging	1	started	1
						has been in decline	1	sucks	1
						has left investors	1	turned around	1
						have lead	1	was ice cold	1
						went up	1	was overpowered	1
Total		37	Total	15	Total	44			

Note: T= Tokens

In terms of 'locative adverbial' (see Table 7), both Malay and English use the preposition *inside* and *in* most frequently. Chinese, however, has a different conceptualization of locative markers. They use 上 *shang* 'above' when referring to the market. Therefore, Chinese speakers say 'market' as *above the market* rather than *inside the market*. This may be similar to English *on the market*, which refers to the market as a imaginative platform for activity to take place. Malay never uses market with the preposition *atas* 'above' or 'on.' The investigation of the locative adverbials provides an interesting comparison of the locative schemata of the three speech communities.

Table 7 Collocations for 'market' as Locative Adverbials

Chinese		Malay		English	
Collocates	T	Collocates	T	Collocates	T
上 'above'	13	dalam 'in'	4	in	11
在..上 'above of'	2	bersaing dalam 'compete in'	2	from	1
中 'midst'	1	di 'in'	2	into	1
在 'at'	1	peneraju 'pioeneer'	2	on	1
到 'until'	1	dari 'from'	1		
		bersaing di 'compete in'	1		
		saing di 'compete in'	1		
Total	18	Total	13	Total	14

Note: T= Tokens

In terms of 'modifiers' (Table 8) Chinese *shichang* often modifies *competition* and *possession*, whereas Malay *pasar* often modifies *needs*. English 'market' often modifies *slump*, *pessimism* and *swings* in our data. In terms of 'objects,' the things done on to the market are different in the three languages. In Chinese, the verbs that take *shichang* as an object is *fight into*, *open up*, *expand*, *enter*, etc. In English, the verbs are *break down (wall)* and *exploit*, both of which appear frequently in our corpus. English, however, the verbs are varied and none of the instances is more prototypical than the others.

Table 7 Collocations for ‘market’ as Modifiers

Chinese				Malay		English	
Collocates	T	Collocates	T	Collocates	T	Collocates	T
競爭 ‘competition’	8	奇蹟 ‘miracle’	1	<i>kehendak</i> ‘needs’	3	slump	9
佔有率 ‘possession rate’	5	動向 ‘movement’	1	<i>bahagian</i> ‘part’	1	pessimism	3
優勢 ‘advantage’	2	動態 ‘movement’	1	<i>keadaan</i> ‘situation’	1	swing(s)	3
口味 ‘taste’	1	貿易規範 ‘trading model’	1	<i>penyusutan</i> ‘shrink’	1	crash	2
大餅 ‘pie chart’	1	經濟體制 ‘economic model’	1	<i>sebagai penggerak utama</i> ‘as a main force to’	1	boom	1
機制 ‘mechanism’	1	需求 ‘needs’	1	<i>strategi</i> ‘strategy’	1	bottom	1
地位 ‘status’	1	需要 ‘needs’	1	Total	8	in	1
成長 ‘growth’	1	機能 ‘mechanism’	1			instability	1
行情 ‘situation’	1	機會 ‘chance’	1			woes	1
行情表 ‘chart’	1	競爭力 ‘competitive power’	1			players	1
投機 ‘to take chances’	1	競爭力的 ‘with competitive power’	1			turmoil	1
取向 ‘tendency’	1	競爭的 ‘competitive’	1			volatility	1
競爭壓力 ‘competitive pressure’	1						
Total			37	Total	8	Total	25

Note: T= Tokens

5. Conclusion

In sum, this paper looks at the MARKET metaphors in three languages in terms of metaphor types and its interface with the syntactic preferences of ‘market.’ The results showed that English uses fewer COMPETITION metaphors than the Chinese and English. English MARKET metaphors are more concerned with the fall of the market rather than its competitive ability. In terms of syntactic position of ‘market,’ two major findings were found. First, the syntactic positions of the target word ‘market’ affect the types of metaphors selected. For instance, when MARKET IS A PERSON (METONYMY) is chosen, all three show preferences to place ‘market’ as the doer of the action. Second, all three languages show preferences for different syntactic positions. Chinese prefers to place ‘market’ at the subject position, followed by modifier and object. Malay prefers the object position and English prefers the subject position.

The results of the metaphor types and the syntactic positions show that syntax should not be neglected in its influence in determining the types of metaphors used in different languages. In addition, the types of metaphors selected by different languages are reflections of the communities’ perspectives toward the notion of MARKET.

This study provides insights to compare metaphors cross languages not only at the meaning level but also takes into consideration the meanings and syntax. Previous work had only emphasizes one aspect of the metaphor analysis such as the emphasis on the meaning (such as Lakoff and Johnson, 1980) or on the fine-grained syntax level in the grammatical metaphors (Halliday, 1985). By incorporating frequency count into a combined semantic-syntactic analysis, this work proposes

a quantitative approach to comparing explicit and implicit perspectives of different communities toward the economy of their countries.

6. Acknowledgements

I would like to thank Professor Kathleen Ahrens for editing and commenting on this paper as well as thanks to my classmates in Professor Ahrens' Lexical Semantics class (National Taiwan University Spring 2005) for commenting on this paper. All errors remain my own responsibility.

7. References

- Ahrens, Kathleen, Siaw-Fong Chung, Chu-Ren Huang. 2003. "Conceptual Metaphors: Ontology-based Representation and Corpora Driven Mapping Principles." In the *Proceedings of the ACL Workshop on the Lexicon and Figurative Language*. pp. 35-41.
- Charteris-Black, Jonathan and Timothy Ennis. 2001. "A Comparative Study of Metaphor in Spanish and English Financial Reporting." *English for Specific Purposes*, 20 (3). 249-266.
- Chung, Siaw Fong, Kathleen Ahrens and Chu-Ren Huang. 2003. "ECONOMY IS A PERSON: A Chinese-English Corpora and Ontological-based Comparison Using the Conceptual Mapping Model." In the *Proceedings of the 15th ROCLING Conference for the Association for Computational Linguistics and Chinese Language Processing*, National Tsing-Hwa University, Taiwan. pp. 87-110.
- Chung, Siaw Fong, Kathleen Ahrens and Yahui Sung. 2003. "STOCK MARKETS AS OCEAN WATER: A Corpus-based, Comparative Study in Mandarin Chinese, English and Spanish." In the *Proceedings of the 17th Pacific Asia Conference on Language, Information and Computation (PACLIC)*, Singapore. pp. 124-133.
- Halliday, Michael A. K. 1985. *An introduction to functional grammar*. London: Baltimore and Md., USA: E. Arnold.
- Kilgarriff, Adam and Tugwell, David. 2001. "WORD SKETCH: Extraction and Display of Significant Collocations for Lexicography". In the *Proceedings of the ACL Workshop COLLOCATION: Computational Extraction, Analysis and Exploitation*. Toulouse. pp. 32-38.
- Lakoff, George and Mark Johnson. 1980. *Metaphors We Live By*. Chicago and London: The University of Chicago Press.
- Su, I-Wen Lily. 2000. "Mapping in Thought and Language as Evidenced in Chinese." *Chinese Studies*18: 395-421.

