

## **Toward an Emergent View of Lexical Semantics\***

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In this paper I propose that the principles of Emergent Grammar (Hopper 1987, 1998) can be applied to lexical semantics. I discuss three instances of discourse semantics to show why an emergent view of semantics can provide a realistic account of semantics in discourse. The three cases are: 1) emergence and negotiation of meaning due to participant interaction in discourse; 2) (re)distribution of meanings among perceived synonymous lexical entities due to textual use and communicative demands; and 3) category shift of lexical entities as a result of frequent use in discourse. The results of these case studies are taken as evidence supporting the emergent semantics framework, namely: a) semantic meanings of lexical items and lexical combinations may emerge, be negotiated, and be acquired through language-use; b) meaning in isolation may be at variance with meaning in use; and c) it is indispensable to examine actual discourse practice to understand the nature of lexical semantics.

Key words: lexical semantics, Emergent Grammar, meaning and discourse, discourse analysis, Mandarin lexicon

### **1. Introduction: Emergent Grammar and emergent semantics**

One of the central tenets of functional linguistics is the view that grammar is essentially routinized patterns of language use, i.e., grammatical structures are arising out of discourse practice, and as such grammar is best viewed as dynamic and subject to constant change. Hopper has used the term Emergent Grammar to capture this view of grammar (Hopper 1987, 1998). Numerous studies have appeared showing how discourse practice influences the shape of grammar (see, for example, the recent collection of papers in Bybee and Hopper 2001).

With this view, many functional linguists take as their task to explain the discourse

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basis of grammar and finding recurrent structural tendencies in discourse practice. In Tao (2000b), for example, I attempted to show that the so-called pseudo-cleft construction in Chinese (e.g., 我開的是歐洲文學選講 *Wo kai de shi Ouzhou wenxue xuanjiang* ‘What I offered was an elective course in European literature’) is actually an emergent structure that arises from discourse communicative needs. This is established on the basis that even though the “Nominalization + Copula” (pseudo-cleft) combination can be an open structure in Chinese, in real discourse the possibilities are not really wide open. What I find in discourse is that there is a preferred pattern of “Light Structure + Heavy Structure” in terms of both number of constituents and information distribution. Thus my data show that pseudo-cleft utterances concentrate heavily on a limited range of structural patterns and these patterns can be argued to be discourse motivated.

The goal of this paper is not so much about Emergent Grammar, even though it is closely related, but about Emergent Semantics, i.e., the dynamic nature of meaning of lexical entities. While there have been extensive studies of Emergent Grammar in many languages, relatively little has been done to elucidate the emergent nature of semantics. McCarthy (1987/1992) is one of the earliest studies to point out the interactive nature of lexical meaning, discussed under the purview of prosodic prominence. Bybee (1998) is an explicit Emergent Grammar-based treatment of the lexicon, with an emphasis on the dynamic nature of the formation of the lexicon. Huang (1998), a conversation-based study, argues for the discourse-interactive nature of meaning, showing numerous ways in which meaning is negotiated and emerges from conversation practice. And Biq (1999) addresses especially the issue of meaning-negotiation in conversation concerning various aspects of meta-language and meta-communication, such as naming and conversational implicature. This paper will build on these previous authors’ contributions and try to provide some new perspectives on the emergent nature of lexical semantics. To be sure, even traditional semantic studies have looked to history and have conducted extensive etymological research on changes in meaning in lexical items, postulating such mechanisms as meaning expansion, meaning reduction, meaning shift, and so forth. However, the problem with this kind of research is that most researchers had a tendency to focus on individual items without attempting a systematic and principled explanation for the nature of lexical semantics. It is also implied that meaning change is simply a natural result of time change. In most synchronic semantic studies, on the other hand, isolated lexical meanings or mechanically determined lexical compositions are typically taken as the norm of semantic representations (see Tao 2001b for a critique of a case study). While these investigations have accumulated a wealth of knowledge for our understanding of the semantic dimension of human language, little attention has been paid to the role of discourse practice in shaping the lexicon and the dynamic nature of meaning. It is the central role of discourse practice that will be highlighted in this paper.

To begin with, let me propose that an emergent view of lexical semantics would entail minimally the following.

- (1) a. Semantic meanings of lexical items and lexical combinations may emerge, be negotiated, and be acquired through language use.
- b. Meaning in isolation may be at variance with meaning in use.
- c. It is therefore indispensable to examine actual discourse practice to understand the nature of lexical semantics.

Taking advantage of such modern linguistic tools as electronic corpora and corpus analysis tools, some of the well-known ideas in linguistic semantics can now be substantiated with new data and new techniques. For example, Wittgenstein (1953) has suggested not to look for the meaning of a word, but to look for its use. Bolinger (1977) asserted that no two linguistic forms can be said to be absolutely identical in meaning and function. And Firth (1957) contended that usage patterns of lexical forms can best be examined by looking at the company they keep. All these ideas, along with Emergent Grammar, provide the foundation for an emergent view of lexical semantics.

In the following sections, I shall provide some case studies in Chinese demonstrating the utility of the emergent view of lexical semantics. My discussion will cover the following three areas of discourse semantic phenomena: 1) emergence of meaning due to participant interaction in discourse; 2) (re)distribution of meanings among perceived synonymous lexical entities due to textual use and communicative demands; 3) category shift of lexical entities due to frequent use in discourse.

## 2. Meaning emerges as a result of participant interaction

Huang (1998) has pointed out that traditional lexical semantic analysts and lexicographers, for one reason or another, tend to assume a unitary approach by extrapolating common meanings of lexical items and presenting them as normative; they tend to put aside the negotiated aspects of meaning as insignificant, leaving the impression that lexical semantics is static and fixed. Thus, as a dictionary entry, *chuchai* 出差 may be defined as an out-of-town activity related to business or industry assignments (機關、部隊或企業單位的工作人員) 暫時到外地辦理公事 / 出去擔負運輸、修建等臨時任務 Jiguan, budui huo qiye danwei de gongzuo renyuan zhanshi dao waidi banli gongshi / chuqu danfu yunshu, xiujian deng linshi renwu (Zhongguo Shehui Kexueyuan, Yuyan Yanjiusuo 現代漢語詞典 2002 年版). In actual interaction, however, participants themselves do not assume a general normative approach; they are more interested in the particulars that are closely related to their own life experience. Thus, as Huang's example

shows, the meaning of *chuchai* that emerges out of the sample discourse in (2) bears little resemblance to the dictionary definition we have just seen.

(2) (From Huang 1998, Ex. 6)

A: 他可能以為那邊比較輕鬆啊。..做試驗。..想不到一去就是出差。  
..一天到晚出差。<sup>1</sup>

B: M.

A: ...(3.3) 出差就是..拿一個帳篷啊，..一個睡袋，..然後就去外面出差。  
..都睡在外面。

B: a 幹嗎？..去採種子。

A: ..去採種子啊。..採葉子，..採黃土那些。...(0.8) 他都去那種...(1.3) 都沒有去的地方。

A: Ta keneng yiwei nabian bijiao qingsong a. ..Zuo shiyan. ..Xiangbudaoyi qu jiushi chuchai. ..Yitian daowan chuchai.

B: M.

A: ... (3.3) Chuchai jiushi .. na yige zhangpeng a, ..yige shuidai, ..ranhou jiu qu waimian chuchai. ..Dou shui zai waimian.

B: A ganma? ..Qu cai zhongzi.

A: ..Qu cai zhongzi a. ..cai yezi, ..cai huangtu naxie. ...(0.8) Ta dou qu nazhong ... (1.3) dou meiyou ren qu de difang.

‘A: Well, you might think of the place as relaxing, and where people just do experiments and stuff like that. Little had I known that he would go out of town as soon as he arrived. He does this all the time. B: Mm. A: What is called business trip, it is more like taking a tent, and a sleeping bag, and then you go out, you just sleep outdoors. B: Oh, what do they do then? Collect seeds or something? A: They just collect seeds, leaves, and soil samples. He just goes to those places that no one would ever go to.’

Meaning emerging from conversation practice as shown above is common practice in daily interaction. In my own data, which consist of everyday conversations and are

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<sup>1</sup> The conversation data used in this study are all transcribed according to the Du Bois et al. (1993) transcription system. In this system, the intonation unit, defined as a stretch of natural speech produced in a single unified intonation contour, is taken to be the primary unit of spoken discourse and is represented by punctuation marks. Final intonation units are marked by periods (.), question marks (?), as well as exclamation marks (!). Non-final intonation contours are marked by commas (,). Truncated intonation contours are indicated by dashes (--). Other notations include the following. ^: Primary stress; ...( X ): Longer pauses in seconds; [ ]: Overlapping speech; -- / --: Truncation; @: laughter; <@ @>, speech and laughter.

similar to Huang's and Biq's, it is noted that there are some additional ways in which meaning can be negotiated between participants. In one type of situation speakers may appear to be discussing the definition or some important attributes of a lexical item; what they are really focusing on are some aspects of meaning that interest them most at the moment of conversing, and these aspects of the meaning of the lexical item may, again, be totally absent from standard definitions of the item in question. For example,

- (3) W: 總之是不一樣。誼就跟這個那個屏保那個曲線，正好也有<sup>^</sup>這樣一個曲線，然後看著挺好玩兒的。<@然後，以前就老覺得，@>那個合唱嘛有個，得有個指揮哈。你這沒，[<@沒指揮，@>]  
 M: [就是，]  
 W: [<@沒，沒指揮不叫合唱。@>]  
 M: [<@好像就是打拍子。@>] (ZF)  
 W: Zongzhi shi buyiyang. Ai jiu gen zhege nage pingbao nage quxian, zhenghao ye you <sup>^</sup>zheyang yige quxian. Ranhou kanzhe ting haowanr de. <@ Ranhou, yiqian jiu lao jue de, @> nage hechang ma youge, dei youge zhihui ha. Ni zhe mei, [<@ mei zhihui, @>]  
 M: [Jiu shi,]  
 W: [<@ Mei, mei zhihui bujiao hechang. @>]  
 M: [<@ Haoxiang jiushi da paizi. @>]

'W: Anyway it is different. It's like this line here on the screen saver, it is the same kind of line. It's quite fun to look at. And, so in the past I always felt that for choral compositions, you've got to have a conductor. If not, without a conductor, M: Right. W: Without a conductor it should not be called a choral composition. M: The conductor just controls the beat.'

Speaker W's second turn, by pointing out an important attribute of *hechang* 合唱 'chorus', clearly redefines the meaning of the term. If we check the dictionary definition of *hechang*, we will find something like this: 由若干人分成幾個聲部共同演唱一首多聲部的歌曲 You ruogan ren fencheng jige shengbu gongtong yanchang yishou duo shengbu de gequ ('choral compositions involving different singers and different divisions of voice' 現代漢語詞典 2002 年版), where there is no mention of the requirement of a conductor. However, to the participants, what appears to be most interesting is the fact that coördination, by way of a conductor, is important to orchestrate a complex performance; thus the definition of *hechang* in this example can be said to have been radically redefined for the communicative purpose at hand. McCarthy (1987/1992) has referred to this phenomenon as existential paradigms (see also Huang 1998), or making choices imposed by the real world and the interaction of the moment, which may "not

necessarily customarily (be) thought to inhere in the perceived abstract lexicon of the language” (Brazil 1985). Thus, cases like this seem to be perfect examples illustrating Hopper’s view that “signs reflect a constant competition among speakers for the control of the meanings of terms and for the definitions of words and expressions” (Hopper 1998:163).

Another way speakers negotiate meaning is providing apparently novel and *ad hoc* taxonomies for the reference of a term (Cumming and Ono 1987). Thus in the following example, we can see that W is trying to establish two categories for the reference of the term *shazi* 傻子 ‘fool’: those who are overzealous (特別熱情 *tebie reqing*) and those who pretend to be cool (特別酷 *tebie ku*).

- (4) W: 他那種就是那種，特別，特別，<sup>^</sup>熱情那種傻子，你知道吧？  
M: 嗯嗯。  
W: 傻子分兩種，一種是那個，特別@熱情，還有特別<sup>^</sup>酷那種傻子@。  
這個，當，最後當阿Q，這個是特別<sup>^</sup>酷那個傻子。(ZF)  
W: Ta nazhong jiushi nazhong, tebie, tebie, <sup>^</sup>reqing nazhong shazi, ni zhidao ba?  
M: En en.  
W: Shazi fen liangzhong, yizhong shi nage, tebie @ reqing, haiyou tebie ku nazhong shazi @. Zhege, dang, zuihou dang Ah Q, zhege shi tebie <sup>^</sup>ku nage shazi.

‘W: He is like the kind of person who is particularly, particularly, warm, that kind of fool, you know? M: Mm. W: There are two kinds of fool, one is that, they are overzealous, and then there is another kind, who are very cool. This guy is, is like Ah-Q, he is like pretending to be cool, that’s the kind of fool he is.’

Obviously, whether these taxonomies can be legitimately established or not by whatever criteria and whether speakers will continue to use these taxonomies after the conversation is beside the point; what is important is that the speakers need these taxonomies to make a point (i.e., to describe what kind of person the protagonist being talked about is). In fact the following example suggests that the speakers do not even need to provide a completed taxonomy; very often even half-baked taxonomies would suffice.

- (5) W: 反正那時候兒，那時候兒，我們班就分兩撥人兒，一種就是那個=，特別底層的那種，就是，就是，早晨兒起來=，哎呀說是咱們吃<sup>^</sup>饅頭，還是吃窩窩頭，到底什麼得算算帳。  
M: 嗯嗯嗯。  
W: 挺好玩兒的。(ZF)

W: Fanzheng na shihour, na shihour, women ban jiu fen liangbor renr, yi zhong jiushi nage=, tebie diceng de nazhong, jiushi, jiushi, zaochenr qilai=, aiya shuo shi zanmen chi ^mantou, haishi chi wowotou, daodi shenme dei suansuan zhang.

M: En en en en.

W: Ting haowanr de.

‘W: Anyway, at that time there were two kinds of people in my class. One was that, a kind of people, who are kind of at the very bottom, like, it’s like, you get up in the morning, and you have to wonder what you can eat, and you have to be very careful in spending money. M: Okay. W: It’s so funny.’

In (5) the speaker announces at the beginning that there are two types of people in the class, yet it is not clear what the other type of people would be given the fact that she describes only one type of people with a definition. But clearly the point has been made, and that suffices for the interactive tasks of the moment.

In this section, then, we have seen the first aspect of emergent semantics, i.e., how lexical semantics systematically subordinates to communicative tasks and to participant interaction at the moment of talking and how meanings can emerge as a result of discourse practice.

A theoretical question arises here as to whether there is any abstract meaning that can be delineated for a given lexical item, given, as I am trying to show here, that the meaning of a lexical item may change from context to context.<sup>2</sup> I believe that Hopper has already answered this question when he says that “(t)his apparent fixedness (of meaning) is an illusion brought about precisely because of the reliance on intuitive data that reaches back to remembered snatches of speech whose real context is long gone, and that, in retrospect, appears to be permanently welded to specific meanings.” (Hopper 1998:166) From this perspective, then, any perceived fixed meanings of lexical entities are either illusions or simply convenient labels made by the speaker (including the lexicographer) for a certain task at hand.

In the next section we discuss the impacts of textual use and communicative needs on (re)distribution of meanings among perceived synonymous lexical entities.

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<sup>2</sup> I am grateful to the anonymous reviewer whose comments reminded me of this very intriguing issue.

### 3. (Re)distribution of meanings due to textual use and communicative demands

Another way we can look at the effect of language use on the emergence of lexical meaning is to compare a set of synonymous lexical entities and their association patterns in use (Biber et al. 1998). This is useful in that, if a set of words has otherwise similar meanings, it would be interesting to find out what it is that makes them different in usage patterns, or emerge with subtle differences in meaning, if any. I shall show here that textual practice and communicative needs are primarily the factors contributing to their emergent patterns.

In Tao (2001a) I looked at three verbs of appearing: *chuxian* 出現, *chansheng* 產生, and *fasheng* 發生, all meaning ‘appearing/occurring’. Dictionary definitions of these three items tell us that they are similar in many respects.

Definitions in *A Dictionary of Modern Chinese* (現代漢語詞典 2002) are shown as follows:

【出現】：顯露出來；產生出來：比賽前半小時運動員已經~在運動場上了 | 近年來~了許多優秀作品。(Chuxian: Xianlou chulai, chansheng chulai ‘appear out, emerge out’)

【產生】：由已有事物中生出新的事物；出現：~矛盾；| 中華民族悠久的歷史中，~了許多可歌可泣的英雄人物。(Chansheng: You yiyou shiwu zhong shengchuxinde shiwu; chuxian ‘new things appear out of existent things; appear’)

【發生】：原來沒有的事出現了；產生：~變化 | ~事故 | ~關係 (Fasheng: Yuanlai meiyou de shi chuxian le; chansheng ‘new things appear out of non-existence; appear’)

The dictionary definitions show that: 1) these verbs are regarded as synonymous and can be used to explicate one another (出現←產生 chuxian ← chansheng; 產生←出現 chansheng ← chuxian; 發生←產生 fasheng ← chansheng); 2) major differences appear to be between *chansheng* and *fasheng*; i.e., *fasheng* is defined in terms of entities being from non-existence to existence, while *chansheng* is defined in terms of entities developing some new attributes.

My examination of *Beijing Ren* (北京人 by Zhang Xinxin and Sang Ye), a half-million character collection of edited personal stories solicited through interview, indicates that there are important divisions of meaning among the three synonymous lexical entities. Specifically, *chuxian* is often used to indicate the appearance of some unexpected

entities, such as *geming* ‘revolution’, *yiwai* ‘accident/incident’, and *qingkuang* ‘situation’.<sup>3</sup>

(6) Concordance lines of all instances of *chuxian* in *Beijing Ren*.

- |   |                    |    |                          |
|---|--------------------|----|--------------------------|
| 1 | 你們一定知道，一種正確的宇宙學說的  | 出現 | ，將引起世界性的工業、農業、科技革命。      |
| 2 | 電話總機班裡也有我的人，一旦     | 出現 | 意外，趕緊告訴我，我把著電話機，叫鐵路給團裡   |
| 3 | 公司成立得不算最早，但是，很可能   | 出現 | 我們這一批較有理論素養和精神準備的“新經理”。  |
| 4 | 工了；可是，又有新的牌子和箭頭    | 出現 | 了，你們看—這塊新牌子在幾個月後就是一座新大廈。 |
| 5 | “值星員”，就相當於小組長吧。    | 出現 | 矛盾，調解調解，調解不了，就找政府幹部。     |
| 6 | 舞蹈家；趙予哥哥學鋼琴，上課時卻   | 出現 | 在籃球場上—後來終於是搞了電影。         |
| 7 | 是什麼自己也不知道；突然就明晰了，  | 出現 | 在腦門兒這兒，就是“北京人”三個字。       |
| 8 | 從歷史上看，我國           | 出現 | 過許多飛檐走壁的能人，平地躍起一兩丈高。     |
| 9 | 瞭望一類純政治、新聞性雜誌訂數猛增。 | 出現 | 這個情況，可能有整黨學習的緣故。         |

(Gloss of the head nouns: 1. revolution; 2. accident; 3. new types of manager; 4. new signs and arrows; 5. impasse; 6. an unexpected person; 7. three characters; 8. magic persons; 9. new situation.)

*Chansheng*, on the other hand, is mostly associated with abstract ideas or emotional states. Thus in the following concordance lines, we can see collocations of *chansheng* with *xiangfa* ‘idea’, *jihua* ‘plan’, *buman* ‘dissatisfaction’, *fangan* ‘disliking’, *zibenzhuyi* ‘capitalism’, and so forth.

(7) Concordance lines of all instances of *chansheng* in *Beijing Ren*.

- |   |                 |    |                          |
|---|-----------------|----|--------------------------|
| 1 | 也就是在這個過程之中，我又   | 產生 | 了新的想法和計畫……這個就不           |
| 2 | 效率並不高；而且，有時就    | 產生 | 了對老師、家長的不滿，從而有           |
| 3 | 發現了問題，只是靠“階級本性” | 產生 | 的反感。而且，這類問題現在非常          |
| 4 | 我重新估計自己的生存價值，   | 產生 | 出“己所不欲，務施與人”的念頭；         |
| 5 | 不“繼續革命”，“小生產自發地 | 產生 | 資本主義”，現今，不普及教育           |
| 6 | 追回來，時代還需要我們這一代人 | 產生 | 出繼往開來、承上啓下的科學家、企業家和政治家呀！ |

(Gloss of the head nouns: 1. thinking and plan; 2. dissatisfaction; 3. disliking; 4. an idea; 5. capitalism; 6. scientists, entrepreneurs, and politicians.)

And finally, the use of *fasheng* is often associated with events that contain some undesirable qualities, such as *fenzheng* ‘dispute’, *zhanzheng* ‘war’, and *anjian* ‘crime’.

<sup>3</sup> Li (1986:103) noticed in his written Chinese data the frequent cooccurrences of verbs of appearing with adverbs such as *huran* and *turan* ‘suddenly, unexpectedly’ and the meaning of unexpectedness that is associated with these verb constructions, even though he did not in this regard make distinctions among different types of verbs of appearing.

(8) Concordance lines of all instances of *fasheng* in *Beijing Ren*.

1	是中共的法，不算數！”我們闖進來捕，就	發生	紛爭了。也有時，我們的網目過
2	遇上幾回土匪，當時正值二王劫槍案件	發生	，全國大清查，城裡的壞人跑進
3	們。遇上颱風或者出了故障，運氣不好	發生	海事，總不能叫我們死在洋面上，
4	沙發和兩個小圓凳。”一九三二年在上海	發生	的戰爭使我換了住處，但是我沒
5	什麼事裡頭；我是說如果有什麼大事兒	發生	的話。整“三種人”是對的。冤有
6	變成兩大派對立。和東北的“紅衛兵”	發生	糾紛之後，我又“大串聯”，這回專
7	事。要加強教育。今年，我們學校也	發生	了兩個離婚事件—頭一批顧
8	就好了。結婚的時候，我告訴他插隊時	發生	的那件事，他很痛苦，幾乎不能
9	該寫這些陰暗面，要寫好人好事。”都是	發生	在身邊的事，怎麼不能寫呢？新人
10	可是，確實追不上那形勢了，連眼前	發生	的都不理解，都超出理想了，換你
11	從一九二九年用那大銅球開始，從來沒	發生	過爭議，一直是公平合理。那有
12	思無欲的寧靜感，也是在那會兒。後來	發生	了一件事。我們和當地牧民的關係
13	個辦法。醫生說：百分之九十五的病例	發生	在三歲之前，唉，我偏成了百分之

(Gloss of the head nouns: 1. dispute; 2. crime; 3. sea incidents; 4. war; 5. major incidents; 6. fights; 7. divorces; 8. that thing; 9. common events; 10. what happens before your eyes; 11. arguments; 12. that event; 13. disease.)

The notion of semantic prosody can be applied nicely here. As has been discussed by Bublitz 1996, Lewandowska-Tomaszczyk 1996, Louw 1993, Partington 1998, Sinclair 1987, 1994, and Tao 2000a, semantic prosody refers to the overall connotation of not just a single word, but a string of words. In English, for example, ‘cause’ may be interpreted as simply to mean to make something happen; however, in actual texts, one finds that it is overwhelmingly used in an unfavorable context, in that what gets ‘caused’ is typically some negative events or state-of-affairs, such as ‘cause damage’. In contrast, ‘provide’ is frequently associated with positive things: to ‘provide services, support’, etc; in other words, the overall connotations associated with the contexts in which ‘cause’ and ‘provide’ appear are very different, although just by themselves, there is not much lexical semantic difference that can be detected between them in terms of negativity (Stubbs 1995). Thus semantic prosody is a semantic quality that is acquired through language use, and not something inherent in the lexical semantics of the entities in question. As can be inferred from this discussion, semantic prosody is usually realized as favorable (positive), neutral, or non-favorable (negative) connotations. But our data on verbs of appearing suggest that semantic prosody may be extended to include such qualities as abstractness, unexpectedness, and so forth.

From an ontological point of view, we can suggest that differences in semantic prosody can be attributed to communicative needs. That is, the emergence of semantic prosody is fundamentally driven by the demand to communicate ideas that need to be differentiated. Thus in the following example, we can see a series of verbs of appearing,

including two of the appearing verbs we have just seen, *chuxian* and *fasheng*, as well as one that is not included in our discussion: *fuchu* 浮出, which means emerging in the manner of floating out from under water.

- (9) 根據氣象預報，張健橫渡的這 3 天裡，可能出現降雨及有風天氣，海況並不好。...出發後不久卻發生了一件“惊心动魄”的事，海面上突然浮出一條長約兩米的大魚，大家以為是鯊魚，... (生活時報, 2000.8.9, “張健奮臂向海那邊游去”)

Genju qixiang yubao, Zhang Jian hengdu de zhe santian li, keneng **chuxian** jiangyu ji youfeng tianqi, haikuang bing bu hao. ... Chufa hou bujiu **fasheng** le yijian ‘jingxin dongpo’ de shi, haimian shang turan **fuchu** yitiao chang yue liangmi de dayu, dajia yiwei shi shayu, ... (Shenghuo Shibao, 2000.8.9, “Zhang Jian Fen Bi Xiang Hai Na Bian You Qu”)

‘According to the weather forecast, during the three days when Zhang Jian would swim across the strait, there was a possibility of rain (appearing), and the weather could be windy. The outlook of the sea situation was not really good. ... As soon as Zhang set off to cross the strait, something frightening occurred: a giant sea animal about two meters long surfaced from deep water, and everyone took it as a shark, ...’ (Zhang Swims Across the Sea, Life Times, August 9, 2000)

The existence and use of such compound words as *fuchu* (float-appear) ‘surface’ in (9) where the manner of appearing, ‘floating’, is encoded, are by no means incidental; these compounds indicate the needs of the speakers to fine-tune their expressions for different types of acts/events of appearing they have experienced. By the same token, the (re)distribution of meaning and use in the otherwise similar verbs of appearing can be seen as determined by communicative needs.

#### 4. Category shift due to frequent use in discourse

In this section we will discuss another aspect of emergent semantics, that is, how frequent use can change the semantic category of a lexical element. I shall show that in addition to the evolution of regular lexical items into function words (i.e., grammaticalization, Hopper and Traugott 1993), words can acquire new meanings while maintaining the same lexical category. The case in point is the verb *shuo* 說 ‘say, tell, talk’.

*Shuo* as a speech act verb is usually used to indicate speech activities. For example:

- (10) Y: ...(5)後來了-- ...後來，..後來他說，你丟東西沒有？...(1.2)我說，  
..證件沒丟，..錢沒了。(HK)  
Y: ... (.5) Houlai -- ...houlai, ..houlai ta shuo, ni diu dongxi meiyou? ...(1.2)  
Wo shuo, .. zhengjian mei diu, ... qian mei le.  
‘Y: Then, then, then he said, ‘Did you lose anything?’ I said, ‘My ID is still here, but the money is gone.’

However, since *shuo* expresses a basic kind of human activity and is highly frequent in discourse (ranking 16<sup>th</sup> among the top 8000 words and 13<sup>th</sup> among the top 4000 words in spoken texts, according to the *Frequency Dictionary of Modern Chinese* compiled by the Beijing Language Institute 現代漢語頻率詞典, 1986), we find a number of changes that have taken place in *shuo* (Meng 1982, Liu 1986).

First, we see a semantic category shift. *Shuo*, originally a verb expressing speech activities, can be used to indicate the act of thinking, functioning as a mental-activity verb. This is illustrated by the following example.

- (11) Y: ...後來我- -- ...就慢慢就，心情就-- 就放鬆了。...我說這警察也不是，  
..那，..那麼可怕。...不過都是便衣警員，..就是了。(HK)  
Y: ... Houlai wo - -- ...jiu manman jiu, xinqing jiu -- jiu fangsong le. ...Wo  
shuo zhe jingcha ye bushi, .. na, ..name kepa. ... Buguo doushi bianyi  
jingyuan, ..jiushi le.  
‘Y: Then, gradually I relaxed a bit. I said/thought that the police were not, not that frightening. They are, of course, all plain-clothes police.’

In this example, the speaker is recounting what happened to him during an event where he lost his wallet and then got it back through the police. Clearly this use of *shuo* is not entirely for speech activities, as the speaker was waiting in the police station and had no one to talk to. *Shuo* in this context can be easily replaced with the mental act verb *xiang* 想. Example (12) gives a similar use.

- (12) W: 有一天晚上又打一電話，哎呦=磨嘰的呦，我說這是^誰呀，我說@。  
又在那兒說，哎呀，你怎麼沒來呀什麼的。(ZF)  
W: You yitian wanshang you da yi dianhua, aiyou=mouji de yao, wo shuo  
zheshi shei a, wo shuo. You zai nar shuo, aiya, ni zenme mei lai ya shenme  
de.  
‘W: Then the other night he called again. Gee, I said/thought who is this guy? He kept rambling on and on, ‘What kept you from coming?’ and stuff like that.’

In this example, the speaker was surprised by the mysterious phone call she received. *Shuo* indicates her internal thinking at the moment of answering the phone. More interesting is the following example where, verbs of thinking (*xiang* ‘think’ and *pa* ‘fear’) and *shuo* are used in tandem.

- (13) Y: ...(.8) 我當時還=想的很多。..我說怕他媽的，..這個，  
 T: ...開庭了，..審- --  
 Y: ...又要審呢，..[什麼的]。(HK)  
 Y: ... (.8) Wo dangshi hai=xiang de hen duo. ..Woshuo pa tamade, ..zhege,  
 T: ... Kaiting le, ..shen - --  
 Y: ... You yao shen ne, .. [shenme de].  
 ‘Y: I was thinking a lot of things then. I said (and) feared that, shit, this thing, T: Going to court and having a trial or something. Y: I actually have to go to a trial.’

Of course it is not surprising to find that the same high frequency lexical item undergoes grammaticalization and develops from a regular verb into a grammatical function word (Bybee 1998, 2001). In this respect, *shuo* has developed in a number of directions. One of the results of grammaticalization is the occurrence of *shuo* as a quotative (Meng 1982, Liu 1986). For example:

- (14) Y: ...完了以後，把那個-- ...正好巴士司機呢，...(.7)就作證說，...(.8)有個人，...交了個錢包給我。(HK)  
 Y: ..Wanle yihou, ba nage-- ...zhenghao bashi siji ne, ...(.7) jiu zuozheng shuo, ...(.8) youge ren, ... jiaole ge qianbao gei wo.  
 ‘Y: After that, they wanted, that bus driver, he testified, and said, ‘There was this man, he gave me the wallet.’’

In (14) *shuo* is used together with *zuozheng* 作證 ‘testify’, following which the content of the testimonial was given.

Another result of grammaticalization is to use *shuo* as a linking element (Meng 1982), indicating a further development of *shuo* in the domain of textual linking functions (Traugott 1982, Traugott and Konig 1991). For example:

- (15) M: 結論是<sup>^</sup>這個，就說他吧那個，現在在他班屬於那種，比較，比較<sup>^</sup>調皮=，經常挨 ci 兒的，你知道吧。(ZF)  
M: Jielun shi <sup>^</sup>zhege, jiushuo ta ba nage, xianzai zai ta ban shuyu nazhong, bijiao, bijiao <sup>^</sup>tiaopi=, jingchang aicir de, ni zhidao ba.  
'M: Well the conclusion is that, what should I say, he is now seen as some kind of a trouble-maker in his class, and often got discriminated against by others. You know.'

Here the function of *shuo* is very similar to the copula *shi* that precedes it. In fact even if *shi* is omitted the utterance would still be fine: 結論就說 'the conclusion can be said as'. Thus we often find instances where *shi* and *shuo* are just used together (Biq 2001):

- (16) M: [這屏幕保護就是說，]  
W: [就也沒人去<sup>^</sup>換它。]  
M: 你，你過一會兒就這個，你到那兒你以為機器是<sup>^</sup>關著的呢，然後結果你一<sup>^</sup>碰就，<@ 實際，機器是開著的 @>。(ZF)  
M: [Zhe pingmu baohu jiushi shuo,]  
W: [Jiu ye mei ren qu <sup>^</sup>huan ta.]  
M: Ni, ni guo yihuir jiu zhege, ni dao nar ni yiwei jiqi shi <sup>^</sup>guanzhe de ne, ranhou jiegou ni yi <sup>^</sup>peng jiu, <@ shiji, jiqi shi kaizhe de @>.  
'M: What the screen saver does is (or what the screen saver can be said is),  
W: You don't need people to change it. M: After a while, you might think that the machine is turned off, and then when you really got to touch it, you'll find that it actually is on.'

Furthermore, we can also observe that *shuo* can function as a kind of complementizer or quasi-complementizer (Wang et al. 2000), in ways similar to other verbs of saying in Cantonese (Chui 1994) and many other languages (Lord 1993, Matisoff 1991). In the following example we can see that *shuo* is used to link the verbal complex (tan bu dao 談不到 'can't tell') with the two complement clauses (shei dui na, nashou quzi lijie de hao 誰對哪，哪首曲子理解得好 'which is correct and which piece of music is better understood') that follow it.

- (17) M: 看一些，嗯，看一些著名指揮，就是說，談不到說，誰對哪，哪首曲子理解得好哈，  
W: 嗯。  
M: 就說他把這情緒貫徹在裡邊兒了，(ZF)  
M: Kan yixie, en, kan yixie zhuming zhihui, jiushishuo, tanbudao shuo, shei dui na, nashou quzi lijie de hao ha,  
W: En.  
M: Jiushuo ta ba zhe qingxu guanche zai libian le,  
'M: If you look at some famous conductors, that is to say, it's hard to tell (saying) who is correct and which piece of music is better understood by them.  
W: Mm. M: It's like they put their emotion in the music.'

Overall we can see that the lexical category of a linguistic form can be changed when the item in question is frequently used in discourse. Such changes may occur between content categories (i.e., between different subtypes of verbs), or from a regular lexical category to a grammatical functional category. This, I believe, demonstrates another effect of emergent semantics.

## 5. Conclusions

In this paper I suggest that the principles of Emergent Grammar as articulated by Hopper (1987, 1998) can be applied to lexical semantics. I have discussed three cases where an emergent view of lexical semantics can be shown to be useful. Specifically, I have shown that speakers constantly negotiate meanings or aspects of meanings which may be absent from the perceived abstract lexicon of the language, but which are significant in terms of life experience or communicative needs at the moment of talking. I have also shown that apparently synonymous lexical items may be redistributed in association with different type of semantic prosody and used in different contexts due to discourse practice and communicative needs. And finally we have seen that semantic categories of a lexical entity can be changed when the item in question is frequently used in discourse; significantly, such changes may happen within lexical categories (i.e., between different subtypes of verbs) along with the now-familiar process of grammaticalization, i.e., a lexical entity shifting from a regular lexical category to a grammatical category.

This list of the symptoms of discourse-based semantics provided in this paper, which is further built upon the research of a number of previous scholars, is by no means exhaustive, but the results of these case studies can be taken as evidence supporting the emergent semantics framework that was outlined at the beginning of the paper, namely,

a) semantic meanings of lexical items and lexical combinations may emerge, be negotiated, and be acquired through language use; b) meaning in isolation may be at variance with meaning in use; and c) it is indispensable to examine actual discourse practice to understand the nature of lexical semantics.

Finally, more broadly speaking, in so far as the origin of meaning is concerned, when we compare the state of lexical semantics with other areas of the arts and humanities, we notice that lexical semantics, in contrast with other areas of humanities research, has so far been treated as a less challenging area. While in literary criticism there is an on-going debate among subjectivism (where meaning of a text is said to be determined entirely by the reader), constructivism (where meaning is believed to exist in the interplay between the text and the reader), and objectivism (where meaning is said to exist entirely in the text) (Fish 1999), in the arts community there is a well established tradition that the meaning of artistic products is subject to intersubjective negotiation between the creator and the audience. In linguistics it appears that linguistic forms and their meanings are interpreted far more rigidly than many other forms of symbolic systems. This may be due to the fact that in everyday communication involving members of the speech community there are far more factors involved than in the process of artistic creation, not the least of which is the constant tension between formulacity (for ease of storage and retrieval) and creativity (to meet the demands of expressivity). And students of lexical semantics appear to have leaned heavily towards abstracting meanings out of context. What this study shows is that meaning is fundamentally transitory, where meaning is seen as being created on the basis of prior experience and in the process of communication, and the provisional result serves as new context where meaning can be further refined. In other words, lexical semantics is not a constant state, but rather an ever-evolving process, much as Hopper has described regarding the nature of grammar.

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## 動態語義學初探

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本文試圖說明，Hopper (1987, 1998) 提出的動態語法學原則也適用於詞匯語義學領域。本文具體討論從話語中觀察到的三類動態語義現象：1) 因談話人互動而帶來的動態語義現象；2) 同義或近義詞受交際制約在篇章中出現語義重新分配現象；3) 由高頻率語用而造成的詞語的詞類轉移現象。這三種現象說明，語言單位的語義可以因語言的運用而改變或被確認，脫離語境的語義跟語言運用中的語義並不完全一致，因此有必要借助語言運用來研究語義問題。

關鍵詞：詞匯語義學，動態語法學，語義和話語，言談分析，漢語語匯