# The Polysemy of PO in Mandarin Chinese

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#### Abstract

The present paper notes that the lexical item PO, literally meaning 'to break', bears multiple semantic imports in Mandarin Chinese. Given the lack of well-documented research on the semantics of the lexical item, this paper aims to explore the various meanings of PO. By examining the collocations of PO, thirteen meanings are identified, with predicative and attributive senses. It is proposed that the manifold meanings are interrelated with each other and that several meanings are derived from the core verbal meaning of the lexical item. Three generalized metaphors are observed to assume a mediating role in the semantic extensions of PO. In light of the semantic relatedness of the various meanings, the polysemous nature of the lexical item PO is substantiated.

Key words: PO, polysemy, semantic extension, lexical semantics

### 1. Introduction

Since a growing number of psychological studies shed new light on human cognition in 1970s, the field of semantics has witnessed flourishing cognitive-oriented approaches to semantic representations of lexicon and grammar—especially lexical semantics and cognitive semantics (Rosch 1973, 1977, 1978, Lakoff and Johnson 1980, Lakoff 1987, 2002, Johnson 1987, Langacker 1987, 1990, 1999, Geerearts 1993, Talmy 1985, 2000a,b, Taylor 1989, 2002a,b, 2003, among others). These cognitive-theoretic proposals have spawned a voluminous literature pertaining to conceptualization, categorization, semantic extension, and grammaticalization of polysemous lexical items in Mandarin Chinese, such as *guo* 'to cross' (Wang 2002, Hsiao 1997, 2003, Wu 2003), *gei* 'to give' (Huang 2004), and *kai* 'to open' (Tsai 2006).

When it comes to the issues of polysemy, one point meriting our note is the distinction between homonymy and polysemy. Homonymy refers to the relation between different lexical entries which have unrelated meanings but accidentally exhibit an identical linguistic form, orthographic or phonetic (Ravin and Leacock 2000). A polysemous word, in contrast, is one single lexical item which bears different, but etymologically related, meanings (Lyons 1995, Ravin and Leacock 2000). The English word *break* is a case of polysemy (Tang 2004), and *breken* 'to break' in Dutch also has multiple meanings (Kellerman 1978). The present

paper observes that the lexical item PO, literally meaning 'to break', seems to bear versatile semantic imports in Mandarin Chinese. A question arises as to whether PO is a polyseme or two or more homonyms in Mandarin Chinese. It is noted that studies on the semantics of the lexical item PO, if any, are underrepresented, or even undocumented. Hence, this study aims to probe into the manifold meanings of PO. A cognitive approach will be drawn on to explicate the relations between different semantics of PO and to substantiate the polysemous nature of the lexical item.

This paper is organized as follows. Section 2 is concerned with the research background of the present analysis. Section 3 deals with the various senses of PO and proposes a possible account for the semantic relatedness of the manifold meanings. Section 4 concludes this paper.

### 2. Research Background

In linguistics, the theory of prototypes has exerted a momentous impact on lexical semantics and cognitive linguistics (e.g. Rastier 1999, Chu and Chi 1999, Ravin and Leacock 2000). The prototypical category framework has laid theoretical foundations for research on polysemy, and mechanisms for meaning extension have also derived much inspiration from prototypes. The prototypical theory and apparatus for semantic extension are reviewed below.

### 2.1 The Prototypical Category Theory

The human kind seems to have an innate ability for categorization; for example, our brain divides the world into two primary types of entities, things that exist and situations that take place (Huang, Li, and Li 2006). Frameworks for human's categorization include the classical approach, the prototypical approach, and the relational approach.<sup>1</sup> Among them, the notion of prototypes is adopted in this paper.

Prototypes are amenable to two interpretations. The concept of prototypes is reminiscent of the renowned American psychologist Eleanor Rosch (1973, 1977, 1978). Rosch introduces the role of prototypes to elucidate human's categorization. People categorize objects on the basis of the resemblance between the objects and the prototypical members of the category. According to Rosch (1978:36), prototypes can be defined as the 'clearest cases of category membership defined operationally by people's judgments of goodness of membership in the category'. A prototype of a category is thus viewed as a salient exemplar of the category. Some instances of a category are more typical than others and hence emerge in human's mind more easily. For example, *robin* is a representative, prototypical instance of the category

<sup>&</sup>lt;sup>1</sup> For detailed information of the classical approach, please refer to Katz and Fodor (1963), and for the relational approach, please see Evens (1988) and Fellbaum (1998).

BIRD in English,<sup>2</sup> while *penguin* is not a central, salient case.

Alternatively, prototypes are construed as an abstraction, a mental representation, rather than as a particular, concrete referent or instance. Lakoff (1987, idealized cognitive models (ICMs)), for instance, puts forth a prototypical concept of such a type—the cluster concept. The cluster concept consists of several cognitive models. For example, the meaning of MOTHER comprises the following cognitive models: the birth model, the genetic model, the nurturance model, the marital model, and the genealogical model. MOTHER forms a radial conceptual model; it has a central category where all the above models converge, as well as peripheral categories where fewer models congregate.

One point of categories merits our note here. Categories are not homogeneous; they are characterized by a prototype, with core and peripheral members, and fuzzy boundaries (Rosch 1973, 1977, 1978). Membership in a category is not contingent on whether an entity possesses all the attributes of a category. Rather, it is the degrees of family resemblances that link category members together (proposed by Wittgenstein 1953).

It has been maintained that our categorization hinges much on the structure of the outside world (Johnson 1987, Lakoff 1987). There are three levels of categories, i.e. basic-level, superordinate, and subordinate categories. Above and below basic-level categories exist superordiate and subordinate categories, respectively. The former are more abstract and embracing than the latter. For instance, DOG is a basic-level category. Superordinate to it is the category of ANIMAL, and the category of COLLIE, for example, is subordinate. The relations of the three levels of categories form a hierarchical structure of our language. Shifts from basic-level categories to superordinate ones lead to generalizations, while specifications are achieved from basic-level to subordinate categories.

### 2.2 Semantic Extension

Polysemy is a consequence of lexical semantic evolution towards different but related directions; different meanings are linked in terms of the semantic relatedness. Two traditional concepts assume a mediating role in semantic extension, viz. metaphor and metonymy, and avenues leading to polysemy involve semantic radiation and meaning chain.

Metaphors are one of the major mechanisms contributing to semantic change (e.g. Bybee and Pagliuca 1985, Sweester 1986, 1990). Metaphorical extension refers to the mappings across conceptual domains, from the source domain to the target, in which entities exhibit resemblances (Lakoff and Johnson 1980). It has been proposed that metaphors are grounded on our embodied experiences of the world and constitute part of our conceptual system (Lakoff and Johnson 1980, Johnson 1987, Lakoff 2002). In addition to metaphors, metonymy also accounts for semantic change. It refers to the process of establishing

<sup>&</sup>lt;sup>2</sup> Prototypical exemplars of a category may be subject to cultural-specific differences.

associations between entities within a given conceptual structure (e.g. Taylor 1989, Hopper and Traugot 1993).

One path to metaphoric and metonymic extension is semantic radiation. Semantically, radiation is the process in which secondary meanings evolve from the central, core meaning in every possible uni-direction like rays (cf. Lakoff 1987, Langacker 1990). The core meaning is the prototype, from which different meanings are derived from. Nonetheless, the radial process cannot satisfactorily explain all the semantic change. For a number of words, the secondary meanings evolving from the core may become a hub for further semantic derivation, which may in turn undergo onward semantic evolution. Such a route to semantic extension is named meaning chain (cf. Lakoff 1987, Tayler 1989, Langacker 1990).

#### 3. The Analysis

The present paper probes into the manifold meanings of the lexical item PO in Mandarin Chinese. PO is a productive word in Mandarin Chinese. Based on Academia Sinica Balanced Corpus of Modern Chinese<sup>3</sup> and Chinese GigaWordCorpus,<sup>4</sup> 16,448 tokens of PO were retrieved in total (219 tokens from the former corpus, and 16,229 tokens from the latter). Due to the limit of time and space, nonetheless, this paper only examines the meanings of 200 tokens, but simultaneously has recourse to Lü (1999) as reference to bridge a gap that the limited number of tokens analyzed might leave.

# 3.1 Multiple Meanings of PO

This paper notes that the lexical item PO has two syntactic categories, i.e. as a verb and as an adjective. The semantics of a verb and of an adjective can be identified by probing into their collocations. Based on the present data, the senses of PO as a verb can be classified into ten types, and three meanings are singled out for PO as an adjective, as exemplified below:

- (1) A verb meaning 'to damage an intact physical entity/substance'
  - a. 窗户破了 Chuanghu po-le. 'The window broke.'
  - b. 打破玻璃 dapo boli 'to break glass'

<sup>&</sup>lt;sup>3</sup> Academia Sinica Balanced Corpus of Modern Chinese (Sinica 3.0) encompasses 5 million words in Mandarin Chinese. The website for the corpus is <u>http://www.sinica.edu.tw/SinicaCorpus/</u>.

<sup>&</sup>lt;sup>4</sup> Subsumed under the Sketch Engine (abbreviated as SkE, also known as Word Sketch Engine <u>http://www.sketchengine.co.uk/</u>), Chinese GigaWordCorpus covers 1 billion words in Mandarin Chinese and is the largest corpus of Modern Mandarin Chinese at present. The website for the corpus is <u>http://corpora.fi.muni.cz/chinese\_all/</u>.

- (2) A causative verb meaning 'lit. to split an entity into two pieces'
  - a. 破門而入 po men er ru 'lit. to split the door into two pieces and enter (a room); to burst into a room'
  - b. 破繭而出 po jian er chu 'lit. to tear a cocoon apart and go out'
  - c. (乘風)破浪 po lang 'lit. to split waves of ocean into two parts'
- (3) A verb meaning 'to scrape the intact surface (of skin)'

a. (磨)破皮 po pi 'to scrape the skin'

- b. 嘴破 zui po 'The skin of the oral cavity is wounded; stomatitis.'
- c. 腸破(肚流) chang po 'The skin of the bowel is wounded'
- (4) A causative verb meaning 'to eradicate (an idea, belief, custom, etc.)'
  a. 破除迷思 pochu misi 'to break the myth'
  b. 破舊(立新) po jiu 'to eliminate the old custom'
- (5) A causative verb meaning 'to disobey (a rule, precedent, convention, etc.)'a. 破戒 po jie 'to break a religious precept'b. 破例 po li 'to make an exception'
- (6) A causative verb meaning 'to surpass (a checkpoint, record, etc.)'
  a. 破關 po guan 'to go through a checkpoint'
  b. 破紀錄 po jilu 'to break the record'
- (7) A causative verb meaning 'to defeat (enemies)'
  a. 破敵 po di 'to defeat enemies'
  b. 破除重圍 pochu chongwei 'to defeat a multitude of enemies'
- (8) A causative verb meaning 'to expend (money)'
  - a. 破費 po fei 'to expend one's money'
  - b. 破產 po chan 'to go bankrupt'
- (9) A causative verb meaning 'to uncover (a fact)'a. 破案 po an 'to solve a criminal case'
- (10) A causative verb meaning 'to end a situation'
  - a. 破涕為笑 po ti wei xiao 'to turn tears into smiles'
  - b. 打破僵局 dapo jiangju 'to break the ice'
  - c. 打破沉默 dapo chenmo 'to break the silence'
- (11) An adjective meaning 'broken, ragged'
  - a. 破舊的 pojiu de 'tattered, ragged'
  - b. 破衣服 po yifu 'ragged clothes'
- (12) An adjective meaning 'worthless' 破玩意兒 po wanyier 'worthless stuff'
- (13) An adjective meaning 'lousy'他的中文很破 Ta de zhongwen hen po. 'His Chinese is very lousy.'

#### 3.2 Semantic Relatedness

The various meanings of the item PO are elaborated on in the following subsections. The ten verbal meanings of PO are explicated first, followed by accounts of the semantic imports of PO as an adjective.

### 3.2.1 A Verb Meaning 'to Damage an Intact Physical Entity/Substance'

The verb PO bears the core meaning 'to damage an intact physical entity/substance'. The entity in this case is concrete, tangible, and most importantly, breakable. The breakable entity remains 'intact' before it is affected by the action of breaking. The action of breaking causes the entity to undergo change of state, and the degree of affectedness is high.

A clear, typical instance of a brittle object is a window, as in (14a). The collocate 窗户 (*chuanghu* 'window') with the verb PO comes into human mind easily; the meaning 'to damage an intact physical entity/subtance' is prototypical and thus stands at the center of semantic structure of the lexical item PO. In (14b), 玻璃 (*boli* 'glass') is substance, of which a window is made. The meaning of *boli* alternates with that of a discrete object through metonymy.<sup>5</sup>

The expressions in (14a-b), despite containing the same lexical item PO, denote different aspectual interpretations. The word PO in (14a) is an intransitive verb and has an inchoative meaning.<sup>6</sup> In (14b), *dapo* 'hit-broken' is a resultative verb compound; PO is a complement of the verb  $\frac{1}{27}$  (*da* 'hit') and denotes the resultative state caused by the action that the predicate depicts.

- (14) A verb meaning 'to damage an intact physical entity/substance' (=(13), repeated here for ease of reference and discussion)
  - a. 窗户破了 Chuanghu po-le. 'The window broke.'
  - b. 打破玻璃 dapo boli 'to break glass'

# 3.2.2 A Causative Verb Meaning 'to Split an Entity into Two Pieces'

As derived from the core meaning, the verb PO can collocate with an entity that could be split into two pieces. Such a collocation bears the literal meaning 'to split an entity into two parts'. In (15a), a door can be viewed as a visible PHYSICAL BARRIER from one space to another. When one has the desire to enter another space, one has to remove the barrier before the desire can be realized. If the space/room has a door and the door is closed, one

<sup>&</sup>lt;sup>5</sup> The count/mass alternation for nouns is one type of polysemous variation, a case of metonymy.

<sup>&</sup>lt;sup>6</sup> For discussion of causative/inchoative alternation of the word *break* in English, the reader is referred to Holmes (1999), for example.

normal way of entering the room is to 'open' the door by unlocking the door and using the doorknob or handle. If one splits the door into two pieces and abruptly enters the room through the door barrier, instead of following the normal way of entering the room, then the extended meaning of 破門而入 (*po men er ru*) obtains, i.e. 'to burst into a room'.

This is the case of (15b). The expression 破繭而出 (*po jian er chu*) literally means 'to tear a cocoon apart and go out'. When a silkworm is wrapped in a cocoon, it must tear the cocoon into two parts before it transforms into a butterfly and flies out of the cocoon. According to Lakoff and Johnson (1980), our conceptual system is grounded on our embodied experiences of the world. We view our body as a PHYSICAL ENTITY, separated from the world by the surface of (the skin) of our body, like a concrete PHYSICAL CONTAINER with an inside and an outside. Likewise, a cocoon can be regarded as a concrete PHYSICAL CONTAINER, which constrains a silkworm. When one strives to get free from a container constraint, whether concrete or abstract, one has to split apart the container constraint, just as a silkworm does to the cocoon. Along the thread of thought, the metaphorical meaning of the expression is derived.

A figurative meaning can be derived as well. Human beings impose artificial boundaries onto physical phenomena and consider them to be discrete as individuals themselves are (Lakoff and Johnson 1980). Along this line, the waves of ocean can be split into two parts as well, and the extended meaning of (15c) (乘風)破浪 (*po lang* 'lit. to split waves of ocean into two parts') emerge.

- (15) A causative verb meaning 'to split an entity into two pieces'
  - a. 破門而入 po men er ru 'lit. to split the door into two pieces and enter (a room); to burst into a room'
  - b. 破繭而出 po jian er chu 'lit. to tear a cocoon apart and go out'
  - c. (乘風)破浪 po lang 'lit. to split waves of ocean into two parts'

### 3.2.3 A Verb Meaning 'to Scrape the Intact Surface (of Skin)'

As suggested above, our body is regarded as a concrete PHYSICAL CONTAINER with an inside and an outside. Just as the surface of a cup, which is made of brittle glass, can be damaged, our skin as the surface of the container, our body, is delicate and can be damaged as well, as in (16a) ( $\underline{B}$ ) $\overline{w}$  $\underline{c}$  (*po pi* 'to scrape the skin'). Since a container has an inside and an outside, the inside and the outside have a surface, both of which can be damaged. The expression  $\underline{a}$  (*zui po*) denotes that the skin of the inside, i.e. the oral cavity, is wounded, namely stomatitis. In (16c), a bowel can be viewed as a smaller container inside the larger container, our body, and  $\underline{B}$  w( $\underline{H}$ ) (*chang po*) means that the skin of the bowel is wounded.

Other examples involving human body are shown in (17a-b). With respect to 破相 (po

*xiang*), a human face is regarded as 'intact' if there is no scar on it, just as a window is viewed as intact before it is broken or marred. When a human face is marred by a scar, the expression is used. Also, the concept of intactness applies not only to human body but also to the notion of virginality. The metaphor is VIRGINALITY IS A PHYSICAL ENTITY, which is closely linked with human body and can be damaged once one has sex, as in (17b). The meaning of PO in  $\overline{w}$  (*po shen*) might be extended through the avenue shown in Figure 1, i.e. from a brittle entity through human body to virginality.

- (16) A verb meaning 'to scrape the intact surface (of skin)'
  - a. (磨)破皮 po pi 'to scrape the skin'
  - b. 嘴破 zui po 'The skin of the oral cavity is wounded; stomatitis.'
  - c. 腸破(肚流) chang po 'The skin of the bowel is wounded'
- (17) a. 破相 po xiang 'to be marred by a scar on the face'
  - b. 破身 po shen 'to lose virginality'



### 3.2.4 A Causative Verb Meaning 'to Eradicate (an Idea, Custom, etc.)'

In addition, abstract ideas, beliefs, and customs can be metaphorically viewed as a concrete entity—AN IDEA IS A PHYSICAL ENTITY. Just as a glass, a concrete object, can be broken into pieces, a myth, imaged as a physical entity, can also be broken into pieces by the action depicted by the verb PO, as shown by 破除迷思 (*pochu misi* 'to break the myth') in (18a). The metaphoric extension also holds true of an old custom, as in (18b) 破舊(立新) (*po jiu* 'to eliminate an old custom'). When an object is smashed into 'pieces', it undergoes tremendously high degree of affectedness. Its state is changed vastly, or even completely, and thus is different from the original shape (and/or nature); that is to say, the object is no longer what it was. Along this thread of thought, the extended meaning of PO 'to eradicate' is yielded.

- (18) A causative verb meaning 'to eradicate (an idea, belief, custom, etc.)'
  - a. 破除迷思 pochu misi 'to break the myth'
  - b. 破舊(立新) po jiu 'to eliminate the old custom'

### 3.2.5 A Causative Verb Meaning 'to Disobey (a Precedent, Convention, etc.)'

When one is put in a container, one's demeanor and action are restrained. A rule, precedent, or convention can thus be treated as a concrete container that constrains our conduct, i.e. the metaphor A RULE IS A PHYSICAL CONTAINER. For example, a religious precept constrains one's way of living, such as interdicting one from doing something, eating something, or saying something. When one does not follow the religious precept, it is imaged that one breaks the container constraint, as in (19a) 破戒 (*po jie* 'to break a religious precept'). For (19b)  $\overline{\alpha} \phi$  (*po li* 'to make an exception'), if one is constantly constrained by conventions and follows them when one acts or handles matters. Once one does not act in accordance with the conventions one used to follow, one makes an exception to the conventions, i.e. the meaning of (19b).

- (19) A causative verb meaning 'to disobey (a rule, precedent, convention, etc.)'
  - a. 破戒 po jie 'to break a religious precept'
  - b. 破例 po li 'to make an exception'

### 3.2.6 A Causative Verb Meaning 'to Surpass (a Checkpoint, Record, etc.)'

In Figure 2, there are 10 figures at the horizontal axis. The highest score among the ten figures is 75 points. The expression in (20b)  $\overline{w}$  紀錄 (*po jilu* 'to break the record') can be used only when a figure exceeds 75 points in this case. The noun 紀錄 (*jilu* 'record') can not refer to any score in the document but exclusively to the highest score recorded in the past. Hence, the expression 紀錄 (*jilu* 'record') has a similar meaning to 關 (*guan* 'checkpoint') in (20a) 破關 (*po guan* 'to go through a checkpoint')—a point for check or reference. By drawing on the metaphor A CHECKPOINT IS A PHYSICAL BARRIER, we can proffer a possible account for the collocations 破關 and  $\overline{w}$ 紀錄 and the extended meaning of the verb PO. Since a checkpoint is regarded as a barrier, when one reaches the checkpoint and proceeds forward or upward through it,<sup>7</sup> one breaks through the checkpoint barrier.

- (20) A causative verb meaning 'to surpass (a checkpoint, record, etc.)'
  - a. 破關 po guan 'to go through a checkpoint'
  - b. 破紀錄 po jilu 'to break the record'

<sup>&</sup>lt;sup>7</sup> FORWARD and UPWARD here involve an orientational metaphor MORE IS UP/FORWARD. The more upward a score goes, the higher it is.



Figure 2. PO 'to surpass'

# 3.2.7 A Causative Verb Meaning 'to Defeat (Enemies)'

Enemies can form a line, a wall, or even a circle. Thus, they can be viewed as a line of barrier or a wall of barrier as well, as shown by the expression 四面圜敵 (*si mian huan di* 'to be surrounded by enemies'). The metaphor is ENEMIES ARE A PHYSICAL WALL OF THE BARRIER. Along this line, to break through the wall of the barrier constituted by the bodies of enemies means 'to defeat the enemies', as in (21a) 破敵 (*po di* 'to defeat enemies') and (21b) 破除重圍 (*pochu chongwei* 'to defeat a multitude of enemies').

- (21) A causative verb meaning 'to defeat (enemies)'
  - a. 破敵 po di 'to defeat enemies'
  - b. 破除重圍 pochu chongwei 'to defeat a multitude of enemies'

### 3.2.8 A Causative Verb Meaning 'to Expend (Money)'

The verb PO can collocate with money, as in (22a)  $\frac{1}{2}$  (*fei* 'money') and (22b)  $\underline{\hat{k}}$  (*chan* 'property'). Money is considered to be a concrete object—the metaphor MONEY IS A PHYSICAL ENTITY. The core meaning of the verb PO is 'to damage an intact physical entity/substance'. When one's money is expended, the sum of the money decreases and thus does not remain intact anymore. The collocation of PO and money derives the meaning of expending, as in (22a). As a concrete entity is broken into 'pieces', the degree of affectedness is tremendously great, and one's property, as imaged as the object, goes to pieces. Hence, the expression  $\underline{w}_{\underline{k}}$  (*po chan*) derives the meaning 'to go bankrupt' through metaphoric extension.

- (22) A causative verb meaning 'to expend (money)'
  - a. 破費 po fei 'to expend one's money'
  - b. 破產 po chan 'to go bankrupt'

### 3.2.9 A Causative Verb Meaning 'to Uncover (a Fact)'

As exemplified in (23), a criminal case can be also viewed as a concrete container—the metaphor A CRIMINAL CASE IS A PHYSICAL CONTAINER. Just as a cup contains certain liquid, the criminal container contains unknown facts. As one breaks a cup, the liquid contained in the cup will flow out. In the same vein, one has to break the criminal container so as to disclose things or facts that are covered. The derived meaning of PO 'to uncover' obtains accordingly.

- (23) A causative verb meaning 'to uncover (a fact)' 破案 po an 'to solve a criminal case'
- 3.2.10 A Causative Verb Meaning 'to End a Situation'

Human beings impose an artificial bound on a situation and view a situation as a concrete container—the metaphor A SITUATION IS A PHYSICAL CONTAINER. As a concrete container is broken, the state of the liquid in the container is changed, and the original state does not exist anymore. When the verb PO collocates with a state of affairs, that situation is hence put to an end. As in (24a) 破涕為笑 (*po ti wei xiao* 'to turn tears into smiles'), it signifies that one stops crying, the prior state, and turns into a smile, a new state. Along the thread of thought, the extended meaning of PO 'to end a situation' holds true of (36b) 打破僵局 (*dapo jiangju* 'to break the ice') and (24c) 打破沉默 (*dapo chenmo* 'to break the silence') as well.

- (24) A causative verb meaning 'to end a situation'
  - a. 破涕為笑 po ti wei xiao 'to turn tears into smiles'
  - b. 打破僵局 dapo jiangju 'to break the ice'
  - c. 打破沉默 dapo chenmo 'to break the silence'

### 3.2.11 Attributive and Predicative Adjectives

In addition to functioning as a verb, the lexical item PO can also serve as an adjective, as illustrated below:

- (25) An adjective meaning 'broken, ragged'
  - a. 破舊的 pojiu de 'tattered, ragged'
  - b. 破衣服 po yifu 'ragged clothes'

- (26) An adjective meaning 'worthless' 破玩意兒 po wanyier 'worthless stuff'
- (27) An adjective meaning 'lousy'他的中文很破 Ta de zhongwen hen po. 'His Chinese is very lousy.'

It is speculated that the adjectival meanings of PO may evolve from the core semantics of the verb PO, i.e. 'to damage an intact physical entity'. Functioning as a verb, PO has three types of syntactic status, namely as a transitive verb, an intransitive verb, and a verb complement, as shown in (28).

- (28) Syntactic status of the verb PO
  - a. 打破玻璃 dapo boli 'to break glass'
  - b. 窗户破了 Chuanghu po-le. 'The window broke.'
  - c. 破窗(而入) po chuang 'to split the window into two pieces'

As a transitive verb, PO imparts a causative meaning to the sentence, as in (28c). PO as an intransitive usually bears an inchoative meaning, as in (28b). As an RVC, it denotes the resultative state brought about by the action that the predicate describes, as in (28a). Both the inchoative meaning and the RVC delineate a state, which might lead to an attributive meaning of PO. The core meaning of PO as a verb might account for the core adjectival meaning 'broken, damaged', as in (25) 破舊的 (*pojiu de* 'tattered, ragged'). As an entity is broken or worn-out to a great extent, that object will be regarded as useless and worthless. The extended meaning 'worthless' is thus derived, as in (26) 破玩意兒 (*po wanyier* 'worthless stuff'). When it is used for predication, PO delineates the quality of the entity referred to by the subject, as in (27) 他的中文很破 (*Ta de zhongwen hen po.* 'His Chinese is very lousy.'). In this case, the language proficiency is regarded as a concrete entity that can be measured and assessed—low proficiency. Figure 3 provides a possible account for the semantic evolution of PO as an adjective. From the core verbal meaning of PO, the lexical item derives the more concrete adjectival sense, 'ragged', and the abstract semantic imports, 'worthless' and 'lousy'.



Figure 3. Semantic Extensions of PO as an Adjective

#### 4. Conclusion

This paper has discussed the multiple semantics of the lexical item PO and identities ten verbal meanings and three adjectival meanings. As a verb, PO bears the core meaning 'to damage an intact physical entity'. The other extended meanings are interrelated to the core meaning; several abstract meanings are derived from the core directly, and some meanings evolve through secondary semantic extension. It is noted that metaphoric extension assumes an indispensable role in accounting for the evolution of the series of semantic imports. It is generalized that the semantic derivations of PO involve the following three metaphors:

# X IS A PHYSICAL ENTITY. X IS A PHYSICAL CONTAINER. X IS A PHYSICAL BARRIER.

These metaphors are interrelated. A container is a physical entity, and so is a physical barrier. A container usually has at least five facets, and each facet can be regarded as a barrier in some sense. A concrete entity, a physical container, and a physical barrier exhibit the nature of brittleness/breakability and therefore can undergo the action of breaking. Through metaphors, the verb PO can collocate with abstract entities, including ideas, rules, records, enemies, money, unknown facts, and situations, and thus develops the extended meanings. With respect to the attributive meanings of PO, the core verbal meaning of PO gives rise to the derived core attributive meaning, which in turn lends impetus to the further evolution of adjectival meanings. Since the manifold meanings of PO, predicative or attributive, are interrelated, the polysemous nature of PO is evident. Hence, PO is not homonymous but a lexical item which bears different, but semantically related, meanings, viz. a polyseme.

### References

- Bybee, J. L., and W. Pagliuca. 1985. Cross-linguistic comparison and the development of grammatical meaning. *Historical Semantics, Historical Word Formation*, ed. by J. Fisiak, 59-83. Berlin: Mouton.
- Chu, C. C., and T.-J. Chi. 1999. A Cognitive-Functional Grammar of Mandarin Chinese. Taipei: Crane.
- Evens, M. W. 1988. *Relational Models of the Lexicon: Representing Knowledge in Semantic Network.* Cambridge: Cambridge University Press.
- Fellbaum, C. 1998. WordNet: A Lexical Reference System and Its Application. Cambridge, Mass.: MIT Press.
- Geerearts, D. 1993. Vagueness's puzzles, polysemy's vagaries. Cognitive Linguistics

4:223-272.

- Holmes, J. 1999. The syntax and semantics of causative verbs. UCL Working Papers in Linguistics 11.
- Hopper, P. J., and E. C. Traugott. 1993. *Grammaticalization: A Conceptual Framework*. Chicago: University of Chicago Press.
- Hsiao, Y. E. 2003. Conceptualizations of GUO in Mandarin. *Language and Linguistics* 4:279-300.
- Huang, C.-T. J., Y.-H. A. Li, and Y. Li. 2006. *Syntax of Chinese*, to be published by Cambridge University. Downloadable at http://www.people.fas.harvard.edu/~ctjhuang/
- Huang, S. 2004. On deriving complex polysemy: Mandarin GEI in spoken and written corpora. Paper presented at the 16<sup>th</sup> American Conference on Chinese Linguistics, University of Iowa, USA.
- Johnson, M. 1987. *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*. Chicago: University of Chicago Press.
- Katz, J. J., and J. A. Fodor. 1963. The structure of a semantic theory. Language 39:170-210.
- Kellerman, E. 1978. Giving learners a break: Native language intuitions as a source of predictions about transferability. *Working Papers on Bilingualism* 15:59-92.
- Lakoff, G., and M. Johnson. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lakoff, G. 1987. Women, Fire, and Dangerous Things. Chicago: University of Chicago Press.
- Lakoff, G. 2002. Why cognitive linguistics requires embodies realism. *Cognitive Linguistics* 13:245-263.
- Langacker, R. W. 1982. Space grammar, analyzability, and the English passive. *Language* 58:22-80.
- Langacker, R. W. 1987. *Foundations of Cognitive Grammar: Theoretical Prerequisites*. Stanford: Stanford University Press.
- Langacker, R. W. 1990. *Concept, Image, and Symbol: The Cognitive Basis of Grammar*. Berlin; New York: Mouton de Gruyter.
- Langacker, R. W. 1999. *Grammar and Conceptualization*. Berlin; New York: Mouton de Gruyter.
- Lü, S. 1999. Xiandai Hanyu Ba Bai Ci [Eight Hundred Words in Modern Chinese]. Beijing: Commercial Press.
- Lyons, J. 1995. *Linguistic Semantics: An Introduction*. Cambridge, England; New York: Cambridge University Press.
- Rastier, F. 1999. Cognitive semantics and diachronic semantics. *Historical Semantics and Cognition*, ed. by A. Blank, and P. Koch, 109-144. Berlin: Mouton de Gruyter.
- Ravin, Y., and C. Leacock. 2000. Polysemy: An overview. Polysemy: Theoretical and

*Computational Approaches*, ed. by Y. Ravin, and C. Leacock, 1-29. Oxford: Oxford University Press.

- Rosch, E. 1973. On the internal structure of perceptual and semantic categories. *Cognitive Development and Acquisition of Language*, ed. by T. E. Moore. New York: Academic Press.
- Rosch, E. 1977. Human categorization. *Advances in Cross-Cultural Psychology*, ed. by N. Warren. London: Academic Press.
- Rosch, E. 1978. Principles of categorization. *Cognition and Categorization*, ed. by E. Rosch, and B. Lloyd, 27-48. Hillsdale, NJ: Erlbaum.
- Talmy, L. 1985. Lexicalization patterns: Semantic structure in lexical forms. Language Typology and Syntactic Descriptions, ed. by T. Shopen, 36-149. Cambridge: Cambridge University Press.
- Talmy, L. 2000a. *Toward a Cognitive Semantics: Concept Structuring System*. Cambridge: MIT Press.
- Talmy, L. 2000b. *Toward a Cognitive Semantics: Typology and Process in Concept Structuring*. Cambridge: MIT Press.
- Tayler, J. R. 1989. *Linguistic Categorization: Prototypes in Linguistic Theory*. Oxford: Oxford University Press.
- Tayler, J. R. 2002a. Cognitive Grammar. Oxford; New York: Oxford University Press.
- Tayler, J. R. 2002b. Polysemy's paradoxes. Language Sciences 25:637-655.
- Tayler, J. R. 2003. *Linguistic Categorization*. 3<sup>rd</sup> edition. New York: Oxford University Press.
- Tang, S. 2004. Putting BREAK to use: Prototypes and meaning extension. MA thesis, Huazhong University of Science and Technology.
- Tsai, P.-T. 2006. Hsiendai hanyu *kai* yu qi yanshen yanchiu [A study on semantic extension of *kai* in Modern Chinese]. MA thesis, National Taiwan Normal University.
- Wang, L. F. 2002. From a motion verb to an aspect marker: A study of *guo* in Mandarin Chinese. *Concentric: Studies in English Literature and Linguistics* 28:57-84.
- Wittgenstein, L. 1953. Philosophical Investigations. Oxford: Basil Blackwell and Mott.
- Wu, H.-C. 2003. A case study on the grammaticalization of GUO in Mandarin Chinese—Polysemy of the motion verb with respect to semantic changes. *Language and Linguistics* 4:857-885.