Opposites in Language and Thought: A Chinese Perspective

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Abstract

There is a strong view held by many semanticists that 'oppositeness' is lexically embodied in every language (e.g. Cruse, 1986, 2011; Lyons, 1977; Murphy 2003). This suggests that antonymous thought may be an inherent feature of human cognition. However, in the available literature on the sense relations of opposites, most of the analyses in English focus on adjectives, in particular gradable adjectives. How 'oppositeness of meaning' is actually construed by speakers from other languages and cultures, in particular by those from non-Indo European languages, has largely been unexplored. This paper fills the gap by providing a Chinese language perspective. It first illustrates the critical role opposites play in the word and conceptual formation in Chinese. It then offers a fined-grained case analysis of two pairs of culturally salient complementary noun opposites designating social categories as a way of gaining insight into varied construals and conceptualisations of the nature of 'oppositeness of meaning'. A central methodological concern is how culturally distinctive ways of thinking about the relationships between the two members of a complementary pair can be reflected and captured. The paper proposes that the Natural Semantic Metalanguage (NSM), in particular its 'cultural scripts' theory branch, provides a possible solution. Related methodological issues discussed in the paper include subtypes of complementary opposites, cultural scripts vs. logical formulation, the issue of markedness, and the role of culture in the semantics of Chinese opposites.

Keywords: antonymy, complementary noun opposites, semantic relations, markedness, Chinese opposites, cultural scripts

1. Introduction: the basicness of antonymous thought in human cognition

In his well-received textbook *Meaning in Language* (3rd edn), Alan Cruse writes:

> Everyone, even quite young children can answer questions like *What's the opposite of big/long/heavy/up/out/etc.?* Oppositeness is perhaps the only sense relation to receive direct lexical recognition in everyday language. It is presumably, therefore, in some way, cognitively primitive. (Cruse, 2011, p.153)

Cruse's view that opposites are lexically embodied across languages is representative of semanticists interested in sense relations between words. For example, Lynne Murphy regards antonyms as "the archetypical lexical semantic relations". She further comments that "[u]nlike synonymy, everyone agrees that antonymy exists, and it is robustly evident in natural language" (Murphy, 2003, p 169).

The somewhat deeply entrenched view of semanticists and cognitive linguists that opposites represent basic semantic relations suggests strongly that antonymous thought may be an inherent feature of human cognition. As such, it is worthy of close study by students of language and cognition.

At the same time, however, Cruse (2011) also points out that "it is quite hard to pin down exactly what 'oppositeness' consists of" (p. 153). It is probably because of this reason that research on opposites remains thin compared to the voluminous writings on human cognition within cognitive linguistics (notable exceptions including Cruse, 1976, 1986, 1992, 2002, 2011; Cruse & Togia, 1995; Lehrer & Lehrer, 1982; Lehrer, 1985; Mettinger, 1994; Paradis, 2001; Murphy, 2003; Paradis & Willners, 2011; Jones et al., 2012). Even less explored are opposites and the nature of oppositeness of meaning from a cross-linguistic perspective, owing to the existing literature largely focused on English (cf. Hale, 1971; Muehleisen & Isono, 2009; Willners & Paradis, 2010). Therefore, the first objective of the present study is to contribute to the literature on 'antonymous thought' by providing a Chinese language perspective on this topic.[i]

The second objective is to examine one type of opposite pair, namely, *complementary noun opposites*, an area that has not attracted much scholarly attention, but which occupies an important place in the Chinese language and in Chinese speakers' ways of thinking. Cruse (1986, 2011) proposes four general types of opposites: complementaries, antonyms, reversives, and converses. Of these different types, arguably it is the antonyms that have received the most extensive treatment (e.g. Sapir, 1944; Lehrer, 1985; Cruse, 1992). Following the distinction first made by Lyons (1963), the term 'antonym' has a narrower sense, mostly applied to gradable opposites. Since in English antonyms are generally expressed by adjectives, and because antonyms are the most studied type of opposites, the lion's share of the research on opposites has been naturally directed to those gradable adjectives in English such as *big* and *small*. Thus, by focusing on 'complementary noun opposites' in Chinese, this paper simultaneously explores two under-addressed areas in the general study of opposites – complementaries and noun opposites. In particular, the paper is interested in the different subtypes that exist within complementary noun opposites in Chinese and in the subtle, but crucial meaning relations that distinguish one subtype from another as a way of gaining an insight into varied construals and conceptualisations of the nature of 'oppositeness of meaning'.

To probe what meaning or sense relations hold between the member classes of opposite pairs is to study a habitual way of thinking about the relations between concepts and categories, and, more broadly, how mental lexicon is structured and organised. This naturally raises a methodological question-- how can such ways of thinking be faithfully represented? This paper proposes that the Natural Semantic Metalanguage (NSM) approach to meaning representation, in particular its branch known as the 'Cultural Scripts' theory, can provide a possible solution. Thus, the third objective of this paper is to illustrate this with a case study of two dyads of complementary noun opposites in Chinese.

In what follows, the paper will start with an illustration of the prominent role opposites play in Chinese language and thought. It will then introduce NSM as a descriptive framework for exploring sense relations. The main body of the paper will be a detailed description and analysis of two pairs of complementary noun opposites: (a) the *shēngrén* ('a stranger'; lit. 'raw/unripe/uncooked person')/*shúrén* ('a familiar person/an old acquaintance'; lit. 'cooked/ripe person') pair, and (b) the *zìjǐrén* ('insiders/members of the in-group'; lit. 'oneself person')/*wàirén* ('outsiders/members of the out-group'; lit. 'outer/external person') pair. This is followed by a preliminary discussion of some of the methodological and theoretical implications arising from the present study, including subtypes of complementaries, cultural scripts vs. logical formulation, the issue of markedness and the role of culture in the semantics of Chinese opposites.

2. Why 'opposites' in Chinese?

Opposites are prevalent in the Chinese language. For example, a productive morphological strategy for making compounds is to combine binary opposites. Each of the following examples (1-4) is a good case in point, where the compound is made up of a type of opposite pair. Interestingly, these examples also show that combining opposite pairs is a fruitful way of generating conceptual supercategories and abstract concepts in the language. All of the examples, however, only give the reader a glimpse of this widespread linguistic phenomenon in Chinese.

(1) *dà-xiǎo* 大小 'big-small': size; adults and children
cháng-duǎn 长短 'long-short': length; strengths and weaknesses

(2) *hū-xī* 呼吸 'exhale-inhale': breathe (v.); breath (n.)
jìn-tuì 进退 'advance-retreat': advance or retreat; dilemma

(3) *fū-qī* 夫妻 'husband-wife': couple

(4) *dòng-jìng* 动静 'moving-stationary': signs of action (being taken)
shēng-sǐ 生死 'life-death': survival

In example (1), both of the compounds are made of gradable antonyms, i.e. combining 'big' and 'small' to mean size, and 'long' and 'short' to mean length. Both are also typical examples showing that, in Chinese, dimensions are 'made up of' the two poles of some gradable property. The following examples in (5), taken from Li & Thompson (1989, p.81), further illustrate this general strategy of naming dimensions, degrees, and qualities in Chinese.

(5) *hǎo-huài* 好坏 'good-bad = quality'
     lěng-rè 冷热 'cold-hot = temperature'
     gāo-ǎi 高矮 'tall-short = height'
     kuài-màn 快慢 'fast-slow = speed'
     hòu-báo 厚薄 'thick-thin = thickness'
     zhēn-jiǎ 真假 'true-false = truthfulness'

Adding to the above compounds that denote the dimensions of 'size', 'temperature', 'height', 'speed', and 'thickness' are those of 'quantity', 'weight', 'depth', 'width', and 'the degree of difficulty', as shown in example (6), among others[ii]:

(6) *duō-shǎo* 多少 'many/much-few/little': quantity
     qīng-zhòng 轻重 'light-heavy': weight; seriously
     shēn-qiǎn 深浅 'deep-shallow': depth
     kuān-zhǎi 宽窄 'wide-narrow': width
     nán-yì 难易 'difficult-easy': the degree of difficulty

While the compounds in (1), (5) and (6) are made up of antonyms, those in (2) are composed of directional opposites (reversives), and those in (3) of converses (that is, if A is B's husband, then B is A's wife). The compounds in (4) are made up of complementaries in which the two constituent classes evoke each other and display the sense relation of mutual exclusion. Thus, if something is described as being 'moving', it implies that this something is not simultaneously stationary, or vice versa. Similarly, if someone is said to be 'dead', then the same person cannot be said to be 'alive' at the same time, or vice versa.

It should be noted that although the word-for-word glosses give the impression that *dòng-jìng* in (4) both belong to the word class of adjectives ('moving/stationary'), they actually have distinctive 'nounness'—'in the state of moving'/'in the state of being stationary'.[iii] Cruse (1986, p. 201) observes that "complementaries are, generally speaking, either verbs or adjectives". This may be true in English. However, complementaries tend to be read as nominals in Chinese. And it is those complementaries that fall into the noun class, in particular those designating categories of people, that will be of central concern to this paper.

3. Representing meaning relations: methodological considerations

It is generally held that complementaries do not operate over scales and do not involve what Sapir (1944) calls "grading judgements". A referent, a situation, or a state falls under *either* one *or* the other class of the complementaries, with a clearly-demarcated conceptual boundary separating the two. Interestingly, the two classes also bind together, forming a complete conceptual domain. Thus, two related tasks appear to be of paramount importance in studying any one pair of complementaries. One is to delineate the two discrete member categories as a means of defining the conceptual boundary that divides them, and the other is to portray the dynamics and interactions between the two categories. The latter has a great deal to do with whether a particular referent is thought of as being capable of changing its membership within a given opposite pair, and if so, in what direction. Researching the dynamics between complementaries may well be stamped with a characteristically Chinese way of thinking about complementary opposites which may not be salient to, or necessarily shared by, speakers of other languages. However, as a culturally distinct way of thinking, it should be accounted for in a full treatment of Chinese complementaries. The question is how the two tasks just mentioned can be pursued. In particular, what descriptive tool can one use to represent the meanings of and the conceptual relations between the member classes that make up each pair of complementaries? This paper proposes that the Natural Semantic Metalanguage (NSM) theory is capable of such tasks. It will illustrate this by applying it, in particular one of its branches—the 'cultural scripts' theory, to the case study of two pairs of noun complementaries in Chinese. They are the *shēngrén* ('a stranger')/*shúrén* ('a familiar person/an old acquaintance') pair, and the *zìjǐrén* ('insiders/members of the in-group')/*wàirén* ('outsiders/members of the out-group') pair.

Before a close examination of the meaning relations that hold between the members of a given pair of complementaries, it is necessary to explain how NSM works. Given that the applications of the NSM theory are broad and varied, and the related literature is extensive (e.g. Goddard 2008, 2009, 2010a, 2011; Goddard & Wierzbicka, 1994, 2002, 2007, in press; Wierzbicka, 1992, 1996, 2009; Ye, 2007), this section will only focus on those aspects most relevant to the present study.

In a nutshell, the Natural Semantic Metalanguage (NSM) adopts a decompositional approach to meaning description and representation, aiming to model speakers' meanings and ways of thinking. This is achieved by using a tightly controlled, empirically established metalanguage made up of 65 semantic primes such as I, KNOW, THINK, FEEL, GOOD, HAPPEN, SEE and BECAUSE (See Appendix for the full list of the primes in English). These primes, which cross-linguistic evidence has shown to be universal (e.g. Goddard & Wierzbicka, 1994, 2002; Peeters, 2006), are also known as 'indefinables' in that their meaning cannot be defined further without circularity. And there is a 'universal grammar' governing the combinatorial

behaviour of these primes (see in particular Goddard & Wierzbicka, 2002). In many ways, the 65 primes and their canonical use form a mini universal language that can be regarded as the intersection, or the inner semantic core, of all languages. This means that the metalanguage made up of these primes can have its equivalent version in any natural language and that any formulations couched in them are likely to be self-explanatory and have maximum translatability across languages.

The primes fulfil two purposes. They are used to construct explications (definitions) for individual words and expressions or to formulate 'cultural scripts'—statements made about shared ways of speaking, knowing, thinking, and feeling within a speech community. Explications couched in NSM are well-suited to battling the problem of definition circularity prevalent in the study of complementaries, where one member class is routinely defined by the negation of the other. Such practice says little about the actual meaning of either of the classes within a complementary pair. It seems that when it comes to an 'opposite pair', the combined use of the explications and 'cultural scripts' provides an optimal solution so that, with the aid of explications, the conceptual boundaries of both of the member classes can be clearly delineated, and that, with the aid of cultural scripts, the construed relations between the two concepts can be fully depicted. It also appears that the semantic primes ONE, TWO, KIND, and NOT are conceptual keys to approaching the semantics of complementaries. Due to space constraints, the following section will focus on the application of 'cultural scripts' only, illustrating how they can be used to explore the sense relations that hold, as well as the dynamics that are exhibited, between the members of the complementary pairs in question.

4. Case analysis

The case analysis centres around two pairs of complementary noun opposites: that of *shēngrén* 生人 ('a stranger'; lit. 'raw/unripe/uncooked person')/*shúrén* 熟人 ('a familiar person/an old acquaintance'; lit. 'cooked/ripe person'), and that of *zìjǐrén* 自己人 ('insiders/members of the in-group'; lit. 'oneself person')/*wàirén* 外人 ('outsiders/members of the out-group'; lit. 'outer/external person'). Given that NSM-based analysis may not be immediately familiar to the reader, a general discussion of the differences between these two pairs of complementaries will precede NSM-styled descriptions of them.

4.1 General discussion

The four concepts that make up the two pairs of opposites concerned here designate four key social categories in Chinese social relations.[iv] The classes of *shēngrén* ('strangers') and *shúrén* ('familiar persons') make up the entire

social domain outside the extended family, and those of *zìjǐrén* ('insider/one of us') and *wàirén* ('outsiders') cover the whole conceptual domain of social relationships. The paired concepts are often evoked in the same context. The following examples taken from a Chinese language corpus (Centre for Chinese Linguistics, 2009) give the reader a rough idea of how these concepts can co-occur in spoken or written contexts:

(7)
但甭管是<u>生人</u>还是<u>熟人</u>
反正来的都是客，不分高低贵贱，他皆不厌其烦，以平常心待之。
But for him, whether strangers (*shēngrén*) or old acquaintances (*shúrén*), whoever comes are his guests. He treats them patiently and in the same way, regardless of their social standing.

(8)
黄市乡检查站收费更为离奇，检查人员见车就招停，<u>陌生人</u>多收，<u>熟人</u>便少收，没有统一的收费标准和收据。ᵛ
The charges imposed by the toll booth in Huangshi county are even more odd. The inspectors stop any cars. People they don't know (*shēngrén*) pay more. People they know (*shúrén*) pay less. There aren't the same payment standards and receipts.

(9)
向我赠送钥匙，我理解，你们是不把我当<u>外人</u>，而是看作<u>自己人</u>，这对我来说是莫大的荣幸。
By giving me the key, I understand that you are not treating me as an outsider (*wàirén*), but that you see me as an insider (*zìjǐrén*). To me this is the greatest honour.

(10)
中国人在心理上对人际关系一般都有内外之别，有一个"<u>自己人／外人</u>"、"<u>熟人／陌生人</u>"的区分，人际交往依着关系格局不同而不同对待。
In their mind, Chinese generally distinguish internal from external in their interpersonal relationships, differentiating between 'we-group and out-group' (*zìjǐrén/wàirén*), 'familiar people and strangers' (*shúrén/moshēngrén*). The social interaction differs depending on patterns of differentiated social relationships.

Generally speaking, the two dyads of complementaries concerned here display three major differences. The first concerns the basis of category formation. Both *shēngrén* ('stranger') and *shúrén* ('familiar person') are, to a large extent, experience-derived, objective categories. The demarcation of the two categories of people is purely based on the central figure's own experience—whether she or he has previously met and conversed with the referent person. It is apparent that, from 'raw' to 'ripe', *duration of time* is seen by Chinese speakers to be an important factor in organising social relationships. In contrast, *zìjǐrén* ('members of the in-group') and *wàirén* ('members of the out-group') are fundamentally subjective, psychological categories in that conceptions of these two kinds of people are not rooted in the central figure's

personal experience with them, but are formed in the eye of the beholder -- based on the perception of the speaker as to whether the group of people have some identifiable shared common ground among them. If the central figure and the speaker are the same person, then the 'in-group' is very much self-centred. By default, *zìjǐrén* refers to members of one's extended family. Thus, it is always possible that those who are thought of as *zìjǐrén* ('insiders') by the central figure actually include many *shēngrén* ('strangers'), and those who are thought of as *wàirén* ('members of the out-group') may also be *shúrén* ('familiar people'). Because *zìjǐrén* and *wàirén* are subjective, notional concepts, they can naturally fit into the expressions of *(bù)bǎ x dāng zìjǐrén duìdài* ('(not) regard someone x as one of us'), as is the case in example (9). *Shēngrén* ('stranger') and *shúrén* ('familiar person'), however, would be unacceptable in such a frame exactly because they are objective categories.

The corollary is that the two pairs diverge in their internal conceptual structure. With the *shēngrén/shúrén* pair, our understanding of one member is not dependent on the other. However, our notion of 'outsiders' cannot exist without some implicit reference to a pre-determined, well-defined in-group. Thus, the concepts of *zìjǐrén* ('members of the in-group') and *wàirén* ('members of the out-group') are relative and relational to each other, with the former embedded in the latter. This means the class of *wàirén* ('members of the out-group') is always semantically marked.

The third difference concerns the dynamics between the two members within a pair of complementaries. Contrary to complementaries such as *nán* 男 ('human male') and *nǚ* 女 ('human female') where it is generally thought that the assignment of a referent person to an existing conceptual category remains fixed and permanent, there is no such 'fixed' expectation with regard to the two pairs of complementaries concerned here. It is generally thought that a particular referent's membership can be 'reversed'. However, with the *shēngrén/shúrén* pair, the membership change is only permissible unidirectionally-- from 'a stranger' to 'a familiar person', whereas with the *zìjǐrén/wàirén* pair, it can occur in either direction.

The next section will show how these fine differences, in particular the last two which directly concern the relationships between conceptual categories, can be reflected and captured in carefully formulated cultural scripts.

4.2 Describing semantic relations in cultural scripts

Scripts [A] and [B] presented below describe the complementary semantic relations that hold between *shēngrén* ('strangers') and *shúren* ('familiar people'), and between *zìjǐrén* ('members of in-group') and *wàirén* ('members of out-group') respectively. Component [a] in both of the scripts shows how a conceptual domain is divided into and made up of two compartments. Components [b] and [c] are formulated in a parallel structure, showing that

the two member classes are given equal lexical status. These components in both scripts also suggest that the two member classes are mutually implicating. The commitment to the application of one category effectively rules out the possibility of the application of the other *at the same time* (as reflected in 'can't <u>say</u> at the same time' in Script [A] and 'can't <u>think</u> at the same time' in Script [B]).

However, it is important to note that components (a) and (b) concern primarily the positive *presence* of both of the member classes (as indicated by the arrows in the scripts). In Script [A], the negation of the other member is not present at all. In Script [B], it is presented only as an entailment of the affirmation of one member. The rationale behind these asymmetrical ways of representation will be discussed in Section 5.2 when we consider the advantage of cultural scripts over logical postulations for studying complementary opposites.

Several subtle but important differences between the two dyads of complementaries are also captured by the scripts. Firstly, the objective nature of the *shēngrén* ('stranger') and *shúren* ('familiar person') categories is reflected in the phrasing 'say about someone else' in [A]. In contrast, the phrasing 'think about some people' in [B] shows that *zìjǐrén* ('members of the in-group') and *wàirén* ('members of the out-group') are subjective and group-oriented categories. Secondly, because the classes of people designated by the terms *shēngrén* ('strangers') and *shúren* ('familiar people') are formed on the basis of personal experience, they form some relationship with the central figure. As such, it is perfectly natural to combine these terms with *singular* possessive pronouns such as *wǒde* ('my'). However, combining possessive pronouns would only be an option for *zìjǐrén* ('insiders/members of the in-group'), not for *wàirén* ('outsiders/members of the out-group'), and the possessive pronoun has to be plural in nature, for the obvious reason that a member of the out-group bears no relationship with the central figure and that the status of in-group membership is not achieved through a certain relationship with the central figure, but through some identifiable 'we-ness'. This is why, throughout Script [A], individual people are referred to as 'this is my *shúren*' or 'this is my *shēngrén*', whereas in Script [B], they are referred to as 'one of *zìjǐrén*'.

[A] A cultural script describing the complementary relations between *shēngrén* ('stranger') and *shúren* ('familiar person'):

[a] people often think about all people like this:
   "some people are my *qīnrén*[M] ('kin')[vi]
   other people are not my *qīnrén*[M] ('kin')
   there are two kinds of other people
   people of one kind are called [M] *shēngrén,*
   people of the other kind are called [M] *shúren*"

[b] if someone can say about someone else: "this is my shēngrén", ←
    this someone cannot say <u>at the same time</u>: "this is my *shúren*"

[c] if someone can say about someone else: "this is my *shúren*", ←
    this someone cannot say <u>at the same time</u>: "this is my *shēngrén*"

[B] A cultural script describing complementary relations between *zìjǐrén* ('insider') and *wàirén* ('outsider'):

[a] people often think about all people like this:
    "there are two kinds of people
    people of one kind are called [M] *zìjǐrén*,
    people of the other kind are called [M] *wàirén*"

[b] if someone <u>thinks about</u> <u>some people</u> like this: "these people are *zìjǐrén*", ←
    this someone can't think <u>at the same time</u>: "they are *wàirén*",
    this someone can think: "they are not *wàirén*"

[c] if someone <u>thinks about</u> <u>some other people</u> like this:
    "these people are *wàirén*", ←
    this someone can't think at the same time: "they are *zìjǐrén*"
    this someone can think: "they are not *zìjǐrén*"

Scripts [C] and [D] presented below describe the dynamics between the two members within a given complementary pair. They have much to do with whether an individual referent is thought of as being capable of changing its membership at a later time (t_2). Script (C) conveys the idea that a 'stranger' can become a 'familiar person' after some time, but not the other way around. The phrasing 'can't say after some time' in component [c] shows that once a referent is labelled as a 'familiar person', the membership assignment is permanent. This also implies that the class of 'familiar persons' is ever expanding. Script [D] suggests that the referent person is thought of as being capable of moving along the 'in-group'-'out-group' continuum in either direction. What the script also tries to capture is a predominant way of thinking by Chinese speakers –thinking in terms of whether or not someone is 'one of us' rather than whether someone is 'one of them'. This makes sense when we think that the clearly-defined group of people labelled by the central figure as *zìjǐrén* centres around and includes the central figure. The *zìjǐrén* group is always the immediately available reference point (extending out from the central figure) along the *zìjǐrén-wàirén* continuum. What is described in Script [D] is not only consistent with the unmarked status of *zìjǐrén* in this complementary pair, but also reflects a central concern in Chinese social interaction—pulling interpersonal relationships along the *zìjǐrén-wàirén* continuum towards the central figure, turning what is regarded as an 'out-grouper' into an 'in-grouper' (see Ye, 2004 & in press).

[C] A cultural script describing the dynamics between the *shēngrén* ('stranger') and *shúren* ('familiar person') categories:

[a] people often think about some other people like this:
　　"some people are my *qīnrén*[M] ('kin')
　　other people are not my *qīnrén*[M] ('kin')
　　there are two kinds of other people
　　people of one kind are called [M] *shēngrén*,
　　people of the other kind are called [M] *shúren*"

[b] often if someone can't say about someone else: "this is my *shúren*",　　←
　　this someone <u>can say it after some time</u>

[c] if at some time someone can say about someone else like this:
　　"this is my *shúren*",
　　this someone <u>can't say after some time</u>: "this is not my *shúren*"

[D] A cultural script describing the dynamics between the *zìjǐrén* ('insider') and *wàirén* ('outsider') categories:

[a] people often think about all people like this:
　　"there are two kinds of people
　　people of one kind are called [M] *zìjǐrén*,
　　people of the other kind are called [M] *wàirén*"

[b] someone can at all times [always] think about some people like this:
　　"I can think about these people like this: <u>they are zìjǐrén, they are not
　　wàirén</u>" ←

[c] if someone thinks about someone else like this:
　　"this someone is not one of *zìjǐrén*",　←
　　this someone can think not like this about the same someone
　　some time afterwards

[d] if someone thinks about someone else like this:
　　"this someone is one of zìjǐrén"
　　this someone can think not like this about the same someone
　　some time afterwards

5. Theoretical and methodological implications

This section discusses some of the theoretical and methodological implications arising from the previous analysis. They include subtypes of complementaries, the advantage of cultural scripts over logic representation, the issue of markedness, and the role of culture in the semantics of Chinese opposites. The discussion of these points is closely linked to the idea of using cultural scripts as a methodological tool for exploring construed sense relations, in particular culture-specific conceptualisation of complementaries.

5.1 Subtypes of complementaries

The analysis presented above suggests at least two subtypes of complementary opposites. The pair of *shēngrén/shúrén* represents one subtype where 'membership' can be reversed, but which is only permissible in one direction. The pair of *zìjǐrén/wàirén* represents the other subtype where the assignment of the referent to membership classes can change in both ways. The latter, which can be deemed as involving a higher degree of interaction between the two membership classes within a complementary pair, embodies a culturally distinctive way of thinking, a point to which I will return in 5.4. In light of these two subtypes of complementaries, a third subtype can also be identified where the application of a referent to either of the membership classes is normally thought to be fixed and permanent. The *nán/nǚ* ('human male/human female') pair would be typical of this third type.[vii]

It can be said that *nán* 男 ('human male') and *nǚ* 女 ('human female') represent objective categories. However, the same can also be said of *shēngrén* ('stranger') and *shúren* ('familiar person'). What is interesting about the three types of complementaries that designate categories of people is that there seems to be some correlation between the conceptual basis of the formation of these categories and the relationship between a particular referent and an existing member class. If categories are formed on the basis of some objectively observable fixed quality, in the case of *nán* and *nǚ* that is the bodily features, then the application of a particular referent person to a membership class is generally a fixed one. If categories arise from some sort of personal experience, such as 'duration of time' in the case of *shēngrén* ('stranger') and *shúren* ('familiar person'), the membership assignment may not be permanent, but the change only happens in one direction. And if the ground for categorising people stems from 'subjective opinion' held by the speaker, it follows naturally that the membership assignment is more flexible.

These examples show that 'objective' and 'subjective' are not particularly helpful descriptive labels, because there are qualitative differences between the so-called 'objective categories'. A particular characteristic of cultural scripts is that they attend to finer points and subtle differences, and offer nuanced analysis where hidden, but crucial, messages can be fully conveyed.[viii]

5.2 Cultural scripts *vs.* logical postulation

In discussing the formulation of the cultural scripts describing the complementary relations holding between members of an opposite pair, it was mentioned that the scripts primarily concern the *presence* of both of the member classes. The negation of the oppositional class are either not presented (as in Script [A]) or postulated as entailment (as in Script [B]) rather than as some conceptual category taking on a status equal to the positive presence of a given class member. This can be seen as reflecting more closely ordinary people's conceptions of the *asymmetrical* relationship

between explicitly naming a category and the negation of its oppositional category. Although by logical relations the predication of the negation of one subset has the same truth value as the predication of the other within any one pair of complementaries, in natural language people do not tend to give equal conceptual weight to these two 'standpoints'. In the case of *shēngrén* ('stranger') and *shúren* ('familiar person'), where terms designating social categories that have some objective basis, it would be extremely odd to refer to someone by saying "this is not my *shēngrén*' or 'this is not my *shúren*'. This is why the negation of the oppositional class is not present in the script at all. Givón's (1978) study on negation in language shows that, with a single preposition, its affirmative and its negative versions do not share the same presuppositional status, and that negations often fulfil a discourse function. Verhagen's (2005) work on negation in relation to intersubjectivity also points in the same direction. In this connection, Lakoff's (2004) reiterated message that the negation of the frame activates and only reinforces the frame is also highly relevant. What is particularly interesting about pairs of complementaries is that their lexicalisation affirms that *both* classes are conceptually salient and sufficiently important in language to be given separate labels. The existence of both member classes drives home the fact that logical equations and postulations often cannot explain, and in fact disguise, the rich linguistic phenomena in natural language and the psychological complexity reflected in them. In natural language, there is every reason for the existence of dual *named* categories that make up and simultaneously bisect one conceptual domain. The scripts justify and highlight this point.

5.3 The issue of markedness

The notion of markedness is often evoked in the discussion of pairs of opposites. Lyons (1977), for example, distinguishes three types of markedness: morphological, distributional, and semantic.[ix] The *zìjǐrén* ('insiders/members of in-group')/*wàirén* ('outsiders/members of out-group') pair seems to suggest yet another conception of markedness. In this pair, the notion of markedness is closely tied to the idea of 'meaning dependence' and 'presupposed shared common ground'-- the class designated by an unmarked term (such as *zìjǐrén*) is embedded in the semantic structure of the marked term (such as *wàirén*). In other words, the class of *wàirén* presupposes the class of *zìjǐrén*. As a result, the class designated by the marked term is always relative to the class designated by the unmarked term. In social domain, the exemplary pair of *zìjǐrén* /*wàirén* also suggests that the issue of 'markedness' may be highly cultural.

In his comprehensive overview of the field of lexicology, Hanks (2008) points out that "[d]istinctions between marked and unmarked items play an important and sometimes neglected part in lexical analysis" (p. 18). What has emerged in this paper shows that, to approach the important issue of markedness in semantic analysis, a cross-linguistic perspective should also be taken into consideration. Furthermore, the cultural scripts offered in the

paper provide an empirical basis for researchers to explore further how markedness can be reflected in the formal representation of meaning.

5.4 The role of culture in the semantics of opposites in Chinese

In his pioneering work on sense relations, Lyons (1977) indicates that a general human tendency is to "think in opposites" and "categorise experience in terms of binary contrasts", and that "binary opposition is one of the most important principles governing the structure of language" (p.271). The Chinese examples of opposites discussed in this paper support Lyons' claim unequivocally.

At the same time, it seems that culture has an invisible role to play in the oppositional experiences and meanings that get singled out by speakers of a given language. In the social domain, different types of oppositional categories of people seem to occupy an especially important place for Chinese speakers, and this certainly has a great deal to do with how social interaction is enacted in Chinese society and the resultant dominant social practices.

In exploring the relations that hold between members within a complementary opposite pair, the paper goes a step further to investigate the dynamics between member classes, an important dimension in how Chinese speakers think about complementaries. The idea of dynamics contains the idea of 'change' – a time-conscious way of looking at, on the one hand, the interaction between a particular referent and the existing categories, and on the other hand, the interaction between the existing categories themselves following the change brought on by membership change of a particular referent. Thus, embodied in many Chinese complementaries is a culturally distinctive way of looking at the relations between oppositional concepts and categories.[x]

Thus, opposites do not appear to simply match some pre-given reality, but rather they are what Wierzbicka (e.g. 2006) calls "conceptual artefects" that are produced by a given culture and embody culturally salient ways of thinking about the particular relationship holding between concepts and categories. In this we find great potential for using cultural scripts as a descriptive tool to articulate, in a highly disciplined and controlled way, the culture-specific conceptualisations of the relations that hold between the categories within an opposite pair.

Notes

i. Throughout the paper, 'Chinese language' refers to Mandarin (Chinese).
ii. There are also terms such as *chángdù* 长度 (lit. 'long degree') and *kuāndù* 宽度 (lit. 'wide degree') used in Chinese which are comparable to *length* and

width in English in that the normalisation of the unmarked term of the opposite pair leads to the neutralisation of the opposition (cf. Lehrer, 1985). However, terms derived from this morphological process are mainly used in formal register.

iii. Often it is difficult to tell which individual character stands for which part of speech due to the paucity of morphological inflections in Chinese. In the kind of compounds presented above, the individual member of the oppositional pair that makes up the compound has predominantly a nominal reading.

iv. See Ye, 2004 & in press for a detailed discussion of how these four concepts play a decisive role in Chinese social interaction. See Ye, 2004 & forthcoming for a detailed discussion of their meaning.

v. A variant *of shēngrén* 生人 is *mòshēngrén* 陌生人. *Xīnhuá Fānyìcí Cídiǎn (Xinhua Dictionary of Antonyms*, Zhang & Zhang, 2010, p. 637) lists *shēngrén* as the opposite of *shúrén*.

vi. The subscript [m] stands for semantic molecule. Semantic molecules are "non-primitive meanings (hence ultimately decomposable into semantic primes) that can function as units in the semantic structure of yet more complex words" (Goddard, 2010b, p. 124). Like 'indefinables', semantic molecules are also arrived at through painstaking and rigorous semantic analysis.

vii. See Ye (forthcoming) for the cultural script describing the complementary relations between *nán* and *nǔ* ('human male' and 'human female') and for commonly used expressions involving this pair of complementaries. In Chinese culture, *nán* ('human male') and *nǔ* ('human female') corresponds to *yáng* and *yīn* respectively, showing how Chinese speakers view the relationship between *nán* and *nǔ* as also being mutually dependent and nurturing. A separate cultural script is needed to portray this culturally ingrained way of thinking.

viii. The three subtypes of complementary noun opposites identified here all relate to categories of people. It is possible that beyond social categories there are other types of complementaries. *Yīn* and *yáng*, a pair of concepts well-known to people in the West, can be seen as an archetype of complementary opposites in Chinese, where the two entities are not only perceived as mutually excluding, but also are mutually dependent and embedded. This means that the dynamics between them are slightly different from any of the three types mentioned above.

The important role complementary opposites play in the Chinese language, undoubtedly, has its roots in the Chinese 'naïve dialectics' and the Taoist philosophical tradition (Fung, 1952; Peng, et al., 2006). To discuss these would take this paper too far away from its central topic. Here, the main point is that exploring the relationships between the members of a pair of complementaries is to explore a way of thinking about the relationship between them, and that 'cultural scripts' can be used an explanatory tool to articulate culturally salient ways of thinking.

ix. For Lyons, semantic markedness is where an unmarked term becomes neutralised (e.g. lion as an unmarked term in the case of lion and lioness) (Lyons, 1977).

x. The phenomenon of change is also closely linked to the mutually dependent and cyclic nature of *yīn* and *yáng*.

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Appendix: Semantic primes (English exponents), grouped into related categories

I, YOU, SOMEONE, SOMETHING~THING, PEOPLE, BODY	substantives
KIND, PART	relational substantives
THIS, THE SAME, OTHER~ELSE	determiners
ONE, TWO, MUCH~MANY, LITTLE~FEW, SOME, ALL,	quantifiers
GOOD, BAD	evaluators
BIG, SMALL	descriptors
KNOW, THINK, WANT, DON'T WANT, FEEL, SEE, HEAR	mental predicates
SAY, WORDS, TRUE	speech
DO, HAPPEN, MOVE, TOUCH	actions, events, movement, contact
THERE IS, BE (SOMEWHERE), BE (SOMEONE/SOMETHING), BE (SOMEONE'S)	existence, location, specification, possession
LIVE, DIE	life and death
WHEN~TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT	time
WHERE~PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE	space
NOT, MAYBE, CAN, BECAUSE, IF	logical concepts
VERY, MORE	intensifier, augmentor
LIKE~AS~WAY	similarity

• Primes exist as the meanings of lexical units (not at the level of lexemes) • Exponents of primes may be words, bound morphemes, or phrasemes • They can be formally complex
• They can have combinatorial variants or "allolexes" (indicated with ~) • Each prime has well-specified syntactic (combinatorial) properties.