

Mappings From the Source Domain of Plant in Mandarin Chinese

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Abstract

This paper investigates what words map from the source domain of PLANT in Mandarin Chinese. In particular, we examine how different aspects of the source domain of PLANT are mapped onto the different target domains of LOVE, MARRIAGE, HAPPINESS, and BELIEFS. We found that mapping principles can account for the different mappings (Ahrens 2000).

1 Introduction

The Contemporary Theory of Metaphor (CTM) postulates that metaphors are not just figurative parts of speech, but are instead fundamental to our understanding of how we view the world (Lakoff 1993). The CTM hypothesizes that information about a source domain (SD) maps to a target domain (TD). For example, in LOVE IS PLANT metaphor, one conceptual domain is mapped (i.e. love) onto another (i.e. plant). The former domain is target domain, which is comparatively more abstract. The latter domain is source domain, which is comparatively more concrete. People understand the abstract target domain of love through the concrete source domain of plant. This is demonstrated in example (1).

- (1) *women de ai jianjian chengzhang*
we MOD love gradually grow
Our love grows gradually.

The target domain is specified as LOVE, and the source domain is specified as PLANT. People understand love by understanding how plant grows. Thus, LOVE IS PLANT metaphor is a conceptual metaphor in English.

Lakoff (1993) proposes the Invariance Principle to account for the mapping relationships between the target and the source domains.

Metaphorical mappings preserve the cognitive topology of the source domain, in a way that is consistent with the inherent structure of the target domain.

Thus, *growth* is an image-schema in the source domain of plant that is preserved when mapped onto the target domain of love. Conceptual domains used in conceptual metaphors are in fact quite complex domain matrices, which include many image-schematic domain mappings (Clausner and Croft, 1999).

Lakoff (1993) stated that the general principles governing the patterns of inferences in metaphorical correspondences could not be precisely formulated because they are part of the entire conceptual system. We disagree with this point of view and instead propose that it is only once the governing patterns of inference in the metaphorical correspondences (what we call mapping principles) have been analyzed that one can say whether or not a concept can be mapped between the source and target domain. In this paper, we first discuss our methodology in section 2 and then examine the four target domains that use the source domain of PLANT in section 3. In section 4, we discuss the mapping principles involved. In section 5, we discuss further areas of study.

2 Data and Methodology

To analyze the existing conceptual metaphors using PLANT as the source domain in Mandarin Chinese, we first gather examples of a particular target domain such as MARRIAGE or LOVE. All data are from two sources. Spoken data are obtained from four research assistants who are all native speakers in Mandarin. They gather examples based on daily conversation, lectures, TV and radio shows, and experience chatting with friends. Written data are obtained from CKIP of Academia Sinica corpus, which contains five million words. Whether or not these examples are conceptual metaphors are determined by discussion of seven people. Among them, four are graduate students of linguistics and three are professors of linguistic institute.

Once all examples for a target domain have been generated, then the examples are categorized and grouped into similar source domains (i.e. LOVE IS PLANT). Next, three questions are answered that have to do with the entities, qualities and function of each particular source domain. These questions are answered separately with respect to two scenarios: first, with respect to real-world knowledge about a particular source domain, and second, with respect to the entities, qualities and functions that were found to have been mapped to the target domain (i.e. from examining the linguistic examples). This two-step procedure is taken in order to better analyze the particular aspects that the TD (target domain) uses of the SD (source domain), as compared with the conceptual information that the SD contains as a whole. The three questions concerning the real-world knowledge of the SD are as follows:

- 1) What entities does the SD have?
- 2) What qualities does the SD have (or what qualities do the entities in the SD have)?
- 3) What does the SD do? What can someone do to/in the SD?

The three questions concerning the entities, qualities and functions used in the mapping from the SD to the TD are as follows:

- 1) What entities does the SD have that are mapped to the TD?
- 2) What qualities does the SD have (or what qualities do the entities in the SD have) that are mapped to the TD?
- 3) What does the SD do that is mapped to the TD? What can someone do to/in the SD that is mapped to the TD?

In the last step, the entities, qualities and functions that are mapped to the TD (as found in the linguistic example) are compared with the entities, qualities and functions that the SD contains in the real-world in order to determine what aspects of the SD the TD uses. For example, as we will see in section 3.4, although the SD of PLANT can contain the concepts of growing, flowering, fruiting, or cultivating, the TD of BELIEF uses PLANT primarily in relation to cultivating.

3 Mappings from the source domain of PLANT

Mappings from the source domain of PLANT include LOVE IS PLANT, MARRIAGE IS PLANT, HAPPINESS IS PLANT, BELIEF IS PLANT, and PEOPLE ARE PLANTS. In the following section, we discussed each separately.

3.1 LOVE IS A PLANT metaphor

In the LOVE IS PLANT metaphor, LOVE focuses on the aspect of growth of PLANTS. The natural growth involves the sprouting of a plant, as in example (2), the process of growth, as in example (3), and the flower and the fruit, as in example (4):

- (2) *liang ren de ai miao zuijin cai gang mengya*
two people MOD love seedling lately just recently sprout
“Their love just begins to sprout lately.”
- (3) *wo dui tade ai-yi jianjian zizhang*
I for his love gradually grow
“My love for him has grown gradually.”
- (4) *ta liang de aiqing yijin kaihuajieguo*
he two MOD love already blossom and bear fruit
“Their love has yielded positive results.”

So the sprouting, growing, flowering parts in the PLANT domain are mapped to the LOVE domain. Love can sprout, grow, flower and fruit as a plant can. Note that none of examples in LOVE IS PLANT metaphor involves the death of a plant. We will discuss the reason in the section on mapping principles.

3.2 MARRIAGE IS A PLANT metaphor

In the MARRIAGE IS PLANT metaphor, MARRIAGE maps more evenly and thoroughly to every part of a plant as well as the process of growing, including growing as in example (5), bearing fruit as in example (6), withering as in example (7), and irrigation as in example (8).

- (5) *tamen de hunyin zai chengzhang*
their marriage is grow
“Their marriage is growing.”
- (6) *ta-men-de hunyin zhongyu kaihuajieguo*
their marriage finally blossom and bear fruit
“Their marriage finally has a happy ending.”
- (7) *ta de hunyin yijing kuwei le*
he MOD marriage already wither ASP
“His marriage has already withered.”
- (8) *hunyin xuyao xinqin de guangai*
marriage need industrious MOD irrigate
“It takes hard work to maintain a marriage.”

Here the aspects of plants being mapped include what the plants do, and what someone can do to

the plant. Plants can grow and wither and a marriage can be stronger and weaker. People can irrigate the plants and people can add water (or life) the marriage. In addition, in example (9), we can see that the entity of “pest” is also mapped to the MARRIAGE domain.

- (9) *waiyu shi hunyin de haichong*
 having affairs is marriage MOD pest
 “Having affairs is a pest for a marriage.”

The entity “pest” is not considered a core element that constructs the domain of PLANT. But just as well, the term being mapped by “pest” in the domain of MARRIAGE, “affair”, is also not a necessity in marriage. This further demonstrated that the mapping isn’t randomly assigned, but accords well with the image-schema that preserved in each domain. Note that MARRIAGE maps less to the beginning of a plant. No seedling and sprouting are mapped to the MARRIAGE domain.

3.3 HAPPINESS IS A PLANT metaphor

In HAPPINESS IS PLANT metaphor, HAPPINESS maps to the result of cultivating a plant. More specifically, it maps mainly to the flower and the fruit. The entity of “flower” is mapped in the examples (10), the function of “flowering” is mapped in the example (13), and the entity of “fruit” and “the taste of fruit” are mapped in example (11) and (12).

- (10) *xin hua duoduo kai*
 heart flower CL blossom
 “To feel exuberantly happy.”
- (11) *ta shi women de kaixinkuo*
 he is we MOD happy fruit.
 “He is our happy fruit.”
- (12) *ta zhongyu chang dao kuai de ziwei*
 he finally taste ASP happy MOD flavor
 “He finally tasted the flavor of happiness.”
- (13) *ta de lian shang zhanfong chu xiaorong*
 he MOD face on blossom out smile
 “Smile blossoms on his face.”

To look closely at the examples, we observed a trend in the mappings. The metaphor focuses on blossoming of the flower. Therefore, the result of the growth of plant is what maps to the target domain of happiness.

3.4 BELIEF IS A PLANT metaphor

In the BELIEF IS PLANT metaphor, BELIEF mainly maps to what someone can do to the plant. If people cultivate it well, the plant of belief grows well. So the mappings include the seedling, rooting, irrigation, and cultivation. This is showed in examples (14) to (16):

(14) *bo xia xinyang de zhongzi*
 plant down belief MOD seed
 "To plant the seed of faith in somebody's heart."

(15) *wo zai jiating li gengyun chu yi pian wo tu hao rang*
 I in family inside cultivate out one field fertile land good let

xinyang keyi shengzhang
 belief can grow
 "I cultivate a fertile land in my family to help belief grow."

(16) *nimen yao haohao guangai xinyang*
 you must good irrigate belief
 "You must make effort and irrigate beliefs."

BELIEF is understood as PLANT because plants involve physical growth and beliefs involve emotional growth.

3.5 Summary of mappings

In previous sections, we discussed the metaphors of LOVE IS A PLANT, MARRIAGE IS A PLANT, HAPPINESS IS A PLANT, and BELIEF IS A PLANT. These are the four most productive metaphors with PLANT as a source domain in Mandarin Chinese. We found that the correspondences between target domains and the source domain of PLANT follow a particular and distinct pattern in each metaphor. The question remains now is how and why different target domains select different aspects of PLANT domain.

4 Discussion of Mapping Principles

We compare the target domains of LOVE, MARRIAGE, HAPPINESS, and BELIEF in this section. The source domain PLANT has entities such as seed, flower, and fruit, qualities such as flourish, and functions such as sprout, grow, and wither. We found that the target domain of LOVE maps more to the earlier stage of growing, including sprouting and seedling while the target domain MARRIAGE maps more to a later stage of growing, including withering. For example, "Their love just begins to sprout lately" in the example (2) compares to "His marriage is already withering away." in the example (7). The target domain HAPPINESS maps more to the result of cultivation while the target domain BELIEF maps more to the process of cultivation. For example, "He is our happy fruit" in example (11) and "I cultivate a fertile land in my family to help belief grow" in example (15).

The comparison of those target domains helps us to generate mapping principles. Mapping principles are determined by generating examples of the metaphor in question. The image-schemas that can be mapped in conventional instances are grouped into entities, qualities and functions, which we have illustrated in the section of method and in the preceding examples.

So we found the MP for LOVE IS A PLANT metaphor states that love is understood as plant because plants involve physical growth and love involves emotional growth. For MARRIAGE IS A PLANT metaphor, the mapping principle states that marriage is understood as plant because plants can grow and wither and a marriage can grow stronger or weaker or die. For HAPPINESS IS A PLANT metaphor, the mapping principle states that happiness is understood as a plant because plant can flower and happiness implies a result of an emotional growth. For BELIEFS ARE PLANTS metaphor, the mapping principle states that beliefs are understood as plants because plants involve physical cultivation and beliefs involve emotional cultivation.

From the mapping principles of MARRIAGE and LOVE, we can see that the MPs conform to our cultural and bodily experience. LOVE is in the early stage of MARRIAGE. Compared with LOVE, which can grow naturally depending only on natural resources as plants, MARRIAGE requires not only natural growth but also man made cultivation, such as irrigation. This suggests that people emphasize the cultivation of their marriages, but that the cultivation of love is not necessary. Furthermore, both LOVE and MARRIAGE involve HAPPINESS because these target domains all contain the entity of fruit. Examples of people being understood as a plant are all fixed expressions and are not productively used in Mandarin. As for BELIEFS ARE PLANTS, it is quite independent from other target domain in that it emphasizes cultivation. When we talk about belief in terms of plants, we always select the aspect of cultivation in the domain of plants. We talk about what can people do to believe in something, instead of what can beliefs do to us.

We further compare the terms used in each target domains including entities, qualities, and functions in the source domain of PLANT. We are interested in whether or not they can be used in the target domains of LOVE, MARRIAGE, HAPPINESS, and BELIEFS. The tables below summarize the mapping relationships. The numbers of examples can be referred to the numbers in the appendix.

Entity					
PLANT		LOVE	MARRIAGE	HAPPINESS	BELIEFS
ziwei 滋味	taste	√(6)	√(7)	√(3)	√(7)
guo 果	fruit	√(4)	√(1)	√(2)	
miao 苗	seedling	√(1)			
haichong 害虫	pest		√(2)		
zhongzi 种子	seed			√(1)	
wotu 沃土	soil				√(5)

Quality					
PLANT		LOVE	MARRIAGE	HAPPINESS	BELIEFS
xinhuanufong 心花怒放	blossoming			√(4)	
xinhuaoduokai 心花朵朵开	blossoming			√(5)	
maosheng 茂盛	prosperous				√(4)

Functions					
PLANT		LOVE	MARRIAGE	HAPPINESS	BELIEFS
chengzhang 成长	grow	√(7)	√(8)		√(2)
guangai 灌溉	irrigate	√(3)	√(6)		√(6)
kaihuajieguo 开花结果	to flower and to fruit	√(5)	√(3)		
sanbuo 散播	to seed and to spread	√(8)		√(1)	
zhagen 扎根	to root	√(9)			√(3)
zizhang 滋长	grow	√(2)			
shengzhang 生长	grow				√(5)
zhuozhang 茁壮	grow				√(2)
mengya 萌芽	sprout	√(1)			
diaojie 凋谢	wither		√(4)		
kuwei 枯萎	wither		√(5)		
buozhong 播种	to seed				√(4)
buo 播	to seed				√(1)
zhanfong 绽放	blossom			√(6)	
gengyun 耕耘	cultivate				√(5)

We find that some terms used conventionally in one domain can be totally novel in another. For example, the term *guangai* "irrigation" can't be applied in the domain of HAPPINESS because the mapping principle emphasizes the result of growth. In addition, novel examples are created if the mapping principle is not followed. For example, love can be like a plant that grows as shown in the example (3) "My love for him has grown gradually." But if we don't follow the mapping principle and use the term "fertilize", which is a function related to cultivation, to describe love instead of the term "grow", which is a function related to growth, then we create a novel example such as example (17):

* (17) *women de ai xuyao shifei*
our Mod love need fertilize
"Our love needs to be fertilized".

The fact that some concepts from the source domain cannot be mapped to the target domain can be explained with mapping principles. Thus, mapping principles add explanatory power to the Contemporary Theory of Metaphor.

5 Conclusion

The study shows that the abstract domain of LOVE, MARRIAGE, HAPPINESS, and BELIEFS can be better understood and compared through their mappings to the different parts of the concrete source domain of PLANT in Mandarin Chinese. We find that different aspects of plants are selected by different target domains. In particular, MPs allow us to see why a particular target domain selects a range of source domains. The earlier growth of a plant is mapped to the domain of LOVE, the later stage of growth is mapped to the domain of MARRIAGE, the result of a plant is mapped to HAPPINESS, and the cultivation of a plant is mapped to the domain of BELIEF. In sum, analyzing MPs helps us to better understand the conceptual organization of language and the representation of meaning.

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