

## CHAPTER 4

### ANALYSIS

Idiomatic expressions associated with hearts display a variety of meanings.

Regardless of the diversity of meanings, a majority of the heart idioms collected for this research involve feelings and emotions. This is not hard to understand because hearts are crossculturally understood as the site of emotions. The following definitions of hearts selected from a free online dictionary where several dictionaries and encyclopedia are combined accord with what is maintained in this thesis:<sup>1</sup> “(1) the locus of feelings and intuitions, (2) the hollow muscular organ located behind the sternum and between the lungs; its rhythmic contractions pump blood through the body, (3) the courage to carry on, (4) an area that is approximately central within some larger region, (5) the choicest or most essential or most vital part of some idea or experience, (6) an inclination or tendency of a certain kind, (7) a positive feeling of liking.”

In this chapter the analysis of heart idioms will be divided into five subsections

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<sup>1</sup> This online dictionary can be found at <http://www.thefreedictionary.com/>

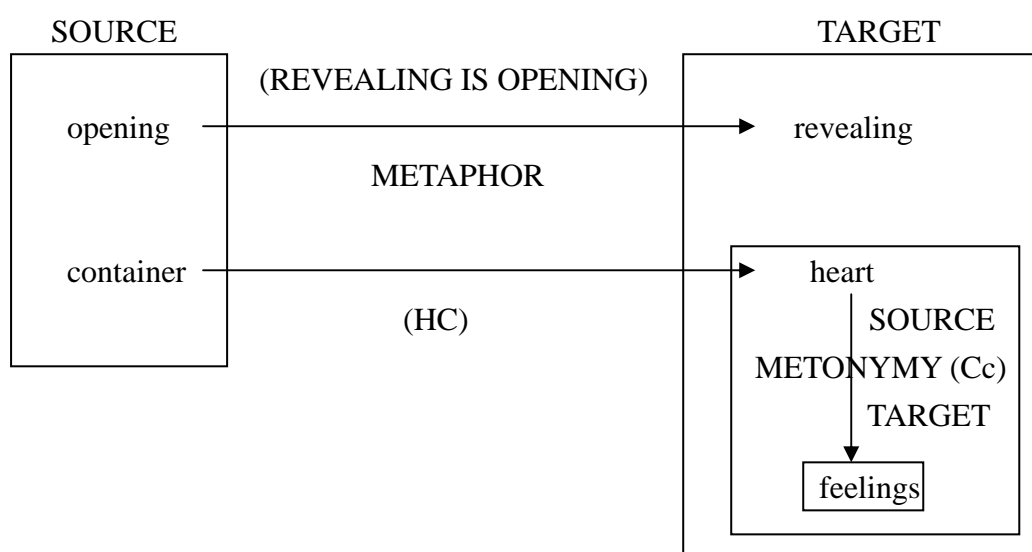
based on generic emotions, specific emotions, personality, emotional types of personality, and others. Specifically, the derivations of meanings of each type will be demonstrated with the mechanisms of metonymy, metaphor, and the interaction of the two.

#### **4.1 Analysis of Heart Idioms Displaying Generic Emotions**

Among the 12 heart idioms of generic emotions, eight of them display target-in-source metonymy within the metaphoric target. These eight idioms include *at/from the bottom of one's heart*, *in one's heart of hearts*, *open one's heart*, *take something to heart*, *bare one's heart*, *pour one's heart*, *this filled my heart with something*, and *one's heart is swelling with something*. A glance at these heart idioms would give the impression that hearts are treated as containers. This impression might originate from the biological fact that hearts are hollow human organs, which is mentioned in the definitions of hearts. Take *open one's heart* as an example. The heart is first conceptualized as a container full of feelings through the HEART IS A CONTAINER metaphor. When someone opens this container, he tries to reveal the feelings inside the container (REVEALING IS OPENING & CONTAINER FOR CONTAINED). In this idiom, the two metaphors conform to the Invariance Principle. For example, something inside the container is mapped onto the feelings inside the

heart, and the person who opens the container is mapped onto the person who reveals the feelings inside the heart. The interaction between metaphor and metonymy can be illustrated in Figure 4.1:<sup>2</sup>

Figure 4.1. Target-in-source metonymy within the metaphoric target  
*open one's heart*



Another example of target-in-source metonymy within the metaphoric target is *take something to heart*. Heart is also conceptualized as a container full of feelings through the HEART IS A CONTAINER metaphor. When you take something to this container, this container has the thing that you take to it (STATES ARE LOCATIONS (POSSESSION IS LOCATION to be specific)). The POSSESSION IS LOCATION metaphor can be elucidated by what Heine (1997) terms a Goal Schema.<sup>3</sup> Heine

<sup>2</sup> For the simplicity of figures, the abbreviation, (Cc), will stand for CONTAINER FOR CONTAINED metonymy, and (HC) for HEART IS A CONTAINER metaphor.

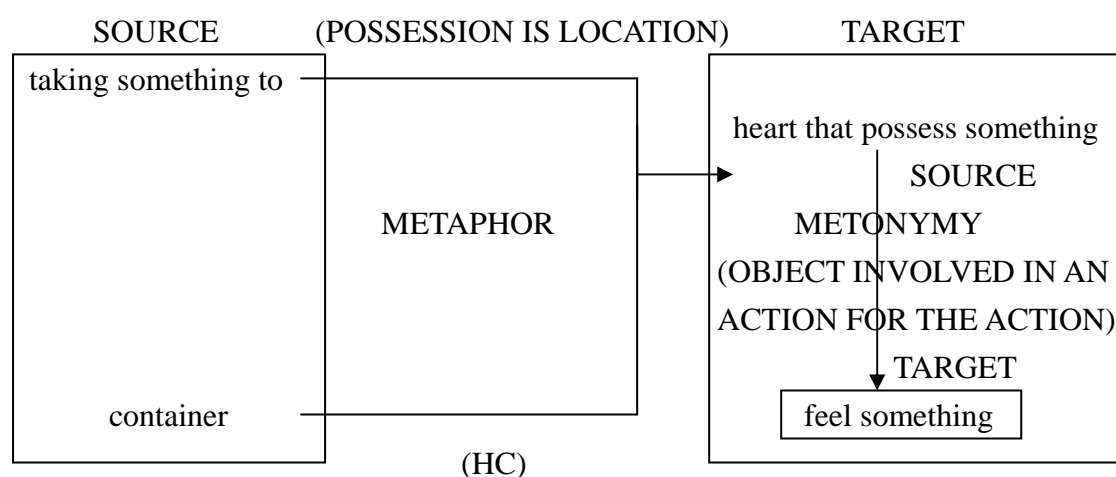
<sup>3</sup> The abstract concept—possession—is claimed by Heine (1997) to be referred to by certain event

(1997: 94) describes the Goal Schema as “schema [which] typically consists of a verb of existence or of location, where the possessor is encoded as a dative/benefactive or goal case expression and the possessee typically is a subject.” Therefore, if something is possessed, it is understood to be located at the place of the possessor. In this idiom, the heart possesses whatever is taken to it. Since hearts are traditionally believed to be the organ that we use to feel, this idiom obtains the meaning of feeling something through the metonymy OBJECT INVOLVED IN AN ACTION FOR THE ACTION.

The interaction between metaphor and metonymy of *take something to heart* is shown in Figure 4.2:

Figure 4.2. Target-in-source metonymy within the metaphoric target.

*take something to heart*

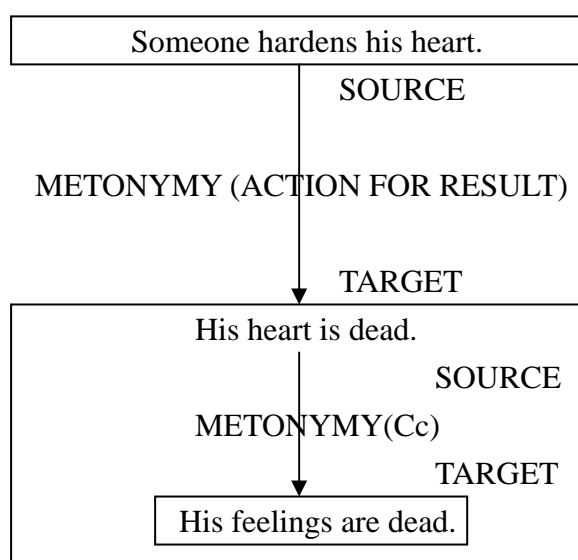



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schemas such as the Action Schema, the Location Schema, the Goal schema, and many others. Heine (1997) asserts that these schemas account for the majority of possession constructions crosslinguistically.

Except for the eight heart idioms of target-in-source metonymy within the metaphoric target, the other four idioms involve only metonymy—two involving one metonymy, and the other two involving two metonymies. While *a change of heart* and *with all one's heart* involve the CONTAINER FOR CONTAINED metonymy (HEART FOR FEELINGS to be specific) exclusively, both *wear/pin one's heart on one's sleeve* and *harden one's heart* show a more complicated interaction between two metonymies, that is, target-in-source metonymy within the metonymic target. Figure 4.3 demonstrates target-in-source metonymy within the metonymic target of *harden one's heart*:

Figure 4.3. Target-in-source metonymy within the metonymic target.  
*harden one's heart*



In Figure 4.3, someone tries to harden his heart in order to make his heart dead (ACTION FOR RESULT). The first metonymy is activated as indicated. The target of this metonymy in turn becomes the source of another metonymic mapping through the CONTAINER FOR CONTAINED metonymy in which the source, *his heart is dead*, is further mapped onto the target, *his feelings are dead*. It is through this target-in-source metonymy within the metonymic target that we can capture the figurative meaning of *harden one's heart*.

In this section, the analysis of heart idioms displaying generic emotions reveals three types of cognitive-semantic mechanisms behind heart idioms: (1) target-in-source metonymy within the metaphoric target, as in *at/from the bottom of one's heart*, *in one's heart of hearts*, *open one's heart*, *take something to heart*, *bare one's heart*, *pour one's heart*, *this filled my heart with something*, and *one's heart is swelling with something*, (2) target-in-source metonymy within the metonymic target, as in *wear/pin one's heart on one's sleeve* and *harden one's heart*, and (3) single metonymy, as in *a change of heart* and *with all one's heart*. The following table summarizes the results of the analysis so far:

Table 4.1. Summary of the analysis of heart idioms displaying generic emotions

Cognitive-Semantic Mechanisms	Heart Idiom of Generic Emotions
(1) target-in-source metonymy within the metaphoric target	<i>at/from the bottom of one's heart, in one's heart of hearts, open one's heart, take something to heart, bare one's heart, pour one's heart, this filled my heart with something, and one's heart is swelling with something</i>
(2) target-in-source metonymy within the metonymic target	<i>wear/pin one's heart on one's sleeve and harden one's heart</i>
(3) single metonymy	<i>a change of heart and with all one's heart</i>

The following section will work on the analysis of heart idioms displaying specific emotions to see whether there are different models of cognitive-semantic mechanisms involved.

#### 4.2 Analysis of Heart Idioms Displaying Specific Emotions

Ruiz de Mendoza (2003) proposes three models of interaction between metaphor and metonymy. The analysis of the 34 heart idioms displaying specific emotions, however, discovers a new model of the interaction between metaphor and metonymy, that is, target-in-source metonymy within the metaphoric source. Of the 34 heart idioms, 10 of them belong to this new interaction model. They are *take heart*, *the way to a man's heart is through his stomach*, *cry one's heart out*, *set one's heart on*

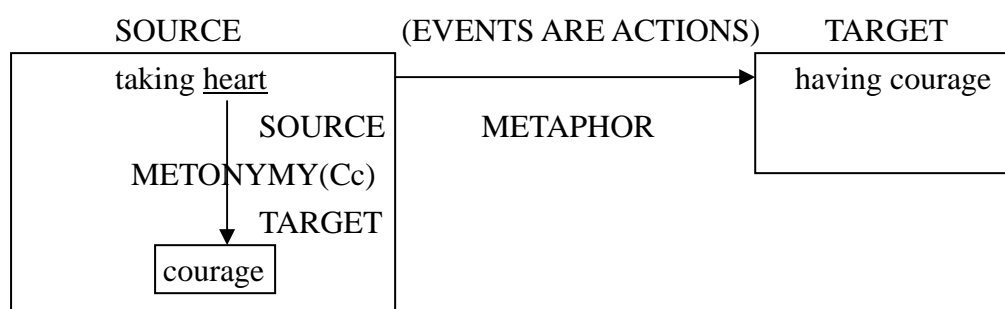
*something, put (new, fresh, etc) heart into, have one's heart in one's mouth/boots, lift (up) one's heart, someone's heart sinks, find it in one's heart, and his heart sank into his boots.* Detailed analysis of the first two heart idioms will be given with figures in this section.

The heart idiom—*take heart*—is firstly examined. When someone takes heart from others, it means that he obtains courage from others. In fact, as illustrated in the definitions given previously, heart is often related to positive feelings or positive quality of spirits such as courage. The question at issue now is that courage represents something abstract that can not be possibly taken away physically. Consequently, the courage-related organ of hearts is taken away instead to simulate the action of taking courage. Note that a target-in-source metonymy already occurs when we access courage through the heart (CONTAINER FOR CONTAINED). This target-in-source metonymy serves as a trigger for us to view the action of taking as an event of possession (EVENTS ARE ACTIONS (POSSESSING IS TAKING to be specific)). This concept of possession can be represented by an Action Schema in Heine (1997). Heine (1997: 91) states “the notion of possession is conceptually derived from a propositional structure that typically involves an agent, a patient, and some action or activity.” In other words, possessing something is referred to as doing some actions or taking part in an activity. This new interaction model is represented in Figure 4.4:



Figure 4.4. Target-in-source metonymy within the metaphoric source.

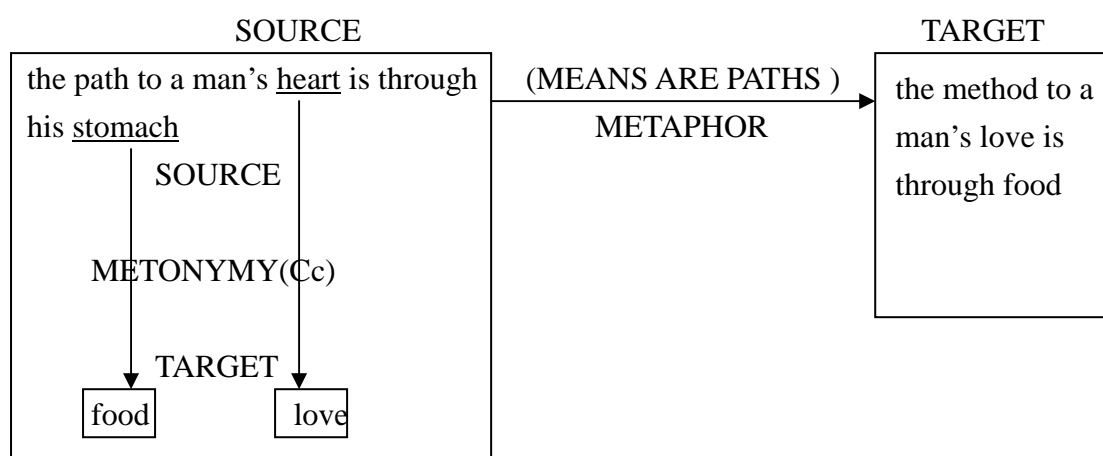
*take heart*



Another example of this new interaction model is *the way to a man's heart is through his stomach*, which means 'feeding a man food that he likes will cause him to love you.' It is clear that the heart is conceptualized as love, and the stomach as food through the CONTAINER FOR CONTAINED metonymy. Heart is often considered to be a container full of all kinds of emotions. Among those emotions, love is a typical example. We often draw a red heart to express the emotion of love. As for the stomach, it is the organ that we use to digest food. As a result, it is reasonable to use the stomach to stand for the food inside it. Then, these two metonymies serve as a trigger for us to activate the MEANS ARE PATHS metaphor in order to interpret the concrete path to a man's heart as an abstract method to a man's love. This model of target-in-source metonymy within the metaphoric source is shown in Figure 4.5:

Figure 4.5. Target-in-source metonymy within the metaphoric source.

*The way to a man's heart is through his stomach.*



In addition to the 10 heart idioms showing the new interaction model above, three heart idioms, *an aching heart*, *break one's heart*, and *make one's heart bleed*, can be represented by the model of source-in-target metonymy within the metaphoric source proposed by Ruiz de Mendoza (2003). Take *break one's heart* as an example. When someone actually breaks your heart, that person intends to make you feel physical pain (ACTION FOR RESULT). Therefore, we have access to a scene that a person is physically in pain through the scene that someone takes an action to break that person's heart. The scene that a person is suffering from a physical pain is then mapped onto the scene that the same person feels terrible psychologically through the metaphor PSYCHOLOGICAL PAIN IS PHYSICAL PAIN, which is subordinate to the higher mapping ABSTRACT IS CONCRETE.<sup>4</sup> Figure 4.6 shows the interaction

<sup>4</sup> In fact, the psychological pain is in turn mapped onto sadness through the CATEGORY FOR MEMBERS metonymy. However, this process is not presented in the figure for the sake of simplicity.

model of *break one's heart*:

Figure 4.6. Source-in-target metonymy within the metaphoric source.

*break one's heart*

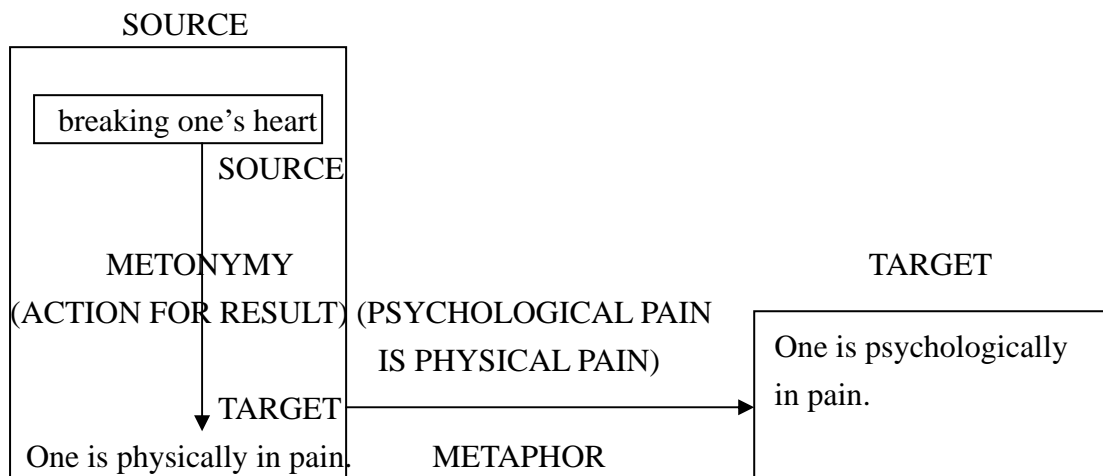
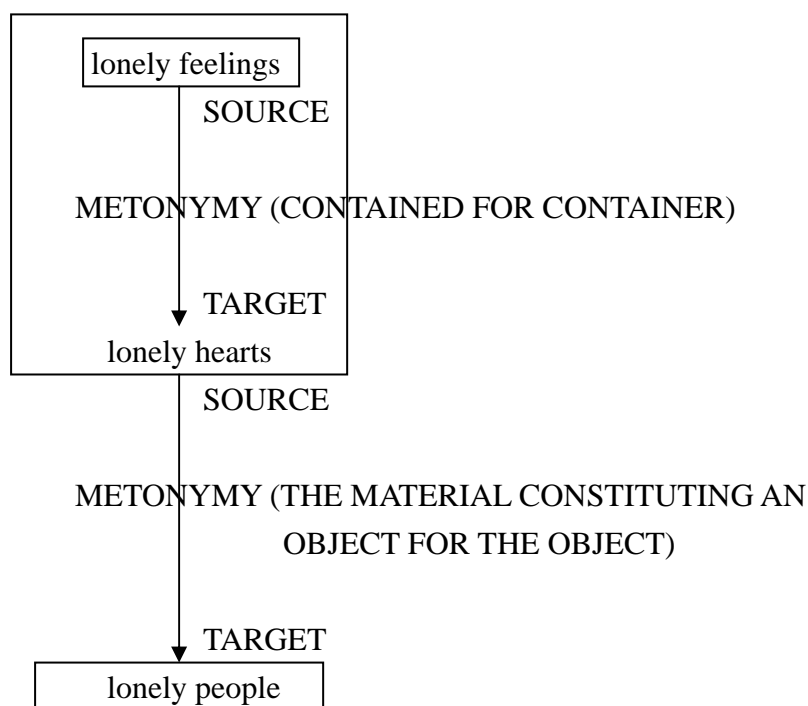


Figure 4.7. Source-in-target metonymy within the metonymic source.

*a lonely hearts club*



Still another new interaction model found in this category is source-in-target metonymy within the metonymic source. Examples are *a lonely hearts club* and *absence makes the heart grow fonder*. Figure 4.7 demonstrates the interaction model of *a lonely hearts club*, which serves as a clear example of source-in-target metonymy within the metonymic source. *A lonely hearts club* is an organization for lonely people to hang out together. Note that a club is not an organization for hearts but for human beings. Hence, the most essential organ *hearts* is taken to stand for ‘people’ through the metonymy THE MATERIAL CONSTITUTING AN OBJECT FOR THE OBJECT (HEART FOR PERSON to be specific). Moreover, the word *lonely* is supposed to describe a person’s inner feelings instead of a person’s heart to begin with. Therefore, the CONTAINED FOR CONTAINER metonymy is activated enabling us to describe hearts as *lonely hearts*.

So far, we have seen three interaction models that do not appear in heart idioms of generic emotions. The rest of the heart idioms of specific emotions, however, show two types of cognitive-semantic mechanisms found in heart idioms of generic emotions. *Win one’s heart, conquer one’s heart, to one’s heart’s content, have something at heart, offer one’s heart, steal one’s heart (away), something is close to someone’s heart, and lose one’s heart (to)* belong to the model of target-in-source metonymy within the metaphoric target. *One’s heart skips/misses a beat, heart stands*

*still, one's heart throb for someone, a heart overflowing, lose heart, somebody being one's heart's desire, put/set one's heart/mind at rest* have to do with only one metonymy respectively. One example from each type above will be presented with detailed analysis below.

Figure 4.8. Target-in-source metonymy within the metaphoric target.

*win one's heart*

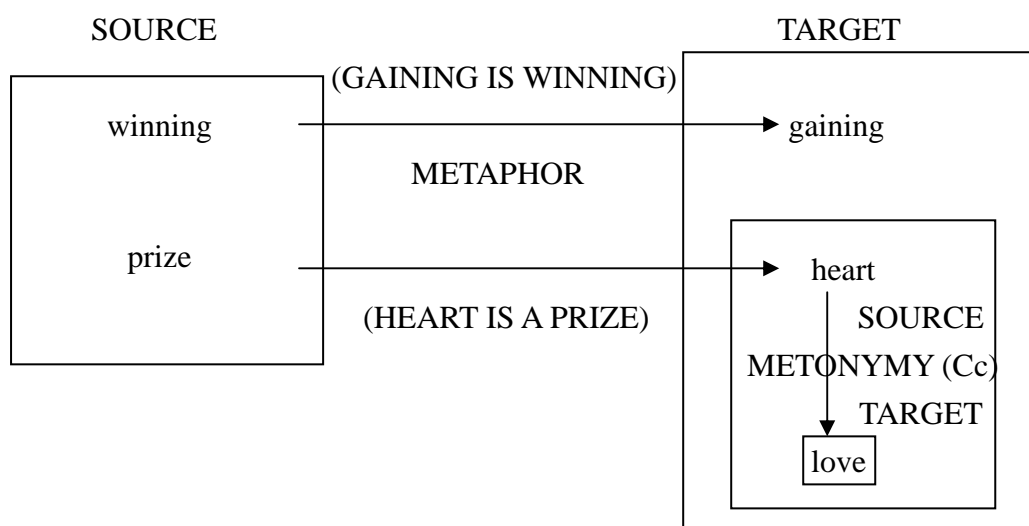


Figure 4.8 above demonstrates the interaction model of *win one's heart*. In this idiom, through the HEART IS A PRIZE metaphor, heart is metaphorically conceptualized as some kind of prize that can be won, and the person's love, which is often represented by heart through the CONTAINER FOR CONTAINED metonymy, becomes something that can be won. Furthermore, winning the love is viewed as gaining the love by the GAINING IS WINNING metaphor. This metaphor can be understood by looking at a race. When someone wins a race, he or she normally gains

a prize, a medal, or even fame. Therefore, the winner becomes the gainer, and something won becomes something gained. This conforms to the Invariance Principle.

Finally, consider the example *one's heart skips/misses a beat*, which involves only one metonymy—PHYSIOLOGICAL/BEHAVIORAL EFFECT FOR EMOTION. It is often the case that we exaggerate a situation by saying something is so stunning or surprising that it catches our breath or even our heartbeat. In this idiom, we use the physiological effect of an emotion, *one's heart skips/misses a beat*, for the emotion, surprise, that leads to this physiological effect.

In this section, with two types of cognitive-semantic mechanisms already found in the heart idioms of generic emotions, three new types, target-in-source metonymy within the metaphoric source, source-in-target metonymy within the metaphoric source, and source-in-target metonymy within the metonymic source, are also detected existing behind the heart idioms of specific emotions. Table 4.2 in the following page summarizes the result of this section:

Table 4.2. Summary of the analysis of heart idioms displaying specific emotions

Cognitive-Semantic Mechanisms	Heart Idiom of Specific Emotions
(1) target-in-source metonymy within the metaphoric source	<i>take heart, the way to a man's heart is through his stomach, cry one's heart out, set one's heart on something, put (new, fresh, etc) heart into, have one's heart in one's mouth/boots, lift (up) one's heart, someone's heart sinks, find it in one's heart, and his heart sank into his boots</i>
(2) source-in-target metonymy within the metaphoric source	<i>an aching heart, break one's heart, and make one's heart bleed</i>
(3) source-in-target metonymy within the metonymic source	<i>a lonely hearts club and absence makes the heart grow fonder</i>
(4) target-in-source metonymy within the metaphoric target	<i>Win one's heart, conquer one's heart, to one's heart's content, have something at heart, offer one's heart, steal one's heart (away), something is close to someone's heart, and lose one's heart (to)</i>
(5) single metonymy	<i>one's heart skips/misses a beat, heart stands still, one's heart throb for someone, a heart overflowing, lose heart, somebody being one's heart's desire, put/set one's heart/mind at rest</i>

Section 4.3 will examine cognitive-semantic mechanisms behind the heart idioms of personality.

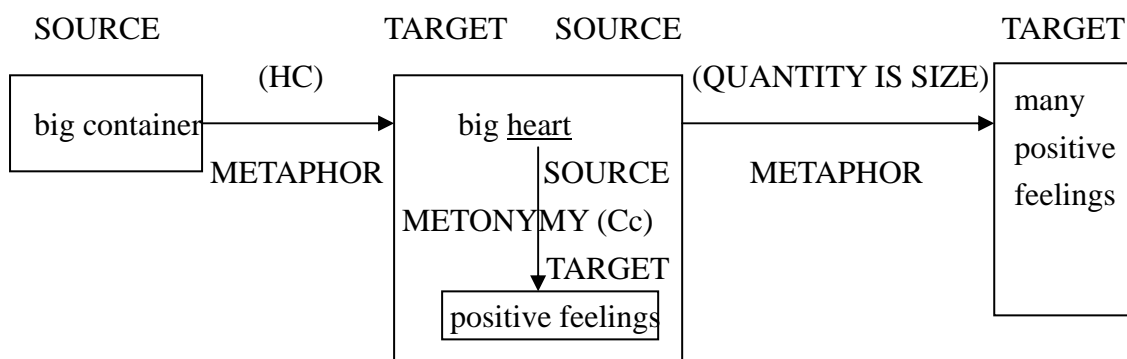
### 4.3 Analysis of Heart Idioms Displaying Personality

A new interaction model is identified for the idiom *have a big heart*. A chain derivation whereby target-in-source metonymy is the target of one metaphor which in turn serves as the source of another metaphor is detected in this derivation model.

This complicated interaction model is diagrammed in Figure 4.9:

Figure 4.9. Target-in-source metonymy being the target of one metaphor and the source of another metaphor.

*have a big heart*



We have known that heart is viewed as a container full of feelings, especially the positive ones (see definitions of heart). As a result, we use the concept of a big container to talk about a big heart through the HEART IS A CONTAINER metaphor. Then, through the CONTAINER FOR CONTAINED metonymy, we have access to the feelings inside through heart. This metonymy in turn triggers the metaphoric mapping between the size of a container and the quantity of the containee (QUANTITY IS SIZE). This metaphor is based on our conception that a bigger



container can accommodate more items inside. For instance, we tend to pick the bigger gift box between two gift boxes, because we assume that a bigger box has more gifts inside. Hence, we consider a person with a big heart as having many positive feelings.

*Have a big heart* is the only example demonstrating this new interaction model.

The rest heart idioms display the same interaction models found in the heart idioms of generic and specific emotions. *Take (somebody/something) to one's heart* and *have a place in every heart* belong to the interaction models of target-in-source metonymy within the metaphoric source. *Have one's heart in the right place*, *soft heart*, and *tender heart*, show the interaction of source-in-target metonymy within the metaphoric source. *Open heart* concerns the target-in-source metonymy within the metaphoric target. Since they do not differ from those idioms of the same interaction models previously discussed, detailed analysis of the three idioms above is not provided.

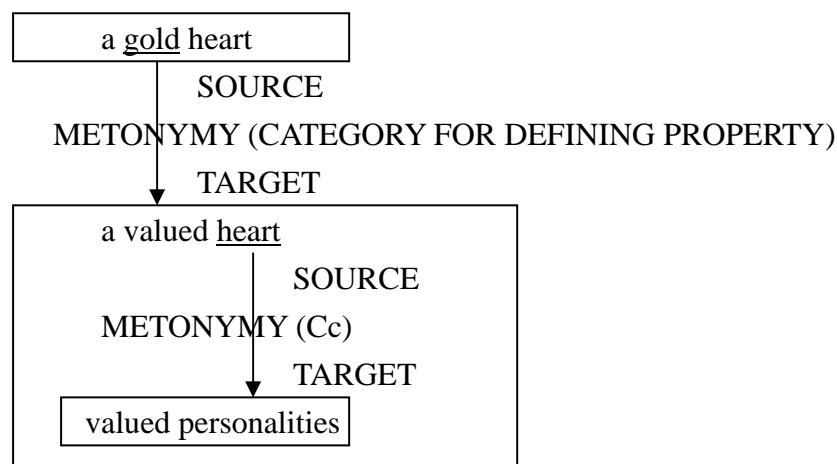
In addition to the three idioms above, *pure in heart*, *have a heart*, and *have the heart (to)* involve only the CONTAINER FOR CONTAINED metonymy, and *heart of gold*, *heart of iron*, and *heart of stone* involve target-in-source metonymy within the metonymic target. Take *heart of gold* as an example. Since gold is a kind of valued metal, it is often used to symbolize value. Activating the CATEGORY FOR

DEFINING PROPERTY metonymy, this idiom brings up the meaning that a gold heart is considered to be a valued heart.<sup>5</sup> Next, heart is mapped onto personalities inside it through the CONTAINER FOR CONTAINED metonymy; therefore, we derive the interpretation of valued personalities, like kindness, generosity, courage, etc.

Figure 4.10 represents its interaction model:

Figure 4.10. Target-in-source metonymy within the metonymic target.

*heart of gold*



At the end of this section, the heart idiom—*pure in heart*—is discussed. Yu (2003) believes that, in Western cultures, the mind is the location of thought whereas the heart is the seat of emotions. Yu (2003: 160) states: “In Western cultures, there is a binary contrast between the heart and the mind. The mind is the location of thought whereas the heart is the seat of emotions.” Yu’s statement is only partially correct

<sup>5</sup> Although gold is widely understood as a symbol of value, it has to be noted that value is just one of the many defining properties of gold. Therefore, the use of gold for one of the defining properties concerns the CATEGORY FOR DEFINING PROPERTY metonymy, which is a whole-for-part metonymy.

because the analysis of heart idioms in this chapter will show that hearts are conceptualized as minds as well. Specifically, *pure in heart* suggests that the heart, being the site of emotions, is treated as the location of thought as well. *Pure in heart* means someone never has evil or harmful thoughts or intentions. Obviously, the heart is conceptualized as a container full of thoughts and intentions. Other pieces of evidence come from *set one's heart/mind on something* and *put/set someone's heart/mind at rest*. These two heart idioms of specific emotions suggest that hearts and minds are interchangeable.

The analysis of heart idioms in this section discovers a whole new interaction model, target-in-source metonymy being the target of one metaphor and the source of another metaphor, and several types of metaphor and metonymy that are not found previously. The following section will focus on the analysis of heart idioms displaying emotional types of personality. Before we move on to the next section, the summary of the results in this section is given in Table 4.3:

Table 4.3. Summary of the analysis of heart idioms displaying personality

Cognitive-Semantic Mechanisms	Heart Idiom of Personality
(1) target-in-source metonymy being the target of one metaphor and the source of another metaphor	<i>have a big heart</i>
(2) target-in-source metonymy within the metaphoric source	<i>take (somebody/something) to one's heart and have a place in every heart</i>
(3) source-in-target metonymy within the metaphoric source	<i>have one's heart in the right place, soft heart, and tender heart</i>
(4) target-in-source metonymy within the metaphoric target	<i>open heart</i>
(5) target-in-source metonymy within the metonymic target	<i>heart of gold, heart of iron, and heart of stone</i>
(6) single metonymy	<i>pure in heart, have a heart, and have the heart (to)</i>

#### 4.4 Analysis of Heart Idioms Displaying Emotional Types of Personality

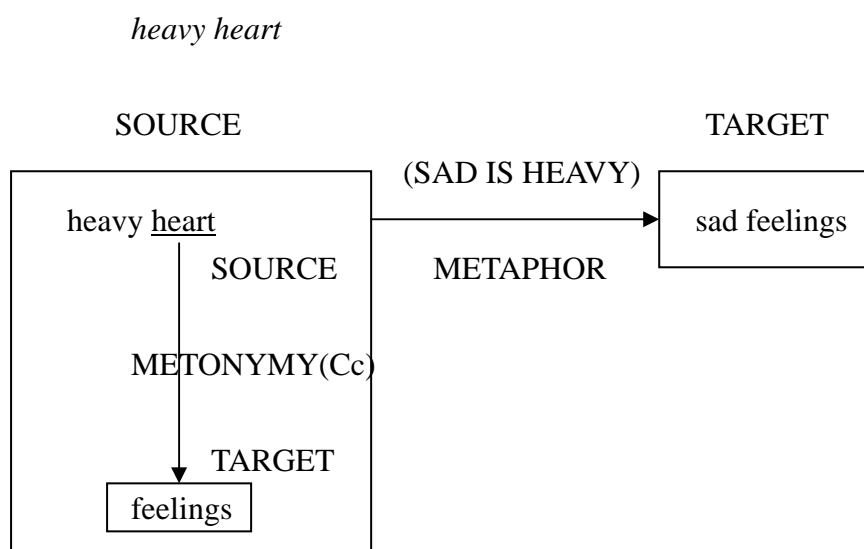
The inspection of the eight heart idioms of emotional types of personality finds that *light heart, heavy heart, set all hearts on fire, someone's heart goes out to,* and *have one's heart in something* belong to the model of target-in-source metonymy within the metaphoric source, *sick at heart* and *one's heart bleeds for somebody* belong to the model of source-in-target within the metaphoric source, and *young at heart* involves only one single metonymy.

First, *heavy heart* comes up for discussion as a result of its significance of supporting the new model of target-in-source metonymy within the metaphoric source.

The interaction between metaphor and metonymy behind *heavy heart* is provided in

Figure 4.11:

Figure 4.11. Target-in-source metonymy within the metaphoric source.



Note that the heart has to be mapped onto feelings through the CONTAINER FOR CONTAINED metonymy first, and then the SAD IS HEAVY metaphor can be triggered.<sup>6</sup> It is not likely to be the case that the SAD IS HEAVY metaphor takes place first to trigger the CONTAINER FOR CONTAINED metonymy (HEART FOR FEELINGS to be specific), however. This can be proved with idioms like *heavy going* 'hard work'. The SAD IS HEAVY metaphor is not applicable in this idiom because

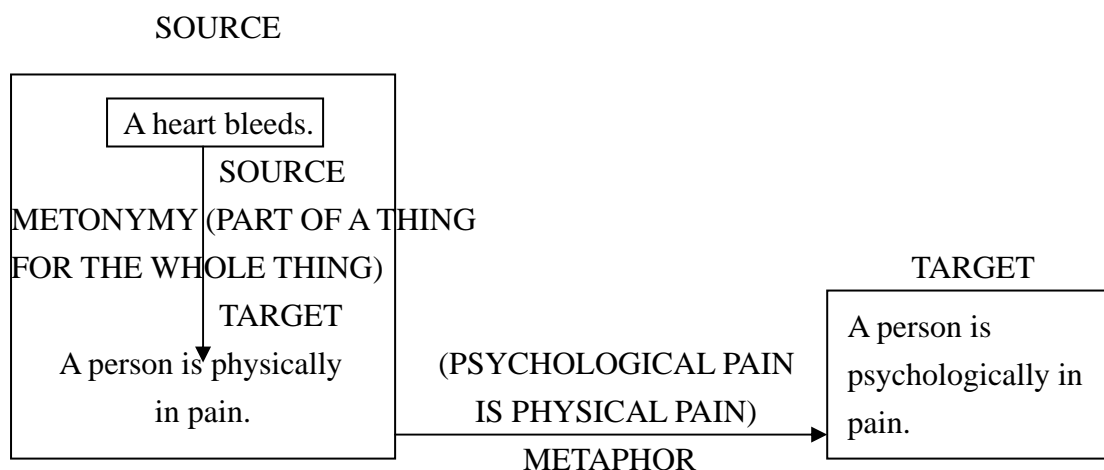
<sup>6</sup> The SAD IS HEAVY metaphor is a variation of the SAD IS DOWN metaphor. Orientational metaphors like SAD IS DOWN and HAPPY IS UP are thoroughly discussed in *Metaphors We Live By* by Lakoff & Johnson (1980).

*heavy going* does not involve feelings. As for *heavy heart*, however, our conventional knowledge allows us to relate heart to feelings. We thus have a trigger for the activation of the SAD IS HEAVY metaphor.

Having discussed an example of target-in-source metonymy within the metaphoric source, we now shift our attention to an example of source-in-target metonymy within the metaphoric source—*one's heart bleeds for somebody*. When someone's heart bleeds, he or she is physically in a bad condition (PART OF A THING FOR THE WHOLE THING). Since we know that hearts are often connected with feelings, we naturally associate this bad physical condition with some bad psychological condition as indicated by the metaphor PSYCHOLOGICAL PAIN IS PHYSICAL PAIN. Figure 4.12 is the interaction model of *one's heart bleeds for somebody*:

Figure 4.12. Source-in-target metonymy within the metaphoric source.

*One's heart bleeds for somebody.*



This section will end with discussion on *young at heart* ‘one feels or thinks he is young’, which provides us with another piece of evidence that hearts are also taken to be the location of thought. When we describe an older person as *young at heart*, we mean that he maintains a young mentality regardless of his old age. This suggests that hearts are treated as the location of thought, and therefore opposes Yu’s (2003) assertion.

The analysis of heart idioms in this section discovers three types of cognitive-semantic mechanisms already found in the previous analysis. Table 4.4 summarizes the result of the analysis:

Table 4.4. Summary of the analysis of heart idioms displaying emotional types of personality

Cognitive-Semantic Mechanisms	Heart Idiom of Emotional Types of Personality
(1) target-in-source metonymy within the metaphoric source	<i>light heart, heavy heart, set all hearts on fire, someone’s heart goes out to, and have one’s heart in something</i>
(2) source-in-target within the metaphoric source	<i>sick at heart and one’s heart bleeds for somebody for somebody</i>
(3) single metonymy	<i>Young at heart</i>

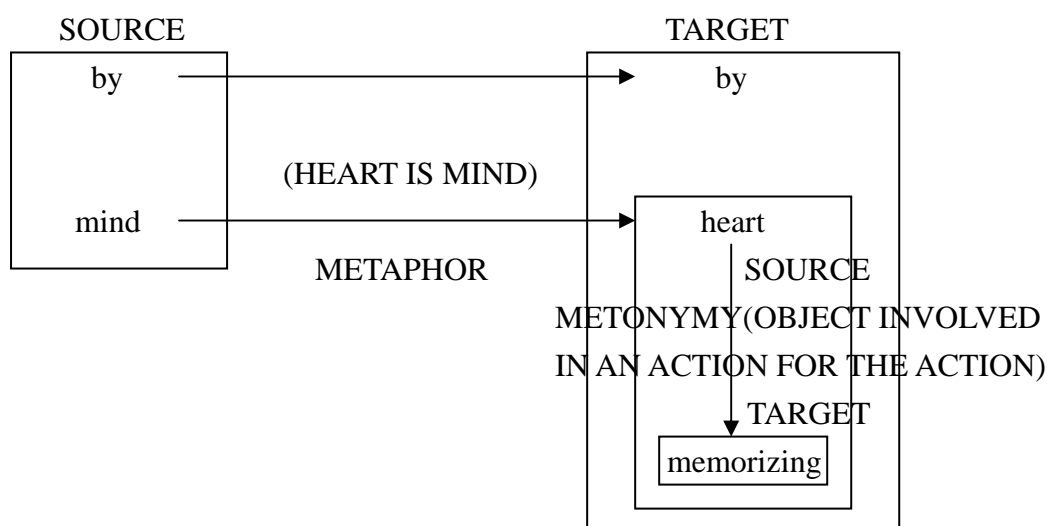
The next section will deal with the analysis of heart idioms belonging to the category of others.

#### 4.5 Analysis of Heart Idioms Displaying Others

Heart idioms in this category display a variety of cognitive-semantic mechanisms. We will first touch the issue of hearts being the location of thought. In this category, the heart idiom, *by heart*, supports the assumption that hearts are the location of thought. When we do something *by heart*, we do it by memorizing. Nonetheless, memorization is believed and proved to be the function of our brain. This suggests that we in fact treat hearts as a brains or minds. As a result, we have a HEART IS MIND metaphor. Afterward, through the metonymy OBJECT INVOLVED IN AN ACTION FOR THE ACTION, we capture the figurative meaning of *by heart* as ‘by memorizing’. In this idiom, the function of the mind is mapped onto that of the heart. This metaphor thus conforms to the Invariance Principle. The interaction model of *by heart* is shown in Figure 4.13:

Figure 4.13. Target-in-source metonymy within the metaphoric target.

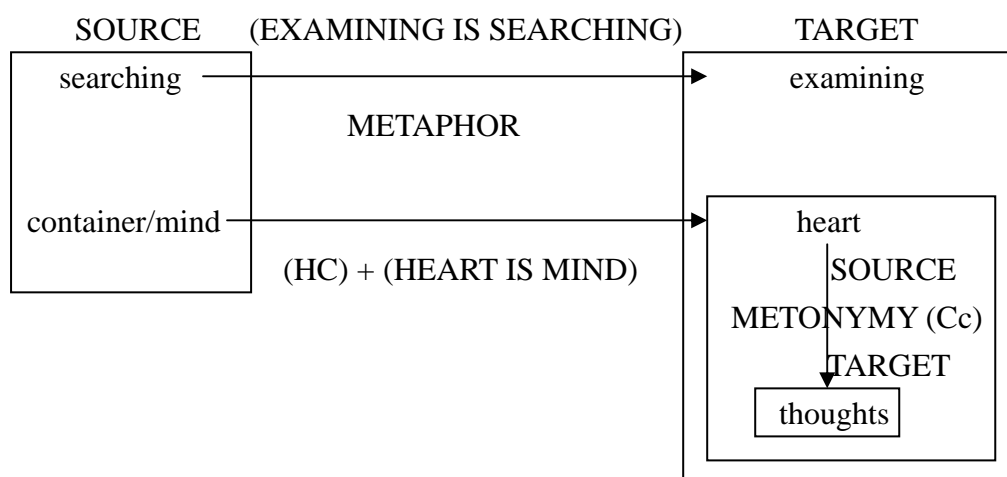
*by heart*





The analysis of heart idioms so far has revealed that hearts are conceptualized not only as containers full of feelings but also as containers full of thoughts. *Search one's heart* and *believe/know something in one's heart* are another two examples for heart being a container full of thoughts. The interaction between metaphor and metonymy of *search one's heart* is shown in Figure 4.14:

Figure 4.14. Target-in-source metonymy within the metaphoric target.  
*search one's heart*



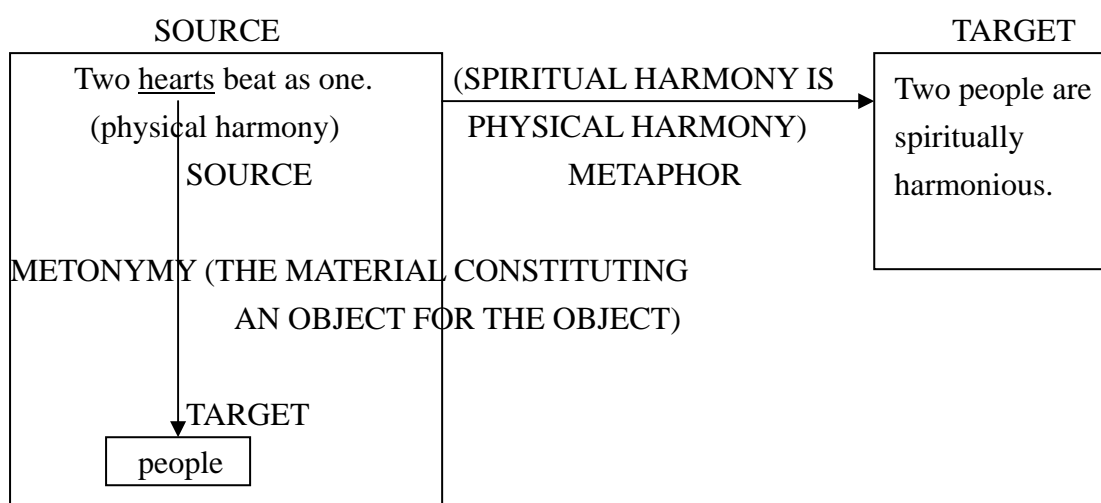
In the very beginning, through the metaphors HEART IS A CONTAINER and HEART IS MIND, the heart is thought of as the mind and as a container that we can search for something inside. When we search our heart for something, we examine the thoughts inside our heart (EXAMINING IS SEARCHING) to see if they are proper reasons for us to take certain actions. At the same time, the heart as the container stands for the thoughts, the containee (CONTAINER FOR CONTAINED).

*Get to the heart of, the heart/root of the matter, after one's heart, and at heart* concern the use of single metonymy. Take *get to the heart of* and *the heart/root of the matter* for example. They have to do with meanings like the most important or crucial part of something. The literal meaning and the figurative meaning can be easily linked with the HEART FOR ESSENCE metonymy, owing to the understanding of heart as the most vital organ of a human body.

In addition to the cognitive-semantic mechanisms discussed above, the model of target-in-source metonymy within the metaphoric source can also be detected for the other idioms *two hearts that beat as one* and *put one's heart and soul into*. *Two hearts that beat as one* is an interesting example. Through the metonymy THE MATERIAL CONSTITUTING AN OBJECT FOR THE OBJECT (HEART FOR PERSON to be specific), we can say that two hearts beat as one when two people match in every aspect. This physical harmony, same heartbeat tempo, is then mapped onto two people who are spiritually harmonious, especially in thoughts and ideas (SPIRITUAL HARMONY IS PHYSICAL HARMONY). Figure 4.15 shows the interaction model:

Figure 4.15. Target-in-source metonymy within the metaphoric source.

*two hearts that beat as one*



We have examined a large number of heart idioms of various cognitive-semantic mechanisms. There is, however, one heart idiom that can not be analyzed through the cognitive-semantic mechanisms we have seen so far. That is, *cross one's heart and hope to die*. When someone says that he crosses his heart and hopes to die, he means he makes promises. This idiom is idiosyncratic because it can not be analyzed and the motivation to link the literal meaning and the figurative meaning is also very weak for ordinary people. However, there are two possibilities for the motivation of this idiom.<sup>7</sup> One possibility can be traced back to the dawn of the Aztec civilization when the king of the Aztecs forced businessmen to wear a special chest plate that crossed their heart in order to make them tell the truth about

<sup>7</sup> The complete story of the origin of *cross one's heart and hope to die* can be found at the following website, where origins of many other figurative expressions are also collected: <http://www.screamingmonkeylabs.com/sayings.html>

their merchandises. The other possibility has to do with Christianity that people make the sign of the cross over their heart to swear that they are telling the truth. As a result, this idiom has a historical or religious motivation for its figurative meaning. To this point, we have seen that heart idioms are analyzable or motivated. However, we still have to admit that it is not the case for all idioms. Again, take *kick the bucket* for example. There must be a historical motivation that makes people at that time to link this idiom to ‘die’. However, this historical motivation is no longer retrievable. Thus, *kick the bucket* becomes what Nunberg et al. (1994) call “an idiomatic phrase”. Table 4.5 summarizes the result of the analysis in this section:

Table 4.5. Summary of the analysis of heart idioms belonging to the type of others

Cognitive-Semantic Mechanisms	Heart Idiom of Others
(1) target-in-source metonymy within the metaphoric target	<i>by heart, search one’s heart, and believe/know something in one’s heart</i>
(2) target-in-source metonymy within the metaphoric source	<i>two hearts that beat as one and put one’s heart and soul into</i>
(3) single metonymy	<i>get to the heart of, the heart/root of the matter, after one’s heart, and at heart concern</i>
(4) historical or religious motivation	<i>cross one’s heart and hope to die</i>

In this chapter, much effort has been spent on the discovery of the cognitive semantic mechanisms behind heart idioms. Two models proposed by Ruiz de Mendoza (2003), source-in-target metonymy within the metaphoric source and target-in-source metonymy within the metaphoric target, have been detected existing behind the heart idioms. In addition to these two models, four brand new models of cognitive-semantic mechanisms, target-in-source metonymy within the metaphoric source, target-in-source metonymy being the target of one metaphor and the source of another metaphor, target-in-source metonymy within the metonymic target, and source-in-target metonymy within the metonymic source, have also been discovered by this research. Moreover, there are also heart idioms involving only single metonymy.

The analysis of this research has also found that hearts, being the locus of emotions, are also conceptualized as the location of thought. As a result, being a container full of feelings and thoughts, it is often used to refer to the feelings or thoughts inside through the CONTAINER FOR CONTAINED metonymy. Sometimes, hearts also stands for people because of its significance in maintaining life. Hence, hearts are used metonymically for people through the metonymy THE MATERIAL CONSTITUTING AN OBJECT FOR THE OBJECT.

## **4.6 Reflections of the Theories**

From the analysis of heart idioms in this chapter we have seen how metaphor, metonymy, and the interaction of the two link the literal meanings of heart idioms to their figurative meanings. These mechanisms provide us with the proper motivations to encode and decode heart idioms. In this section, we are going to reflect those theories reviewed in chapter three in terms of their applicability of the analysis of heart idioms. But before that, a short discussion on prototypes based on Wittgenstein (1978) is given. The categorization and analysis of heart idioms in this research have shown us that generally human hearts represent emotions, personalities, or thoughts. Despite the variety, human hearts representing emotions outnumber those representing personalities and those representing thoughts. In fact, only a small number of heart idioms relate to thoughts. As a result, it is reasonable to state that the prototypical meanings of heart idioms are associated with emotions, and that personalities and thoughts border to the periphery of the meanings of heart idioms.

### **4.6.1 Reflections of the Theory of Metaphor**

A variety of conventional metaphors—conceptual metaphors and event structure metaphors—are found in the analysis of heart idioms, with a few novel metaphors—image metaphors, generic-level metaphors, and great chain

metaphors—found in the analysis. The following table lists out all the metaphors mentioned in the analysis:

Table 4.6. All the metaphors mentioned in the analysis

Type of Metaphor	Metaphor
Conceptual	REVEALING IS OPENING PSYCHOLOGICAL PAIN IS PHYSICAL PAIN GAINING IS WINNING QUANTITY IS SIZE SAD IS HEAVY EXAMINING IS SEARCHING SPIRITUAL HARMONY IS PHYSICAL HARMONY
Event Structure	MEANS ARE PATHS STATES ARE LOCATIONS (POSSESSION IS LOCATION)
Image	HEART IS A CONTAINER
Generic-level	EVENTS ARE ACTIONS (POSSESSION IS TAKING)
Great Chain	HEART IS A PRIZE HEART IS MIND

It has to be noted that repetitive occurrences of certain metaphors are not depicted in the above table. Therefore, a single occurrence of a metaphor in the above table does not necessarily imply a rare occurrence of that metaphor in the analysis. Moreover, some of the metaphors listed in the above table are subsumed under more general metaphors. For example, PSYCHOLOGICAL PAIN IS PHYSICAL PAIN and

SPIRITUAL HARMONY IS PHYSICAL HARMONY are subsumed under the ABSTRACT IS CONCRETE metaphor. What Table 4.6 shows us is that heart idioms make use of all the types of metaphors proposed by Lakoff (1993). It also shows that hearts tend to be conceptualized as other objects through novel metaphors, while the action or status related to hearts tends to be conceptualized as another action or status through conventional metaphors.

#### **4.6.2 Reflections of the Theory of Metonymy**

Although Kövecses & Radden (1998) proposes 15 types of metonymy-producing relationships and many principles that govern the selection of certain metonymies, only six types of metonymy-producing relationships and some principles are found at work in the analysis of heart idioms. Table 4.7 in the following page summarizes the six types of metonymy-producing relationships and the cognitive principles found in the analysis:



Table 4.7. All the types of metonymy-producing relationships mentioned in the analysis and related cognitive principles<sup>8</sup>

ICM	Metonymy (Principle Conformed) [Principle Violated]
Containment	CONTAINER FOR CONTAINED ( <u>concrete over abstract, good gestalt over poor gestalt, bounded over unbounded, &amp; stereotypical over nonstereotypical</u> )
Action	OBJECT INVOLVED IN AN ACTION FOR THAT ACTION ( <u>concrete over abstract, functional over nonfunctional, &amp; stereotypical over nonstereotypical</u> ) ACTION FOR RESULT ( <u>immediate over non-immediate</u> )
Constitution	THE MATERIAL CONSTITUTING AN OBJECT FOR THE OBJECT ( <u>stereotypical over nonstereotypical &amp; important over less important</u> ) [ <u>human over nonhuman, good gestalt over poor gestalt, &amp; bounded over unbounded</u> ] <sup>9</sup>
Causation	PHYSIOLOGICAL/BEHAVIORAL EFFECT FOR EMOTION ( <u>concrete over abstract &amp; immediate over non-immediate</u> )
Category-and-property	CATEGORY FOR DEFINING PROPERTY ( <u>concrete over abstract, good gestalt over poor gestalt, bounded over unbounded, &amp; stereotypical over nonstereotypical</u> )
Thing-and-part	PART OF A THING FOR THE WHOLE THING ( <u>concrete over abstract</u> ) <sup>10</sup>

<sup>8</sup> In Table 4.7, principles in the round brackets are the principles conformed to by the metonymy, while the principles in the square brackets are the principles violated by the metonymy.

<sup>9</sup> This metonymy stands for HEART FOR PERSON to be specific. That's why it violates the cognitive principles of human over nonhuman, good gestalt over poor gestalt, & bounded over unbounded.

<sup>10</sup> This metonymy occurs in the idiom *one's heart bleeds for somebody*, where a bleeding heart represents a person with physical illness. This conforms to the concrete over abstract principle.

All the metonymies listed in Table 4.7 are bidirectional, except for the one in the Causation ICM—PHYSIOLOGICAL/BEHAVIORAL EFFECT FOR EMOTION.

The question at issue now is how heart idioms obey and disobey the cognitive principles and communicative principles proposed by Kövecses & Radden (1998).

From Table 4.7 we can see that concrete over abstract and stereotypical over nonstereotypical are the cognitive principles conformed to by most metonymies found behind heart idioms. In addition, good gestalt over poor gestalt, bounded over unbounded, and immediate over non-immediate are also common principles that govern the formation of metonymies behind heart idioms. However, the metonymy THE MATERIAL CONSTITUTING AN OBJECT FOR THE OBJECT is the only instance that we find violating Kövecses & Radden's (1998) cognitive principles—human over nonhuman, good gestalt over poor gestalt, and bounded over unbounded. Although it conforms to the stereotypical over nonstereotypical and important over less important principles, and hence accounts for the selection of the heart over other human organs as the vehicle to the target—person, they can not explain the mapping from hearts to people. Kövecses & Radden (1998) mention that social considerations may account for the selection of non-default routes. Nonetheless, social considerations do not seem to be able to account for this instance.

To conclude, metonymies behind heart idioms conform to most cognitive

principles suggested by Kövecses & Radden (1998); nevertheless, the analysis of heart idioms in this research suggests that human over nonhuman, good gestalt over poor gestalt, and bounded over unbounded are not dominant principles that govern the metonymies behind heart idioms.

#### 4.6.3 Reflections of the Theory of Interaction Models

Table 4.8. Models evoked for the research

Interaction Models Needed for this Research	Note
(1) target-in-source metonymy within the metaphoric target (2) source-in-target metonymy within the metaphoric source	Proposed by Ruiz de Mendoza (2003)
(3) target-in-source metonymy within the metaphorical source (4) target-in-source metonymy being the target of one metaphor and the source of another metaphor (5) target-in-source metonymy within the metonymic target (6) source-in-target metonymy within the metonymic source	Proposed by this Current Study

Ruiz de Mendoza (2003) proposes three models of interaction between metaphor and metonymy. Only two of the three interaction models, however, are discovered in the analysis of heart idioms in this research. Beyond that, other interaction models not mentioned by Ruiz de Mendoza (2003) are also detected in the

analysis. Table 4.8 presents all the interaction models evoked for the analysis, separating models proposed by Ruiz de Mendoza (2003) from new models found in this research. Table 4.8 suggests that Ruiz de Mendoza's (2003) interaction models can not fully account for the cognitive-semantic mechanisms behind heart idioms. On the other hand, it shows that more types of interaction models take parts in deriving the figurative meanings of heart idioms from their literal meanings.

To this point, we have analyzed the cognitive-semantic mechanisms behind heart idioms and examined how the theories of metaphor, metonymy, and interaction models reviewed in chapter three are reflected in heart idioms. The next and final chapter will give a conclusion of the current research.