UC Berkeley

Dissertations, Department of Linguistics

Title

Grammar in Metaphor: A Construction Grammar Account of Metaphoric Language

Permalink

https://escholarship.org/uc/item/9d9222f9

Author

Sullivan, Karen

Publication Date

2007

Grammar in Metaphor: A Construction Grammar Account of Metaphoric Language

by

Karen Sorensen Sullivan

B.A. (University of Oregon) 2001 M.A. (University of California, Berkeley) 2004

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

Linguistics

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Eve Sweetser, Chair Professor Gary Holland Professor George Lakoff Professor John Lindow Professor Richard Rhodes

Fall 2007



Abstract

Grammar in Metaphor: A Construction Grammar Account of Metaphoric Language

by

Karen Sorensen Sullivan

Doctor of Philosophy in Linguistics

University of California, Berkeley

Professor Eve Sweetser, Chair

Over the past few decades, the conceptual metaphor revolution inspired by Lakoff and Johnson (1980) has offered considerable insight into the conceptual structure of metaphor. However, interest in the conceptual characteristics of metaphor has sometimes overshadowed the question of how metaphor surfaces in language. This dissertation tackles the issue of metaphoric language by identifying how specific linguistic resources – from grammatical constructions to poetic devices – are employed to convey the conceptual structure of metaphor.

The dissertation focuses on the role of grammatical constructions in metaphoric language. In metaphoric phrases that can be understood out of context, such as *bright idea*, the dissertation argues that words in particular constructional slots indicate the source domain of a conceptual metaphor (i.e. are "metaphoric"), and words in other slots represent the metaphor's target domain (typically with a "non-metaphoric" meaning).

For example, *bright idea* is interpretable partly because the source-domain predicating adjective *bright* (metaphorically meaning "intelligent") modifies the target-domain "non-metaphoric" noun *idea*. A similar phrase with a target-domain adjective and a source-domain noun, such as *intelligent light*, lacks the meaning "intelligent idea".

The patterns underlying metaphoric uses of constructions can be explained in terms of conceptual autonomy and conceptual dependence (cf. Langacker 1987, Croft 2003), which the dissertation models using semantic frames (cf. Fillmore 1982). In non-metaphoric uses of constructions, conceptually autonomous elements "fill in," or elaborate, the meaning of conceptually dependent elements. In metaphoric language, the autonomous elements' elaboration process includes the designation of a target domain, which forces the dependent elements to be interpreted "metaphorically".

The dissertation extends this analysis to numerous constructions, including domain constructions, as in *mental exercise*; preposition phrase constructions, as in *the foundation of an argument*; predicate-argument constructions; equations; idioms; constructional combinations; and techniques of metaphor evocation that are usually limited to literary genres, such as parallelism and "negation of the literal". One chapter addresses the problem of metaphor look-alikes, by introducing a series of tests to distinguish genuine metaphor from the results of non-metaphoric semantic changes. The dissertation also includes a chapter on Finnish constructions, demonstrating that the analysis employed here can be applied to languages other than English.

	_
Chair	Date

TABLE OF CONTENTS

1	Spea	king metaphori	cally	1
	1.1	Applications		14
	1.2	Framework and	terminology	18
	1.3	Resources and n	nethodology	24
		PART	I FRAMES AND DOMAINS	
2	Sema	antic frames in 1	metaphor and meaning	27
	2.1	Introduction to		28
	2.2	Defining "doma		31
	2.3		in metaphor input domains	34
	2.4	A frame-semant	ic model of autonomy and dependence	40
3	Frame compatibility and lexical choice in metaphor		47	
	3.1	The Invariance		48
	3.2		1 HAPPINESS IS LIGHT	52
	3.3		I INTELLIGENCE IS LIGHT-EMISSION	55
	2.4		aphoric and non-metaphoric polysemies of bright	58 60
	3.4	Knowing is seeing and comprehensibility is visibility Adjectives vs. adverbs: brilliantly, clearly, brightly and sunnily		
	3.5 3.6	Conclusion	iverus: brutantty, clearly, brightly and sunnity	63 64
	PART	II Const	TRUCTIONS IN METAPHORIC LANGU	AGE
4	The	interaction of gr	rammar and metaphor	67
	4.1	Domain constru	ctions	74
		4.1.1 Autonon	ny and dependence in domain constructions	76
		4.1.2 How do	main constructions evoke metaphor	78
	4.2		lifier constructions	87
		-	edicating modifier constructions evoke metaphor	89
	4.3	Compounds		95
			ny and dependence in compounds	95
			mpounds evoke metaphor	97
	4.4		nent constructions	101
			edicate-argument constructions evoke metaphor	102
			-neutral items	105
			ve constructions itive constructions	107 112
	4.5		ase constructions	112
	7.3	•	autonomy and dependence	110
			sition phrase constructions	119
			eposition phrase constructions evoke metaphor	112
		1	relations in metaphoric preposition phrase constructions	127
			tions and closed-class items	130

5	Meta	aphoric	uses of copula constructions	134
	5.1	Classif	fying copula constructions	137
	5.2		ions (predicative nominals)	141
		5.2.1	"Similes" with like or as	146
	5.3	Predic	ative adjectives and predicative PPs	151
6	The	combina	ation of constructions in metaphoric language	156
	6.1	Multip	ole target-domain items	157
		6.1.1	The xyz construction (Type 1)	163
	6.2	-	ole source-domain items	166
		6.2.1	The xyz construction (Type 2)	171
	6.3		ole source- and target-domain items	173
	6.4	Combi	ining conceptual metaphors	176
7	Meta	aphoric	uses of subordination constructions	182
	7.1	Overv	iew of subordination	183
	7.2	Relativ	ve clauses	185
	7.3	Overv	iew of complementation	188
		7.3.1	That-complementation with metaphoric main clauses	190
	7.4	Raisin	g and equi	193
		7.4.1	Subject-to-Subject raising and equi	198
		7.4.2	Subject-to-Object raising and equi	202
		7.4.3	"Tough movement," or Object-to Subject raising	206
		7.4.4	Metaphoric uses of equi predicates	207
	7.5	Condi	tionals	209
		7.5.1	Domain-evoking P-clauses and Q-clauses	209
		7.5.2	Meta-metaphorical conditionals	212
		7.5.3	The uses of as if	213
	7.6	Obser	vations on anaphoric pro-forms	217
8	Meta	aphor in	Finnish grammatical constructions and case endings	224
	8.1	Comp	arison with English constructions	226
		8.1.1	Domain constructions	227
		8.1.2	Predicating modifier constructions	229
		8.1.3	Compounds	231
		8.1.4	Predicate-argument constructions	232
		8.1.5	Prepositions and postpositions	236
	8.2 The Finnish local cases		nnish local cases	238
		8.2.1	Space, time, and metaphor in the local cases	240
		8.2.2	Inessive case	241
		8.2.3	Elative case	243
		8.2.4	Illative case	246
		8.2.5	Adessive case	247
		8.2.6	Ablative case	249
		8.2.7	Allative case	252

PART III IDENTIFYING METAPHORIC EXTENSION

9		The roles of metaphoric extension and metonymic inferencing in semantic change			
	III SC	mantic change	255		
	9.1	The processes in question	257		
		9.1.1 The metaphor model	258		
		9.1.2 The metonymic inferencing model	259		
		9.1.3 A frame-based model of metonymic inferencing	261		
	9.2	Identifying metonymic inferencing	266		
	- · · -	9.2.1 Extralinguistic evidence test	270		
		9.2.2 Systematic extensions test	271		
	9.3	Identifying metaphoric extension	275		
	,	9.3.1 Ambiguous contexts test	276		
	9.4	Secondary metaphor/inferencing distinctions	278		
	,	9.4.1 Synchronic comprehensibility test	279		
		9.4.2 Test for dependence on central sense	282		
		9.4.3 Unidirectionality test	284		
	9.5	Explaining extensions such as see "know/understand"	288		
	7.0	9.5.1 Primary metaphors and primary scenes	291		
		9.5.2 Hypothesis 1: straightforward primary metaphor	296		
		9.5.3 Hypothesis 2: "parallel chaining"	298		
		9.5.4 Summary	299		
	9.6	Novel, lexicalized, and "dead" metaphors	300		
	7.0	9.6.1 Processing metaphoric language	303		
10	Meta	PART IV IDIOMATIC CONSTRUCTIONS uphor and the semantic idiosyncrasies of constructions	312		
	10.1	The ditransitive revisited	313		
	10.1	Resultative constructions	317		
	10.2	10.2.1 The PP-resultative	317		
		10.2.2 The AP-resultative	320		
	10.3	The crazy constructions	322		
11	Meta	phor in idioms	327		
	11.1	Decomposability and syntactic productivity	329		
	11.2	Inherent metaphoricity	335		
	11.3	"Non-metaphoric" idioms: slam the door, kith and kin, etc.	337		
	11.4	The preservation of metaphor in idiomatic meaning	341		
	11.1	11.4.1 The origin of take advantage of	343		
		11.4.2 When perish lost its transitivity	346		
		11.4.3 Extra source-domain items in pull strings	350		
	11.5	Metaphor death and reanalysis in idioms	357		
	11.5	11.5.1 By and large, a metaphoric reinterpretation	358		
		11.5.2 How shooting the breeze killed a metaphor	36 4		
	11.6	Conclusion	372		
	-1.0	~ ~ 	- 72		

12	How much is metaphor? Case studies of the way and WXDY constructions		
	12.1 12.2	The way of the way construction The WXDY construction	370 39
	P	PART V METAPHOR IN LITERATURE AND ART	Γ
13	Poeti	c metaphor	40
	13.1	Everyday constructions in poetic metaphor	40
		13.1.1 Predicating modifier constructions	40
		13.1.2 Domain constructions	40
		13.1.3 Predicate-argument constructions	41
		13.1.4 Preposition phrase constructions	41
		13.1.5 Equations	41
		13.1.6 "Qualifying phrases"	42
		13.1.7 Conditionals	42
	13.2	Devices unique to literary language	42
		13.2.1 Parallelism	42
		13.2.2 Negation of the literal	43
		13.2.3 Allegory and parable 13.2.4 Revisited metaphors	43 43
14	Moto		
14	Meta	phor in art	44
	14.1	The voices of image and form	44
		14.1.1 Methodology	44
		14.1.2 ART FOR ARTIST metonymy	45
	14.2	Representational and abstract "languages"	45
		14.2.1 Painters' "vocabulary," "words" and "translation"	45
		14.2.2 Artistic "truth"	45
	142	14.2.3 "Narrative" in abstract and representational art	45
	14.3	Art as dialogue	46
	14.4	14.3.1 Eavesdropping on art	46
	14.4	Written versus spoken language 14.4.1 Genres of artistic "poetry" and "prose"	46 46
	14.5	Direct "quotations" from artwork	47
	14.6	Trends in "speaking," painting and thinking	47
	1110		• /
15	Conc	lusion	47
Bibli	ograph	y	47

1 Speaking metaphorically

The conceptual metaphor revolution inspired by Lakoff and Johnson (1980) continues to give us a clearer picture of the conceptual structure of metaphor with every passing year. But even as we uncover the intricacies of conceptual metaphor, metaphoric *language* becomes more and more of a mystery. How can a speaker, using language, communicate the conceptual complexities of a metaphor to a hearer?

Metaphoric language clearly involves using words "metaphorically". For example, the word *wealth* can refer to a literal accumulation of money or valuables, but it can also refer metaphorically to spiritual accomplishments, as in the metaphoric phrase *spiritual wealth*. When *wealth* is modified by *spiritual*, the item *wealth* is understood as referring to spiritual accomplishments, rather than to financial accumulation.

However, the mere juxtaposition of *spiritual* and *wealth* does not necessitate a metaphoric interpretation. The sentence *Earl has spiritual concerns about his wealth* refers to literal, financial wealth, even though the example involves the words *spiritual* and *wealth*. The items *spiritual* and *wealth* apparently have to occur in a particular grammatical relation, in which *spiritual* modifies *wealth*, to ensure that metaphor is communicated.

It appears, then, that both words and grammatical constructions participate in conveying metaphoric meaning. The choice of particular words, such as *wealth* and *spiritual*, is an important part of metaphoric language, yet these words must be used in a specific grammatical context in order to be interpreted metaphorically.

Several researchers have observed that grammatical constructions play a role in metaphoric language. Christine Brooke-Rose's ground-breaking account of metaphoric

language (1958) identifies several grammatical constructions that are used in metaphoric language, including equations and preposition phrase constructions. Mark Turner's work (cf. 1991) recognizes additional constructions found in metaphoric language, most notably the *xyz* construction, as in clauses such as *necessity is the mother of invention*. However, Brooke-Rose's and Turner's accounts are limited to the study of particular English constructions, and their work is primarily descriptive: these researchers make little attempt to identify semantic principles or overarching trends in the use of constructions in metaphor.

In this dissertation, I aim to provide a more complete account of constructions' metaphoric uses than has previously been available, and to identify the semantic patterns that underlie the uses of these constructions in metaphor. This semantic analysis allows generalizations to be made across the metaphoric usages of numerous English and non-English constructions. The analysis has the additional advantage of illustrating how the metaphoric uses of these constructions are related to their non-metaphoric uses.

In the following chapters, I offer data and examples that illustrate the roles of words and constructions in conveying metaphoric meaning. In the absence of contextual factors (which will also be considered in this dissertation), I argue that constructions have semantic requirements that constrain which words in the construction can be interpreted metaphorically, and which words instead indicate how the metaphoric items should be construed. For example, in *spiritual wealth*, the word *wealth* is interpreted metaphorically, and the word *spiritual* tells us that *wealth* should be interpreted as referring to spirituality, rather than material acquisitions.

These distinctions can be better understood within the framework of Conceptual Metaphor Theory (CMT), which is used to model the conceptual structure of metaphors (cf. Lakoff and Johnson 1980). I will use the CMT framework throughout this dissertation. In CMT, metaphor occurs when conceptual structure from one **domain** (an area of experience) is applied to a different domain (and is said to be **mapped** to this domain). Usually, metaphors map structure from a more concrete domain to a more abstract one. For example, one metaphor allows us to understand the abstract concept of SPIRITUAL ACCOMPLISHMENTS in terms of the more concrete domain of MATERIAL ACQUISITIONS. ¹ This metaphor maps structure from MATERIAL ACQUISITIONS to SPIRITUAL ACCOMPLISHMENTS, and it does so in a systematic way: for example, the person acquiring material wealth maps to the person achieving spiritual accomplishments; the quantity of material acquisitions maps to the quality of the spiritual accomplishments; the origin of the material acquisitions maps to the cause of the spiritual accomplishments; and so forth ²

In CMT, the (concrete) domain which supplies structure is called the **source domain** of a metaphor, and the (abstract) domain to which the structure is mapped is called the **target domain**. In the metaphor described above, MATERIAL ACQUISITIONS is the source domain and SPIRITUAL ACCOMPLISHMENTS is the target domain. Conceptual metaphors themselves are named using the format *target domain is source domain*, as in SPIRITUAL ACCOMPLISHMENTS ARE MATERIAL ACQUISITIONS.

-

¹ The names of source and target domains, and the titles of conceptual metaphors, are traditionally given in small caps.

² This metaphor is actually a special case of a more general metaphor, PURPOSES ARE DESIRED OBJECTS, sometimes called the "Object Event-Structure" metaphor (Lakoff and Johnson 1999:196-8).

Mapping structure from a more concrete domain to a more abstract one allows us to understand an abstraction, such as spiritual accomplishment, in terms of a more concrete realm of experience, such as the acquisition of material wealth. Metaphors allow us to use inferences about concrete domains in reasoning about the more abstract ones. For example, the metaphor SPIRITUAL ACCOMPLISHMENTS ARE MATERIAL ACQUISITIONS generates the inference that spiritual accomplishments may be difficult to achieve, just as wealth may be difficult to acquire; that these spiritual accomplishments persist over time and therefore "accumulate," in the manner that financial wealth can be kept and accumulated; that spiritual accomplishments have merit, in the same way that financial success has value; and so forth. These inferences are not necessarily literally "true" in the target domain. For example, some people might not value spiritual accomplishments, and others might believe that spiritual acts are transitory and cannot be "hoarded" or "accumulated". The metaphor SPIRITUAL ACCOMPLISHMENTS ARE MATERIAL ACQUISITIONS brings with it a set of inferences that can be used when thinking and talking about spirituality, which therefore makes the metaphor a useful cognitive and communicative tool. CMT is a theory that can capture, represent, and explain the mappings and inferences generated by the use of a metaphor.

With the terminology of CMT, the central argument of this dissertation can be rephrased more precisely. Earlier, I said that constructions determine which words can be used metaphorically in phrases or clauses that are comprehensible as metaphoric even when taken out of context. More specifically, I am arguing that constructions constrain which words in these phrases or clauses can come from the *source domain* of a given metaphor, and which from the *target domain* of the metaphor.

As an illustration of how constructions constrain the source and target domains of their component items, compare the noun phrases *spiritual wealth* and *blood-stained wealth*. Both phrases are metaphorical, but in very different ways. As we've seen, *spiritual wealth* does not refer to literal wealth at all, but instead metaphorically indicates spiritual accomplishments. On the other hand, *blood-stained wealth* does refer to literal, financial wealth; but the modifier *blood-stained* metaphorically indicates that the wealth has been acquired in an immoral manner.

The differences in these metaphoric phrases arise from the distinct semantic patterns underlying the *spiritual wealth* and *blood-stained wealth*. *Spiritual* in *spiritual wealth* is a domain adjective, whereas *blood-stained* in *blood-stained wealth* is a predicating adjective. We will see that the constructions that call for these different types of adjectives, such as the constructions used in *spiritual wealth* and *blood-stained wealth*, have distinct semantic patterns that lead to their differing uses in metaphor. The differences between these adjective types and these constructions have primarily been documented in non-metaphoric language, but I will argue that the differences also have implications for metaphoric language.

A **predicating adjective**, whether in metaphoric or non-metaphoric language, is distinguished by its ability to appear in the predicate/post-copula position. For example, *a beautiful princess* has the corresponding construction *a princess who is beautiful*. A non-predicating adjective, such as *electrical* in *electrical engineer*, cannot appear in this position: *an electrical engineer* does not have a counterpart construction **an engineer who is electrical* (Levi 1978:3). The non-predicating adjective *electrical* refers to a subcategory of engineers, not a quality of a particular engineer. Non-predicating

adjectives like *electrical* are called **domain adjectives** (cf. Ernst 1984, Sweetser 1997, Ernst 2001), and the constructions in which they occur are called **domain constructions**.

Spiritual wealth is an instance of a domain construction. In the metaphorically used domain construction spiritual wealth, the domain name spiritual indicates the target domain of the mapping (SPIRITUAL ACCOMPLISHMENTS) and the head noun wealth indicates the metaphoric source (MATERIAL ACQUISITIONS), together instantiating the conceptual metaphor SPIRITUAL ACCOMPLISHMENTS ARE MATERIAL ACQUISITIONS. In other words, spiritual indicates the target domain of this metaphor, wealth indicates the source domain, and the phrase spiritual wealth communicates the complete conceptual metaphor SPIRITUAL ACCOMPLISHMENTS ARE MATERIAL ACQUISITIONS.

In *blood-stained wealth*, on the other hand, the modifier *blood-stained* is a predicating adjective. Whereas the domain adjective *spiritual* indicated the target domain of a metaphor, the predicating adjective *blood-stained* indicates the source domain of a metaphor. Specifically, *blood-stained* evokes UNCLEAN, the source domain of IMMORAL IS UNCLEAN. In fact, *blood-stained* involves a special case of the metaphor, in which the uncleanness is specifically BLOODINESS, mapping to a special case of immorality, the CAUSATION OF DEATHS. The "blood-stained wealth" is literal monetary wealth, but it is metaphorically "tainted" with the immorality of human deaths.

The essential difference between *spiritual wealth* and *blood-stained wealth* is nothing mysterious. In the first case, we are talking about metaphorical wealth, rather than literal wealth. In the second case, *wealth* is literal, but its predicating modifier is metaphoric. The domain indicator *spiritual* in *spiritual wealth* evokes the target domain of the relevant metaphor, whereas in *blood-stained wealth*, the head noun, *wealth*, has this

function. Each phrase instantiates a particular construction, and each phrase has a different pattern of metaphor evocation.

These correspondences are not random and are not reversible. For example, in the metaphoric noun phrase *bright student*, the predicating adjective *bright* evokes the domain of LIGHT, while *student* evokes the domain of INTELLECT, following the same source-target (predicating modifier construction) pattern that we saw in *blood-stained wealth*. It isn't possible to instead attach a target-domain predicating modifier to a source-domain head: the noun phrase *intelligent light* is difficult to interpret, and certainly cannot refer to an intelligent student. It is the predicating modifier construction itself that allows the two domains in *bright student* to be put together correctly to retrieve the metaphor INTELLIGENCE IS LIGHT-EMISSION, a submapping of KNOWING IS SEEING (emission of light makes objects more visible, which maps to the correspondence that intelligence makes concepts easier to understand).

Instances of the same grammatical construction, then, communicate metaphor using the same patterns: bright student and blood-stained wealth are both predicating modifier constructions, and in both, the predicating modifier communicates the source domain of a metaphor and the head noun indicates the target domain. However, instances of different constructions, such as blood-stained wealth and spiritual wealth, can involve different patterns of source- and target-domain communication. The similar patterns of word usage in instances of the same construction, considered alongside the dissimilar patterns in different constructions, suggest a strong correlation between particular grammatical constructions and their uses in metaphoric language.

Moreover, the behavior of grammatical constructions in evoking metaphor can be shown to follow from a more general function of constructions: relating conceptually autonomous and conceptually dependent elements (Langacker 1987, 1991, 2002). As Langacker describes, "when two component structures combine (via a grammatical construction), normally an asymmetry exists between them ... One structure is said to be dependent on another to the extent that it presupposes it as part of its own internal structure" (2002:122). In the phrase obese cat, the element cat is autonomous, because it is perfectly possible to conceptualize a cat without considering its weight. The element obese is dependent, because the meaning of obese depends on the conceptualization of an animal or human that demonstrates the quality of obesity. We will return to conceptual autonomy and dependence throughout this dissertation, beginning with an introduction to these concepts in the following chapter.³ Note that conceptual autonomy and conceptual dependence are semantic concepts, and are not tied to *syntactic* dependency. Syntactically dependent elements may be conceptually dependent or conceptually autonomous.

Conceptual autonomy and dependence pave the way for a broader generalization about metaphoric language, one that is not specific to any construction or class of constructions. I argue that in all metaphorically used constructions, in the absence of other contextual clues, a conceptually dependent element in the construction communicates the metaphoric source domain and a conceptually autonomous element indicates the target domain. This is a logical use of the communicative resources of

_

³ Langacker does not discuss domain constructions in any of his work on conceptual autonomy and dependence (such as Langacker [1987], [1991], or [2002]). For this reason, section 4.1.1 of this paper provides an analysis of domain constructions using the concepts, definitions and tools provided by Langacker.

autonomy and dependence. Speakers recognize that a dependent element presupposes the existence of an autonomous element, and that the meaning of the dependent element will vary depending on the choice of an autonomous element. Speakers will therefore tend to use the dependent element to indicate a metaphoric source domain, with the assurance that this element's meaning will be understood differently (possibly even understood within a different domain) based on the meaning of the autonomous element.

William Croft (2003) notices the potential of the concepts of autonomy and dependence in explaining metaphoric language. Croft argues that metaphoric language occurs when semantically autonomous and dependent elements representing different conceptual domains are grammatically combined, which forces at least one element to be interpreted metaphorically. Croft also observes that "...domain mapping (metaphor) occurs with dependent predications" (2003:192). In other words, he notices that dependent elements tend to involve lexical items that communicate a source domain.

In this dissertation, I test the generality of Croft's observation by examining metaphoric language in a corpus, and find that the connection between dependent elements and source-domain items is widespread and surprisingly regular in its behavior. Based in part on the results of this corpus study, I am able to build on Croft's analysis and offer more specific generalizations about the correlation between dependent elements and source-domain items, and the corresponding connection between autonomous elements and target-domain items.

The regularity of constructions' metaphor evocation has been obscured by three factors: (1) the lack of a role for constructional meaning in generative theories of syntax; (2) metaphor look-alikes such as inferencing and metonymy; and (3) non-linguistic

strategies of evoking metaphor, such as gesture and extralinguistic context, which can render it difficult to identify what part of a metaphor is being communicated by language. This dissertation bypasses the first problem by embracing a constructionist approach, in which constructions are recognized as units with meaning, as well as form. The second and third issues are tackled in Parts III and V of this paper, in which the metaphor lookalikes, the effects of context and genre, and non-linguistic methods of evocation are recognized and examined.

In fact, the analysis of metaphoric language in Parts I and II will prove useful in Part III, when I offer a series of tests to distinguish metaphoric language from look-alikes that developed through non-metaphoric processes of semantic change. Several traits of metaphoric language can be extracted from the analysis in the first parts of the dissertation, and form the bases of some of the tests that can be applied to semantic changes. These tests can help determine whether or not a given semantic change was, in fact, the result of metaphor – or whether the change resulted from non-metaphoric processes, such as inferencing based on metonymic associations.

The analysis in the first parts of this paper will also inform the investigation of poetic metaphor in Chapter 13 of Part V. Here, the trends in metaphoric language identified in the earlier chapters of this paper are compared with those found in the more creative, varied uses of metaphor found in poetry and literature. I show that when this comparison is made, all the metaphoric uses of constructions that are found in everyday language can also be identified in poetry. However, poetic and literary language also includes strategies for communicating metaphor that are rare or absent in everyday language. The structure of everyday metaphoric language, as presented in Parts I and II of this paper, allow the

unique features of poetic metaphor to be isolated. This process sheds light on both the shared resources of everyday language and poetic language, and the additional possibilities offered by creative and aesthetic uses of language.

The dissertation is structured as follows. The remainder of this chapter discusses the theoretical implications and potential applications of this study, and gives an overview of the framework and methodology of this dissertation. The next part of the dissertation, Part I, focuses on the internal structure of the source and target domains used in metaphor. In particular, this part of the dissertation focuses on semantic frames – structures used to model situations, scenarios or events – and their use in the structure of the domains used in metaphor. In Part I, Chapter 2 introduces two new applications of semantic frames: first, Sections 2.2 and 2.3 present a method of modeling the frame structure found in the source and target domains used in metaphor; and second, Section 2.4 offers a frame-based reinterpretation of conceptual autonomy and dependence. The delineation of frame structure in the source and target domains of metaphors will allow a more precise depiction of the source and target domains of metaphor, and of the process of metaphoric mapping. The use of frames in modeling conceptual autonomy and dependence makes it possible to diagram and discuss these relations in a more systematic, uniform manner than has been previously possible. The combination of these two new applications of frames additionally facilitates the central goal of this dissertation – exploring the relation between grammar and metaphor – by permitting a uniform representation of the domains used in metaphor, and of conceptual autonomy and dependence, which are crucial concepts in creating generalizations concerning the use of constructions in metaphoric language.

Chapter 3 consists of a case study of metaphoric predicating adjectives used to evoke the metaphors HAPPINESS IS LIGHT and KNOWING IS SEEING, such as *bright* as in *bright student*. This chapter shows how frame compatibility issues can either allow a given lexical item to be used metaphorically, or prevent it from being used to express a particular metaphor. This chapter emphasizes the importance of frames in metaphor, and also underscores the extent to which semantic structure – such as frame structure – is preserved in metaphoric mappings.

The next part of this dissertation, Part II, directly tackles the issue of how grammatical constructions are used in communicating metaphor. In Part II, Chapter 4 demonstrates the constraints on the metaphoric uses of common English constructions. Chapter 5 addresses metaphoric uses of copula constructions, including equations such as *time is money*. Chapter 6 studies the compositional manner in which multiple metaphoric constructions combine, as in clauses such as *inflation is a remedy for economic ills*; while Chapter 7 introduces more complex English constructions, such as raising, equi, and conditional constructions. The next chapter tests the cross-linguistic validity of the previous analysis with a study of metaphorically used Finnish constructions, with particular emphasis on the Finnish local cases.

In Part III, Chapter 9 addresses the most prevalent and persistent metaphor look-alike, metonymic inferencing (also called "invited inferencing" or "pragmatic inferencing"). The chapter presents a list of characteristics by which metaphoric extension and metonymic inferencing can be distinguished. The characteristics of metaphor used in the chapter are largely based on the analysis of metaphoric language in the earlier parts of this dissertation.

The next section of this paper, Part IV, addresses the metaphoric use of constructions with more complicated semantic properties, such as resultatives, idioms, and the *way* construction (as in *he bribed his way to the top*). Chapter 10 studies the special characteristics of constructions such as the ditransitive and the resultative, and the effects of these constructions' semantic peculiarities on their metaphoric uses. In Chapter 11, this discussion is expanded to include the unique characteristics of idiomatic constructions and the effects of these on metaphor evocation. Chapter 12 offers two case studies of how the concepts introduced in previous chapters can be combined: this chapter takes the characteristics of constructional meaning, metaphoric language, metonymic extension, and idiomaticity, and applies these concepts to an analysis of the *way* construction (as in *he bribed his way to the top*) and the WXDY construction (as in *what's that song doing in my head?*).

The final segment of the dissertation, Part V, addresses metaphor communication in poetry, literature, and art. Chapter 13 examines the complex and subtle metaphor evocation found in poetic language. Poetic and literary genres evoke metaphor using all of the same constructions found in everyday language, with certain variations; but these genres also involve several lengthier, more obscure metaphoric devices that are rare or absent in everyday communication.

The last chapter in the dissertation reports the results of a corpus study examining the correlations between artists' metaphoric language and their choice of subject matter (or their choice to avoid recognizable subject matter entirely). This chapter emphasizes the conceptual nature of metaphor, its consequent ability to permeate diverse modes of

expression, and the coherence and consistency of the conceptual metaphors that human beings use in thinking, speaking, and painting.

1.1 Applications

The study of grammar in metaphor has theoretical implications for a number of academic fields. These include:

Conceptual Metaphor Theory. The fact that our usage of grammatical constructions is sensitive to metaphor suggests that metaphor is more pervasive and influential than has been generally recognized. Not only can we find *evidence* of metaphor in language, but we should also be looking for *constraints* imposed by metaphoric structure on the potential uses of linguistic structures such as lexical items and grammatical constructions. Conceptual metaphor theorists can look at metaphoric language – along with metaphoric reasoning, art, gesture, etc. – not only as a means to understand the conceptual structure of metaphor, but also as a process that is potentially shaped and constrained by metaphor. It's even possible that aspects of language, gesture, art, and other human behavior may have evolved over time to more efficiently utilize and communicate metaphor.

The study of grammar in metaphor will also maximize metaphor analysts' efficient use of linguistic resources. Metaphoric language is currently the most popular source of data on conceptual metaphor, and an understanding of how conceptual metaphor shapes language can improve the efficient use of linguistic resources. Collocational studies of metaphor, in particular, will benefit from the analyses in this dissertation. The constructional patterns discussed here make it clear which collocational patterns (i.e., co-occurrences of items) need to be included in searches of corpora to retrieve instances of a

given metaphor, based on the grammatical relationships that tend to be used in metaphoric language.

The Mental Spaces notation found in Blending Theory is compatible with the current analysis. The Conceptual Metaphor Theory (CMT)-style diagrams throughout this dissertation could be adapted to representation as metaphoric blends. I have adopted the CMT notation here because the two input "spaces" used in CMT are adequate for my current purposes: the generic space and blend space found in Blending Theory (BT) diagrams of metaphoric blends can be easily derived from the CMT domain "spaces" I provide. All of the mappings discussed in this dissertation are unidirectional, mapping from source to target, so I have no need to represent the additional types of mappings available in BT. I have chosen to use CMT notation, rather than the BT formalism, because it is simpler; because it uses the types of spaces and mappings needed in the current study; and because it is more familiar to many scholars of metaphor.

A BT account might, however, provide a clearer picture of certain aspects of metaphor discussed in this dissertation. For example, the combinations of metaphors discussed in Chapter 6 could be diagrammed more easily in BT, which can better capture the relations between inputs from three or more input spaces. Blending Theory might also be considered more compatible with the current data than CMT, because of BT's tradition of including frame structure in mental spaces. To my knowledge, CMT notation has never previously included the use of frames in its metaphor input domains.

Historical semantics is crucial to the discussion in Chapter 9, which distinguishes metaphor from semantic extension based on inferencing (cf. Traugott and Dasher 2002). The characteristics of metaphoric and inference-based extension presented in this chapter

will facilitate the identification of an extension as one of these two types, and will enable the study of interactions and overlaps between these types of change.

Construction grammar (CxG) gains a new argument in its favor from the evidence presented in this dissertation. Few of the generalizations about metaphoric language that will be discussed here could be captured in a generative theory of grammar. Domain evocation roles cannot be assigned to the lexicon, nor are they a function of lexical items' grammatical categories. For example, we cannot simply say that nouns tend to indicate source domains, or that nouns indicate target domains, because a noun will communicate the source domain of a metaphor in one construction and a metaphoric target domain in another (such as *wealth* in *spiritual wealth* versus in *blood-stained wealth*). Only a theory of grammar involving constructional meaning can account for these regularities.

Additionally, generative grammar cannot describe non-compositional constructions such as the resultative construction (10.2) or the *way* construction (12.1), which I argue carry their own rules for metaphor evocation.

More generally, constructional evocation patterns are useful in any theory of grammar, because they can explain the ambiguity of certain sentences (in terms of domain-neutral items, introduced in Section 4.4.2) and predict semantic well-formedness based on adherence to permitted constructional patterns and acceptable conceptual metaphors.

Cognitive grammar (CG), as envisioned by Langacker, contributes certain concepts to the current model of metaphoric language. The most crucial concepts used in this dissertation are *autonomy*, *dependence*, and *profiling* (Langacker 1987, 1991, 2002), which are defined and discussed in the next section. I will also use the terms *head*,

modifier and *complement* in their CG senses (Langacker 2002). In exchange for the use of these terms and concepts, the current analysis offers a new, more formalized strategy of presenting CG structures using frames. The characterization of metaphoric language in terms of autonomy and dependence additionally provides new evidence for the validity, functionality and cognitive reality of autonomous and dependent elements.

Cognitive stylistics. The characteristics of linguistic metaphor introduced here will make it possible for textual analysts to identify the specific lexical items, constructions, and contextual techniques used by an author to express a metaphor. This will allow literary scholars and critics to produce a more fine-grained analysis of literary and poetic metaphor than has previously been possible. In addition, the comparison of metaphor evocation techniques across different genres of language use (Chapter 13) opens up a new avenue of research into genre classification and characterization.

Natural language technologies (such as AI, search engines, and translation software) will gain a new level of accuracy from an understanding of constructional metaphor evocation. A computer can be taught frame recognition, as demonstrated by the FrameNet project led by Charles Fillmore. This frame recognition could easily be linked to domain information, based on the frame-to-domain evocation discussed beginning in Section 2.1. Once a computer is taught the constructional patterns used in domain evocation, it will recognize domain-evoking lexical items in target and source domain-evoking positions. The computer could then recognize most metaphoric language and could understand queries and input using metaphor. For translation purposes, the computer could be taught the constructional evocation strategies of a second language (such as the Finnish patterns discussed in Chapter 8). The computer could then use these

patterns to reconstruct a metaphor it has recognized in the input language into the target language.

1.2 Framework and terminology

What does it mean to take a constructionist approach to grammar? For current purposes, the various versions of Construction Grammar will be reduced to their lowest common denominator: namely, that all linguistic structures that contribute non-compositional form and/or meaning are **constructions**. Lexical items and grammatical structures are types of constructions, according to this definition, because they contribute form and meaning to an utterance

To clarify the distinction between **form** and **meaning**, let us look at an example from the lexicon. The English lexical item *cat* has a phonetic form [k^hæt⁷], consisting of a series of sounds. It also has a meaning, which includes reference to a particular species of mammal. The sound [k^hæt⁷], and the meaning CAT have nothing in common except for an arbitrary association of form and meaning.⁴ A person who does not associate the form [k^hæt⁷] with the meaning CAT cannot be said to know the word *cat*. (Many cats, for example, do not seem to make this connection.) The relation between form and meaning must simply be memorized. In linguistics, this relation is said to be stored in the **lexicon**.

Certain theories of grammar assume that grammatical constructions have form without meaning, whereas other theories assign both form and meaning to constructions.

Grammatical constructions involve words, which indisputably have meanings. This

18

⁴ Throughout this paper, conceptual structures – including metaphoric domains, mappings, frames, and frame elements – are named in SMALL CAPS. Lexical items and other language data are in *italics*; paraphrased meanings and translations are in "quotes"; and newly introduced terms are **boldfaced**.

makes it difficult to decide which part of the construction's semantics to attribute to the words, and which part (if any) to attribute to the construction itself. Generative and transformational grammarians assume that constructions have no meaning, and that constructions are simply forms into which meaningful lexical items are inserted.

Construction and cognitive grammarians, on the other hand, argue that constructions have semantic entries. Speakers store constructional form-meaning pairs in the **construction**.

Numerous authors argue persuasively for the necessity of attributing meaning to grammatical constructions (cf. Lakoff 1987, Goldberg 1995, Fillmore and Kay 1999, Croft 2001, Goldberg 2006, Fillmore, Kay, Michaelis and Sag 2006). I will not review those arguments here. I will, however, note that few of the generalizations about metaphoric language made here are possible unless it is assumed that grammatical constructions have meaning.

In general, this dissertation will use the vocabulary of Construction Grammar. Lexical items, morphological processes, and syntactic configurations are therefore all termed **constructions.** When it is clear from context that grammatical constructions are meant, I will refer to these simply as "constructions".

Some grammatical constructions correspond to structures traditionally considered "syntactic phrases," such as noun phrases. Constructions may also consist of units not normally considered full phrases, such as the combination of a modifier and a head without a determiner. For my current purposes, constructions' status as phrases or non-phrases is unimportant, and I will not distinguish between these types of constructions.

The relation between constructions and "clauses" is equally indirect. Many constructions, such as predicating modifier constructions or preposition phrase

constructions, lack a verb and cannot be considered "clauses". Other constructions, including predicate-argument constructions and copula constructions, do include a verb or copula and can be called "clauses". Still other constructions, such as conditionals, necessarily involve multiple "clauses". The distinction between clauses and non-clauses, like the distinction between phrases and non-phrases, will not be particularly useful here. For the most part, then, I will ignore constructions' status as phrases or clauses.

Compositional constructional uses are called **constructs**. Constructs, unlike constructions, do not contribute any new specifications of form or meaning (Fillmore and Kay 1999). For a specific instantiation of a predicating modifier construction, such as *obese cat*, is a construct. The lexical contributions of *obese* and *cat* are inserted compositionally into the constructional semantics of the predicating modifier construction. If the particular combination *obese* and *cat* were to assume a special significance over time, it could develop into a construction (specifically, an idiomatic construction). The noun phrase *fat cat* has in fact assumed a special idiomatic (metaphoric) meaning in reference to wealthy men, and can be considered a lexical construction in its own right. Idioms of this type will be discussed in Chapter 11. The phrase *obese cat*, however, is simply a construct: a compositional instance of the predicating modifier construction.

A few other terms and concepts from CxG will be introduced over the course of this dissertation, but terminology will be kept to a minimum. I will avoid the use of formalisms found in some versions of CxG, such as in Embodied Construction Grammar (ECG). Only a few properties of constructional meaning and form will be pertinent to the discussion here, and these can be distinguished and described without excessive

formalization. Any variation of CxG, or indeed any other theory of grammar which admits constructional meaning, will be compatible with my analyses.

Alongside the concepts of CxG, I will make use of several key concepts from Langacker's Cognitive Grammar, or CG (cf. Langacker 1997, 2002). Chief among these are conceptual **autonomy** and **dependence**. Conceptual dependence is crucially different from the syntactic "dependency" found in dependency and generative grammars. Phrases that are syntactic "heads," in a dependency grammar, are often found to be conceptually dependent in CG, and likewise, syntactic "dependents" can often be shown to be conceptually autonomous in CG. Conceptual dependence and autonomy are discussed beginning in Section 2.4, in which I offer a frame-based explanation of these concepts. A crucial component of my argument in this dissertation is that dependent elements tend to evoke metaphoric source domains, while autonomous elements usually indicate metaphoric target domains. Conceptual autonomy and dependence are, therefore, concepts that help capture the generalizations governing the composition of meaning in non-metaphoric and metaphoric uses of constructions. We will be returning to these concepts throughout the dissertation.

Another important dichotomy drawn from Cognitive Grammar is the **profile-base** relation. According to Langacker, "The base of a predication is its domain (or each domain in a complex matrix). Its profile is a substructure elevated to a special level of prominence within the base, namely that substructure which the expression 'designates'" (2002:5). I will talk about frame elements that are profiled relative to the base of the frame to which they belong. I also describe how particular metaphoric mappings can be profiled against the base of the metaphoric structure in which they take part.

The profile-base relation also plays a role in the definitions of the terms *head*, *modifier*, and *complement* as they are used here. According to Langacker (2002) head-modifier and head-complement relations are distinguished by a difference in their "profile determinant". A **profile determinant** is the element in a construction that designates the particular entity that is also profiled by the construction as a composite whole (Langacker 1997:235). For example, in the phrase *tall man*, the element *man* is the profile determinant, because the phrase *tall man* as a whole profiles the entity of a man. In the clause *the man jumped*, the profile determinant is instead the verb *jumped*, because the clause as a whole profiles the relation of jumping. In both of these examples, *man* is the autonomous element (as we will see from Section 2.4), but the profile determinant in the two expressions differs.

Langacker explains how profile determinants are relevant to the definition of *head*, *modifier* and *complement* (2002:127) in the following passage:

We speak of (a head-modifier) relation when there is a clear asymmetry between a conceptually autonomous and a conceptually dependent predication, and where the autonomous structure functions as profile determinant: the autonomous component is then the head, while the dependent component is the modifier. In (a construction) where the dependent component functions as profile determinant, we speak instead of a head-complement relation.

According to this explanation, the phrase *tall man* instantiates a head-modifier relation, because the element *man* is both the autonomous element and the profile determinant. The clause *the man jumped*, on the other hand, instantiates a head-complement relation, because the dependent element (*jumped*) is the construction's profile determinant.

I will not make much use of the term "profile determinant". The concept is relevant here mostly because it forms the basis of the Langackerian senses of the terms *head*, *modifier* and *complement*, and these terms will be used in their CG senses throughout the dissertation.

I will sometimes refer to the CG dichotomy of **trajector** and **landmark**. A trajector is the substructure that is in focus in a relational profile, as in a predicate-argument construction or modifier-head construction. The trajector is understood relative to the landmark, which is another salient substructure in the relational profile. For example, Langacker (2002:175-6) describes how the concept TALL profiles a relation between an object and an abstract scale of comparison. The object is the trajector, while the abstract scale (against which it is understood) is the landmark. In *tall man*, the trajector (TR) is elaborated by *man*. For the present purposes, the concepts of trajector and landmark will be most crucial in the description of relations evoked by grammatical constructions, in which the TR and LM will be designated to help clarify the patterns of conceptual autonomy and dependence within these constructions.

In addition to the terms and assumptions of CxG and CG, several other concepts and models from cognitive linguistics will be fundamental to this dissertation. These include conceptual metaphor theory and semantic frames. I will assume that a reader is conversant with the basic premises of conceptual metaphor theory; namely, that metaphor is a conceptual phenomenon involving structured mappings from a source domain to a target domain. Some approachable, introductory books on conceptual metaphor include *Metaphors We Live By* (Lakoff and Johnson 1980), *Philosophy in the Flesh* (Lakoff and Johnson 1999) and *Metaphor: A Practical Introduction* (Kövecses 2002).

Semantic frames consist of sets of elements and relations which are abstracted from real-world situations. For example, if you hear the word *revenge*, you understand that an AVENGER is carrying out an act of PUNISHMENT on an OFFENDER for some INJURY.

AVENGER, PUNISHMENT and the rest of these items denote **elements** in the **frame** of REVENGE. For a discussion of the concept of frames, and arguments for the necessity of frames in a theory of semantics, see Fillmore's "Frame Semantics" (1982); for an updated discussion of frames and their use in the FrameNet project, see the online publication "FrameNet: Theory and Practice" (Ruppenhofer et al. 2005); for examples of frames, visit the extensive FrameNet website at http://framenet.icsi.berkeley.edu/.

1.3 Resources and methodology

Construction grammarians, unlike generative grammarians, prefer to use real language examples rather than inventing sentences based on their own speaker intuitions. I use actual language examples whenever possible, modifying and adapting these examples only in order to create minimal pairs or to cull irrelevant material from a sentence.

Results collected from the full British National Corpus (BNC) are used in Chapter 3, which compares the frame structure evident in adjectives' metaphoric and non-metaphoric collocations.

In Chapters 4-7 of this dissertation I supplement my discussion of constructions and constructional combinations with examples and statistics from a mini-corpus of metaphoric sentences drawn from the BNC. This mini-corpus consists of 1697 instances of conceptual metaphor, evoked by 2415 metaphoric constructions involving open-class items, which I have classified according to their constructional type. These metaphoric

phrases and sentences were collected from the BNC as a by-product of the FrameNet project. I modified this mini-corpus only insofar as I have thrown out a small number of sentences that did not involve metaphor, but instead involved only metonymy or non-metaphoric idioms; and I have annotated the remainder of the corpus according to the constructions involved. I use this corpus to supply some rough statistics regarding the frequency of these constructions and their combinations, and to provide natural language examples of metaphor to which I can apply and test my analysis.

In Chapter 8, Finnish data is taken from Google, books, newspapers, and native speaker consultants.

Chapter 9, which deals with metaphoric and non-metaphoric semantic extensions, draws modern and historical data from Chadwyck Literature Online, the University of Virginia corpora, the Middle English Compendium, and the Oxford English Dictionary. Google provides additional modern English data. The data on idioms in Chapter 11, information on the WXDY and *way* constructions in Chapter 12, and certain examples in Chapter 10, all come from the sources named in this paragraph.

Section 9.6 additionally cites data from four articles reporting on psychological experiments studying polysemy, which I argue have a bearing on the processing of metaphoric constructions.

Chapter 13 compares excerpts from literature and poetry (either from books or online compendiums such as the historical sources listed above) with more conversational examples from online chatrooms, blogs, and other informal contexts. Chapter 14, which discusses artists' use of metaphor in their artwork and language, includes numerous quotations from artists' magazines, art books, and a corpus of artists' statements.

PART I FRAMES AND DOMAINS

2 Semantic frames in metaphor and meaning

Most linguists would probably agree that metaphoric meaning is related to non-metaphoric meaning, and that metaphoric uses of constructions are related to their non-metaphoric uses. The trick is identifying the elements of meaning that these uses share, and capturing them in a semantic theory. This dissertation compares non-metaphoric and metaphoric meaning using two tools for semantic analysis: semantic frames (cf. Fillmore 1980) and conceptual autonomy/dependence (cf. Langacker 1987). Both tools need to be slightly adapted to serve this purpose. The current chapter introduces semantic frames and conceptual autonomy/dependence, expands the breadth of each of these concepts to encompass metaphoric language, and explains how the concepts will be represented and applied throughout the rest of the dissertation.

To date, semantic frames have appeared mostly in analyses of non-metaphoric language. Conceptual metaphor theorists have suggested that frame structure is preserved in metaphoric mappings, but this has never been formally represented. Section 2.2 offers a new definition of the domains used in metaphor. The following subsection (2.3), suggests a method for representing frames and modeling their use in these metaphor input domains.

Next, Section 2.4 introduces Langacker's model of conceptual autonomy and conceptual dependence. This section also introduces a system for representing these concepts using the frame-semantic structure introduced in the first part of this chapter.

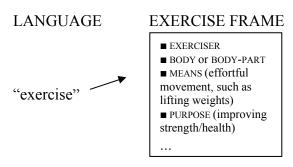
The formalisms developed in this chapter allow us to create a unified representation of frame structure, metaphor input domains, and autonomy/dependence. These three

types of semantic analysis, when combined into a single coherent model, offer a comprehensive resource for comparing metaphoric and non-metaphoric language.

2.1 Introduction to semantic frames

Semantic frames have several applications in the study of metaphoric language. But what exactly *are* semantic frames? An online publication by several of the architects of the FrameNet project (Ruppenhofer et al 2005:1) describes a **semantic frame** as "a script-like conceptual structure that describes a particular type of situation, object, or event and the participants and props involved in it". Frames, as used in FrameNet, consist of sets of roles and relations that form part of the meaning of a lexical item. For example, the verb *exercise* only makes sense in terms of the frame of EXERCISE. This frame includes **elements** such as a person with a BODY (an EXERCISER), effortful movement of the body (MEANS), and strengthening or otherwise improving the body (the PURPOSE of the effortful movement), as shown below.

Figure (2.1) The verb *exercise* evokes the *EXERCISE frame⁵



In the rare cases in which I diagram or discuss a frame that has not been documented by the FrameNet project, I will designate these frames with an asterisk in their first appearance (as in *EXERCISE). In my

diagrams and discussion of frames that have been documented by FrameNet, I will often include only a subset of the frames' structure. More complete analysis of these frames can be found at:

http://framenet.icsi.berkeley.edu/.

The verb *exercise* **evokes** this frame and makes all of its elements potentially available to a speaker and hearer. If a speaker says "I exercised today," a hearer understands that the speaker (the EXERCISER) engaged in some type of effortful movement (MEANS) of his or her BODY (or one of its PARTS), with the PURPOSE of strengthening or improving the body. Other items in the utterance refer to individual elements in the frame. In the sentence "Marc exercised his biceps with weights to improve muscle tone," *Marc* refers to the EXERCISER, the phrase *with weights* refers to the MEANS element, the noun phrase *his biceps* specifies the relevant PART of the BODY, and *to improve muscle tone* refers to the PURPOSE of the exercise. The phrases referring to these frame elements are semantic **dependents** of the verb *exercise* and, as such, form part of the semantic **valence** of the verb *exercise*.

Frame elements themselves can be further analyzed as relating roles to fillers. The item *Marc* in *Marc exercised* refers to the EXERCISER element; but *Marc* also tells us that the specific EXERCISER involved is MARC. The EXERCISER element can also be called a frame **role**, meaning that it is a frame element that can be given a more specific value in context. The more specific value assigned to this role (in this case, MARC), is the **value** that **fills** the EXERCISER role, or simply the **filler** of the EXERCISER role.

In general, I will refer to the components of frame structure as "frame elements". When the distinction between roles and fillers becomes relevant, I will instead refer to frame elements such as EXERCISER as "frame roles," and I will refer to the specific values assigned to these roles as "fillers". In diagrams, I designate fillers parenthetically following the frame roles that they fill. For example, in diagramming *Marc exercised* in a format as in Figure (2.1), I would list the element EXERCISER as "EXERCISER (Marc)," to

show that the EXERCISER role is filled by MARC. I will also use this notation to designate identity links between frame roles, such as EXERCISER (INGESTOR), which indicates that the EXERCISER role and the INGESTOR role are filled by the same individual. Frame roles will be indicated in small caps, whereas fillers will be in normal text. If the fillers are designated by lexical items in a sentence or phrase, such as *Marc* in *Marc exercised*, they will be boldfaced, as in "EXERCISER (Marc)".

What is the cognitive status of semantic frames such as EXERCISE? The frame structure catalogued in FrameNet is derived from the analysis of the semantic valence of frame-evoking items, as demonstrated by over 135,000 annotated sentences from the British National Corpus. The frame structures documented by FrameNet are presumed to have a certain cognitive status for speakers (they are called "conceptual structures" in the above quote from Ruppenhofer et al.). However, it is unclear how tightly this conceptual status is bound to language. Whereas conceptual metaphor has experimentally demonstrable effects on extralinguistic cognition and communication, the relation between semantic frames and extralinguistic cognition has not been examined. It is likely that semantic frames, as documented in FrameNet, reflect only a subset of our conceptual representations of situations, objects, and events such as EXERCISE.

On the other hand, any information about a situation, object, or event that is required to understand a lexical item will also be required to understand the actual situation, object or event that the item denotes. (If I don't understand conceptually that EXERCISE involves an EXERCISER, BODY, etc., I certainly won't understand a sentence about *exercise*.)

Therefore, I will treat frame structure as a cognitive as well as a linguistic schematization of information about situations, objects, and events. Although the FrameNet-style

schematization may be simplified compared to our complete cognitive representation of situations, objects, or events, the schematization represents a documented subset of this cognitive representation.

2.2 Defining "domains"

Conceptual domains are a crucial concept in metaphor theory, yet there is no general agreement – nor even much discussion – on how to define the type of "domain" used in metaphor. Before we can continue our exploration of metaphor evocation, or even discuss the relation between frames and domains, we will need a more explicit definition of "domain" than has been offered so far. We have to be able to say at what point a metaphor has been evoked before we can identify the linguistic and conceptual structures that are involved in the evocation of that metaphor. And in order to specify when a metaphor has been evoked, we must first define what sort of structure constitutes a metaphoric source or target domain.

In *Metaphors We Live By*, the seminal work on conceptual metaphor, Lakoff and Johnson do not discuss domains, only "concepts" such as ARGUMENT and WAR.

Metaphors such as ARGUMENT IS WAR allow one "concept" to be understood in terms of another (1980). In their 1999 collaboration *Philosophy in the Flesh*, Lakoff and Johnson describe metaphor as mapping from "sensorimotor domains" to "domains of subjective experience" (:45), and give examples of sensorimotor domains (such as verticality: UP in MORE IS UP) and subjective domains (such as quantity judgments: MORE in MORE IS UP), but they do not describe any criteria for what can constitute either type of domain.

Christopher Johnson's work on metaphor acquisition in children (1997) helps explain where "domains" come from, and sheds some light on what domains are and what they are not. Johnson argues that infants and young children do not yet consciously understand the difference between sensorimotor domains such as UP and subjective domains such as MORE, the domains that form the basis of primary metaphors such as MORE IS UP (apparent in expressions such as stocks rose). Children's failure to consciously differentiate MORE and UP is illustrated by Piaget's experiments in which children consistently judge a container with a higher level of liquid to contain a greater quantity of the liquid, regardless of the width of the container (1972). Johnson (1997) found that small children also fail to distinguish between the sensorimotor domain SEEING and the subjective domain KNOWING, as evidenced by their use of the verb see. The verb is first used to describe contexts in which SEEING and KNOWING co-occur, as in "Let's see what's in the box." Initially, domains such as KNOWING and SEEING are conflated – they are not consciously recognized as separate. Children later **differentiate** the conflated domains into the types of domains that can be used in metaphor, at which point unambiguous uses of see such as "I see what you mean" become possible.

In this dissertation, I am interested in metaphoric language, which occurs only after domain differentiation. As such I will be dealing only with the post-differentiation type of "domain" that can be metaphorically mapped. I make no claims regarding the status of these domains outside of metaphor (although I regard them as conceptual structures) so I will refer to these domains specifically as **metaphor input domains** rather than **conceptual domains**. There may well be reasons to postulate the existence of domains outside of their use in metaphor. However, I suspect that any such "domains" would be

more complex and varied than those used in metaphor. Metaphor necessarily involves partial mappings (cf. Lakoff and Johnson 1980), and not all areas of human experience are represented in the structure of either metaphoric source or target domains. Rather than speculate about other possible kinds of "domains," therefore, I will here focus only on the type that is demonstrably used in metaphor.

I define a **metaphor input domain** as this: the cognitive structure comprising all schematic information potentially available for mapping via a given metaphor. In other words, if a structure or type of structure can be observed as mapping metaphorically, it is evidence of a corresponding structure or type of structure in both the metaphoric source and target domains. According to this definition, metaphor input domains include no structure except that which can be metaphorically mapped. This is an Occam's-Razor approach to metaphor input domains, based on the recognition that much of our evidence of domain structure comes from that which is evidenced by metaphoric mappings. Metaphoric mappings are well-documented not only in language, but also in art, gesture and reasoning, and therefore provide an excellent basis for hypotheses about conceptual metaphor structure.

This definition of metaphor input domains also has the advantage of being dynamic. As the structure of a metaphor evolves over time, the evidence of mappings will change too. The structure of metaphor input domains, defined in terms of the evidence of these mappings, will therefore always reflect the current structure of a metaphor. Metaphors used in different cultures, by different individuals, or even by the same individual at different times, can also vary. By focusing on the evidence from metaphoric mappings,

we can study the metaphor input domains that exist in a particular culture or for a particular individual.

2.3 Frame structure in metaphor input domains

One type of structure that appears in metaphoric mappings is frame structure. According to the above definition of metaphor input domains, these domains consist entirely of schematic information available for metaphoric mapping, so it seems natural that the rich schematic structure of frames would be utilized in metaphor (as suggested by Lakoff and Johnson 1999). A quick survey of metaphoric mappings shows that a given conceptual metaphor can, in fact, involve structure from multiple frames.

As an example, let's look at several metaphors with the source domain BODY, such as SOCIAL STRUCTURES ARE BODIES (*department head, the long arm of the law, economic health*); the metaphor THE MIND IS A BODY, which includes submappings such as IDEAS ARE FOOD (*a tasty thought, let me digest that*), MENTAL EXERCISE IS PHYSICAL EXERCISE (*to exercise mentally, a workout for your brain*); and so forth. The submapping MENTAL EXERCISE IS PHYSICAL EXERCISE maps structure from the EXERCISE frame, whereas the submapping IDEAS ARE FOOD maps structure from the INGESTION frame. The metaphor SOCIAL STRUCTURES ARE BODIES instead maps information about body structure (including OBSERVABLE_BODYPARTS), health (MEDICAL_CONDITIONS) and force exertion (CAUSE_MOTION and MANIPULATION).

The structure of these frames shows up in metaphoric mappings from BODY, as is apparent in phrases such as *department head, a tasty thought, exercise mentally* etc.

According to the stated definition of metaphor input domains, the BODY domain includes

the structure of all the frames that show up in metaphoric mappings. I suggest that the BODY domain also acts a kind of "super-frame," with the function of specifying how each of its component frames is related to each of the other frames. We know, for example, that the INGESTION of beneficial foods, combined with EXERCISE, will strengthen and tone various OBSERVABLE_BODYPARTS, which in turn will permit more powerful force exertion (MANIPULATION and CAUSE_MOTION), and help maintain good health (avoiding MEDICAL_CONDITIONS and EXPERIENCE_BODILY_HARM). All of the related frames in the BODY domain overlap. Each individual frame, such as EXERCISE, structures a set of roles and the relations between them. I hypothesize that an important role of domains is to organize the structure from each of their component frames and to enable effective access from one frame to another. This function of domains allows metaphors such as THE MIND IS A BODY to coherently map structure from a combination of frames.

Although one metaphor can map structure from numerous frames, certain frames are more important than others in any particular instance of metaphoric language. These frames will usually be those that are directly evoked by particular items in a metaphoric phrase or clause. For instance, the item *exercise* in the phrase *mental exercise* evokes the frame of EXERCISE, so this frame is more crucial to understanding the phrase *mental exercise* than other frames in the BODY domain. Frame structure that is evoked by particular items in a metaphoric phrase or clause can be said to be **profiled** relative to the

-

⁶ Some of this information can be captured by intermediate-level frames, such as *NUTRITION, which captures the correlation between the INGESTION of beneficial foods and the attributes of good health in other frames, such as MEDICAL_CONDITIONS and OBSERVABLE_BODYPARTS. Frames that combine the structure of low-level frames like MEDICAL_CONDITIONS and OBSERVABLE_BODYPARTS have been called "scenarios" (Ruppenhofer et al. 2005), "big frames" or "super-frames". In the interest of simplicity, I will not include these intermediate frames in my analysis. According to my definition of "metaphor input domains," domains are not qualitatively different than "super-frames" – except in that the frames included in a metaphor input domain are defined as part of that domain only if their structure is evident in one or more

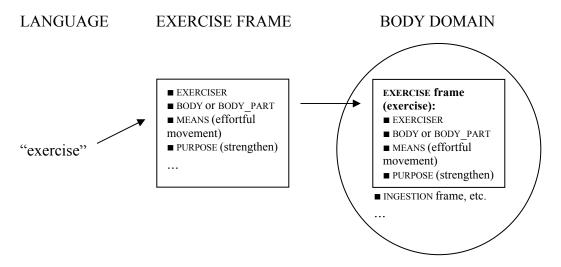
other structure in the source and target domains of the relevant metaphor. The structure in these domains that is *not* profiled constitutes the **base** against which the profiled structure is understood, in the sense of Langacker (2002). Profiled frame structure is more active than non-profiled frame structure in generating inferences in a particular instance of a conceptual metaphor. For example, when I hear the phrase *mental exercise*, I will focus on generating inferences related to EXERCISE (such as the inference that "mental exercise" improves the mind, as physical exercise improves the body) rather than those related to INGESTION, MEDICAL_CONDITIONS, or other frames that can be mapped via THE MIND IS A BODY.⁷

When a frame is profiled within a particular domain, I will represent the frame as a rectangle with the (circular) domain, as in Figure (2.2) below. My diagrams generally omit frames within the domain that are not profiled; for example, the INGESTION, OBSEVABLE_BODYPARTS and MEDICAL_CONDITIONS frames structure the BODY domain, but are not represented in Figure (2.2). Selected non-profiled frames will often be listed in a domain, but these will not be represented in a rectangle. For example, the INGESTION frame is listed in the BODY domain, but no internal structure for this frame is listed. These non-profiled frames are named in diagrams simply as a reminder that a metaphoric domain contains structure that is not profiled, nor illustrated in the diagram.

_

metaphoric mappings. In other respects, domains can be considered a type of "super-frame"; I have chosen to use the term "domain" out of respect for the traditional use of this term in conceptual metaphor analysis.

Figure (2.2) The item exercise evokes the EXERCISE frame and the BODY domain



This diagram represents the BODY domain as evoked by the phrase *mental exercise*. This phrase profiles the EXERCISE frame in the BODY source domain, because the relevant aspect of the BODY is in this case related to EXERCISE. The arrows represent processes of evocation. The item *exercise* evokes the EXERCISE frame, and once the phrase is recognized as metaphoric, the BODY domain will be evoked via the EXERCISE frame (which forms part of the structure of the BODY domain). We will return to this example in Section 4.1, which deals with metaphor evocation in domain constructions such as *mental exercise*.

In order for a domain to exist, it is crucial that its component frames share a certain amount of structure that will allow them to be related to each other. A domain will often contain elements that are shared across many related frames. EXERCISE,

OBSERVABLE_BODYPARTS, and several of the other frames listed at the start of this section involve the element BODY or BODY PART, which helps tie the frames together. Elements

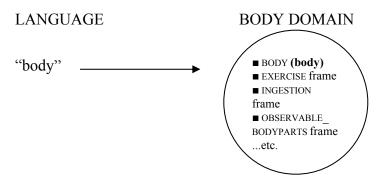
⁷ This use of the concepts *profile* and *base* is consistent with Croft's usage of the term "domain" to refer to a base against which multiple structures (such as frame structures) can potentially be profiled (2003:166); however, here, "domain" refers specifically to metaphor input domains.

Such as the BODY_PART element from EXERCISE and the BODY_PART element from OBSERVABLE_BODYPARTS share an **identity link**, which means that these roles can be filled by the same filler: the arm that you exercise (as modeled in the EXERCISE frame) is the same arm that is also a part of your body (as shown in the OBSERVABLE_BODYPARTS frame). When an element such as BODY_PART is metaphorically mapped, it maps to a single element in the target domain, such as MIND (in THE MIND IS A BODY) or ECONOMY (via THE ECONOMY IS A BODY).

Elements such as BODY or BODY_PART are special for several reasons. Not only do they exist as identity-linked elements in many or all of the frames in a given domain, but items denoting these elements – such as the noun *body* – are often not specific enough to evoke a particular low-level frame, such as OBSERVABLE_BODYPARTS. A metaphoric use of the element *body* will evoke the BODY domain, but it can do so without profiling any particular sub-frame within BODY. The term *body* designates a BODY element in the BODY domain, but it is not automatically clear which frame(s) this element belongs to within the BODY domain.

Domain adjectives and adverbs are usually derived from nouns denoting an element within a domain, such as the BODY element in the BODY domain, that could be understood as part of several sub-frames within the domain (*bodily, mental, economic,* etc.). When an item evokes a domain without profiling a specific frame, I will call this the **direct evocation** of a domain. For example, I will argue (in Section 4.1) that the item *body* in the phrase *economic body* directly evokes the BODY domain, as represented below.

Figure (2.3) The item *body* evokes the BODY domain



The direct evocation of BODY in Figure (2.3) can be compared with the indirect evocation of the BODY domain in Figure (2.2). Indirect evocation results in the profiling of a frame within the metaphor input domain (the EXERCISE frame in Figure [2.2]), whereas direct evocation does not. Direct and indirect evocation will be discussed further beginning in Section 4.1.

We've seen that elements like BODY are present in several frames, and that each BODY element is related to the others by an identity link. Metaphor input domains additionally contain identity-linked elements that have different names in different frames. For example, in the BODY domain, the PATIENT in the MEDICAL_CONDITIONS frame and the INGESTOR in the INGESTION frame will typically be mapped to the same element in a target domain. The verb phrase "force-feed the economy back to health" profiles both MEDICAL_CONDITIONS and INGESTION in BODY, the source domain of THE ECONOMY IS A BODY. The elements PATIENT and INGESTOR designate the same individual in the BODY domain; and they map to the same element, ECONOMY, in the ECONOMY target domain. This is possible because the elements PATIENT and INGESTOR are typically bound by a

 $^{8}\ http://www.time.com/time/magazine/article/0,9171,826668-2,00.html$

identity link in the BODY domain. ⁹ These two frame elements behave such as a single element in BODY that has the relations assigned to it by both MEDICAL_CONDITIONS and INGESTION.

When any of the frames structuring BODY – such as MEDICAL_CONDITIONS or INGESTION – are activated by an item in a metaphoric construction, the BODY domain is also activated. Through the BODY domain, the other frames structuring BODY then become accessible. The BODY domain will specify the manner in which the newly activated frames are related to the previously activated ones. These examples highlight the two important functions of metaphor input domains: to organize identity-linked elements across different frames; and to allow one frame to be accessed via another.

2.4 A frame-semantic model of autonomy and dependence

A number of generalizations about linguistic metaphor can be captured in terms of conceptual **autonomy** and conceptual **dependence**, as introduced by Langacker (1987, 1991, 2002). According to Langacker, most grammatical relations can be characterized as conjoining an autonomous element (such as *man* in *tall man*) to a dependent element (such as *tall*, which is **elaborated** by *man*). Langacker (2002:122) describes this process in more detail:

-

⁹ Again, in a maximally detailed account of frames and domains, these elements could be linked at the level of an intermediate frame, such as *NUTRITION. See footnote (5) for more details on this possible representation.

When two component structures combine (via a grammatical construction), normally an asymmetry exists between them ... One structure is said to be dependent on another to the extent that it presupposes it as part of its own internal structure. More precisely, one structure, D, is said to be dependent on another structure, A, to the extent that a substructure (of type A) figures saliently in the internal composition of D, and is put in correspondence with A.

The relevant substructure within the dependent element (of the same type as the autonomous element) is called the **elaboration site**, because it is the part of the dependent element that is elaborated by the autonomous element. There are two criteria for classifying an element as either conceptually autonomous or dependent, according to Langacker (1987). The first is the extent to which the elaboration site within the dependent element is a substructure of this dependent element (I will call this the **substructure test**). The second criterion is the extent to which the autonomous element elaborates this elaboration site within the dependent element (which I will call the **elaboration test**).

Langacker models these criteria, structures, and relations using schematic drawings. However, I believe that these concepts can be more precisely described through the use of semantic frames. The elaboration site – the substructure of the dependent element that is elaborated by the autonomous element – consists of a frame role within the frame evoked by the dependent element, which is assigned a value by a filler that is denoted by the autonomous element.

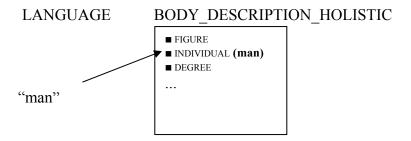
The relation between an autonomous and a dependent element can be illustrated by the phrase *tall man*. The frame structure evoked by *tall* is shown in Figure (2.4); the elaboration provided by *man* is added in Figure (2.5). The words in quotation marks on the leftmost side of these diagrams indicate the linguistic elements that evoke the

For example, *tall* evokes the BODY_DESCRIPTION_HOLISTIC frame as a whole, so the arrow from "tall" points in the general direction of the frame, rather to any specific part of the frame. On the other hand, *man* in *tall man* fills a specific role within the frame, so the arrow from "man" in Figure (2.5) points specifically to the INDIVIDUAL role in the BODY DESCRIPTION HOLISTIC frame, because this is the role filled by *man*.

Figure (2.4) The adjective tall evokes the BODY DESCRIPTION HOLISTIC frame



Figure (2.5) The INDIVIDUAL role in the BODY_DESCRIPTION_HOLISTIC frame is filled by MAN



In the case of *tall man*, the item *tall* evokes the frame of BODY_DESCRIPTION_
HOLISTIC, which includes the element INDIVIDUAL. Here, the INDIVIDUAL role is filled with the value indicated by *man*, as indicated by the notation "INDIVIDUAL (man)" above.
Frame elements are substructures of their frames, so the INDIVIDUAL role is clearly a substructure of BODY_DESCRIPTION_HOLISTIC. According to the substructure test,

therefore, *man* is the autonomous element in the phrase *tall man*, and *tall* is the dependent element. The role of INDIVIDUAL is the elaboration site within the frame structure evoked by the dependent element.

By definition, a filler of a role elaborates that role. The item *man* is a filler for the role of INDIVIDUAL, so we can conclude that *man* elaborates INDIVIDUAL to a high degree. Therefore, according to the elaboration test, *man* is the conceptually autonomous element and *tall* is dependent element. Both of Langacker's tests for autonomy and dependence indicate that in *tall man*, the item *man* is autonomous and *tall* is dependent.

It should be noted that the results of these tests are gradient, not absolute. In every autonomy-dependence relation, each element elaborates the other to a certain degree. As Langacker observes, "conceptual autonomy and dependence are ultimately matters of degree, but in canonical instances of grammatical valence there is a fairly clear asymmetry between the autonomous and dependent predications along these lines" (2002:170). One of the parameters that we associate with *man* is height, so to a certain extent, in some contexts, HEIGHT could be considered a substructure of MAN. Then, "tallness" could be considered to elaborate this parameter describing a MAN; and it could be concluded from this that *tall* elaborates *man* to a certain degree. However, *man* elaborates *tall* to a much more than *tall* elaborates *man*, since it is possible to conceptualize a MAN without considering height; but the concept of HEIGHT is meaningless without a referent that can be "tall". The head nouns of *tall building* and *tall glass* differentiate the referents of the phrases more than the modifiers differentiate, for example, *tall man* and *short man*.

This brief analysis of *tall man* shows that all of the components of Langacker's model of autonomy and dependence can be illustrated using frames. The structures evoked by the autonomous and dependent elements are illustrated as frame structures, and the tests for autonomy and dependence are applied using frame representations. We can say, then, that the "structure" of a dependent element is always specifically a frame structure, and that its elaboration site is a frame role. The structure of the autonomous element is a filler for this frame role; and elaboration itself consists of the filling of a frame role. Throughout this dissertation I will describe autonomy, dependence, and the relation between them using these frame-semantic terms.

I believe that the concepts of autonomy and dependence are completely compatible with the ideals and terminology of Construction Grammar and Frame Semantics, the major frameworks used here. Autonomy and dependence are useful additions to these frameworks in that they help explain the motivation behind the ways that constructions and frames are used — whether they are used metaphorically or non-metaphorically. In both metaphoric and non-metaphoric uses of constructions, the meaning of the dependent element is elaborated by the autonomous element. In a metaphoric sentence or phrase, the autonomous element additionally has the task of indicating that the dependent one should be understood metaphorically, and indicates the target domain to which its meaning should be mapped. The metaphoric uses of autonomous and dependent elements are, therefore, a natural extension of their non-metaphoric uses: in both instances, the autonomous element shapes the meaning of the dependent one.

A theory of autonomy and dependence that incorporates frame structure is especially effective in capturing the generalizations that can be made over metaphoric and non-

metaphoric uses of constructions. For example, the meaning of the metaphoric phrase *brilliant man* is composed in much the same way as the non-metaphoric phrase *tall man*. In both phrases, *man* is the autonomous element and the predicating modifier is the dependent element. In *tall man*, as we've seen, *tall* evokes a frame with a role that can very naturally be elaborated by *man*: the BODY_DESCRIPTION_HOLISTIC frame, in which *man* elaborates the INDIVIDUAL role.

In *brilliant man*, the element *brilliant* evokes the LIGHT_MOVEMENT frame. This frame does not have a role that can naturally be filled by the element MAN, but it does have an element EMITTER (referring to a source of light), which can map via the metaphor KNOWING IS SEEING to the role of a THINKER in the KNOWING domain. (This process is described further in Section 4.2 and illustrated in Figure [4.17]). For now, the important point is that the role of a THINKER can be filled by *man*, which fulfils the elaborative function required of an autonomous element in a construction. The metaphoric phrase *brilliant man* requires the evocation of a conceptual metaphor that is not needed in the comprehension of *tall man*, but this is unproblematic, since this metaphor is a readily accessible conceptual structure. Aside from the activation of this metaphor, the predicating modifiers and modified nouns in *tall man* and *bright man* have very similar functions, and these functions can be illustrated using frames in both cases.

In the CxG framework used here, the patterns of autonomy and dependence common to both non-metaphoric and metaphoric uses of constructions can be attributed to the semantics of grammatical constructions themselves. Constructional meaning determines whether an item is autonomous or dependent, and these patterns vary depending on the construction(s) involved. For example, we will see that the patterns of autonomy and

dependence in predicating modifier constructions such as *tall man* and *brilliant man* are very different from those found in domain constructions such as *physical exercise* and *mental exercise* – even though these constructs might appear superficially similar in that they each can involve an adjective and a noun.

Chapter 4 will address patterns of autonomy and dependence (and the resultant patterns of metaphor evocation) in a variety of constructions. The first section of Chapter 4, which focuses on domain constructions, contains a subsection describing these constructions' patterns of autonomy and dependence in special detail (Section 4.1.1). This section is necessary because these constructions have not, to my knowledge, been analyzed in either Cognitive Grammar or Construction Grammar.

First, however, we will turn to a study of lexical choice in metaphor (Chapter 3). This study provides evidence of the critical role of frames in metaphor, and documents several effects of frame structure on metaphoric language.

3 Frame compatibility and lexical choice in metaphor

Considering how much is now known about the conceptual structure of metaphor, there are many lingering mysteries surrounding metaphoric language. For example, why do semantically similar items often have different metaphoric uses? Why does *brilliant* metaphorically mean 'intelligent', as in *brilliant idea* (via KNOWING IS SEEING), whereas *sunny* metaphorically means 'cheerful', as in *sunny mood* (via HAPPINESS IS LIGHT)? Both *sunny* and *brilliant* refer to qualities of light, so these items might be expected to have the same metaphoric uses and limitations. To further complicate the issue, the adjective *bright* can be used in either KNOWING IS SEEING or HAPPINESS IS LIGHT, as in *bright idea* 'intelligent idea' or *bright mood* 'cheerful mood'.

In this chapter I suggest that the role of frames in metaphor, as outlined in the previous chapter, can solve some of the riddles of metaphoric language. Specifically, I hope to strip away one layer of mystery surrounding lexical choice in metaphor, using the tools of frame semantics (cf. Fillmore 1982). I argue that the frames evoked by lexical items' non-metaphoric senses can determine which items are chosen to express a given conceptual metaphor. I suggest that the Invariance Principle (Lakoff 1993) applies to frame structure as well as image-schema structure, and can help account for the role of frames in metaphoric extension.

My analysis is based on a study of the metaphoric and non-metaphoric uses of a set of adjectives and adverbs in the British National Corpus. The metaphoric uses involve either HAPPINESS IS LIGHT or one of two submappings of KNOWING IS SEEING: INTELLIGENCE IS LIGHT-EMISSION or COMPREHENSIBILITY IS VISIBILITY. The non-metaphoric senses of these modifiers evoke particular frames, which (in accordance with the extended

Invariance Principle), must be carried over into the items' metaphoric uses, making them either suitable or unsuitable for expressing HAPPINESS IS LIGHT, INTELLIGENCE IS LIGHT-EMISSION, or COMPREHENSIBILITY IS VISIBILITY. This analysis will explain, among other things, why *brilliant* means 'intelligent' but *sunny* means 'cheerful', and why *bright* can refer to either intelligence or cheerfulness.

The data in this chapter were collected in a series of searches within the British National Corpus (c.100 million words) involving the following collocations: bright N (n = 4,172), brightly V (n = 323), V brightly (n = 160), brilliant N (n = 1,456), brilliantly V (n = 100), V brilliantly (n = 83), sunny N (n = 587), sunnily V (n = 1), clear N (n = 3,524), clearly V (n = 2,591), dim N (n = 345), dark N (n = 4,856).

The search items' metaphoric and non-metaphoric senses were usually disambiguated by the collocated nouns and verbs (for example, *brilliant idea* involves a metaphoric sense of *brilliant*, whereas *brilliant star* involves a non-metaphoric sense). When the collocated noun or verb permitted multiple senses of the modifier (as in *brilliant one*), I determined which sense was intended based on the larger context in which the collocation occurred.

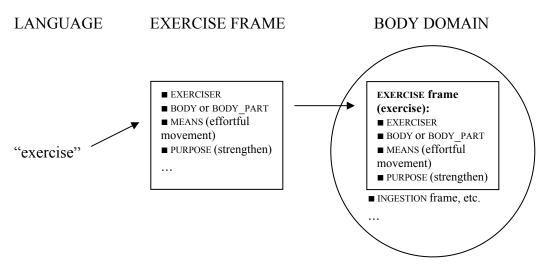
Collocations with over a thousand hits were counted only above a certain frequency cutoff. Single-occurrence collocations were excluded (except for *sunnily began*, the only instance of *sunnily V*).

3.1 The Invariance Principle

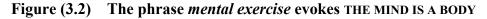
Before diving into the data, I'll briefly review what we learned about frames and domains in the previous chapter. As we've seen, a great deal of the schematic information in a

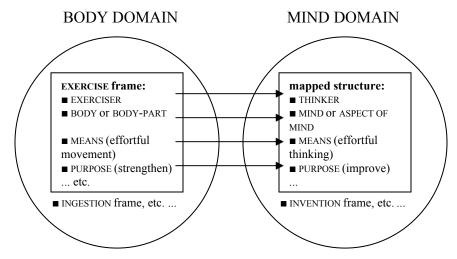
domain comes from frame structure. For example, certain structure in the BODY domain (the source domain of THE MIND IS A BODY) is derived from the EXERCISE frame (evoked by the verb *exercise*), as in Figure (2.2), repeated as (3.1). We also saw that domains are usually structured by multiple frames, so that for example the BODY domain is structured by frames related to 'eating' (INGESTION), 'dying' (DEATH), and others not shown in this diagram.

Figure (3.1) The item *exercise* evokes the EXERCISE frame and the BODY domain



The information about 'exercise' in the BODY domain can be mapped to a target domain, such as MIND, via THE MIND IS A BODY. The mapping of 'exercise' structure to MIND is evident in expressions such as *mental exercise* or *a workout for your brain*. Several mappings of THE MIND IS A BODY which preserve EXERCISE frame elements are shown below.





Crucially, metaphoric mappings preserve frame relations and inferences as well as frame elements. In the BODY domain, the BODY element must refer specifically to the EXERCISER's body. This relation carries over into the MIND domain, in which the MIND must be specifically the THINKER's mind. Likewise, the PURPOSE element in the BODY domain is achieved via a specific MEANS, some type of 'effortful movement' such as lifting weights, etc. This relation leads to the inference in the MIND domain that the PURPOSE of thinking is also to improve the MIND, and that this can be achieved via the MEANS of some sort of 'effortful thinking'.

The preservation of frame elements, relations, and inferences in metaphoric mappings suggests that frame structure, like image-schema structure, is subject to the Invariance Principle (Lakoff 1993:215):

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

If the definition of 'cognitive topology' is extended to include frame structure as well as image-schema structure, then the preservation of frame elements and relations in metaphors such as THE MIND IS A BODY is predicted.

The Invariance Principle does *not* predict whether any particular source-domain structure will be mapped in a given instance of a metaphor. Metaphoric mappings are always partial, preserving only a subset of the source-domain structure (Lakoff and Johnson 1980). The structure that is mapped will vary even between instances of a single conceptual metaphor, when different submappings of the metaphor are involved in each instance.

The partial nature of metaphoric mappings should be kept in mind when tracking the effects of frame structure on metaphor. Since metaphoric domains are often structured by multiple frames, different submappings of a metaphor may preserve the structure of different frames. For instance, IDEAS ARE FOOD (as evinced by phrases such as *half-baked ideas* and other examples cited by Lakoff [1980:46-47]) is a submapping of THE MIND IS A BODY which does not map elements from the EXERCISE frame. Instead, the submapping draws on the structure of the INGESTION frame, such that an INGESTOR maps to a THINKER, INGESTIBLES map to IDEAS, and so forth. The fact that different submappings can map material from different frames will be a crucial assumption in Sections 3.3 and 3.4 of this chapter, which compare the frame structure involved in two submappings of KNOWING IS SEEING: INTELLIGENCE IS LIGHT-EMISSION and COMPREHENSIBILITY IS VISIBILITY.

Much of the analysis in this chapter depends on another corollary of the Invariance Principle, one that is usually assumed rather than stated: that metaphorically mapped 'cognitive topology' is evidence of source-domain structure. In other words, structure that is mapped must logically be present in the source domain. Mappings in THE MIND IS A BODY, such as EFFORTFUL THINKING IS EFFORTFUL MOVEMENT and A THINKER IS AN EXERCISER, demonstrate that MEANS (EFFORTFUL MOVEMENT) and EXERCISER are elements in the BODY domain, which in turn provides evidence that the frame with these elements, EXERCISE, is structuring the BODY domain. In the previous chapter, I defined "metaphor input domains" (source and target domains) as the set of structures potentially available for metaphoric mapping. Evidence of metaphoric mappings will therefore be taken as evidence of structure in metaphor input domains, including frame structure.

Metaphorically mapped frame structure can be directly compared with the frame structure evoked by the non-metaphoric senses of lexical items. If the hypothesis of this chapter is correct, and lexical items' frame structure constrains their compatibility with a given metaphor, we will find the reasons for the items' compatibility or incompatibility with a metaphor by examining the frame structure evoked by the items' non-metaphoric uses.

3.2 Lexical choice in HAPPINESS IS LIGHT

A chief function of several adjectives referring to 'light' is the communication of the metaphor HAPPINESS IS LIGHT. For example, the adjective *bright* means 'happy/cheerful', as in *looking on the bright side*, *bright greeting* and *bright outlook*, in 33% of the total collocations of *bright*. The adjectives *sunny* and *dark* also express HAPPINESS IS LIGHT as in *sunny disposition* or *dark mood*, with the frequencies shown below.

Table (3.1) HAPPINESS IS LIGHT collocations

Item	Total 'LIGHT'	Example	Total 'HAPPI- NESS'	Example	Percent 'HAPPINESS' (of total hits)
bright	2430	bright place	1371	bright disposition	32.9
brightly	382	glowed brightly	101	laughed brightly	20.9
dark	4340	dark room	444	dark thought	9.2
sunny	554	sunny terrace	33	sunny mood	5.6
sunnily	0		1	sunnily began to	100
•				take requests	

NOTE: The column **Total 'LIGHT'** includes all non-metaphoric senses referring to 'light' or 'seeing', regardless of frame evoked. **Percent 'HAPPINESS'** reflects a percentage of the total analyzed collocations of the listed item, which may include senses not added into the totals for either 'LIGHT' or 'HAPPINESS'.

However, some adjectives referring to 'light' can't express HAPPINESS IS LIGHT. For example, *brilliant* never means 'cheerful' or 'happy', as in: *?looking on the brilliant side* or *?brilliant disposition*.

We can see why *brilliant* differs from adjectives such as *bright* and *sunny* when we turn to the non-metaphoric uses of these adjectives, and specifically the frame structure that these uses evoke. Non-metaphoric *bright*, *sunny* and *dark* often modify nouns denoting a location, as in *bright room*, *sunny place*, and *dark corner*. However, *brilliant* is rarely used in this way, as in collocations such as *?brilliant place* or *?brilliant street*.

This difference is indicative of the fact that adjectives such as *bright* and *sunny* usually evoke the LOCATION_OF_LIGHT frame as in Figure (3.3), which involves a GROUND, a location where the light is apparent. The modified location nouns denote this GROUND element.

Figure (3.3) LOCATION OF LIGHT frame (sunny, bright, dark)

- LIGHT
- FIGURE (person or object at GROUND location)
- GROUND
- DEGREE (brightness)

•••

The adjective *brilliant*, on the other hand, typically refers to light emanating from a source, as in *brilliant star* or *brilliant torch*. These uses evoke the LIGHT_MOVEMENT frame in Figure (3.4), which does not involve a GROUND element.

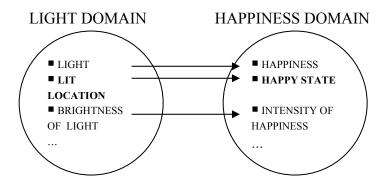
Figure (3.4) LIGHT_MOVEMENT frame (brilliant, bright, dim)

■ EMITTER
■ BEAM
■ DEGREE (brightness)
....

Adjectives that evoke the LOCATION_OF_LIGHT frame frequently modify nouns denoting the GROUND element in this frame; while adjectives that evoke the LIGHT_MOVEMENT frame do not modify these nouns. This distinction makes the presence or absence of collocated GROUND nouns a useful diagnostic of which frame an adjective evokes.

The GROUND element also provides evidence that the LOCATION_OF_LIGHT frame is part of the LIGHT source domain. The metaphor HAPPINESS IS LIGHT includes the mapping HAPPY STATES ARE LIT LOCATIONS, apparent in preposition phrases such as *in a sunny mood* or *in a dark state of mind*. As discussed above, metaphoric mappings reflect source-domain frame structure via the extended Invariance Principle. The mapping HAPPY STATES ARE LIT LOCATIONS (shown in boldface in Figure [3.5] below) therefore reflects a GROUND element (which refers to a location) in the source-domain structure; and the presence of a GROUND element is evidence, in turn, that the LIGHT domain is structured by LOCATION OF LIGHT.

Figure (3.5) HAPPINESS IS LIGHT



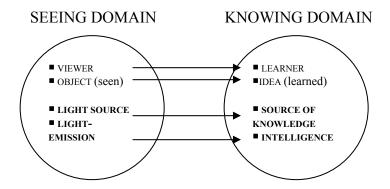
Adjectives such as *sunny*, which evoke the LOCATION_OF_LIGHT frame, can express the metaphor HAPPINESS IS LIGHT because their frame structure matches the frame structure of the LIGHT source domain. Adjectives such as *brilliant*, which evoke a frame other than LOCATION_OF_LIGHT, are inconsistent with the LIGHT source domain and cannot acquire metaphoric meanings in the domain of HAPPINESS. This analysis of the data in Table (3.1) supports the central hypothesis of this chapter: that lexical items' frame evocation constrains the items' uses in metaphor.

3.3 Lexical choice in INTELLIGENCE IS LIGHT-EMISSION

Although the frame structure of *brilliant* renders it incompatible with the metaphor HAPPINESS IS LIGHT, this same frame structure evidently permits *brilliant* to refer metaphorically to 'intelligence' as in *brilliant idea* or *brilliant mind*. This sense of *brilliant* expresses the metaphor KNOWING IS SEEING and its submappings SOURCES OF KNOWLEDGE ARE LIGHT SOURCES and INTELLIGENCE IS LIGHT-EMISSION, shown in Figure (6) below (LIGHT-EMISSION, which enables us to see objects, maps to INTELLIGENCE, which enables us to understand concepts). Since light-emission presupposes a light

source, I will refer to these two submappings collectively as INTELLIGENCE IS LIGHT-EMISSION. 10

Figure (3.6) Knowing is seeing and intelligence is light-emission



The mapping INTELLIGENCE IS LIGHT-EMISSION, like the metaphor HAPPINESS IS LIGHT, can be expressed by certain modifiers but not by others. We saw that *brilliant* expresses this submapping, as in *brilliant mind*. Like *brilliant*, the adjective *dim* can express INTELLIGENCE IS LIGHT-EMISSION, as in *dimwit* or *dim child*. The usage frequencies of these and other items are listed below.

Table (3.2) INTELLIGENCE IS LIGHT-EMISSION collocations

Item	Total 'LIGHT'	Example	Total 'INTELLI- GENCE'	Example	Percent 'INTELLIGENCE' (of total hits)
brilliantly	40	shine brilliantly	35	reason brilliantly	19.1
brilliant	1070	brilliant sun	179	brilliant idea	12.3
bright	2430	bright jewel	371	bright student	8.9
dim	260	dim star	4	dim child	1.1
brightly	382	glow brightly	0		0

Although a considerable percentage of the occurrences of *brilliant* reflect INTELLIGENCE IS LIGHT-EMISSION, other items, such as *sunny* and *dark*, fail to express this metaphor even once. To explain the distinction between items like *brilliant* and items like

¹⁰ In accordance with the partial nature of metaphoric mappings, some instances of KNOWING IS SEEING do not involve the mapping INTELLIGENCE IS LIGHT-EMISSION. The observations in this section apply only to

56

sunny, let us return to the LIGHT_MOVEMENT frame evoked by *brilliant*, repeated as Figure (3.7) below.

Figure (3.7) LIGHT_MOVEMENT frame (brilliant, bright, dim)

- EMITTER
- BEAM
- DEGREE (brightness)

Items such as *brilliant* tend to modify nouns that fill the EMITTER role in this frame, as in *brilliant star*, *brilliant flash*, and *brilliant sun*. Conversely, items such as *sunny* and *dark* exhibited no collocations with EMITTER nouns and presumably do not evoke the LIGHT MOVEMENT frame.

The SEEING source domain of KNOWING IS SEEING, as in Figure (3.6), also includes a EMITTER; the LIGHT SOURCE in this domain is simply something that emits light. This EMITTER/LIGHT SOURCE element maps to a SOURCE OF KNOWLEDGE in the KNOWING domain (a mapping evident in clauses such as *this book is illuminating* or *your answer shed light on the topic*). The presence of this EMITTER element indicates that the LIGHT MOVEMENT frame is active in the SEEING source domain.

Now that we have identified LIGHT_MOVEMENT frame structure in the SEEING domain, centered around the submapping INTELLIGENCE IS LIGHT-EMISSION, we can make a prediction: Only lexical items that evoke the LIGHT_MOVEMENT frame, as *brilliant* does, will be chosen to express INTELLIGENCE IS LIGHT-EMISSION.

The rest of the items under consideration support this generalization. Like *brilliant*, the item *dim* often literally refers to a light source, as in *dim star*, *dim torch* or *dim*

lantern. This reference to LIGHT-EMISSION allows *dim* to refer metaphorically to INTELLIGENCE as in *dim child*.

Unlike *brilliant, sunny* does not modify light source nouns, but refers only to ambient sunlight. The item *sunny* could, in theory, be used image-metaphorically to describe a light source that resembles sunlight, as in *?sunny firelight* or *?sunny lantern*; but there were no examples of this type in the corpus. The item *sunny* does not typically evoke LIGHT_MOVEMENT and, as a result, is incompatible with INTELLIGENCE IS LIGHT-EMISSION.

Like *sunny*, the item *dark* was not found to modify potential light sources (*?dark streetlight*). In practice, *dark* seems to refer to a level of available light, not to an absence of light from a given source. Consequently *dark* does not refer to a lack of intelligence via INTELLIGENCE IS LIGHT-EMISSION.

The EMITTER element in the LIGHT_MOVEMENT frame seems to determine adjectives' compatibility with INTELLIGENCE IS LIGHT-EMISSION, much in the same way that the GROUND element in LOCATION_OF_LIGHT predicted compatibility with HAPPINESS IS LIGHT. This consistency between frames and mappings supports the idea that semantic frames shape items' metaphoric uses.

3.3.1 The metaphoric and non-metaphoric polysemies of *bright*

Most of the adjectives we've examined (*brilliant, dim, sunny* and *dark*) work with either HAPPINESS IS LIGHT or INTELLIGENCE IS LIGHT-EMISSION, but not with both. The adjective *bright* is the exception. Alongside the metaphoric uses meaning 'cheerful', as in *bright*

mood, we find collocations such as *bright idea* and *bright child*, where *bright* means 'intelligent'.

The metaphoric polysemy of *bright* is put in perspective when we consider the diverse non-metaphoric senses of the item. While one sense of *bright* evokes the LOCATION_OF_LIGHT frame, as in *bright room* etc., a second sense of *bright* evokes the LIGHT MOVEMENT frame, as in *bright fire*, *bright object* and *bright moon*.

In accordance with the Invariance Principle, the frame evocation properties of the non-metaphoric senses of *bright* are preserved in its metaphoric uses. The sense of *bright* in *bright room* can, as a result, extend to the metaphoric sense in *bright mood* via HAPPINESS IS LIGHT, whereas the sense in *bright fire* can extend to the metaphoric sense in *bright idea* via INTELLIGENCE IS LIGHT-EMISSION. None of the other adjectives share this polysemy, and as a result, only *bright* can express both HAPPINESS IS LIGHT and INTELLIGENCE IS LIGHT-EMISSION.

It is worth noting that although both *bright* and *brilliant* can express INTELLIGENCE IS LIGHT-EMISSION, *bright* denotes a lesser DEGREE of intelligence than *brilliant*. The adjective *bright* often refers to children or students, as in *bright child, bright boy,* or *bright pupil*. In contrast, *brilliant* is more likely to occur in *brilliant engineer, brilliant scholar* or *brilliant scientist*. This distinction shows that the values assigned to the DEGREE element in the LIGHT_MOVEMENT frame (in which *brilliant* involves a greater DEGREE of light-emission than *bright*) are carried over into the target domain, in which the adjectives denote differing DEGREES of intelligence.

3.4 Knowing is seeing and comprehensibility is visibility

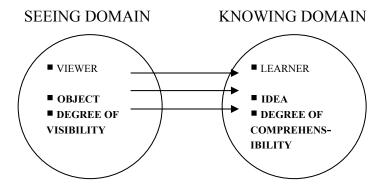
The final set of examples I will discuss involve another submapping of KNOWING IS SEEING, COMPREHENSIBILITY IS VISIBILITY. Certain items that cannot refer to 'stupidity' or 'intelligence' nevertheless have metaphoric meanings related to KNOWING IS SEEING. For example, *a dim idea* normally means a 'vague' or 'uncertain' idea, not a 'stupid' one. The item *dark* similarly can refer to some-thing 'unknown' or 'mysterious', as in *a dark area in our understanding*. Most dramatically, the adjective *clear* means 'obvious' or 'certain' 83 percent of the time as in a *clear understanding*, *clear idea* or a *clear statement*, and adverbial *clearly* means 'certainly' or 'obviously' 86 percent of the time, as shown below.

Table (3.3) COMPREHENSIBILITY IS VISIBILITY collocations

ITEM	TOTAL 'LIGHT'	EXAMPLE	TOTAL 'COMPRE- HENSIBILITY'	EXAMPLE	PERCENT 'COMPRE- HENSIBILITY' (of total hits)
clearly	381	see clearly	2308	reason clearly	85.8
clear	558	clear image	2919	clear statement	82.8
dim	260	dim figure	30	dim idea	8.7
dark	4340	dark shape	51	dark area of understanding	1.1

Items such as *clear* 'obvious/certain' are not based on the 'light-emission' mapping of KNOWING IS SEEING that is active in *brilliant* 'intelligent'. Instead, these uses focus on the sub-mappings IDEAS ARE OBJECTS and COMPREHENSIBILTY (of an idea) IS VISIBILITY (of an object), shown in Figure (3.8). Because the latter mapping presupposes the former, I refer to these two submappings collectively as COMPREHENSIBILITY IS VISIBILITY.

Figure (3.8) Knowing is seeing and comprehensibility is visibility



We know that items are not chosen to express COMPREHENSIBILITY IS VISIBILITY on the basis of the LIGHT_MOVEMENT frame, because, as we saw in the previous section, *clear* and *dark* do not evoke this frame.

Instead, the non-metaphoric uses of the relevant items point to a different frame involved in COMPREHENSIBILITY IS VISIBILITY. Even though the item *dim* occurs in collocations denoting a light source (as in *dim lantern*), in fact *dim* more often refers to an object that is only vaguely or partially seen (*dim shape, dim figure,* or *dim blur*). These senses evoke a frame that includes a visible object and a level of visibility ascribed to that object. These elements may seem familiar, because we saw them in the LOCATION OF LIGHT frame (a frame that structures HAPPINESS IS LIGHT).

The LOCATION_OF_LIGHT frame, shown in Figure (3.3), is repeated in Figure (3.9) with a few changes in emphasis. Nouns modified by *clear* or *dim* denote the FIGURE element in the LOCATION_OF_LIGHT frame, rather than the GROUND element evoked by nouns in phrases such as *bright room*. Noun phrases such as *bright room* denote a GROUND (such as a 'room'), whereas noun phrases such as *clear outline* denote the FIGURE that is visible in some GROUND (such as a visible 'outline'). A related difference between Figure (3.3) and Figure (3.9) is that the DEGREE element in LOCATION_OF_LIGHT

as evoked by *clear*, *dim* etc. refers specifically to the visibility of the FIGURE rather than the brightness of light at the GROUND location.

Figure (3.9) LOCATION_OF_LIGHT frame (clear, dim, dark)

- LIGHT
- FIGURE (visible object)
- GROUND
- DEGREE (visibility)

Just as the GROUND element in LOCATION_OF_LIGHT is apparent in the source domain of HAPPINESS IS LIGHT, the FIGURE and DEGREE (of visibility) in this frame contribute structure to the source domain of KNOWING IS SEEING. The element DEGREE (of visibility) maps from SEEING TO KNOWING via DEGREE OF COMPREHENSIBILITY IS DEGREE OF VISIBILITY, as we saw in Figure (3.8).

As a result of this mapping, items such as *dim*, which have non-metaphoric uses referring to the VISIBILITY of a FIGURE (*dim shape*, *dim outline*) also allow metaphoric uses referring to the COMPREHENSIBILITY of an IDEA (*dim memory*, *dim idea* or *dim awareness*). *Clear* and *dark* also refer to the VISIBILITY of a FIGURE (*clear footprint* or *dark shape*), so these items can likewise refer metaphorically to COMPREHENSIBILITY (*clear idea* or the idiom *dark horse*).

These collocations show that COMPREHENSIBILITY IS VISIBILITY imposes different frame requirements on lexical choice than INTELLIGENCE IS LIGHT-EMISSION, even though both are submappings of KNOWING IS SEEING. Since the LIGHT_MOVEMENT and LOCATION_OF_LIGHT frames are both part of the SEEING domain, certain submappings of KNOWING IS SEEING map structure from one frame, while different submappings map structure from the other.

3.5 Adjectives vs. adverbs: brilliantly, clearly, brightly and sunnily

Adverbs and adjectives that share a common root generally evoke the same frames, and as a result have the same range of metaphoric uses. For example, *brilliant* and *brilliantly* express INTELLIGENCE IS LIGHT-EMISSION 19.1% and 12.3% of the time, respectively, as in Table (3.2); and *clear* and *clearly* express COMPREHENSIBILITY IS VISIBILITY 82.8% and 85.8% of the time, as in Table (3.3). Once again, similarities in frame structure lead to similar metaphoric uses.

Discrepancies between adjectives and adverbs can usually be attributed to factors other than frame structure. For example, *brightly* differs from *bright* in that *brightly* is not used in INTELLIGENCE IS LIGHT-EMISSION (Table [3.2]). This discrepancy is part of a more general trend in which roots referring to 'intelligence' are less likely to be used as adverbs than roots referring to 'cheerfulness'. For example, the collocation *intelligent* N (n = 916) is twice as common in the BNC than *cheerful* N (n = 441), yet adverbial *intelligently* N (n = 38) is rare compared to *cheerfully* N (n = 151).

The adverb *sunnily* presents another case of adverb/adjective difference. Although *sunny* refers to HAPPINESS only 5.6% of the time, the lone instance of *sunnily* refers to HAPPINESS (Table [3.1]). The nonoccurrence of literal *sunnily* is due to a combination of two factors: First, just as the adjective *sunny* does not normally modify nouns denoting light sources other than the sun (Section 3.3), *sunnily* rarely modifies verbs denoting light-emission produced by light sources other than the sun (*?the firelight burned sunnily* or *?the lantern shone sunnily*). Second, *sunnily* is redundant in describing light-emission that actually is from the sun, as in *?the sun shone sunnily* or *?the sunlight gleamed sunnily*. These two restrictions conspire to rule out most non-metaphoric uses of *sunnily*.

In the absence of factors such as those at work in *brightly* and *sunnily*, adverbs seem to share the metaphoric uses of their adjectival counterparts. The previous sections have shown that adjectives that evoke the same frames (such as *bright*, *sunny* and *dark*, which all evoke LOCATION_OF_LIGHT) have the same metaphoric uses (such that *bright*, *sunny* and *dark* all express HAPPINESS IS LIGHT). Apparently, adjectives and adverbs which evoke the same frames likewise have similar metaphoric uses. This suggests that items' frame evocation is a more important factor than lexical category in determining metaphoric usages.

3.6 Conclusion

There seems to be a certain logic behind the choice of lexical items in expressing metaphor. Acknowledging this logic is an important step for conceptual metaphor theory, because understanding the regularities of lexical choice in metaphor will improve metaphor theorists' control over language as a data source. Furthermore, the central role of frame semantics in metaphoric language should draw attention to the significance of frames in conceptual metaphor and the necessity for an extended Invariance Principle.

The correlations noted in this chapter also suggest three new avenues for research:

First, the role of frames in metaphoric extension needs to be tested in conceptual domains other than LIGHT and SEEING. Second, the frame evocation properties of items belonging to other lexical categories (particularly verbs) remain to be examined. And finally, we should look for other forces that help shape lexical choice in metaphor. These will include stylistic concerns (such as the redundancy issue affecting *sunnily*), which should be sorted out from considerations such as frame compatibility.

We have seen in this chapter that frame semantics can constrain lexical choice in metaphor. Let us now turn to another type of constraint on metaphoric language – the constraints that result from the semantics of grammatical constructions.

PART II CONSTRUCTIONS IN METAPHORIC LANGUAGE

4 The interaction of grammar and metaphor

The kaleidoscopic array of metaphoric language – in speech, poetry, and Internet chat rooms – suggests we have a great deal of freedom in the way we use metaphor. Certainly, we can communicate any conceptual metaphor using language. We can elaborate and vary our use of these metaphors in infinite ways, and we can even invent novel metaphors if the prerequisite correspondences are there.

However, our freedoms have limits. Even though we can communicate any conceptual metaphor using language, the linguistic structures we use to express these metaphors are surprisingly invariable. When we look at the smallest metaphoric phrases that can be understood out of context, almost all of them involve a few basic grammatical constructions, and each of these constructions encodes the structure of metaphor following a particular pattern.

I argue in this chapter that most of the constructions used to communicate metaphor can be categorized into a few classes, which I will refer to as **domain constructions** (4.1), **predicating modifier** constructions (4.2), **compounds** (4.3), **predicate-argument** constructions (4.4), and **preposition phrase** constructions (4.5). Rarer constructions, such as copula constructions (such as in *time is money*; Chapter 5) and resultative constructions (11.2), can also play a role in the evocation of metaphor. Additional constructions such as raising and anaphora constructions (Chapter 7) add another layer of complexity to the analysis of metaphoric language. However, the five types listed above account for the bulk of metaphoric language (98% of the 2415 constructions in the BNC mini-corpus cited in this dissertation).

We will see that each of these five basic constructions demonstrates a clear pattern of conceptual autonomy and dependence (in the Langackerian sense of these terms [cf. 1991, 2002] discussed in Chapter 2). I hope to show that these patterns of autonomy and dependence correlate with patterns in these constructions' metaphoric usages.

Specifically, I'll argue that the metaphoric usages of each of these types involve dependent elements that represent metaphoric source domains (i.e., are "metaphoric") and autonomous elements that represent metaphoric target domains (typically with a "non-metaphoric" meaning). The composition of metaphoric meaning in these constructions' metaphoric uses, then, follows from the more general composition of meaning in all of the constructions' uses. This is an intuitively satisfying result.

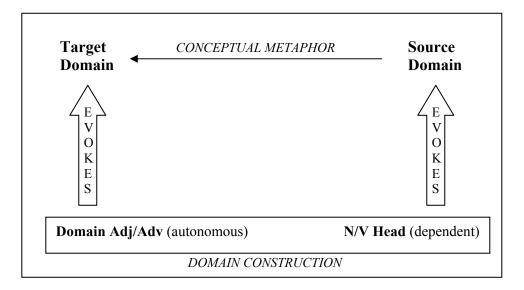
The first type of metaphorically used construction I will consider, **domain constructions**, include phrases such as *spiritual wealth* or *spiritually wealthy*, which involve "domain adjectives" or "domain adverbs" such as *spiritual* or *spiritually* (Levi 1978, Ernst 1984, Sweetser 1997, Ernst 2001).

Domain constructions have not been previously described in terms of conceptual autonomy and dependence, so before we can turn to the metaphoric uses of these constructions, it will be necessary to investigate the patterns of autonomy and dependence in their non-metaphoric uses. Section 4.1.1 provides this analysis. In this section, I argue that the head in a domain construction is the conceptually dependent element, and the adjective, adverb, or compounded nominal is its conceptually autonomous complement.

In a metaphoric domain construction, the conceptually dependent head evokes the source domain, and the conceptually autonomous domain adjective/adverb/nominal

evokes the target domain, following the general trend in the metaphoric uses of autonomous and dependent elements. This is illustrated below.

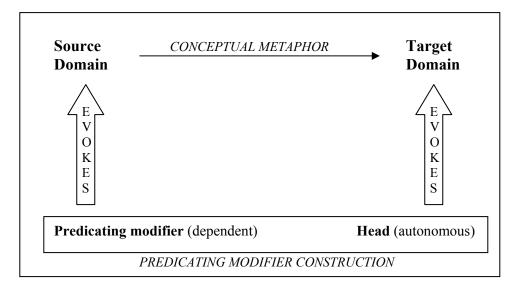
Figure (4.1) Metaphor evocation in domain constructions



In a domain construction that is comprehensible as metaphoric even when taken out of context, such as *mental exercise*, the domain adjective *mental* evokes the target domain MIND, and the head noun *exercise* evokes the source domain BODY – together evoking the conceptual metaphor THE MIND IS A BODY. Domain constructions are discussed in Section 4.1.

Predicating modifier constructions, such as *blood-stained wealth*, *bright student* or *filthy rich*, follow a strikingly different pattern from the domain constructions. In these constructions, the head noun/verb/adjective is the autonomous element in the construction, and the adjective/adverb is the dependent element (Langacker 1991, 2002). As in the metaphoric domain constructions, however, the autonomous element evokes the target domain and the dependent element evokes the source. This is shown below.

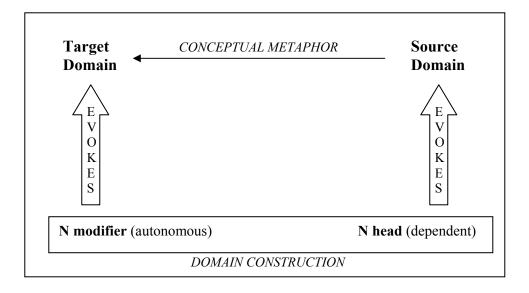
Figure (4.2) Metaphor evocation in predicating modifier constructions



Predicating modifier constructions are discussed in Section 4.2.

In Section 4.3, I discuss metaphoric **compounds** (Sweetser 1997, Turner and Fauconnier 1995) such as *culture war* or *rumor mill*. In some respects, compounds resemble the domain constructions, in that these two classes follow similar patterns of autonomy and dependence:

Figure (4.3) Metaphor evocation in compounds



However, compounds allow for a wider range of meanings than domain constructions. The first element in the compound is capable of affecting the interpretation of the second element in more varied ways than are found in domain constructions. In this respect, I will argue that compounds behave more like predicating modifier constructions rather than domain constructions.

Predicate-argument constructions (Section 4.4), such as *stocks soared*, generally resemble the predicating modifier constructions in their structure, as in Figure (4.4). These constructions involve a head verb that is the conceptually dependent element, and the verb's complements, which are conceptually autonomous (Langacker 1987, 2002). The head verb evokes the source domain and one or more of its arguments evokes the target domain. For example, in *stocks soared*, the verb evokes the source domain UP of the metaphor MORE IS UP, and the subject noun evokes the target domain MORE, because stock values can be quantified but not measured in terms of height.

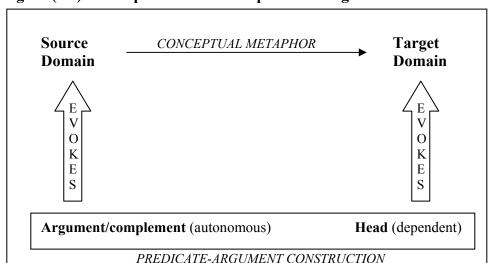


Figure (4.4) Metaphor evocation in predicate-argument constructions

Preposition phrase constructions (4.5) consist of a head noun or verb, and a conceptually autonomous nominal within a preposition phrase complement, as in *the* brilliance of the plan or to pummel with arguments. The subordinate nominal within the PP evokes the target domain, while the head evokes the source, as in Figure (4.5).

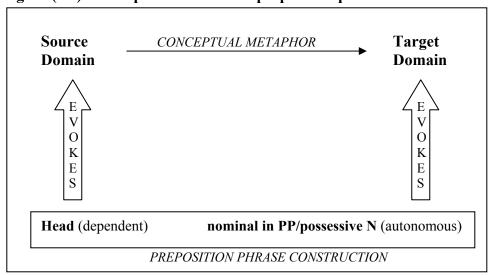


Figure (4.5) Metaphor evocation in preposition phrase constructions

The issue of autonomy vs. dependence is more complex in preposition phrase constructions than elsewhere. The subordinate nominal is clearly autonomous relative to its prepositional head, but the head noun is also autonomous relative to the preposition. I follow Croft's (2003) suggestion that the head noun in a NP-PP is conceptually dependent relative to *the embedded nominal*. I expand upon Croft's argument in Section 4.5.1. This analysis allows preposition phrase constructions to be modeled along the same lines as the other types of constructions used in metaphor, and upholds the generalization that conceptual dependence correlates with use in communicating a metaphoric source domain.

Preposition phrase constructions are more flexible in their meanings than either of the previous classes, thanks to the special properties of prepositions (discussed in Section 4.5.4). These constructions can involve a complementation relation similar to that involved in the domain constructions (for example, *wealth of the spirit* approximates the metaphoric meaning of *spiritual wealth*). Other PP constructions resemble the predicate-argument constructions in their semantics (so that *the growth of his wealth* evokes the same metaphor as *his wealth grew*). Possessive constructions are classified with the PP constructions, so that *the argument's foundation* is considered to evoke metaphor in a manner analogous to *the foundation of the argument*.

The five classes of constructions are summarized below (in the examples, source-domain items are in italics, and target-domain items are in boldface).

Table (4.1) The constructions most commonly used in metaphor

1 abic (4.1)	The constituctions most commonly used in metaphol				
Construction type:	Percent of total:	Source- domain (dependent) slot:	Target- domain (autonomous) slot:	Examples from corpus:	
Domain constructions	3.1	head	domain A/ Adv	political game verbally attack	
Predicating modifier constructions	7.8	predicating modifier	head	bitter thoughts perform brilliantly solidly liberal	
Compounds	1.8	head N	modifier N	the race card	
Predicate- argument constructions	47.3	head	argument NP	the cinema beckoned fire gutted the embassy	
PP/ possessive NP constructions	34.2	head	nominal in PP/ possessive nominal	the foundation of an argument her mind's eye	

The constructions in Table (4.1) include only those in which the target and source domains are evoked by open-class items. The metaphoric uses of closed-class items, notably prepositions, has long been recognized (cf. Rice et al. 1999, Beitel et al. 1997). These, I will argue (4.5.4), behave differently from open-class items. On the one hand,

closed-class items such as prepositions have a limited range of non-metaphoric meanings, all relating to a small set of image-schematic concepts (Bowerman 1996:422, Talmy 2000). This restricted range of meanings necessarily delimits the domains which prepositions can evoke, and therefore the metaphors which they can help encode. On the other hand, prepositions may be used metaphorically in almost any context, and are not dependent on a specific range of constructions in the manner of open-class items. (We will see in Section 8.2 that Finnish case endings, another type of closed-class item, share many of these traits of English prepositions.)

The use of closed-class items and the constructions in Table (4.1) combine to create most of the English metaphoric sentences we see every day. In practice, most metaphoric sentences incorporate more than one of the constructions discussed above, and it can be a complicated matter to describe how the particular lexical items and constructions are functioning to encode the metaphors involved. I will attempt to show that although these constructions interact in complex ways, these interactions are regular and surprisingly compositional. I will discuss the combination of metaphoric constructions in Chapter 6.

4.1 Domain constructions

The domain constructions tend to evoke metaphor in a more transparent and straightforward manner than other constructional types. As such, they provide a good introduction to metaphor evocation. However, it should be kept in mind that domain constructions and compounds are among the rarest of the basic constructional types. The totals and percentages of various domain constructions (out of the total 2416

metaphorically used constructions in the corpus) are shown below. Once again, source-domain items are in italics, while target-domain items are in boldface.

Table (4.2) Types of domain constructions

Construction	Count in	Percent of total	Examples from corpus
Type	mini-corpus	constructions	
Domain	69	2.8 %	my inner cheerleader, a psychological jungle, the
adjective			academic world
Domain	7	0.3 %	financially sound, emotionally damaged,
adverb			verbally scampered, environmentally conscious

Both subtypes of domain constructions follow the pattern of metaphor evocation we saw in Figure (4.1). The head noun, verb or adjective evokes the source domain; while the denominal adjective or adverb evokes the target domain. For example, in *mental* exercise or exercise mentally in (1)-(2) below, the domain adjective mental and the domain adverb mentally evoke the target domain MIND.

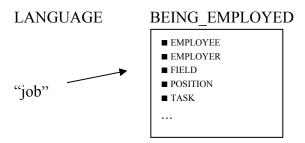
- (1) Here's a **mental exercise** that you can do to help you understand how important backups are. www.pcguide.com/care/bu/exer-c.html
- (2) **Exercise mentally** with crosswords, card games and the like. *www.strengthforcaring.com/manual/50/240/caregiving-and-menopause.html*

The head noun or verb in each metaphoric phrase (here, the noun or verb *exercise*) evokes the source domain of BODY. In each case the construction as a whole reconstructs the metaphor THE MIND IS A BODY (Lakoff and Johnson 1999:240) and its submapping MENTAL EXERCISE IS PHYSICAL EXERCISE.

4.1.1 Autonomy and dependence in domain constructions

Domain constructions have not been previously addressed in the literature on autonomy and dependence. Fortunately, the elaboration and substructure tests provide relatively clear results for these constructions. Let us begin by applying these tests to non-metaphoric domain constructs, such as *academic job*. The noun *job* in *academic job* evokes the BEING EMPLOYED frame, as shown below.

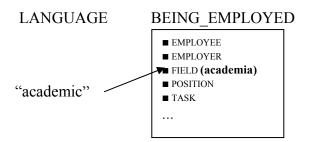
Figure (4.6) The noun job evokes the BEING EMPLOYED frame



Normally, the existence of a JOB entails the existence of many elements, including an EMPLOYEE, a TASK to be performed, and all the other elements that are part of the BEING_EMPLOYED frame. This frame and these elements are a crucial part of the meaning of *job*.

The phrase *academic job* is more specific than *job*, in that it gives the filler of the FIELD role. This is shown below.

Figure (4.7) The FIELD role in the BEING EMPLOYED frame is filled by ACADEMIA



The domain adjective *academic* fills the FIELD role in the BEING_EMPLOYED frame. The adjective *academic* does not itself evoke this frame; in *academic difficulties* or *academic interests*, the BEING_EMPLOYED frame is not evoked. However, the item *job* always evokes this frame, because BEING_EMPLOYED is crucial to the meaning of *job*. Therefore, *job* evokes a frame in which *academic* merely denotes the filler of a frame role.

Frame roles are potential elaboration sites within a frame (Section 2.4), and when these roles are filled, they are "elaborated". The frame role FIELD in BEING_EMPLOYED thus represents an elaboration site within BEING_EMPLOYED. Since frame roles are substructures of frames, the role FIELD can be considered a substructure of the frame evoked by *job*. According to the "substructure test," *job* is a dependent element, because the elaboration site FIELD is a substructure of the BEING_EMPLOYED frame evoked by *job*. This, in turn, makes *academic* look like the autonomous element in the relation.

The "elaboration test" produces a compatible result. The item *academic* fills the FIELD role, which is an elaboration site within the structure evoked by *job*. Since the element *academic* elaborates this site to a high degree, this element passes the "elaboration test" for autonomy. The element *job*, then, appears to be the dependent element in *academic job*.

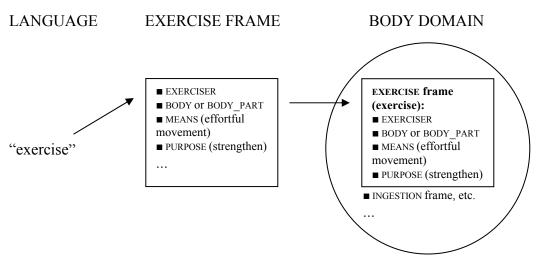
Both tests for autonomy and dependence agree that the domain adjective *academic* is the autonomous element in *academic job*, while the noun *job* is the dependent element. This observation is important because it demonstrates that the pattern of autonomy and dependence in domain constructions is different from the one found in predicating modifier constructions. In predicating modifier constructions involving an adjective and a

noun, such as *tall man*, the noun is the autonomous element and the adjective is dependent. In domain constructions involving an adjective and a noun, the reverse is true: the noun is dependent and the adjective is autonomous. This distinction will help explain the differences in the metaphoric uses of these two types of construction.

4.1.2 How domain constructions evoke metaphor

When we encounter a metaphoric usage of a word such as *exercise*, we activate the EXERCISE frame, just as we would for a non-metaphoric usage of the item *exercise*. In a metaphoric use of *exercise*, however, we also activate the BODY domain. This process is illustrated in Figure (2.2), repeated as (4.8) below.

Figure (4.8) The item *exercise* evokes the EXERCISE frame and the BODY domain



The structure of the EXERCISE frame is included in the BODY domain because part of what we know about bodies is related to exercise. We saw in Section 2.3 that the BODY domain also includes a great deal of other structure that is mapped in various metaphoric usages, including the structure of frames such as INGESTION, MEDICAL_CONDITIONS,

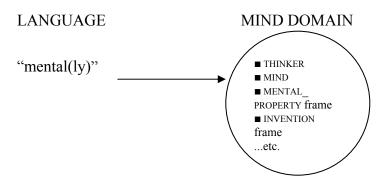
CAUSE_HARM, MANIPULATION, and CAUSE_MOTION (all of which can be found diagrammed on the FrameNet website at http://framenet.icsi.berkeley.edu/).

When an item evokes a domain by evoking a specific frame as in Figure (4.8), that frame has a special status within the evoked domain. Specifically, the evoked frame is **profiled** relative to the other structure in the domain. In the above diagram, the structure within the box representing the EXERCISE frame is profiled. Other structure within the BODY domain, including structure related to INGESTION, MEDICAL_CONDITIONS, etc., is the **base** against which the profile is understood: it is available to assist in the interpretation of the profiled material, but is not itself profiled by the utterance.

Several of the frames structuring the BODY domain share elements and structure that can be activated through any one of these frames. For example, several of the frames in BODY have an element called BODY_PART. As we've seen, the BODY domain specifies that the various frame roles called "BODY_PART" share an **identity link**, meaning that if one of these roles is filled, all will have the same filler. The BODY domain also constrains several other frame elements with identity links (for example, we saw that the PATIENT in the MEDICAL_CONDITIONS frame and the INGESTOR in the INGESTION frame generally designate the same referent in mappings from BODY). To simplify domain diagrams, I will either omit visual representation of these identity links, or represent them using parenthetical clarifications following frame element names, such as "PATIENT (INGESTOR)" or "INGESTOR (PATIENT)". These identity-linked roles will both be written in small caps. As always, fillers of roles will be given in normal text when they parenthetically follow the role they fill, as in "PATIENT (Judy)".

When an item denotes one of the elements that are shared by multiple frames structuring a particular domain (such as BODY in the BODY domain), this can evoke the domain without profiling any particular sub-frame. In this case I will say that the item **directly** evokes the metaphor input domain. For example, in the domain constructs *mental exercise* and *exercise mentally*, the adjective *mental* and the adverb *mentally* directly evoke the MIND domain without profiling any particular sub-frame within MIND, as in Figure (4.9) below.

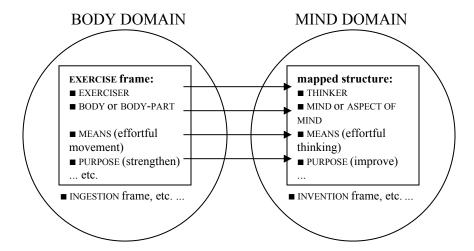
Figure (4.9) The items mental and mentally evoke the MIND domain



Many of the frames in the MIND domain involve a THINKER with a MIND (such as in MENTAL_PROPERTY as evoked by *intelligent*, INVENTION as evoked by *think up*, etc.), although these elements may have different names in different frames. A metaphoric use of *mental* or *mentally* will, as a result of this confluence, directly activate the MIND domain and the MIND role within it, without profiling any particular one of the frames that contains the MIND element.

In the example *mental exercise*, the target domain MIND is directly evoked, but the source domain of BODY is indirectly evoked via the EXERCISE frame, as shown in Figure (4.8). Then, structure from the EXERCISE frame in the BODY source domain maps to MIND, as in Figure (4.10).

Figure (4.10) The phrase mental exercise evokes THE MIND IS A BODY



The mappings from EXERCISE have the effect of profiling corresponding structure in the MIND domain. This mapped structure is not part of any one frame in MIND, but the relations between the elements of EXERCISE map along with the elements themselves to result in a complex profiled structure in the MIND domain.

The manner of source- and target-domain evocation in *mental exercise* is typical of domain constructions. In these constructions, the modified head usually indirectly evokes the source domain, just as *exercise* indirectly evokes the BODY domain by way of the EXERCISE frame. In domain constructions, the domain adjective or adverb *always* directly evokes the target domain, just as *mental* directly evokes the MIND domain. We will see later that most other constructional classes (predicating modifier, compounds, predicate-argument, and preposition phrase) do not share this trait. In predicating modifier constructions, for example, both the source-domain and the target-domain items generally indirectly evoke their respective domains (Section 4.2).

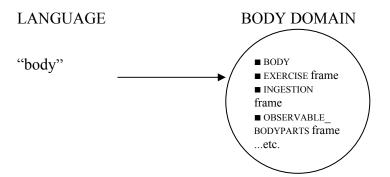
Domain constructions, although they always directly evoke the target domain, may either indirectly evoke the source domain, as in *mental exercise*, or they may directly evoke it. When both source and target domains are directly evoked, this results in a

certain amount of ambiguity. For example, the item *body* in the phrase *economic body* (unlike *exercise* in *mental exercise*) directly evokes the BODY domain, without profiling any single frame in BODY. The phrase *economic body* is found in examples such as (4) below.

(4) The **head** of the new **economic body** is the state oil holding Petróleos de Venezuela... *maxspeak.org/mt/archives/001909.html*

The direct evocation of the BODY domain, as initiated by *economic body*, is illustrated in Figure (2.3), repeated as (4.11). This can be compared with the more complicated process of indirect evocation we saw in Figure (4.8), in which a specific frame within the BODY domain was evoked and profiled.

Figure (4.11) The item *body* evokes the BODY domain



When a source domain such as BODY is directly evoked, it usually becomes clear from context which frame structure should be profiled. If a given source-domain item, such as *body*, does not profile any particular frame, other items in the sentence or phrase usually will. For example, in (4), reference to the *head* of the *economic body* suggests that the most relevant frame within BODY is OBSERVABLE_BODYPARTS, a frame which includes an element BODY PART, which can be filled by HEAD. This element, combined with the

OBSERVABLE_BODYPARTS frame structure necessary to understand it, can map to the domain of SOCIAL STRUCTURES via the mapping LEADERS ARE HEADS in the metaphor SOCIAL STRUCTURES ARE BODIES. Mapping the frame structure from OBSERVABLE_BODYPARTS allows us to understand that the *head* of an *economic body* is the LEADER of an economic social structure.

In contrast, the use of *economic body* in (5) evokes the same metaphor, SOCIAL STRUCTURES ARE BODIES, but profiles a different frame:

(5) The present **illness** of the **economic body** of Ukraine consists of several **diseases** at the same time... www.ukrweekly.com/Archive/1994/089411.shtml

Here, the items *illness* and *diseases* profile the MEDICAL_CONDITIONS frame in the BODY domain, although the item *body* itself does not necessarily profile MEDICAL CONDITIONS.

In fact, a remarkable number of frames in BODY can be profiled using the phrase *economic body*, depending on the other items in the utterance. Two more examples are given below.

- (6) This devaluation had the effects of **drugs**: it could prove **stimulating** to the **economic body** in the short term but it might be **harmful** to it in the longer term.

 givingmachinist.blogspot.com/
- (7) Nine-eleven was a **sucker-punch** to the **gut** of the American **economic body**. www.libertypost.org/cgi-bin/readart.cgi?ArtNum=39840

Example (6) profiles INTOXICATION (*the effects of drugs*), EXPERIENCE_BODILY_HARM (*harmful*), and the EXPERIENCER_OBJ frame, in which a STIMULUS provokes a response in

an EXPERIENCER (*stimulating*). Here, we see the BODY domain fulfilling its function of relating identity-linked elements: the COGNIZER in the INTOXICATION frame is linked to the EXPERIENCER in EXPERIENCE_BODILY_HARM, and the EXPERIENCER in the EXPERIENCER_OBJ frame; likewise the INTOXICANT in the INTOXICATION frame is linked to the CAUSE in EXPERIENCE_BODILY_HARM and the STIMULUS in the EXPERIENCER_OBJ frame.

Example (7) evokes OBSERVABLE_BODYPARTS (*gut*) and EXPERIENCE_BODILY_HARM (*sucker-punch*), across which similar identity links hold. The constructional combinations in these examples – which allow additional source-domain items besides the item *body* found in *economic body* – will be discussed in the next chapter.

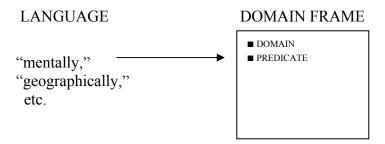
For current purposes, the most crucial observation is that metaphoric language generally profiles at least one frame within a source domain, the structure of which is mapped to the target domain (where it continues to be profiled). The meager structure that is shared between frames in a source domain (the frames EXERCISE, OBSERVABLE_BODYPARTS, EXPERIENCE_BODILY_HARM, etc., share only the element BODY_PART) provides little that can be mapped to a target domain. Given that the whole purpose of metaphor is to map useful structure to a target domain, it is a functional certainty that a metaphor will map structure from at least one frame in order to profile a complex structure in the target domain. Otherwise, it is unclear what sort of inferences a hearer/reader could generate from an ambiguous phrase such as *economic body*. One or more source-domain items, then, will always profile at least one frame within the source domain. If a given source-domain item directly evokes the source domain, another source-domain item will step in to profile a frame within that domain.

Target-domain items are more likely than source-domain items to directly evoke their metaphor input domain. In metaphoric language, it is not necessary for target-domain items to profile specific target-domain structure, because this structure is not going to be metaphorically mapped in any case. The utterance can successfully communicate a system of metaphoric mappings without any additional frame evocation by target-domain items.

Unlike *economic body*, then, the phrase *mental exercise* is not ambiguous when taken out of context. Both phrases involve target-domain items that directly evoke a domain; but more crucially, the source-domain item *exercise* evokes a particular frame in the BODY domain, while the source-domain item *body* does not. The comparison of *economic body* and *mental exercise* demonstrates how direct vs. indirect source-domain evocation has a greater effect on the interpretation of metaphoric language than the manner of target-domain evocation (which is identical for both phrases).

In fact, all metaphorically used domain adverbs and adjectives behave like *economic* and *mental*, in that they directly evoke the metaphoric target domain. A frame-semantic analysis shows us that domain adjectives and adverbs such as *mental*, *mentally* and *economic* are uniquely well-suited to directly evoke a domain without profiling any given frame. Even in their non-metaphoric incarnations, domain modifiers do not necessarily evoke a situational frame. Domain adjectives and adverbs frequently evoke only the DOMAIN frame, shown in Figure (4.12) in its meager entirety.

Figure (4.12) Domain adjectives and adverbs evoke the DOMAIN frame



The domain adjective or adverb in a non-metaphoric domain construction denotes the DOMAIN element (for example, *geographically* in the phrase *geographically adjacent*), while the modified predication (here, *adjacent*) denotes the PREDICATE. This frame does not model a real-world situation in the manner of frames such as EXERCISE. It merely indicates that the predication applies in a particular domain. When used in metaphor, domain adjectives and adverbs indicate that the source-domain items they complement should be understood within the target domain.

In this section we have seen that metaphor evocation in domain constructions follows a relatively straightforward pattern: the head noun, verb or adjective evokes the source domain and may or may not profile a particular frame (for example, the item *exercise* in *mental exercise* profiles the EXERCISE frame in the BODY domain, whereas *body* in *economic body* evokes the BODY domain directly). Profiled frame structure is then mapped to the target domain (in *mental exercise*, from BODY to MIND). The target domain is directly evoked by the domain adjective or adverb without profiling any particular frame (for example, *mental* directly evokes MIND).

Metaphoric phrases such as *mental exercise* demonstrate that metaphoric language involves particular patterns of source-domain and target-domain items. These patterns are based on the conceptual structure of metaphor, in which structure maps from a source

domain to a target domain. The patterns found in metaphoric language arose as a way to communicate these underlying conceptual structures. The linguistic patterns analyzed here should *not* be confused with these underlying conceptual structures. Conceptual metaphor exists whether or not we communicate it using language, and metaphoric language is only possible if a conceptual metaphor exists, or can be created, that will bridge the source and target domains indicated by a linguistic expression. For example, *mental exercise* is comprehensible because the BODY domain provides conceptual structure that can be mapped to the MIND domain (as in Figure 4.10). On the other hand, the phrase *mental elm* is difficult to interpret, because there is inadequate conceptual structure related to ELM TREES that can be mapped to the MIND target domain.

The present analysis of linguistic metaphor cannot supplant, or substitute for, any part of Conceptual Metaphor Theory. It merely models how the structure of conceptual metaphor is communicated using language. Without the underlying cognitive structures represented in Conceptual Metaphor Theory, there would be no metaphor to communicate and no metaphoric language to study.

4.2 Predicating modifier constructions

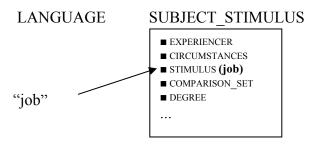
Why are the metaphoric uses of predicating modifiers so different from those of domain modifiers? As we saw in the introduction, *blood-stained wealth* and *spiritual wealth* look superficially similar, so it is striking that *blood-stained wealth* refers to literal wealth, but *spiritual wealth* does not.

The explanation for this difference has its basis in the constructions' patterns of autonomy and dependence. In domain constructions, we've seen that the head

noun/verb/adjective is the conceptually dependent element. This element evokes a frame, and the domain adjective/adverb specifies the filler of a role in this frame. For example, an *academic job* (Figures 4.6-4.7) is a particular type of job, in which the FIELD of the job is specifically ACADEMIA.

In predicating modifier constructions, this pattern of autonomy and dependence is reversed. In these constructions, the head noun/verb/adjective is the conceptually autonomous element (Langacker 1997, 2002). This can be seen from a non-metaphoric phrase such as *boring job*. Here, *job* is the autonomous element. The modifier *boring* evokes the SUBJECT_STIMULUS frame, in which a STIMULUS provokes an experience in an EXPERIENCER. In the phrase *boring job*, JOB fills the role of STIMULUS, as shown below.

Figure (4.13) The STIMULUS role in the SUBJECT_STIMULUS frame is filled by JOB



Because *job* fills a role in the frame evoked by *boring*, the item *job* can be said to elaborate the meaning of *boring* more than vice versa. (Of course, other items may in turn elaborate the meaning of *job*, but this type of complication must wait until the following chapter.)

The autonomy/dependence trends in predicating modifier and domain constructions predict the differences in their metaphoric usages. The predicating modifier constructions involve a source-domain adjective/adverb and a target-domain head (as in *blood-stained*

wealth), whereas the domain constructions require the reverse pattern (as in *spiritual* wealth). Examples of metaphoric predicating modifier constructions such as *blood-stained wealth* are given in Table (4.3) below. Once again, source-domain items are italicized and target-domain items are in boldface.

Table (4.3) Types of predicating modifier constructions

Construction	Count in	Percent of	Examples from corpus
Type	mini-corpus	total	
		constructions	
Adj-N	165	6.7 %	black humour, a dirty look, stony faces, a soft
			giggle, a juicy story, top players
Adv-V	24	1.0 %	campaigned vigorously, said tautly,
			bubbling furiously
Adv-Adj	3	0.1 %	largely rehabilitated, obliquely modernist

Predicating modifier constructions are slightly more common in my corpus than the domain constructions (7.8% as compared to 3.1%), but are relatively rare compared to the predicate-argument and preposition phrase constructions that we will discuss later.

4.2.1 How predicating modifier constructions evoke metaphor

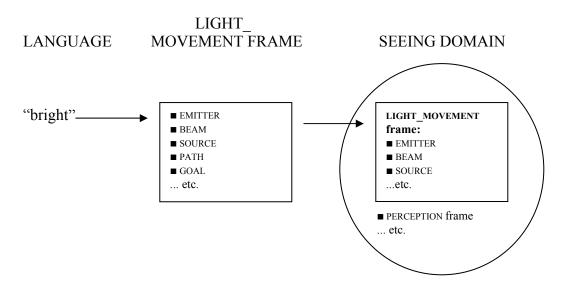
The autonomy/dependence pattern in predicating modifier constructions leads to a messier, more complicated process of metaphor evocation than we saw in the domain constructions. As we have seen, domain adjectives adverbs and compounded nominals do not evoke a semantic frame in the normal sense. For this reason, they typically **directly** evoke a metaphor input domain without profiling a particular frame within that domain. This leads to only one frame, the frame evoked by the source-domain head, being profiled in the target domain (as in *mental exercise* in Figure [4.10]).

A predicating modifier construction such as *blood-stained wealth*, or *bright student* in (8) below, differs from a domain construction in that <u>both</u> metaphor input domains can be indirectly activated by means of an intermediary frame.

(8) Andrew is a very **bright student** who performs at or above grade level in all major subjects. *nhkean.people.wm.edu/efolio/planofaction.doc*

When both metaphor input domains are indirectly activated, this ultimately profiles two frames in the target domain, rather than just one. For example, the NP *bright student* evokes KNOWING IS SEEING through a convoluted route involving two frames. One of these frames is LIGHT MOVEMENT, shown below.

Figure (4.14) The item *bright* evokes the LIGHT_MOVEMENT frame and the SEEING domain

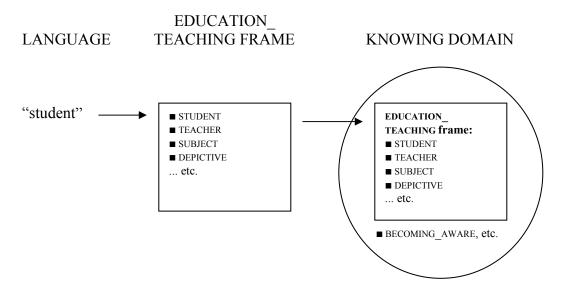


In *bright student*, the adjective *bright* evokes the SEEING source domain in the metaphor KNOWING IS SEEING, and profiles the LIGHT_MOVEMENT frame within this domain.

The SEEING domain includes all frames related to light, light-emission, and light-perception. Because it includes frames related to perception, the SEEING domain can be thought of as a **subdomain** within the BODY domain, which involves all structure related to sensory perception. Similarly, KNOWING is a subdomain within the MIND domain, which includes all frames relating to cognition and comprehension. At a more general level, then, KNOWING IS SEEING can be thought of as a submetaphor of THE MIND IS A BODY. A subdomain is like any domain in that it structures a network of related frames; but for a subdomain, this network is then embedded within the structure of a more general domain. However, for the moment I will be omitting the additional domain structure available in BODY and MIND, which is not profiled in this particular metaphoric usage.

The target domain KNOWING, like the source domain SEEING, is indirectly evoked by *bright student*. This is illustrated in Figure (4.15) below.

Figure (4.15) The item student indirectly evokes the KNOWING domain



The target-domain item *student* indirectly evokes KNOWING via the EDUCATION_TEACHING frame, just as the source-domain item *bright* indirectly evokes SEEING by means of the LIGHT_MOVEMENT frame. Each item in the phrase *bright student* therefore profiles a frame in its respective metaphor input domain, resulting in a more complex profiled target-domain structure than would be evoked by a domain construction such as *mental exercise*, as represented below (compare Figure [4.16] with the simpler structure in Figure [4.10]).

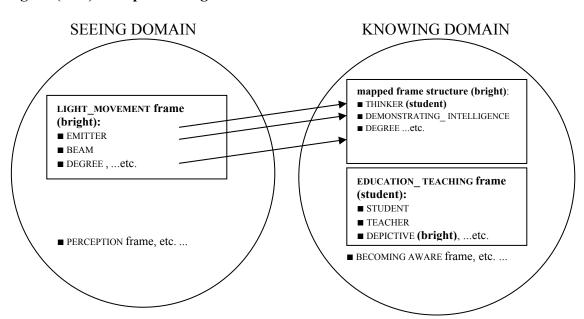


Figure (4.16) The phrase bright student evokes KNOWING IS SEEING

We can see in Figure (4.16) how the frame structure evoked by *bright* maps from the source domain to the target domain, while the frame structure evoked by *student* itself is also profiled in the target domain.

A major function of domains, as defined here, is to interrelate the structure from various frames. Here, the KNOWING domain specifies that the "student" in the EDUCATION TEACHING frame is the same "student" that is demonstrating intelligence

(mapped from the EMITTER of a BEAM in LIGHT_MOVEMENT). This identity relation is indicated by the parenthetical item "student" following the frame element name "EMITTER (student)" and frame name "EDUCATION_TEACHING (student)" in the KNOWING domain

The complex target domain structure in (4.16) is typical when both the source and target domains of a metaphor are evoked indirectly through intermediary frames.

Predicating modifier constructions (which usually involve indirect activation of both domains) can be messy and convoluted compared to domain constructions (which directly evoke the metaphoric target domain).

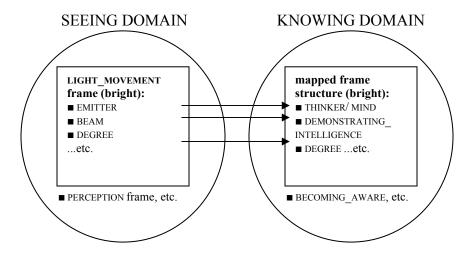
We can imagine some of the factors that might have contributed to the development of these evocation trends. Since domain adjectives/adverbs do not evoke frames of their own, they are, in a sense, the perfect target-domain items: they blandly indicate a target domain, so that the modified heads' frame structure can map to this domain without the complication of integrating the mapped structure with another profiled frame in the target domain. Predicating modifiers, on the other hand, do evoke frames and therefore are more useful as source-domain items, because they provide source-domain frame structure that can produce useful inferences when mapped to the target domain. We will see that predicating modifiers are very similar in this respect to verbs, and that there are a number of generalizations that can be made across the predicating modifier and predicate-argument constructions.

Although many predicating modifiers indirectly evoke their target domains, it is also possible for a predicating modifier to directly evoke a target domain. For example, the

phrase *bright mind*, unlike *bright student*, does not profile any particular frame in the KNOWING domain, as in Figure (4.17) below.

(9) It surely is a shame when a kid has a **bright mind** like that and uses it to get himself into trouble. home.gwi.net/~jdebell/pe/cj/v18-5.htm

Figure (4.17) The phrase bright mind evokes KNOWING IS SEEING



However, predicating modifier constructions more typically indirectly evoke both source and target domains. In this respect, they differ from the domain constructions, and look more like the predicate-argument constructions we will see later.

Before moving on from predicating modifiers to metaphoric compounds, I should note that eight predicating modifiers involved "zero-derived" denominal modifiers, as in the phrase *obsidian eyes*. Even though these modifiers are denominal, I have chosen not to label the phrases as "compounds," because their meaning and syntactic behavior most resembles that of predicating modifier constructions. In a phrase such as *obsidian eyes*, the modifier *obsidian* predicates a quality of a particular referent, *eyes*, in the manner of a predicating adjective such as *black*. Modifiers such as *obsidian* can occur in the post-

copula position, as in *his eyes were obsidian*, ¹¹ which further verifies that these denominals should be considered as predicating modifiers rather than compounded elements. ¹²

4.3 Compounds

Compounds resemble domain constructions in some ways, predicating modifier constructions in others, and have a number of quirks all their own. These constructions appear to be quite rare, as only 45 examples appeared in my corpus:

Table (4.4) Compounds in the corpus

Construction Type	Count in mini- corpus	Percent of total	Examples from corpus
		constructions	
N-N compound	45	1.8 %	heroin tsar, bargain hunting

I did not encounter any A-N compounds, or compounds in which one element was a phrase, as in *over-the-fence gossip* (cf. Benczes 2006: 7). I will therefore limit my analysis here to N-N compounds, the compounds most commonly used in metaphoric language.

4.3.1 Autonomy and dependence in compounds

The autonomy/dependence pattern found in N-N compounds looks most like the pattern in domain constructions, although the meaning and interpretation of metaphoric

¹¹ As in *Paul Nolan* by Robert Harlow, 2002:170

¹² Some compounds exhibit a more complicated mix of characteristics of predicating modifier constructions and normal N-N compounds. For example, the phrase *pillbox hat* is clearly a compound (*the hat that is *pillbox*), yet the head noun is target-domain, whereas the modifier noun is source-domain (together evoking an image metaphor, mapping the shape of a pillbox onto the shape of the hat). Image-metaphoric compounds such as *pillbox hat* may have been formed on the basis of analogy with image-metaphoric

compounds is more variable than that found in domain constructions. As Langacker (1991) notes, the first element of a normal N-N compound is conceptually autonomous, and the second is dependent. This is similar to the pattern found in domain constructions, in which the denominal domain modifier is autonomous and is followed by the conceptually dependent head noun.

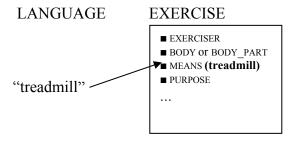
This autonomy/dependence relation can be illustrated by a non-metaphoric compound such as *treadmill exercise*, as in (10).

(10) **Treadmill exercise** also provides versatility while adding consistency to any exercise program. www.jogadog.com/faqs.html

The head noun *exercise* in this compound evokes the now-familiar EXERCISE frame.

One role in this frame, the MEANS role, is elaborated by *treadmill*:

Figure (4.18) The MEANS role in the EXERCISE frame is filled by TREADMILL



The meaning of *treadmill* elaborates part of the meaning of *exercise*, which indicates that *treadmill* is the autonomous element in the relation. The first noun in a normal N-N compound is therefore the conceptually autonomous element, while the head noun is conceptually dependent.

4.3.2 How compounds evoke metaphor

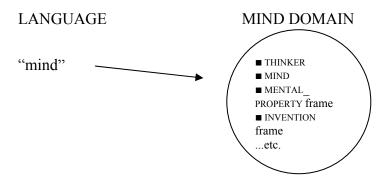
Compounds often evoke metaphor much like domain constructions. If we compare an instance of a domain construction, such as *mental exercise* (depicted in Figure 4.10), with a compound such as *mind exercise*, the phrases appear almost identical in their structure and meaning.

In *mind exercise* in (11), the complement noun *mind* evokes the target domain, just as the domain adjective and adverb *mental* and *mentally* do in (1) and (2).

(11) Have you ever wondered if your mind is normal or different? Well, do this little **mind exercise** and find out at the end! www.albinoblacksheep.com/text/six.html

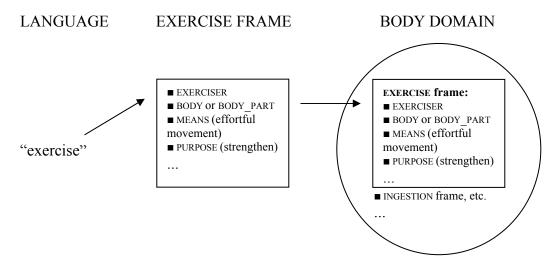
The item *mind* directly evokes the target domain MIND without recourse to an intermediate domain, in the manner of domain adjectives and adverbs. This is shown in Figure (4.19), which has the same structure as the diagram of *mental exercise* in Figure (4.9).

Figure (4.19) The item *mind* evokes the MIND domain



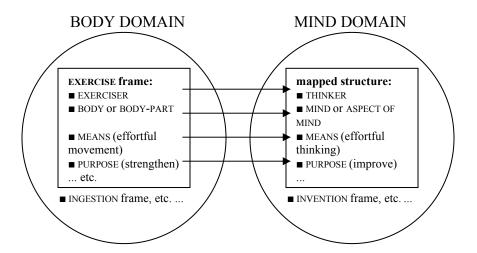
The head noun *exercise* indirectly evokes the BODY domain via the EXERCISE frame, as in Figure (4.20), repeated from Figure (4.8).

Figure (4.20) The item exercise evokes the BODY domain



Together, the items *mind* and *exercise* evoke the familiar metaphor THE MIND IS A BODY, as in Figure (4.21). The structure shown here is the same as that depicted in Figure (4.10) to illustrate the phrases *mental exercise* and *exercise mentally*.

Figure (4.21) The phrase mind exercise evokes THE MIND IS A BODY



Like *mental exercise*, the phrase *mind exercise* can be ambiguous when taken out of context: the phrase can refer to exercise to benefit the mind, exercise using the mind, or imagined physical exercise. This ambiguity results from the direct evocation of the MIND

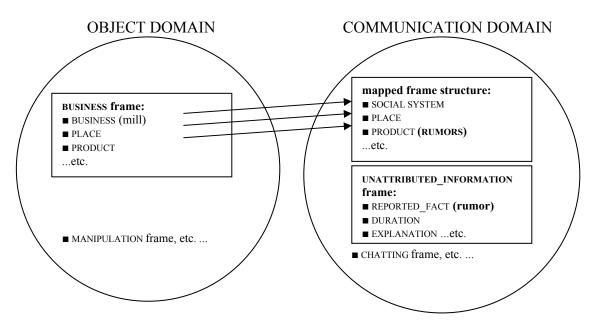
domain. When items fail to specify the frame information that is to be evoked within the target domain, it is up to the surrounding context to specify this information, as we saw in the case of *economic body*, analyzed in Section 4.1.2 and shown in (4)-(7).

Metaphoric compounds differ from metaphoric domain constructions in that they do not always directly evoke the target domain of a metaphor. In this respect, compounds resemble predicating modifier constructions more than domain constructions. For example, a diagram of the structure evoked by a compound such as *rumor mill*, as in Figure (4.22), looks more like the diagram of *bright student* (Figure 4.15) than that of *mental exercise* or *mind exercise*.

(12) Nothing, it seems, is too fanciful for Egypt's **rumour mill**; especially sex, violence and sectarianism.

BNC

Figure (4.22) The phrase *rumor mill* evokes COMMUNICATION OF IDEAS IS OBJECT TRANSFERAL (the Conduit Metaphor)



Here, *mill* evokes the BUSINESS frame and the OBJECT domain, while *rumor* also evokes its domain indirectly, via the UNATTRIBUTED_INFORMATION frame. This results in a complex structure in the target domain, in which the PRODUCT of the mill is mapped to RUMORS, which shares an identity link with the REPORTED_FACT in the UNATTRIBUTED_INFORMATION frame.

Mark Turner (1991:204-5) offers a compatible analysis of metaphoric compounds such as *rumor mill*. He correctly analyzes N-N compounds as involving an element from the target domain (the first noun) and one from the source domain (the second noun). He then asserts that the compound involves the replacement of a source-domain element with the target domain referent of the first noun. In *rumour mill*, the mill's PRODUCT, probably some type of processed grain, is "replaced" with RUMORS; that is, the PRODUCT maps onto RUMORS.

The current analysis is essentially similar to Turner's, but with two additional advantages. First, frame diagrams show exactly which element of a frame is "replaced" by an element from another frame. If alternative "replacements" are possible, then this is also apparent in the diagram. Second, the current analysis is part of a larger model that encompasses many types of constructions used in metaphor. This larger model allows for comparisons between different types of metaphoric constructions, and is able to capture compounds' similarity to domain constructions in terms of autonomy/dependence, as well as their resemblance to predicating modifier constructions in their ability to indirectly evoke both the target and source domains.

4.4 Predicate-argument constructions

The predicate-argument constructions are the most prevalent of the metaphoric constructions (47% in my corpus). The percentages of intransitive, transitive and ditransitive predicate-argument constructions are broken down in Table (4.5):

Table (4.5) Types of predicate-argument constructions

Construction	Count in	Percent of	Examples from corpus
Type	mini-corpus	total	
		constructions	
Intransitive	515	20.9 %	your morals reek, the cinema beckoned, the
			riots blazed
Transitive	648	26.3 %	he built power , two peopleare chasing the
			same world title, my faculty of speech was
			deserting me
Ditransitive	2	0.1 %	Meredith flung him an eager glance

In a metaphoric predicate-argument construction, at least one argument noun evokes the target domain of the metaphor, while the predicate evokes the source domain. This pattern is easiest to see in intransitive constructions, in which the subject evokes the target domain and the verb evokes the source domain. Transitive constructions are more complicated, in that either the subject or the object of the verb may evoke the target domain, or both may evoke the same target domain (Section 4.4.3). In ditransitive constructions (4.4.4), the direct object is usually responsible for evoking the target domain. This is due to the construction's semantics – as analyzed by Goldberg (1995) – which place certain restrictions on the roles that subjects and indirect objects can have in the construction. These restrictions, in turn, limit the roles of subjects and indirect objects in evoking metaphor.

4.4.1 How predicate-argument constructions evoke metaphor

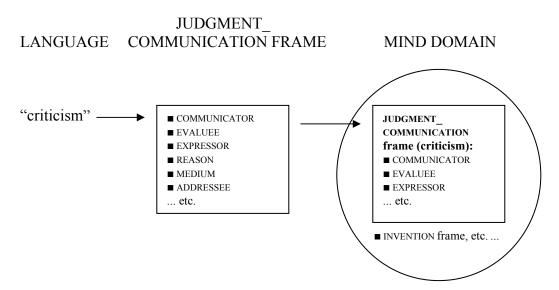
Predicate-argument constructions, like the constructions in previous sections, involve a dependent element that evokes the source domain and (at least) one autonomous element that evokes the target domain. In several respects, predicate-argument constructions resemble predicating modifier constructions. Like predicating modifier constructions (and compounds), predicate-argument constructions can indirectly activate both domains of a conceptual metaphor. This results in two profiled frames, rather than the one profiled frame found in domain constructions – and consequently results in a more complicated target-domain structure.

For example, the evocation pattern of *the criticism stung him*, as in (13) below, resembles that of *bright student* in the previous section, rather than that of a domain construction such as *mental exercise*.

(13) Jalen Rose tried to shrug it off, but the **criticism stung** him. www.detnews.com/2005/pistons/0510/31/D04-366359.htm

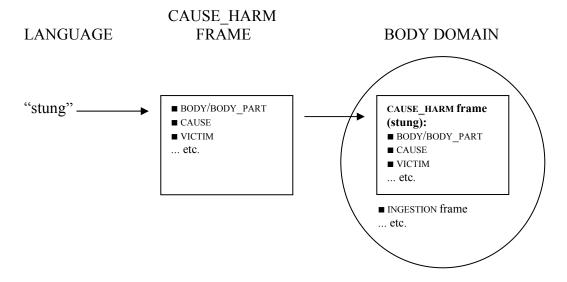
In the clause *the criticism stung him*, the item *criticism* indirectly evokes the MIND domain, as shown in Figure (4.23).

Figure (4.23) The item *criticism* indirectly evokes the MIND domain



The predicate *stung* indirectly evokes the BODY domain, as shown below. (For the time being, we will ignore the "domain-neutral" object pronoun *him*; domain-neutral items are introduced in the next subsection.)

Figure (4.24) The item stung evokes the CAUSE HARM frame and the BODY domain



The combination of *criticism* and *stung* in a predicate-argument construction evokes THE MIND IS A BODY, as in Figure (4.25).

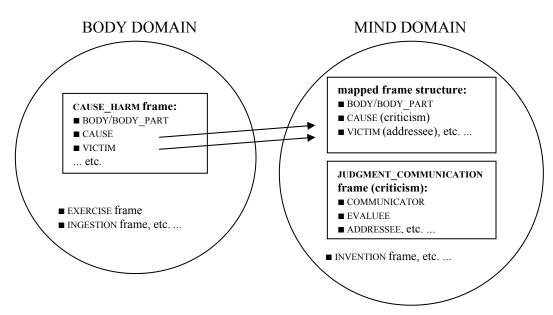


Figure (4.25) The clause the criticism stung him evokes THE MIND IS A BODY

Both *criticism* and *stung* profile frames: *stung* evokes the CAUSE_HARM frame, which maps to the MIND domain, where it is integrated with the JUDGEMENT_COMMUNICATION frame profiled by *criticism*, as shown above.

The BODY domain makes it possible for the two profiled frames to be integrated and interpreted. Here, this is visually represented by the parenthetical information that the CRITICISM evoking the JUDGEMENT COMMUNICATION is the same CRITICISM that is the CAUSE of mental harm (via the mapped CAUSE_HARM frame), and that the VICTIM of the harm shares an identity link with the ADDRESSEE of the criticism (who is probably, though not necessarily, also the EVALUEE being criticized).

It seems, then, that predicate-argument constructions behave like predicating modifier constructions in two important ways: (1) they involve the same domain indication pattern (in which the predicating element is dependent, and evokes the source domain); and (2) they can indirectly evoke both domains by way of intermediate frames.

On the other hand, predicate-argument constructions differ from their predicating modifier relatives in that they are more likely to involve items which are neutral between domains, such as the pronoun *him* in *the criticism stung him*. The next section will describe these items and explore their particular prominence in indirect object constructions.

4.4.2 Domain-neutral items

The analysis of predicate-argument constructions hinges on the identification of items which are **neutral** between domains – that is, items which could refer to structure from either the source or the target domain. Since these items are consistent with both domains, they cannot be solely responsible for the evocation of either domain. These items typically fill the same constructional slots as target-domain items but cannot evoke domains on their own. For example, let's return to example (13), adapted into (14) below, and the first two examples of transitive constructions in Table (4.5), adapted into (15)-(16).

- (14) The criticism stung him.
- (15) Two people are chasing the same world title.
- (16) He built power.

In (14)-(16), the pronoun *him*, the NP *two people*, and the pronoun *he* tell us only that their referents are animate and probably human. HUMAN BEINGS are elements in innumerable frames and can evoke countless domains. Given certain source-domain frames, such as LIGHT MOVEMENT in the SEEING domain (evoked by *bright* in *bright*

student), reference to a human being such as a *student* will be enough to activate the target domain – in this case, KNOWING. Students never emit light, and have no role in the frame of LIGHT_MOVEMENT, so the item *student* will force *bright* to be understood metaphorically, as we saw diagrammed in Figure (4.21).

In (13)-(16), however, human beings (or at least purposeful agents) are elements in frames in both domains. ¹³ This is demonstrated by comparison with the non-metaphoric examples (17)-(19) below, in which the target-domain NPs in (13)-(16) have been replaced, but the domain-neutral NPs remain:

- (17) The bee stung him.
- (18) Two people are chasing the same dog.
- (19) He built a birdhouse.

The metaphoric interpretations of (14)-(16) are no longer available in (17)-(19), even though the NPs *him, two people,* and *he* are still present. These minimal pairs show that *him, two people,* and *he* are not sufficient to evoke a metaphoric target domain, even though they occur in potentially target-domain slots in a predicate-argument construction. The items are equally compatible with either a source-domain or a target-domain interpretation.

Domain-neutral items are common in transitive predicate-argument constructions such as (14)-(16), as the next section shows. However, these items are even more

evoke either domain of the Object Event-Structure Metaphor.

Example (15) involves the metaphor SOCIAL STRUCTURES ARE PHYSICAL STRUCTURES (specifically BUILDINGS), based on the primary metaphor POWER/STATUS IS UP. Only human beings create buildings, and

¹³ Example (14) evokes the Object Event-Structure Metaphor, specifically the special case TRYING TO ACHIEVE A PURPOSE IS HUNTING. Only volitional agents hunt; and only volitional agents try to achieve purposes. A volitional AGENT is an element in both the HUNTING frame and the PURPOSE frame, and can

abundant in ditransitive constructions – especially as indirect objects – for a combination of reasons that we'll unravel in Section 4.4.4.

4.4.3 Transitive constructions

Metaphoric intransitive constructions are necessarily very regular. These constructions involve only one argument (the subject), and it must evoke the target domain in order for the clause to evoke a complete metaphor. Transitive constructions, which involve both a subject and an object, are somewhat more flexible.

Metaphoric transitive constructions may follow one of three patterns. In the first type, the subject evokes the target domain and the object is domain-neutral. It is also possible for the object to evoke the target domain, in which case the subject will be domain-neutral. The third pattern occurs when both subject and object help evoke the target domain. These three possibilities are sorted out in the table below.

Table (4.6) Types of transitive constructions

Transitive Construction	Count in	Percent of total	Examples from corpus
	mini-corpus		
Type		constructions	
Target-domain	51	2.1 %	my faculty of speech was <i>deserting</i> me, the
Subj.			criticism stung him
Target-domain	407	16.9 %	two people are chasing the same world title,
Obj.			He built power , Miller <i>piles on</i> the earnestness ,
			Clinton wooed the Irish vote
Target-domain	190	7.9 %	surprise hammered her heart, the remark
Subj. and Obj.			soothed Yussuf's pride

The pattern in the central row of Table (4.6), in which the object evokes the target domain and the subject is domain-neutral, is by far the most common. As we saw in the previous section, NPs denoting human beings are often domain-neutral, because HUMAN

BEINGS can fill roles in countless frames in many domains. The prototypical subject is animate and human (cf. Goldberg 1995) so it is likely for a transitive sentence's subject to be a pronoun, noun or name that denotes a human being.

In addition, a large number of metaphors map one kind of human activity onto another. For example, the sentence *two people are chasing the same world title* evokes the metaphor TRYING TO ACHIEVE A GOAL IS HUNTING (a special case of the Object Event-Structure Metaphor). This metaphor maps one human activity, HUNTING, onto another, TRYING TO ACHIEVE A GOAL. Similarly, the sentence *he built power* evokes the metaphor SOCIAL SYSTEMS ARE STRUCTURES, in which BUILDING A STRUCTURE maps to CREATING A SOCIAL SYSTEM such as a system of power and influence. Like TRYING TO ACHIEVE A GOAL IS HUNTING, this metaphor maps one human activity onto another. The preponderance of this type of conceptual metaphor ensures that the subjects of metaphoric transitives will frequently denote human beings.

Even though NPs denoting human beings are most commonly subjects, these NPs are also often found as objects. This leads to a certain number of domain-neutral objects in metaphoric transitive constructions, as represented in the first row in Table (4.6). These include examples such as *the criticism stung him*, which we saw diagrammed in Figure (4.25), repeated as Figure (4.26).

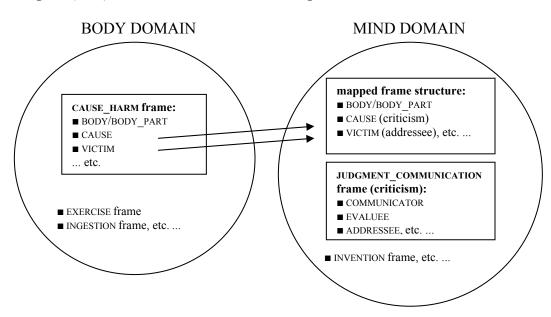


Figure (4.26) The clause the criticism stung him evokes THE MIND IS A BODY

The pronoun *him* is domain-neutral because it denotes a human being, and a HUMAN BEING can equally well fill the VICTIM role in the BODY domain, or the ADDRESSEE role in the MIND domain. The pronoun therefore does not exclusively evoke either one of these domains (though one interpretation will be preferred in a given context).

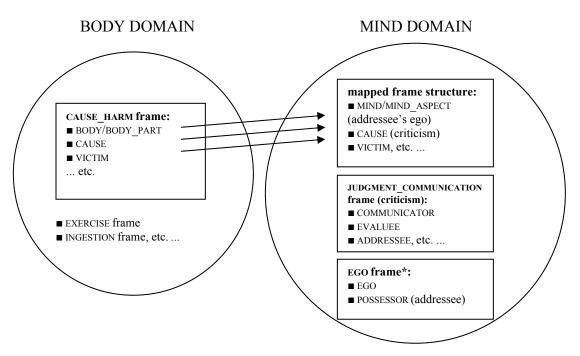
What happens when both arguments in a transitive construction evoke domains? In fact, this can be rather complex. An explanation of these transitives requires a more indepth look at autonomy and dependence in transitive constructions, and at the patterns of source-domain and target-domain items associated with these autonomy/dependence trends.

As an example, take the clause *all the criticism hurt his ego*, as in (20):

(20) Anyways, all the criticism hurt his ego, so he ran home to mommy... www.nfl-fans.com/index.php?showtopic=54346

Like the clause *the criticism stung him*, this sentence evokes THE MIND IS A BODY. However, there are certain crucial differences which can be seen by comparing Figure (4.26) with (4.27) below.

Figure (4.27) The clause the criticism hurt his ego evokes THE MIND IS A BODY



This example differs from the clause *the criticism stung him*, in which *him* is a domain-neutral item (because human beings can be either literally or metaphorically "stung," which allows the item *him* to be compatible with either a source-domain or a target-domain interpretation). In *the criticism hurt his ego*, however, the object NP *his ego* is not compatible with a literal interpretation, because an "ego" is an abstraction that cannot be literally injured. The noun *ego* is not domain-neutral, and it plays a direct role in evoking the MIND target domain.

Another distinction between Figure (4.26) and (4.27) is the number of profiled frames. The noun *ego* evokes the MIND domain by way of the EGO frame, whereas

criticism evokes the MIND domain via the JUDGMENT_COMMUNICATION frame. This results in three profiled frames in the MIND domain in Figure (4.27), instead of two as in Figure (4.26). Domain-neutral items, of course, do not profile any particular frames.

The complex structure in Figure (4.27) is made possible by the autonomy/dependence relations that underlie transitive constructions. Unlike the other constructions we have observed, transitive constructions involve <u>two</u> autonomy/dependence relations that are relevant in metaphoric language.

The first relation appears when the verb and its direct object combine to from a constituent, as described by Langacker (1991:172-3). Within this constituent, the direct object supplies the autonomous element and the verb supplies the dependent element. As always, this autonomous element then elaborates the conceptual structure supplied by the verb. The conceptual structure evoked by *hurt* appears in Figure (4.27) as the "mapped frame structure". We can see that *ego* fills one of the roles in this frame (the

The second relevant autonomy/dependence relation comes into play when we consider the full clause *the criticism hurt his ego*. The subject, *the criticism*, now elaborates the structure evoked by the VP constituent *hurt his ego*. This can be seen in Figure (4.27) in the "mapped frame structure," in which the CAUSE role is filled by CRITICISM. Note that nothing in the frame evoked by criticism itself (the JUDGMENT_COMMUNICATION frame) is elaborated by the structure evoked by the other sentence elements. This corroborates the hypothesis that *criticism* is autonomous relative to the other sentence elements.

The two autonomy/dependence relations in (20) – and the two target-domain items that supply the autonomous elements of these relations – allow a more specific structure to be evoked in the target domain than would otherwise be possible. Each element evokes a frame in either the source or the target domain, resulting in three profiled frames total (either in the target domain or mapped to the target domain).

Additionally, each autonomous element elaborates a role in the mapped frame structure. The fillers of these roles are also the fillers of the other evoked frames or their elements. We saw that the CRITICISM that evokes the JUDGMENT_COMMUNICATION frame will have the same filler as the CAUSE in the mapped frame structure; and the EGO in the EGO frame will have the same filler as the MIND_ASPECT role in the mapped frame structure. In contrast, an example such as *the criticism stung him* does not evoke the EGO frame, and does not specify the filler of the MIND_ASPECT role in the mapped frame structure.

We'll next see the kind of complexity found in ditransitives when we look at constructional combinations in Chapter 6. Outside of constructional combinations such as Turner's xyz (x is the y of z) construction, however, predicate-argument constructions are the only metaphoric constructions that can involve multiple target-domain items.

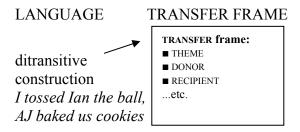
4.4.4 Ditransitive constructions

Ditransitive constructions, like transitive constructions, involve multiple autonomous arguments. Theoretically, all of these arguments could contribute to the evocation of the target domain in metaphoric ditransitives; but in practice, only the direct object typically has this function. This limitation is the result of certain semantic constraints on

ditransitive constructions, discussed in Goldberg (1995), which I argue have the effect of encouraging domain-neutral items. (Indirect object constructions, such as *she gave it to me*, involve preposition phrase constructions and will be discussed later).

The ditransitive construction has two relevant requirements. First, it necessarily involves transfer or intended transfer (the TRANSFER frame, shown below); and second, it requires a volitional subject DONOR and indirect-object RECIPIENT (Goldberg 1995:Ch. 6).

Figure (4.28) The ditransitive construction evokes the TRANSFER frame



The ditransitive has a limited range of metaphoric uses because the TRANSFER frame structures a limited range of source domains, which map to a limited range of target domains. For example, the Conduit Metaphor (COMMUNICATION OF IDEAS IS OBJECT TRANSFERAL, a submapping of THE MIND IS A BODY), maps the TRANSFER frame from the BODY domain to the MIND domain, as in metaphoric sentences such as (21) below.

(21) Gwen gave Ian a great idea.

The COMMUNICATION frame in the MIND domain requires two volitional, self-aware beings who are capable of communication (a COMMUNICATOR and an ADDRESSEE). Any subject and indirect object who fulfill the volitionality requirements for the Conduit Metaphor ditransitive, as in (21), will necessarily fulfill the volitionality requirements for the non-metaphoric ditransitive. As a result it is generally possible to change only the

direct object of a Conduit Metaphor ditransitive and obtain a non-metaphoric sentence, such as (22) below.

(22) Gwen gave Ian a great book.

Gwen and Ian, as human beings, have both minds and bodies and could evoke either the MIND or BODY domain. They are therefore domain-neutral items. It is not the subject Gwen or the indirect object Ian that evokes the BODY domain; instead, it is the ditransitive construction (and here, the verb give) that evokes the TRANSFER frame, which structures the BODY domain. Likewise Ian and Gwen cannot evoke the target domain MIND. Here, only the direct object idea in (21) evokes the MIND domain (and profiles the COMMUNICATION frame). The ditransitive construction, which relates the argument idea to the predicate gave, informs us that TRANSFER should map to the MIND domain, and that sentence (21) should be interpreted metaphorically.

In Conduit Metaphor ditransitives – which are overwhelmingly the most common metaphoric ditransitives – we typically look to the direct object to identify the metaphoric target domain. The subject and indirect object generally refer to animate, volitional beings – and as a result of the restrictions on the ditransitive and those on the COMMUNICATION frame, the subject and indirect object slots will, in this case, necessarily be filled with domain-neutral items.

An exception to this trend in Conduit Metaphor ditransitives is alluded to by Bergen and Chang (2004), who note that the indirect object of a metaphoric ditransitive can (metonymically) denote an institution, as in (23) below.

(23) Mary tossed *The Enquirer* a juicy tidbit.

(24) #Mary tossed *The Enquirer* a beach ball.

As Bergen and Chang observe, an institution cannot be the physical RECIPIENT of a physical object, because it has no hands or other mechanisms to physically catch a ball (2004:183), as in (24); but an institution can be the "ADDRESSEE" of COMMUNICATION, as in (23). This is possible thanks to an INSTITUTION FOR PERSON metonymy, in which the name "*The Enquirer*" stands for the employee or representative that learned new information from Mary. This metonymy works less well if the PERSON is a physical RECIPIENT, as in (24), because the institution does not play a salient role in the person's physical routines, such as catching a beach ball. The function of most metonymies is to emphasize salience by naming the most salient part or element in a frame. The PERSON is more salient than the INSTITUION in (24), which makes a INSTITUTION FOR PERSON metonymy impossible. The metonymy can only operate if the person is filling an ADDRESSEE role on behalf of the institution, as in (23).¹⁴

An NP denoting an institution in the indirect object slot of this construction must, therefore, be interpreted as an ADDRESSEE of COMMUNICATION rather than a RECIPIENT of an OBJECT TRANSFER. The name *The Enquirer* in (23) will evoke the COMMUNICATION frame and domain, and will ensure that the construct is given a metaphoric interpretation. This frees up the direct object, which is no longer constrained to evoke the metaphoric target domain on its own – permitting a source-domain NP in this slot, such as *a juicy tidbit* in (23).

.

¹⁴ Example (24) is interpretable with a different meaning: If the representatives of various institutions are enjoying a beach retreat, then the representative of *The Enquirer* might be referred to by the name of this institution. However, this scenario involves a CHARACTERISTIC FOR PERSON metonymy rather than an INSTITUTION FOR PERSON metonymy. This difference is evident because in the beach retreat scenario, the person must be uniquely identifiable by the characteristic of representing *The Enquirer*. This is not the case

The source-domain direct object in (23) is possible only because of the multiple autonomy-dependence relations in predicate-argument constructions. Complements in predicate-argument constructions typically evoke the target domain or else are domain-neutral; a source-domain direct object is possible in (23) because this object forms a unit with the verb via one autonomy-dependence relation. This unit can then, in turn, constitute the dependent element in other relations, such as the relation between the indirect object and the verb-object combination, or the relation between the subject and the verb phrase.

This analysis is supported by examples such as (25). Here, the target-domain indirect object *The Enquirer* is replaced, and the NP *a juicy tidbit* is interpreted non-metaphorically.

(25) Mary tossed her dog a juicy tidbit.

The metaphoric interpretation found in (23) disappears in (25), when the target-domain indirect object is gone. This proves that the indirect object *The Enquirer* in (23) is the element most responsible for the sentence's metaphoric interpretation.¹⁵

Conduit Metaphor ditransitives, such as (23), permit an indirect object which is not domain-neutral. A second, rarer metaphor can also produce target-domain ditransitives: the Object Event-Structure Metaphor, also known as CAUSATION IS OBJECT TRANSFERAL. Unlike the Conduit Metaphor, this metaphor does not require participants which are animate or volitional in the target domain. Causation, unlike communication, does not

¹⁵ Sentences like (23) seem to be rare: there were no examples of either source-domain indirect objects or target-domain direct objects in the corpus of metaphoric sentences referred to throughout this paper.

in the INSTITUTION FOR PERSON metonymy, which operates precisely <u>because</u> the person's identity is unimportant.

require animate participants. CAUSATION IS OBJECT TRANSFERAL is evident in the following examples from Goldberg (1995:146):

- (26) The paint job gave the car a higher sale price.
- (27) The tabasco sauce gave the baked beans some flavor.
- (28) The music lent the party a festive air.

In these examples, the subject, object, and indirect object all represent the target domain. Only the verb *gave* or *lent* evokes the source domain of OBJECT TRANSFERAL. As Goldberg notes (1995:146), the subject and indirect objects of (26)-(28) fulfill the ditransitive's animacy and volitionality requirements in the source domain (in which they are animate beings transferring an object), although these requirements are not met by the subject and indirect object in the target domain (a *paint job* and a *car* are not literally animate or volitional).

In both Conduit Metaphor and CAUSATION metaphor ditransitives, the subject, object and indirect object all must be items which are consistent with the target domain (either which evoke the target domain, as in CAUSATION usages, or which are domain-neutral, as in Conduit Metaphor usages). Both types of metaphoric ditransitives therefore follow the general pattern of predicate-argument constructions, in which the head evokes the source domain and one or more arguments evoke the target domain. It is striking that despite the constraints placed on metaphoric indirect objects by the ditransitive construction and by the Conduit Metaphor, that when domain-indicating indirect objects do occur, they

follow the same domain evocation pattern demonstrated by all predicate-argument constructions.

4.5 Preposition phrase constructions

The metaphoric preposition phrase constructions are the most varied of the basic classes of constructions we've seen in this chapter. Syntactically, they may be VP-PPs, NP-PPs, or even possessive-possessed NPs. Semantically, the preposition phrase constructions can map a wider range of frame relations than the other classes of constructions, since prepositions are uniquely suited to specify relations between frame elements. The syntactic and semantic flexibility of preposition phrase constructions helps explain why these constructions are so common: in fact, they account for over a third of the metaphoric constructions in the corpus, as shown below. ¹⁶

Table (4.7) Types of preposition phrase constructions

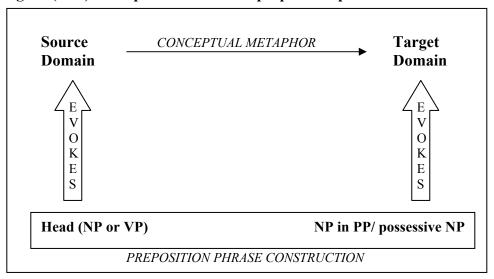
Construction Type	Count in mini- corpus	Percent of total	Examples from corpus
	F	constructions	
Head-PP	829	33.6 %	a taste of his temper, the barons of beer, the divisions in the nation, barriers between religions
Possessive NP	16	0.6 %	her mind's eye, a child's links to a birth parent

Despite this enormous range of variation, the preposition phrase pattern of domain evocation is remarkably consistent. This pattern is shown in Figure (4.4), repeated as Figure (4.29).

118

¹⁶ I am classifying possessive constructions as preposition phrase constructions for two reasons: first because of their similarity to preposition phrase constructions with *of*, and second because languages with more cases and fewer prepositions than English, such as Finnish, assign a metaphor evocation function to case endings which resembles that of English prepositions.

Figure (4.29) Metaphor evocation in preposition phrase constructions



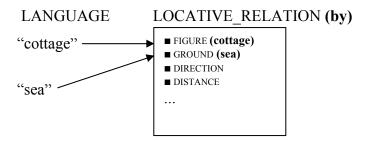
All preposition phrase constructions involve a source-domain head noun or verb, and a target-domain NP within a PP, or a target-domain possessive NP, as in Figure (4.29).

4.5.1 Relative autonomy and dependence in preposition phrase constructions

Autonomy and dependence are complicated issues in preposition phrase constructions. The preposition itself, with its schematic, relational, meaning, is clearly dependent relative to the open-class items in the phrase (Langacker 1991, 2000). However, the autonomy-dependence relation between the two open-class items themselves is less clear-cut.

In most NP-PPs, the noun within the preposition phrase designates a landmark, and the head noun refers to its trajector. The trajector is frequently an entity spatially oriented relative to the landmark, as in *a cottage by the sea* or *the guy behind me*. In examples such as these, the preposition evokes a frame with slots for a FIGURE and a GROUND, as shown in Figure (4.30).

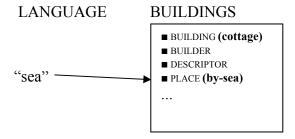
Figure (4.30) The FIGURE and GROUND roles in the LOCATIVE_RELATION frame are filled by COTTAGE and SEA in a cottage by the sea



Both nominal elements elaborate roles in the frame evoked by the preposition, so there is no question that the preposition is conceptually dependent relative to both of these elements.

However, it could be argued that a COTTAGE necessarily in located in a PLACE, whereas the SEA is not necessarily a reference point for fixing the PLACE of other referents. At the same time that *cottage* elaborates a role in the frame that *by* evokes, the item *cottage* also evokes its own BUILDINGS frame, in which the PLACE role is elaborated by SEA.

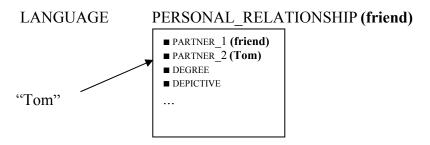
Figure (4.31) The PLACE role in the BUILDINGS frame is filled by SEA in a cottage by the sea



If Figure (4.31) is accurate, and the meaning of *cottage* is elaborated by SEA more than SEA is elaborated by COTTAGE, then *sea* can be said to be autonomous relative to *cottage*, even though both *cottage* and *sea* are conceptually autonomous relative to *by*.

In some preposition phrase constructions, the relative autonomy and dependence of the open-class items is even clearer. For example, Langacker (1991: 38) describes how the trajector in an *of*-construction may be indicated by a relational noun. In this case, the landmark is the entity with respect to which the relationship is understood, as in *father of the bride* or *a friend of Tom*.

Figure (4.32) The PARTNER_1 role in the PERSONAL_RELATIONSHIP frame is filled by FRIEND in a friend of Tom

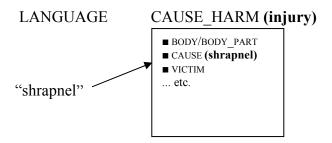


The function of the preposition *of* in a phrase such as *a friend of Tom* is not to evoke a frame, but merely to indicate that the noun within the *of*-phrase should be understood as elaborating a particular role within the head noun's frame. Here, the noun within the *of*-phrase (*Tom*) is unambiguously autonomous relative to the head noun (*friend*).

Autonomy and dependence are similarly clear-cut in instances of nominalized verbs, such as the noun *injury* in the phrase *an injury from shrapnel*. The arguments of a verb often have counterparts in *by*-phrases, *from*-phrases or *of*-phrases that modify a nominal version of the verb's root, such as *shrapnel* in the *from*-phrase in *an injury from shrapnel*. These phrases incorporate nouns that specify participants in the process denoted by the nominalized verb (Langacker 1991: 37). In the noun phrase *an injury from shrapnel*, for example, the element *shrapnel* fills the CAUSE role in the CAUSE HARM frame, just as

shrapnel fills the CAUSE role in the CAUSE_HARM frame as evoked by a clause such as *shrapnel injured him*. This role-filler relation is shown below.

Figure (4.33) The CAUSE role in the CAUSE_HARM frame is filled by SHRAPNEL in an injury from shrapnel



A noun such as *injury* evokes the CAUSE_HARM frame in the same manner that the verb *injure* does; and the item *shrapnel* elaborates a role in the CAUSE_HARM frame whether it is part of the phrase *injury from shrapnel*, or an argument of the verb *injure*. In both the NP *injury from shrapnel* and a sentence such as *the shrapnel injured him*, then, the noun *shrapnel* is conceptually autonomous, because it elaborates the frame evoked by *injure* or *injury*.

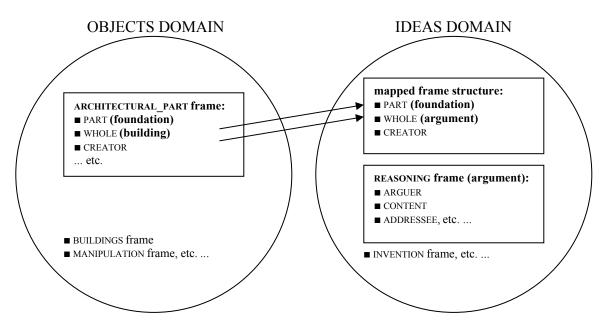
4.5.2 How preposition phrase constructions evoke metaphor

Croft (2003) makes an argument for the relative dependence of nouns within metaphoric preposition phrases. His argument is based on the prevalence of relational nouns in metaphoric preposition phrase constructions, such as the relational noun *friend* we saw as the head of *a friend of Tom* in Figure (4.32). Croft's favorite example is the phrase *mouth* of the river, in which the head noun *mouth* is relational in that it represents a profiled part of a whole (in the source domain, a BODY). The whole is elaborated by river in the target

domain, rendering RIVER a very salient part of the meaning of *mouth* in *mouth of the* river.

A similar example from my corpus is *the foundation of an argument*, which reflects the conceptual metaphor THEORIES ARE BUILDINGS, a special case of IDEAS ARE OBJECTS. *Foundation* is a relational noun, denoting a profiled part of a whole, in this case, a BUILDING. This BUILDING maps to the ARGUMENT evoked by the phrase *the foundation of an argument*, as shown below.

Figure (4.34) The phrase the foundation of an argument evokes THEORIES ARE BUILDINGS, a subcase of IDEAS ARE OBJECTS

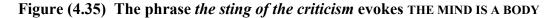


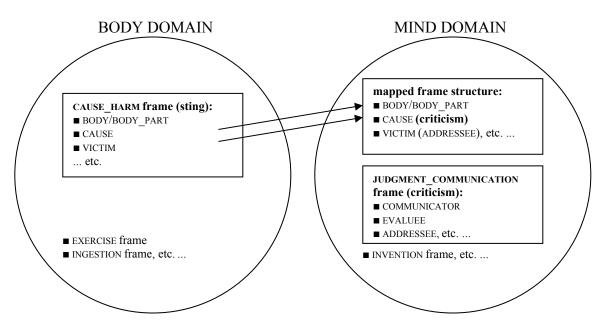
As far as relational nouns are concerned, Croft's analysis seems relatively straightforward. Relational nouns such as *foundation* evoke frames that are elaborated by the noun within the PP. It seems that these relational nouns are, as Croft suggests, conceptually dependent relative to these autonomous nouns within the preposition phrases. These autonomous nouns are also responsible for indicating the target domain of a metaphoric preposition phrase construction; for example, *river* in *mouth of the river* and

argument in foundation of an argument indicate the domains that the phrases are actually referring to, whereas the embedded nouns mouth and foundation are conceptually dependent and evoke the source domains of these metaphoric phrases. The pattern that Croft (2003) observes in metaphoric preposition phrase constructions with relational nouns follows the general trend in which autonomous elements evoke target domains and dependent elements evoke source domains.

Another common class of metaphoric preposition phrase constructions can be shown to follow the pattern noted by Croft (2003). When a verb is nominalized, the verb's arguments often correspond to PPs, as Langacker (1991: 37) describes. For example, the clause *good and evil struggled* evokes the same metaphor as the NP-PP *the struggle* between good and evil; the clause European ideas emigrated evokes the same metaphor as the emigration of European ideas; and it steals the self/the self was stolen evokes the same metaphor as the stealing of the self (these are NP-PPs from the corpus).

The pattern of metaphor evocation in these NP-PPs is not so different from the pattern found in the corresponding predicate-argument constructions. For example, the structure evoked by the phrase *the sting of the criticism*, as in Figure (4.35), is nearly identical to that evoked by the clause *the criticism stung him* (Figure [4.26]).





The CAUSE role (in the CAUSE_HARM frame evoked by *sting*) is mapped to the target domain MIND, where it is filled by the element CRITICISM. Part of the frame evoked by *sting* is elaborated by CRITICISM, demonstrating that *sting* is the conceptually dependent element in the relation as well as the source-domain item. This is equally true in the clause *the criticism stung him* and the preposition phrase construction *the sting of the criticism*.

The "oblique agents" of passive verbs closely resemble preposition phrases such as *of the criticism* in Figure (4.35). In cognitive grammars, "oblique agents" are not transformed from verbal arguments; they are merely nominals that elaborate the meaning of the verb via a preposition phrase construction (Langacker 1991: 37, 201). There is, as a result, no difference in a cognitive grammar between the preposition phrases that modify nouns and verbs.

Both verbal heads and nominal heads of preposition phrase constructions are conceptually dependent on the noun within the preposition phrase. Preposition phrases modifying verbs in passive constructions usually occur in *by*-phrases, as in (29).

- (29) A disused shop in Howard Street, North Shields, was gutted by fire.
- (30) Fire gutted a disused shop in Howard Street, North Shields.

In terms of the image metaphor involved in the above sentences, there is no difference between the passive sentence (29) and the active (30). The agent, whether subject or oblique, is target-domain while the verb is source-domain. In either case, the element denoting an agent is autonomous, whereas the verb head is conceptually dependent (cf. Langacker 1991).

Several varieties of preposition phrase constructions, even *by*-phrases in passive constructions, appear to behave like the relational noun type analyzed by Croft. Based on these trends, it seems reasonable to hypothesize that in all preposition phrases, the noun within the PP is conceptually autonomous relative to the head modified by the preposition phrase. This hypothesis is supported by the metaphoric preposition phrase constructions in my corpus, which involved a source-domain head and a target-domain noun within the PP.

As a final observation on preposition phrase constructions, the metaphoric uses of these constructions can involve indirect evocation of both domains, and therefore two profiled frames. This can be seen in Figure (4.35) diagramming *the sting of the criticism*, in which *sting* evokes the CAUSE_HARM frame in the BODY domain and *criticism* evokes the JUDGMENT COMMUNICATION frame in the MIND domain. (Indirect evocation of these

domains was demonstrated in the case of the clause *the criticism stung him* in Section 4.4.1).

Preposition phrase constructions, like the predicating modifier and predicateargument constructions, occasionally directly evoke a target domain. For example, in the phrase *an image in the mind*, the item *mind* directly evokes the MIND domain just as it does in the compound *mind exercise* or the domain construction *mental exercise*.

4.5.3 Frame relations in metaphoric preposition phrase constructions

Although metaphoric preposition phrase constructions follow the general trends of autonomy/dependence set by other constructions, preposition phrases are unique in the range of frame relations that they can map. Two otherwise identical preposition phrase constructions can cause very different relations to be mapped if they include different prepositions. For example, let us look at the NP-PP *an escape from poverty*, which evokes the Location Event-Structure Metaphor, as illustrated in Figure (4.36).

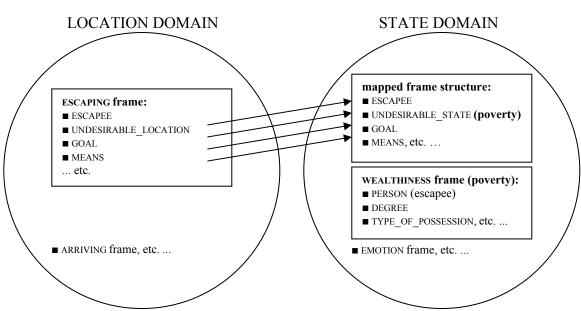


Figure (4.36) The NP an escape from poverty evokes STATES ARE LOCATIONS

In a non-metaphoric phrase such as *escape from prison*, the NP *prison* denotes the UNDESIRABLE_LOCATION element in the ESCAPING frame. In the metaphoric phrase *escape from poverty*, then, the NP denotes the target-domain element that is mapped from the UNDESIRABLE_LOCATION element – namely, an UNDESIRABLE_STATE such as POVERTY. This relation is essential to the comprehension of any metaphor evoked by the items *poverty* and *escape*. It is lacking when the noun *escape* is used without a preposition; for example, compounds cannot easily use the nouns *escape* and *poverty* to evoke a metaphor (#poverty escape, #impoverished escape).

The preposition *from* makes it clear that its dependent noun denotes the UNDESIRABLE_LOCATION in the ESCAPING frame or an element sharing an identity link with this UNDESIRABLE_LOCATION. A different preposition will specify a different relation: *an escape into poverty* (such as might benefit a disillusioned rich person) indicates that the GOAL state of the ESCAPING maps to POVERTY; an *escape via poverty* maps the MEANS of the escape (from some other predicament, such as a lawsuit) onto POVERTY. These variations are shown in Figures (4.37) and (4.38) below. Notice that in (4.36), the UNDESIRABLE_LOCATION maps onto POVERTY; in (4.37), the GOAL maps onto POVERTY; and in (4.38), the MEANS maps onto POVERTY.

Figure (4.37) The NP an escape into poverty evokes STATES ARE LOCATIONS

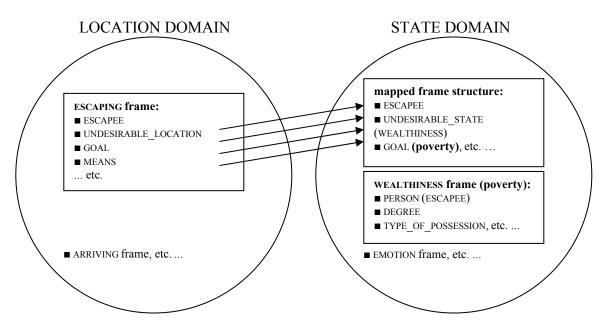
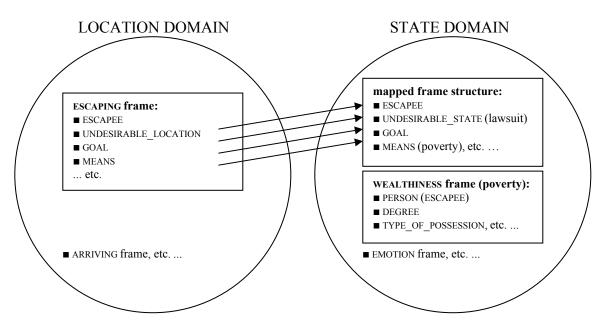


Figure (4.38) The NP an escape via poverty evokes STATES ARE LOCATIONS



The variations in Figures (4.36)-(4.38) are only possible using a preposition phrase construction. In English, only prepositions are suited to express the frame relations in the source domain that will determine which source-domain elements map to which elements in the target domain.

4.5.4 Prepositions and closed-class items

Examples such as Figures (4.36)-(4.38) demonstrate how prepositions excel at specifying frame relations within a domain. When it comes to actually evoking domains, their uses are more limited. A combination of open-class items (nouns, verbs, adjectives and adverbs) can express any conceptual metaphor. But the literal meanings of closed-class items such as prepositions are limited to simple spatial, force-dynamic and image-schematic meanings. These limitations on the items' non-metaphoric uses also places certain restrictions on their metaphoric uses. In fact, closed-class items are barred from *any* target domain evocation, since the domains which they can evoke are extremely concrete and never serve as target domains.

Bowerman (1996: 422) describes the status of closed-class items such as prepositions in the following terms (emphasis mine):

In searching for the ultimate elements from which the meanings of closed-class spatial words such as the set of English prepositions are composed, researchers have been struck by the **relative sparseness of what can be important**. Among the things that can play a role are notions like **verticality**, **horizontality**, **place**, **region**, **inclusion**, **contact**, **support**, **gravity**, **attachment**, **dimensionality** (**point**, **line**, **plane or volume**), **distance**, **movement**, **and path** ...(she cites 20 sources) ... Among things that never seem to play a role are, for example, the color, exact size or shape, or smell of the figure and ground objects ...

According to Bowerman, closed-class items carry only a limited range of non-metaphoric meanings, all of which are image-schematic.

Talmy (2000) also explores the "schematic abstractions" encoded by items such as prepositions. His detailed account includes the observation that "schemas are largely built up from such rudimentary spatial elements as points, bounded and unbounded lines, bounded and unbounded planes, and the like, and ... these elements are governed by

properties pertaining to their combination, coordination, cancelability, and so on" (2000:220). Talmy also observes that the richness of a "full, repletely detailed referent" must be "boiled down' to match ascribed schemas" (2000:220). Items like prepositions can't encode details such as color, shape or magnitude; their meaning is limited to "schematic abstractions" of spatial configurations and force-dynamic relations.

It should not come as a surprise, then, that a limited range of source domains is available for the metaphoric extension of closed-class items such as prepositions. For example, *on* represents a category of meanings which is characterized by SUPPORT and CONTACT (TOUCHING). These schemas are therefore available as source domain material for the appropriate metaphors, such as ASSISTANCE IS SUPPORT (*He relies on his mother*), and SEEING IS TOUCHING (*Her eyes were on him*). Likewise *in* is characterized by INCLUSION (CONTAINMENT) and REGION (LOCATION), giving us VISUAL FIELDS ARE CONTAINERS (*The ship is in sight now*), THE MIND IS A CONTAINER (*I'll keep your suggestion in mind*), and STATES ARE LOCATIONS (*She's in love*). However, *on* or *in* could never evoke the source domain of, say, THEORIES ARE BUILDINGS, because there is nothing about SUPPORT, CONTACT, or the other properties which will specifically evoke the BUILDING domain (SUPPORT and CONTACT are crucial schemas in countless domains).

Once the BUILDING domain has been activated by an open-class lexical item, however, the SUPPORT schema will be recognized as part of the structure of the BUILDING domain. Therefore it is possible to *build onto an argument*, meshing the prepositional meaning with the BUILDING source domain supplied by *build* (the target domain being given by *argument* in a preposition phrase construction).

Prepositions are, in fact, required to have meanings which are compatible with the source domain in a metaphoric sentence. For example, the phrases *exercise of the mind* and *exercise for the mind* both evoke the metaphor THE MIND IS A BODY. In the EXERCISE frame, the BODY element can either be construed as the benefactor of the results of exercise (*for*), or can have a more neutral relation to exercise, as its patient (*of*). The BODY is metaphorically mapped to the MIND, but the limited relations permitted by the frame between BODY and EXERCISE are carried through to the target domain. It would be strange to say *exercise through the mind* or *exercise about the mind*, just as it would be odd to say *exercise through the body* or *exercise about the body*.

Despite this limitation, prepositions are in many respects less bound to a particular domain than the open-class items. A preposition is often the only source domain lexical item in a sentence, as in (31)-(35) below (we'll return to resultatives such as [34]-[36] in Chapter 10):

- (31) Paul's in love. (STATES ARE LOCATIONS)
- (32) I admit the thought was **in** my mind. (THE MIND IS A CONTAINER)
- (33) Oprah is **on** a diet. (ACTION IS MOTION; limitation of action is restriction of motion)
- (34) Lucy folded the paper **into** a boat. (A SHAPE IS A CONTAINER)
- (35) The boss worked her **to** exhaustion. (STATES ARE LOCATIONS)

Prepositions can occur in all the same grammatical positions in their metaphoric uses as in their non-metaphoric uses, as is suggested by the variety of sentences (31)-(35). This freedom no doubt contributes to the preponderance of preposition phrase

constructions, in which the prepositions' source-domain meanings are exploited to permit the transfer of relations to the target domain.

5 Metaphoric uses of copula constructions

Now that we've explored the most common constructions used in metaphoric language, we can turn to a class of constructions that is less common, but more famous for its metaphoric uses: the copula constructions. This class includes equations (such as *time is money*) along with clauses with copula-linked adjectives and PPs. The equation type of copula construction enjoys a special status, because it has become the standard format for the names of conceptual metaphors, such as TIME IS A VALUABLE RESOURCE. However, metaphoric uses of copula constructions are rare compared to the constructions we saw in the last chapter. Table (5.1), an expanded version of Table (4.1), compares copula constructions with the constructions addressed in the previous chapter.

Table (5.1) The constructions most commonly used in metaphor

Construction type:	Percent of total:	Source- domain (dependent) slot:	Target- domain (autonomous) slot:	Examples from corpus:
Domain constructions	3.1	head	domain A/ Adv	political game verbally attack
Predicating modifier constructions	7.8	predicating modifier	head	bitter thoughts perform brilliantly solidly liberal
Compounds	1.8	head N	modifier N	the race card
Predicate- argument constructions	47.3	head	argument NP	the cinema beckoned fire gutted the embassy
PP/ possessive NP constructions	34.2	head	nominal in PP/ possessive nominal	the foundation of an argument her mind's eye
Copula constructions	3.7	copula-linked nominal, PP or AP	head	trade unionism was a difficult road

Copula constructions could be categorized in different ways depending on which theory of grammar you favor. In HPSG, for example, "equations" might best be lumped

with the predicate-argument constructions, because in this theory *be* is considered the clausal head and the subject NP is the copula's specifier. Under this type of analysis, *be* is not so different from standard verbs and might be most conveniently grouped together with them. Alternatively, it could seem attractive to group adjectival copula constructions with the predicating modifier constructions, and preposition phrase copula constructions with the preposition phrases. These groupings each have a certain validity, and we will see that they are not at odds with the data presented here.

However, in Cognitive Grammar, *be* has a special status, and CG captures semantic similarities shared by equations, adjectival copula constructions, and preposition phrase copula constructions. Langacker (2002) demonstrates that these three types of copula constructions all enjoy similar semantic patterns and similar patterns of conceptual autonomy and dependence. As a result, certain generalizations can be made about the metaphoric uses of these types of copula constructions.

The three copula constructions share specific patterns of metaphor evocation that cannot be captured by grouping the types with predicate-argument constructions, predicating modifier constructions, or any other pre-existing class. For these reasons I have chosen to present the copula constructions as a separate category, with the subtypes and frequency counts shown below.

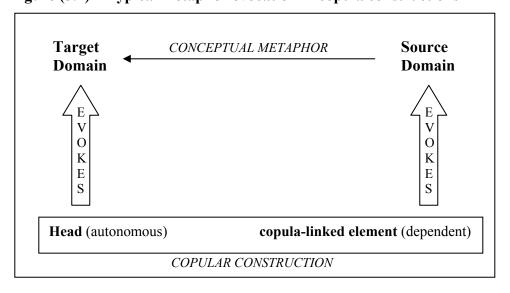
Table (5.2) Types of copula constructions

Construction	Count in	Percent of	Examples from corpus
Type	mini-corpus	total	
		constructions	
NP BE NP/	64	2.6 %	last night had been a glorious voyage of
Equations			discovery, international trade unionism was
			a difficult road, places have become
			commodities
NP BE AP	23	0.9 %	he was utterly <i>allergic</i> to the suggestion,
			everything is <i>gilded</i> with the last glow of the
			sunset
NP BE PP	5	0.2 %	Jones was now <i>in the twilight</i> of a complex
			and often controversial career, ever since she
			had met him she had been <i>on a roller-coaster</i>

The standard pattern found in these metaphoric clauses is for the copula-linked noun, adjective or PP to evoke the target domain; whereas the head noun evokes the source domain. Certain equations can reverse this pattern, for reasons that we will explore later.

With few exceptions, copula constructions follow the pattern found in *time is money*, in which the target-domain item precedes the copular clause, as shown below.

Figure (5.1) Typical metaphor evocation in copula constructions



5.1 Classifying copula constructions

Copula constructions, and particularly equations, have been analyzed and categorized in several ways. For example, Higgins (1979) identifies three types of equations: specificational equations such as *the governor of California is Arnold Schwarzenegger;* predicational equations such as *Arnold Schwarzenegger is a terrible actor;* and identity equations such as *he is Arnold Schwarzenegger*. Mikkelsen (2005) adds a fourth class to this system, namely deictic equations such as *that is Arnold Schwarzenegger* or *that guy is Arnold Schwarzenegger*, which she calls identificational copular sentences.

I will adopt these classifications, but I will follow Sakahara (1996) in defining specificational, predicational and identity equations based on their semantics, rather than primarily on their syntactic forms (as Higgins and Mikkelsen do). ¹⁷ According to Sakahara, specificational sentences such as *the governor of California is Arnold Schwarzenegger* involve a role-filler relation, in which a unique role (the governorship of California) is specified as having a unique filler (Arnold Schwarzenegger). Both role and filler are referential; that is, both *the governor of California* and *Arnold Schwarzenegger* denote referents, as opposed to predications (as predicating modifiers do) or subcategories (as domain adjectives do). Since both nominals denote referents, specificational equations are acceptable with their nominals permuted. *Arnold Schwarzenegger is the governor of California* is just as acceptable as *the governor of California is Arnold Schwarzenegger*. ¹⁸

-

¹⁷ I will continue to use Higgins' (1979) terminology, as these terms are better known than Sakahara's (1996). The equations that I call "specificational" correspond to Sakahara's "identificational" sentences; "predicational" equations are also called "predicational" in Sakahara's terminology; and my "identity" equations are Sakahara's "identity statements".

¹⁸On an account like Higgins (1979), which is based on syntactic form rather than semantics, *Arnold Schwartzenegger is the governor of California* is considered a predicational rather than a specificational equation. Here, both role-filler and filler-role equations will be called specificational equations.

A predicational equation, on the other hand, ascribes a value or quality to a referent. For example, *Arnold Schwarzenegger is a terrible actor* predicates something of the referent Arnold Schwarzenegger; namely, that his acting ability is terrible.

Identity equations are more like the specificational rather than the predicational equations, in that they denote two referents, which are identified with each other. But whereas specificational equations denote a role and its filler, identity equations instead give two values which are asserted to denote the same referent, as in *he is Arnold Schwarzenegger* or *Isak Dinesen is Karen Blixen*.

Mikkelsen's identificational equations can be added to this semantic typology. These behave like the identity equations, with the difference that one of the nominals is a demonstrative pronoun, or otherwise deictically denotes a referent that is contextually available, such as *that guy on TV*, or *the woman over there*.

Of these four types, only predicational and specificational equations are typically used in written metaphoric language. The 64 equations in my mini-corpus consisted of 10 specificational equations (such as *pace is the key to finding your stride*) and 54 predicational equations (such as *last night had been a glorious voyage of discovery*). There were no examples of identity equations, and no identificational equations – which is to be expected in a corpus such as the BNC, which consists mainly of written material, rather than contexts where the speaker and hearer share the contextual and visual grounding that usually makes demonstratives meaningful. Because I lack direct evidence of the identity and identificational equations, I will not discuss these here.

As predicted from Sakahara's analysis, metaphoric predicational equations cannot be "permutated"; that is, switching the two NPs does not result in an acceptable sentence (*a

glorious voyage of discovery had been last night), whereas the specificational equations can be permutated (the key to finding your stride is pace).

How, then, should these different types of equation be analyzed in terms of autonomy and dependence? Langacker (1991) discusses specificational and predicational equations in considerable detail. He refers to these equations as "referential identity" and "class inclusion" relations, respectively; though he argues that the "class inclusion" type also expresses an identity relation, but does so in a way that *implies* class inclusion. Since the "class inclusion" equations express an identity relation between an arbitrary member of a set (such as an arbitrary *terrible actor* in *Arnold Schwarzenegger is a terrible actor*), this implies that Schwarzenegger should be included in the class of terrible actors. Even if these two types of equations are fundamentally similar in this respect, for convenience I will continue to refer to them as "specificational" and "predicational".

Langacker does not consider *be* as the clausal head in either specificational or predicational equations. He argues that "*be* is too abstract to be useful by itself as a clausal head (unless it is interpreted anaphorically)" (1991:205). Instead, he argues that *be* has the role "to *derive* a clausal head from an atemporal relation, which could not otherwise serve in that capacity due to its non-processual character" (:205). In terms of autonomy and dependence, *be* is dependent on the autonomous copula-linked nominal, because this nominal elaborates the abstract process denoted by *be*. The copula *be* evokes a simple, schematic frame (illustrated Langacker 1991:206) in which a relation role is specified as continuing over time. The copula-linked nominal fills this role by supplying the filler for this relation role, thereby elaborating part of the meaning of *be*.

The copula and the copula-linked nominal, therefore, together form the clausal head. As we've seen, this head contains an autonomous and a dependent element; however, in predicational equations the head as a whole is dependent in relation to the subject NP. The process denoted by the copular clause evokes a frame in which a relation continues over time. The subject NP denotes a referent which elaborates the trajector of this relation. For example, in *Arnold Schwarzenegger is a terrible actor*, the referent *Arnold Schwarzenegger* fills the role of the trajector in the relation of being a member of the set of terrible actors. Therefore, the meaning of a subject NP in an equation elaborates the meaning of the relational head, which renders this NP the autonomous element.

This pattern of autonomy and dependence will not hold for specificational, identity and identificational equations. In specificational equations, one nominal denotes a role and one denotes the value that fills this role. As we've seen, the relation between a role and a filler is the classic case of elaboration: the filler **elaborates** the role it fills. Roles, then, are typically dependent elements, while fillers are autonomous, because the latter elaborate the former. In specificational equations, the copula helps evoke a processual relation between the role and its filler. It doesn't matter whether the subject or the copula-linked nominal indicates the role; roles are the perfect elaboration sites and are always dependent relative to their fillers.

In identity and identificational equations, the copula-linked nominal doesn't designate either a relation or a role. Instead, it supplies a referent, just as the subject NP does. In these cases, neither element elaborates the other, and neither is dependent on the other.

Although the pattern of elaboration found in predicational equations is different from the patterns in other types of equation, the pattern *is* the same as the one found in copula constructions with PPs and APs. The relations denoted by preposition phrases and adjectives can also elaborate the RELATION role in the processual frame evoked by *be*. When they do, as in *Arnold Schwarzenegger is drunk* or *Arnold Schwarzenegger is under the table*, the subject NP elaborates the trajector role in these relations (relative to the landmarks of "the set of those who are drunk," and "the table," respectively).

On one level, AP and PP copula constructions resemble predicating modifier and preposition phrase constructions in their patterns of autonomy and dependence; but on a deeper level, this resemblance ends. Superficially, copula constructions such as *the man is drunk* resemble predicating modifier constructions such as *the drunk man* in that the noun (here, *man*) is autonomous and the modifier (*drunk*) is dependent. Likewise, copula constructions such as *the man is under the table* resemble PP constructions such as *the man under the table* in that the noun *man* is autonomous and the PP is dependent. However, the copula constructions differ from these other constructions in that the dependent element is more complex – consisting of two elements, *be* and the AP/PP, which have their own autonomy/dependence relation within the larger head. Another difference is the processual frame added by *be* itself, which is not evoked by most predicating modifier and PP constructions. These differences led me to classify AP and PP copular clauses with the equations rather than with the predicating modifier or PP constructions.

5.2 Equations (predicative nominals)

Our examination of metaphoric copula constructions begins with the equations (also called *predicative nominals*). Equations are the most common and the most varied of the

copula constructions. They also have the distinction of being the most analyzed of all metaphorically used constructions. Metaphoric equations linking two nouns, as in the proverb *time is money*, have been hailed as "the most direct way of linking a metaphor (source-domain item) to its proper term (target-domain item)" (Brooke-Rose 1958:105). Equations enjoy a certain prominence in the notation of modern conceptual metaphor theory, where they have been adopted as the standard format for naming conceptual metaphors (as in TIME IS A RESOURCE, THE MIND IS A BODY, etc.). Despite this prominence, it should be kept in mind that metaphoric equations (like all copula constructions) are rare compared to other metaphorically used constructions, accounting for only 2.6% of the examples in my corpus.

Christine Brooke-Rose, who studies the use of metaphor in poetry, notes the relative rarity of equation constructions in that genre. She attributes this to the directness of the construction: "Its disadvantage is obviousness. It cannot be repeated too often in one poem or passage..." (1958:105). We will return to the poetic uses of equations in Chapter 13. In natural language, however, I believe that equations are avoided more because of their inefficiency than their "obviousness". Equations lack the communicative advantages of either the other predicating constructions or the domain constructions.

Equations are "obvious" in the sense that they often directly evoke both domains of a metaphor without profiling any given frame. For example, the predicating equation *the economy is a body* directly evokes both ECONOMY and BODY in the same manner as the phrase *economic body*, as described in (4.1.2) and diagrammed in Figure (4.10). This attribute is what makes equations well-suited as the titles of conceptual metaphors, because equations have a generality which many constructions lack. However, in

everyday language this same generality poses a problem. We saw that the domain construction *economic body* is ambiguous, because it directly evokes both BODY and ECONOMY and fails to specify what frame structure should be profiled and mapped from BODY. The phrase *economic body* needs to be supplemented with surrounding sourcedomain items to indicate what particular frame should be evoked (as in examples 4-7 in the previous chapter). The clause *the economy is a body* is deficient in the same way.

Surrounding source-domain items, related by the incorporation of other metaphoric constructions, are usually what make a metaphoric equation meaningful. In a clause such as *our economy is a healthy body*, the predicating modifier *healthy* allows us to recognize that the mapped structure profiles the MEDICAL_CONDITIONS frame (like the phrase *illness of the economic body* in [5] in Chapter 4); whereas the sentence *the economy is a body, and Greenspan was its head* or *Greenspan was the head of the economic body* profiles the OBSERVABLE_BODYPARTS frame (as in the phrase *head of the ...economic body* in [4] in Chapter 4).

In fact, equations are almost always used in conjunction with other constructions. The combination of an equation and a preposition phrase, as in *Greenspan was the head of the economic body*, a combination that Mark Turner calls the "xyz" construction (Turner 1991) is especially common. Constructional combinations such as *xyz* will be explored in the next chapter.

Equations' direct evocation of the source and target domains means that they are less useful in isolation than the predicating modifier and predicate-argument constructions, because equations tend to be ambiguous in isolation. Moreover, equations do not utilize domains' ability to interrelate frames as efficiently as the predicating constructions,

which match up identity links across the two profiled frames without any additional constructions or items (as we saw in Figures 4.16 and 4.17).

Equations not only lack the frame-profiling and frame-linking abilities of the predicating modifier and predicate-argument constructions, but they also lack the chief advantage of the domain constructions. A domain construction such as *mental exercise* is useful because it is not necessary to find a target-domain frame that exactly corresponds with the frame structure evoked in the source domain. For instance, the phrase *mental exercise* gives us only the source-domain frame EXERCISE, and the general target domain MIND. We are left to map EXERCISE to a set of elements in the MIND domain that do not belong to any single frame, as in Figure (4.10). This is useful because there is no single frame in the MIND domain which has the structure of "exercise in the mind".

An equation cannot duplicate the effect of a domain construction. For example, *mental exercise is physical exercise* is an equation specifying both domains involved in *mental exercise*, as well as the EXERCISE frame. It sounds unnatural because it involves the domain construction *mental exercise* itself. This makes it an awkward and redundant method of mapping the EXERCISE structure from BODY to MIND, a mapping which is easy to evoke using only a domain construction, but impossible to evoke using only an equation construction.

Despite these disadvantages of equations, they excel at two things. First, predicational equations are ideal for expressing image metaphors (such as *her eyes are sapphires, the crescent moon was a Cheshire cat smile*, etc.). An image metaphor maps a gestalt, usually of shape, color, line, or other visual qualities. Image metaphors can also map non-visual gestalts, such as sounds (as in *his snoring was thunder, the cat's purr was a*

motor). Image metaphors differ from most conceptual metaphors in that they do not map concrete onto abstract, but rather map one concrete sensory image onto another concrete image. Image metaphors usually lack the complex, structured domains and mappings found in other metaphor. This discourages the use of domain constructions (which must directly evoke a recognizable target domain), and predicating modifier and predicate-argument constructions (which rely on a structured target domain which can interrelate the frames profiled by both items). Image metaphors are not well-structured enough to permit the extrapolation needed to interpret most metaphoric constructions. They are perfectly suited to equations, however, which explicitly communicate both source and target domains of a metaphor.

The second use of equations is in combination with other metaphoric constructions. Almost all uses of equations in my corpus occurred in conjunction with other constructions. Examples (1) and (2) below are typical.

- (1) The University is the apex of the educational edifice.
- (2) The establishment of Prohibition laws was a battle in the struggle for status between two divergent styles of life.

Example (1) includes a domain construction (*educational edifice*). Both (1) and (2) involve preposition phrase constructions (*of NP, for NP*, etc). The proliferation of examples such as (1)-(2) suggests that the clarity and directness of equations, while inefficient in isolation, provide an excellent basis for communicating a more complex metaphoric expression using additional constructions.

Equations that are used in combination with other constructions are often specificational, rather than predicational, equations. Example (1) is an instance of this.

The copula-linked phrase *the apex of the educational edifice* evokes the metaphor SOCIAL SYSTEMS ARE BUILDINGS, and defines a role in the target domain of ACADEMIA (a special case of a SOCIAL SYSTEM), which is designated by the source-domain noun *apex*. The subject NP, *the University*, then denotes the value that fills this role. There is only one "apex" of the educational edifice, and this can be filled by only one value. The phrase in (1) connects this role to this filler, and therefore is a specificational, not a predicational, equation.

The structure of both specificational and predicational equations is more varied than might first be apparent. The copula may be replaced with any copular verb or change predicate (3a-b below), or simple apposition (3c), while still evoking the same metaphor. I will call these variations "equations" as well. Observe the similarity between (1) above and the variations in (3) below.

- (3)a. The University has become the apex of the educational edifice.
 - b. Our culture has made the University the apex of the educational edifice.
 - c. The University, the apex of the educational edifice.

5.2.1 "Similes" with *like* or as

Equations may also be hedged with the addition of *like* or *as*, which draw attention to the metaphor itself. These "similes" highlight the differences between the source and target domains, and the partial nature of the metaphoric mappings. This difference in emphasis is the only conceptual distinction between "similes" and other metaphoric language. The hedges *like* and *as* do not otherwise effect the pattern of domain evocation.

The hedges *like* and *as* are particularly common in image metaphor, because image metaphors have sparser, more partial structures than other metaphors. The sparseness of

mappings makes the essential difference between source and target more apparent, and more compatible with a simile-type hedge. For example, compare (a) with (b) in (4)-(5) below.

- (4) a. His snoring was thunder.
 - b. His snoring was like thunder.
- (5) a. Time is money.
 - b. Time is like money.

Example (4) is an image metaphor, comparing the gestalt of the sound of snoring with that of thunder. Some speakers may find that (b) seems more natural to them than (a) because *like* emphasizes the partial nature of the metaphoric mappings (only the image gestalt is mapped). Example (5), on the other hand, is not an image metaphor, but a well-structured conceptual metaphor. In this case, there is no need to draw attention to the metaphor or emphasize the partial nature of the mappings, and many speakers will prefer (5a) to (5b). As a statement, (5b) may even sound incomplete, as if it should be continued with an explanation of the particular mappings referred to (such as in *Time is like money – you take it for granted when you have lots of it*).

Equations demonstrate another, more fundamental variation. Whole clauses as well as simple NPs can be coordinated and given a metaphoric interpretation, as in (6)-(7) below from my corpus.

- (6) A pallid sun appeared like a nosy neighbour spying from behind lace curtains. (image metaphor)
- (7) "They always assumed I'd do disability counselling; they were hanging a label round my neck." (CATEGORIZING IS LABELING)

These clauses can be thought of as denoting complex mappings or sets of mappings. For example, the metaphor in (6) is unusually complex for an image metaphor. The neighbor's face is mapped to the sun, the lace curtains are mapped to clouds, and the neighbor's furtive movements – suggestive of spying and nosiness – are mapped to the position of the sun in relation to the clouds. The image metaphor in *his snoring was thunder* is simple in comparison, merely mapping one type of sound onto another.

Sentence (7) also involves an unusually complex mapping; the entire action of "making assumptions about the speaker" is mapped to "hanging a label around the speakers' neck". Both of these are specific, special cases of CATEGORIZING and LABELING, respectively – ones which would be difficult to evoke using any other construction.

We have seen that equations are the best suited of the metaphoric constructions for dealing with unusual mappings, such as the gestalts used in image metaphor. Sentences (6)-(7) show that equations are also the best constructions for adjoining clauses.

One final variation in the form of equations should be mentioned: the order of the conjoined NPs or clauses. In predicational equations, such as (8) below (evoking the Location Event-Structure Metaphor), permutation of the NPs is unacceptable, as in (9).

- (8) Last night had been a glorious voyage of discovery to a new land ...
- (9) *A glorious voyage of discovery to a new land had been last night ...

Even in specificational equations, such as (1)-(7), the target domain item is generally given first. But in specificational equations, the NPs or clauses can be reversed without

affecting the evoked metaphor. For example, compare (1) and (7) above with the modified versions in (10) and (11) below.

- (10) The apex of the educational edifice is the University.
- (11) "They hung a label round my neck: they just assumed I'd do disability counselling."

The original word order in versions (1) and (7) seem more natural and less affected (example [10] sounds particularly pretentious). In fact, every equation in my mini-corpus followed the target-source pattern represented in (1)-(7), with the exception of two examples, reproduced as (12) and (13) below.

- (12) The key is to keep the fish just warm to avoid overheating ...
- (13) The key to healing the divisions in man's nature ... is love.

Examples (9)-(11) are clearly specificational, not predicational, equations. In (10)-(11), *key* denotes a unique identity, rather than membership in a set. The author of (11) is asserting that there is one specific "key to healing the divisions in man's nature"; and the role denoted by this "key" is specified as being filled by "love". We know that specificational equations can be permutated, while predicational equations cannot be, so (12)-(13) meet this prerequisite for demonstrating their unusual structure.

However, most specificational equations demonstrate a clear ordering preference. Mark Turner (1991) noticed that there is a special reason why examples (12)-(13) buck the trend for specificational equations. Turner (1991:144-7) observes that the normal pattern for equations is target-source, and he also notes that the exceptions to this pattern tend to be what he calls "extremely basic" source domain nouns (Turner 1991:145;

Turner's examples are *root, key* and *fountain*). These nouns tend to precede the target indicator if accompanied by the definite article, as in (12)-(13). By "extremely basic" I believe Turner means that the schemas evoked by these items are compatible with a great many domains, and when they create mappings to a target-domain element they merely label it as "fundamental" (*root* and *fountain* both map to an origin or source), or "crucial to progress" (*key* evokes the Location Event-Structure Metaphor, in which progress past a barrier maps to resolution of a potential difficulty).

In metaphoric predicational equations, the target-domain item (the actual referent of the equation) is given first, so that the hearer understands that this is the topic and that the subsequent predication will reveal some quality of the referent. In the case of metaphoric equations, the predication will, of course, evoke the source domain. However, the generality of the mappings usually involved in *key, root*, etc. makes it unlikely that these items will ever denote the filler of a role. These items are much more likely to denote the role which is to be filled. Indeed, they are used so often metaphorically, denoting source-domain roles, that they may come first in an equation and not dispel the expectation that they evoke a metaphoric source domain. Equations with these items have been conventionalized, in other words, and should probably be considered individual constructions separate from the standard equations.

The source-target tendency of sentences such as (10)-(11) offers a tantalizing glimpse into the conventionalization of linguistic metaphor. However, it does not challenge the overall tendency of equations to follow the target-source pattern. Recall also that *key*, *root*, etc. are exceptional only in terms of their frequency; other source-domain items may come first in a specificational equation, as in (10)-(11), but do so more rarely.

5.3 Predicative APs and predicative PPs

In Cognitive Grammar, copula constructions with copula-linked NPs, APs and PPs can all be analyzed very similarly. As we have seen, each of these constructions involves a copula-linked element that is inherently non-processual, but which is rendered processual via the processual frame evoked by *be*. The copula-linked element elaborates the landmark of this frame, while the subject NP elaborates the trajector; and the copula and the copula-linked element together constitute the dependent element, while the subject NP is the autonomous element.

AP and PP copula constructions also show similarities to the equations in their metaphoric uses. These uses are rare; in my corpus I found only 23 of the former (such as [14] below) and 5 of the latter (as in [15]).

- (14) Progressive rock was over-dressed ...
- (15) Jones was now in the twilight of a complex and often controversial career.

In (14), the clause *progressive rock was over-dressed* evokes a special case of the personification metaphor, in which a person wearing clothing maps to an inanimate referent which is presented in a certain way. This mapping could be expressed as PRETENTIOUSNESS OF PRESENTATION IS DRESSINESS: different levels of formal and casual dress (worn by a person and revealing something about that person) map to different levels of pretentiousness in the presentation of an inanimate referent such as a type of music (revealing something about that music, or, metonymically, about the people who listen to that type of music). The target-domain referent is *progressive rock;* the source domain DRESSINESS is evoked by *over-dressed*. Example (14) is typical of the AP copula

constructions in that it relates an autonomous, target-domain NP to a dependent copulalinked AP that evokes the source domain.

We can see from example (15) that the PP copula constructions are similar to both the AP copula constructions and to the predicational equations. Example (15) evokes the metaphor A CAREER IS A DAY, a variant of A LIFETIME IS A DAY. In this metaphor, different times of day map to the different stages of a career, such that THE ONSET OF A CAREER IS MORNING and THE END OF A CAREER IS NIGHTFALL. This example is interesting because the subject, *Jones*, is domain-neutral (see Section 4.4.2). The PP *of a ... career* is therefore necessary to make the target domain unambiguously clear. In fact, this was typical of the PP copula constructions that I examined. Of the five instances in my corpus, three looked almost exactly like (15), involving a domain-neutral subject, and a copula-linked PP with a nominal that included <u>another</u> PP. The two remaining examples are given below:

- (16) She inflated his ego until he was at bursting point.
- (17) The reports drifting out of Baghdad suggest that an accord of some sort is on the way.

The first of these involves a temporal construction, in which the protasis clause *she inflated his ego* already evokes the target domain of MORE IS BIGGER, in which TOO MUCH of something can be mapped from TOO BIG – also mapping the inference that when something is "too big," it might explode. Temporal constructions will be explored in the next chapter; for now, the important observation is that in this example, as in (15), the target domain is evoked by a second construction as well as the PP copula construction. Even though the pronoun *he* is not strictly domain-neutral (since people don't generally

literally explode) the target domain would not be clear from *he was at bursting point* alone. In isolation, this clause might be interpreted as referring to the subject's anger, and the likelihood of an angry outburst, via ANGER IS A BOILING LIQUID IN A CONTAINER and the mapping ANGRY BEHAVIOR IS EXPLODING.

In (17), the phrase *on the way* is highly idiomatic, and idioms have their own special properties in evoking metaphor (the topic of Chapter 11). Here, the idiomatic properties of *on the way* help evoke the target domain of the Location Event-Structure Metaphor, in which PROGRESS IN ACHIEVING A GOAL IS MOVEMENT TOWARDS A DESTINATION. In (15)-(17), then, the subject has help in evoking the target domain. This is typical of copula constructions in general; it is probably most apparent in the PP copula constructions because there are so few of these. The overall rarity of these constructions meant that there were none of the even rarer variety in which the copula construction evokes a metaphor without involving other constructions.

The PP copula constructions, then, follow the same general pattern as the other copula constructions: the target-domain NP was followed by the copular clause with the source-domain element (a NP, AP or PP). In terms of ordering, then, the AP and PP copula constructions are more akin to the predicational equations than the specificational equations, in that they cannot undergo permutation. This is to be expected, since these APs and PPs are inherently predicational. The copula functions only to make them processual.

In conclusion, the three predicational types of copula constructions share several important similarities: (1) the subject NP is autonomous and evokes the target domain, while the copular clause is dependent and evokes the source domain; (2) the subject NP

precedes the predicational copular clause; and (3) these constructions usually combine with additional metaphor-evoking constructions, as in the *xyz* constructions, or the PP copula constructions such as (15). The specificational equations do not necessarily follow (2), but they always obey (1) and (3) – in fact, these equations obey (3) more strongly than the other copula constructions, since they usually require additional constructions to make it clear precisely which unique role in the source domain should be mapped to the target domain and filled by a mapped element.

The frequencies of these three types of copula constructions in my corpus (along with the other subtypes of constructions discussed in Chapter 4) are summarized below. Table (5.3) expands on the summary of constructional types in Table (5.1) to incorporate the diversity of constructions within the major classes, such as the subtypes of copula constructions shown in Table (5.2), and therefore provides a more precise summary of the makeup of the corpus than Table (5.1).

Table (5.3) Summary of constructional subtypes

Construction	Construction	Count in	Percent	Example from corpus:
type:	subtype:	corpus:	of total:	
Predicating	Adj-N	165	6.7%	a juicy story
modifier	Adv-V	24	1.0%	campaigned vigorously
constructions	Adv-Adj	3	0.1%	largely rehabilitated
Predicate-	Intransitive	515	20.9%	your morals reek
argument	Transitive	648	26.3%	my faculty of speech was deserting me
constructions	Ditransitive	2	0.1%	Meredith <i>flung</i> him an eager glance
Copula	NP BE NP/Equations	64	2.6 %	international trade unionism was a
constructions	NP be AP	23	0.9 %	difficult road
	NP be PP	5	0.2 %	he was utterly <i>allergic to</i> the suggestion
				Jones was now <i>in the twilight</i> of
				acareer
Domain	Domain adjective	69	2.8%	the academic world
constructions	Domain adverb	7	0.3%	verbally scampered
Compounds	N-N compound	45	1.8%	heroin tsar
_	-			
PP/	Head-PP	829	33.6 %	a taste of his temper
possessive	Possessive NP	16	0.6 %	her mind's eye
constructions				-

The next chapter will explore in more detail how metaphor is evoked in constructional combinations such as the *xyz* construction.

6 The combination of constructions in metaphoric language

It only takes one construction to evoke a conceptual metaphor. But in most metaphoric sentences, either the target or the source domain is evoked by multiple items. For example, in the clause *inflation is a remedy for economic ills*, both *remedy* and *ills* are used "metaphorically" (that is, they typically refer to conditions of the BODY, and so can be used metaphorically to evoke the BODY source domain of THE ECONOMY IS A BODY). The terms *inflation* and *economic* instead relate to the ECONOMY, the target domain of THE ECONOMY IS A BODY. This complexity isn't necessary to communicate the metaphor THE ECONOMY IS A BODY. As we saw in Section 4.1, a phrase as simple as *economic ills*, in which *ills* evokes the source domain and *economic* evokes the target domain, is completely sufficient to communicate the metaphor THE ECONOMY IS A BODY.

Even though only one source-domain item and one target-domain item are needed to communicate a metaphor, phrases and clauses with multiple source- and/or target-domain items (such as *inflation is a remedy for economic ills*) seem to be more common than simpler metaphoric phrases and clauses with one source-domain and one target-domain item (such as *economic ills*). In the BNC mini-corpus I refer to throughout Chapters 4-5, for example, the 2415 constructions in the corpus evoked 1697 instances of conceptual metaphor, and 67% of the analyzed constructions were part of constructional combinations expressing a single conceptual metaphor. About two-thirds of the constructions used to evoke metaphor, then, occurred in more complex phrases and clauses such as *inflation is a remedy for economic ills*, while less than a third of these constructions were found in isolated metaphoric phrases, such as *economic ills*.

A smaller number of items in the corpus evoked the source or target of one metaphor, and additionally evoked the source or target of a different metaphor. These items were counted twice: once for each use as either a source- or a target-domain item.

Clearly, constructional combinations are an important part of metaphoric language. This chapter aims to study how the constructions studied in the previous chapter can be used together to communicate more complicated systems of profiled frames and mappings. We will also see how previously evoked metaphors tend to be re-used by adding items from both the source and target domains; and how multiple metaphors can be evoked by a single phrase.

6.1 Multiple target-domain items

There's nothing strange about metaphoric language with multiple target-domain items. Metaphoric language often involves one metaphorically used (source-domain) word surrounded by non-metaphoric (target-domain) words. There is no clear dividing line between simple non-metaphoric language and the target-domain language that is necessary for understanding a metaphor. However, this dissertation focuses on metaphoric phrases and sentences that are comprehensible out of context, and so I will consider "target-domain language" to consist of target-domain items that share an autonomy-dependence relation with an element that evokes a metaphoric source domain. Only phrases and clauses that include a target- and a source-domain item within an autonomy-dependence relation can be understood metaphorically out of context, so only target-domain items in this type of relation with a source-domain item will be considered in this section. Outside of an autonomy-dependence relation involving a source-domain

item, language can be expected to be non-metaphoric unless a metaphoric source domain is evoked in some other way.

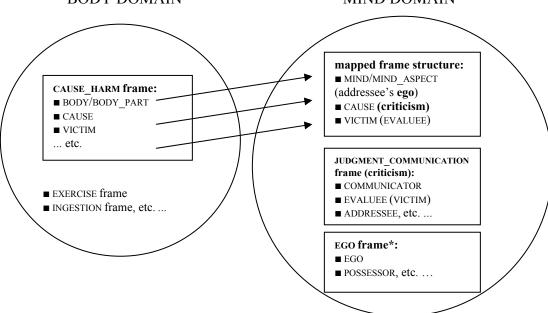
We first saw multiple target-domain items in transitive constructions such as (17) in Chapter 4, repeated here.

(1) Anyways, all the criticism hurt his ego, so he ran home to mommy... www.nfl-fans.com/index.php?showtopic=54346

Notice that both *criticism* and *ego* relate to the MIND, whereas *hurt* is a term that refers to bodily damage, and which therefore evokes the BODY domain. The combination of these items evokes THE MIND IS A BODY, as represented below.

BODY DOMAIN MIND DOMAIN

Figure (6.1) The clause the criticism hurt his ego evokes THE MIND IS A BODY



As we saw in Section 4.3.3, transitive constructions involve two relevant autonomy/dependence relations. The verb and its direct object form one unit, within

which the direct object supplies the autonomous element and the verb supplies the dependent element. The full clause *the criticism hurt his ego* brings in a second autonomy/dependence relation, in which *the criticism* elaborates the structure evoked by the VP constituent *hurt his ego*. These two autonomy/dependence relations collaborate to provide the three profiled frames, connected by identity links, in the target domain MIND shown above. Even within a single predicate-argument construction, then, we can find multiple target-domain items.

A combination of constructions can also yield multiple target-domain items, as in examples such as (2):

(2) The valid criticism stung him ...

Here, both *valid* and *criticism* relate to the MIND, while *stung* refers to the BODY. The metaphor THE MIND IS A BODY, as evoked by this sentence is diagrammed below.

BODY DOMAIN MIND DOMAIN mapped frame structure: ■ MIND/MIND ASPECT) **CAUSE HARM frame:** ■ CAUSE (criticism) ■ BODY/BODY PART ■ VICTIM (EVALUEE), etc. ... ■ CAUSE ■ VICTIM ... etc. JUDGMENT COMMUNICATION frame (criticism): ■ COMMUNICATOR ■ EVALUEE (VICTIM) ■ EXERCISE frame ■ INGESTION frame, etc. ... CORRECTNESS frame: ■ INFORMATION (criticism) ■ DEGREE ■ DOMAIN, etc. ...

Figure (6.2) The clause the valid criticism stung him evokes THE MIND IS A BODY

In this example, the noun phrase *the valid criticism* involves two open-class items, *valid* and *criticism*, and each item evokes a frame. This is true whether or not the phrase is used metaphorically. The phrase *the valid criticism* evokes the JUDGMENT_

COMMUNICATION frame and the CORRECTNESS frame regardless of whether it occurs in a metaphoric clause such as *the valid criticism stung him* or a non-metaphoric clause such as *the valid criticism offended him*. There is an autonomy-dependence relation between *valid* and *criticism* in each clause, but the relation does not play a role in metaphor evocation in the second clause, since no source-domain items are present in the phrase *valid criticism*.

The relevant autonomy-dependence relation is found between the whole unit *the valid criticism* and the verb phrase *stung him*, which includes the source-domain item *stung*.

This relation functions to evoke metaphor as long as some item in the dependent element evokes the source domain, and some item in the autonomous element evokes the target domain. This generalization can be expressed as the following principle:

Combinatory Constraint

In a metaphoric phrase or clause that can be understood out of context and that consists of one conceptually autonomous and one conceptually dependent element, the conceptually autonomous element must contain an item that evokes the target domain and the dependent element must contain an item that evokes the source domain.

Metaphor evocation is not impeded by extra source-domain or target-domain items within an element. However, if an element does contain both source- and target-domain items, as in the verb-phrase element *hurt his ego*, in (1), then these items must themselves be connected via an appropriate autonomy-dependence relation, as they are in (1). It is not possible to have a verb phrase in which the object evokes the source domain and the

verb evokes the target – even if the subject then in turn evokes the target domain. For example, the meaning of sentence (1) cannot be approximated with a MIND-domain verb and a BODY-domain object, as in (3a), which has the intended meaning found in (3b).

(3) a. #Anyways, all the criticism offended his body/body-part/elbow... b. Anyways, all the criticism hurt his ego... www.nfl-fans.com/index.php?showtopic=54346

This generalization can be expressed in the following terms:

Autonomy-Dependence Constraint

In a metaphoric phrase or clause that can be understood out of context, every sourcedomain item must be conceptually dependent relative to an autonomous targetdomain item.

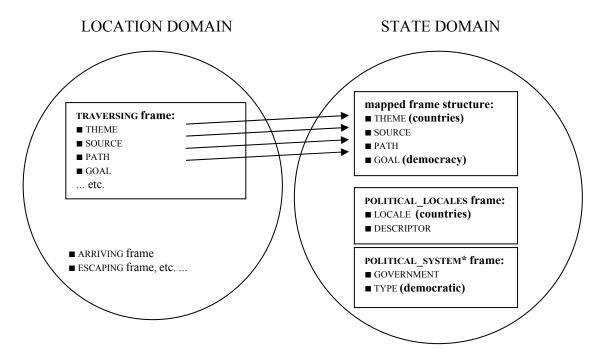
Other types of constructions with multiple target-domain items follow the same rules evident in (1)-(3), as in (4).

(4) Many countries are already proceeding towards democracy. *BNC*

Here two constructions are relevant: the predicate-argument construction which relates the (autonomous) target-domain term *countries* with the (dependent) source-domain element *proceeding*; and the preposition phrase construction which connects the (autonomous) target-domain element *democracy* with the element *proceeding*. Both these constructions are part of a more complex Directed Motion construction, which includes slots for a subject NP and an oblique directional phrase.

Both relevant constructions in (4) evoke the Path to Democracy Metaphor (Lakoff 1999), a special case of the Location Event-Structure Metaphor in which the GOAL is the state of DEMOCRACY, as shown below.

Figure (6.3) The phrase proceeding towards democracy evokes STATES ARE LOCATIONS



The autonomous elements in this example, *countries* and *democracy*, perform a task similar to the one served by the autonomous arguments in example (1). Once again, we see that each element elaborates a role in the "mapped frame structure" evoked by the dependent element *proceeding*. The element *democracy* elaborates the GOAL in the mapped structure, and the element *countries* elaborates the THEME. As in (1)-(3), here each autonomous element also profiles a frame in the target domain. The roles that these elements elaborate in the mapped frame structure are identity-linked to elements in these frames.

In this example, the preposition *towards* conforms to the source domain evoked by *proceeding* (as prepositions in metaphoric phrases do; see [4.5]), and has the function of designating the relation between COUNTRIES and DEMOCRACY. The preposition makes it clear that DEMOCRACY fills the GOAL role, and is the GOAL of the COUNTRIES (the THEME).

The predicate-argument construction and preposition phrase construction, used together in (4), evoke a more complex and well-defined target domain structure than either construction could evoke on its own. A single metaphor-evoking construction (of the types in Chapter 4) can profile, at most, two frames in the target domain, and domain constructions profile only one. The combination of constructions in (4) allows for a more complex set of profiled frames than any single construction.

The combination of constructions also allows for a more fully specified target-domain structure. The elements *countries* and *democracy* elaborate two roles in the mapped frame structure. A single autonomous element can only elaborate one site in the dependent element's structure, so it takes two autonomy/dependence relations to fill two roles in the mapped frame structure, as in Figure (6.2).

6.1.1 The xyz construction (Type 1)

The "xyz construction," found in clauses such as necessity is the mother of invention, was made famous by Mark Turner (1987, 1991). The analyses presented here demonstrate that the xyz construction is neither mysterious or unique; but instead follows the compositional rules that are shared by all metaphoric phrases and clauses. I propose that the study of this "construction" has been complicated, in part, by the fact that there are two distinct constructions that share the xyz form. The first of these, which I will label

"Type 1," involves two target-domain items. The other construction, "Type 2," involves two source-domain items, and I will return to this type in Section 6.2.1.

The first type of xyz construction evokes metaphor following a pattern similar to the one we saw in the clause many countries are proceeding towards democracy, in example (4). This example differs from the xyz constructions only in that it involves a predicate-argument construction and a preposition phrase construction, whereas xyz constructions combine an equation and a preposition phrase construction. The head noun in an xyz construction (Turner's "X") and the noun within the PP (the "Z") are target-domain; the postcopular noun, which is also the head of the NP-PP ("Y") evokes the source-domain. A typical instance of a metaphoric xyz construction is given below.

(5) ...inflation is a remedy for unemployment. www.blackwell-synergy.com/doi/abs/10.1111/j.1813-6982.1981.tb00684.x

In this example, the CURE frame evoked by *remedy* maps from the BODY domain to the ECONOMY, via AN ECONOMY IS A BODY, shown in Figure (6.4). ¹⁹

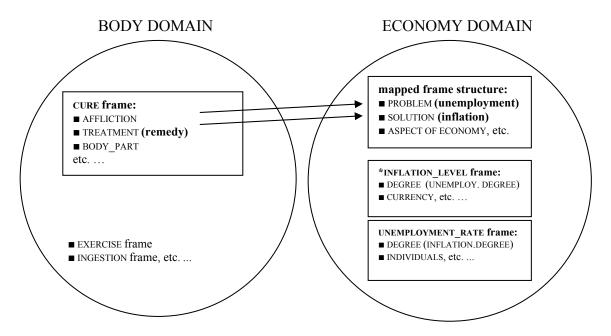
(*INFLATION_LEVEL). The structure of frames will often include only a subset of the frames' structure. More complete analysis of documented frames can be found on the FrameNet website.

164

As throughout the dissertation, the frames in these examples and diagrams are taken from the FrameNet project's corpus-based analyses (http://framenet.icsi.berkeley.edu/). Frames which have not been documented by FrameNet will be presented in their first appearance here with an asterisk

(*INELATION LEVEL). The structure of frames will often include only a subset of the frames' structure.

Figure (6.4) The clause *inflation is a remedy for unemployment* evokes AN ECONOMY IS A BODY



Part of the structure of the ECONOMY domain includes the information that the DEGREE of the INFLATION_LEVEL may be correlated with the DEGREE of the UNEMPLOYMENT_RATE. Sentence (5) asserts that *inflation* (metonymically standing for a change in the level of inflation) is the solution to *unemployment* (metonymically standing for a high unemployment rate).

The phrase *a remedy for unemployment* involves one relevant autonomy/dependence relation. Here, *remedy* evokes the CURE frame, which is mapped to the target domain. The element *unemployment* elaborates the PROBLEM role in this mapped structure (the preposition *for* helps designate the relation between an AFFLICTION and a TREATMENT, or between a PROBLEM and a SOLUTION, so this item helps us identify PROBLEM as the role that should be filled by *unemployment* [Section 4.5.3 explores prepositions' designation of frame relations]). The new, elaborated structure evoked by *a remedy for unemployment*

is now further elaborated by *inflation*. The *inflation* element elaborates the SOLUTION role in the mapped structure.

Turner's *xyz* construction is no different than any other metaphoric combination of autonomy/dependence relations, such as (1)-(4). Here, once again, the compositional integration of appropriate constructional relations allows for multiple frames to be profiled in the metaphoric target domain; and for a more fully specified target-domain structure to be evoked. The incorporation of an equation, rather than some other type of construction, means only that a role in the mapped structure will be filled in both the source and the target domain, as is typical of equations (Section 5.2). In example (5), this means that the TREATMENT role in the CURE frame is filled by REMEDY, meaning a thorough, speedy treatment. The TREATMENT role maps to the SOLUTION role in the target domain, which is filled by INFLATION. This correspondence provides the inference that the solution to unemployment, provided by inflation, will be thorough and speedy.

6.2 Multiple source-domain items

There are two ways in which metaphoric language can use more than one item to evoke the source domain of a metaphor. The first way is relatively prosaic: when a conceptually dependent or autonomous element consists of a phrase or clause that includes several open-class lexical items, the phrase or clause can evoke a single source domain in the same manner as a simplex element. This is permitted by the Combinatory Constraint. The only difference between a complex and a simplex source-domain phrase or clause is that the complex example is likely to profile multiple frames, all of which will map to the target domain. For example, the phrase *strenuous exercise for the mind* evokes the same

metaphor as the simple phrase *exercise for the mind*: the items *strenuous* and *exercise* both evoke the BODY source domain of THE MIND IS A BODY, whereas *mind* evokes the target domain. It doesn't matter much that the noun phrase in the first example includes the modifier *strenuous*.

Of course, the modifier *strenuous* in *strenuous exercise for the mind* does have an effect on the meaning of the phrase. Its effect is identical to the influence it would have in a non-metaphoric phrase such as *strenuous exercise*. The adjective *strenuous* fills the DESCRIPTOR role in the EXERCISE frame, and evokes the DIFFICULTY frame, in which the relevant ACTIVITY is *exercise*. In a metaphoric usage of *strenuous exercise*, the DIFFICULTY frame is mapped along with the EXERCISE frame, as shown below.

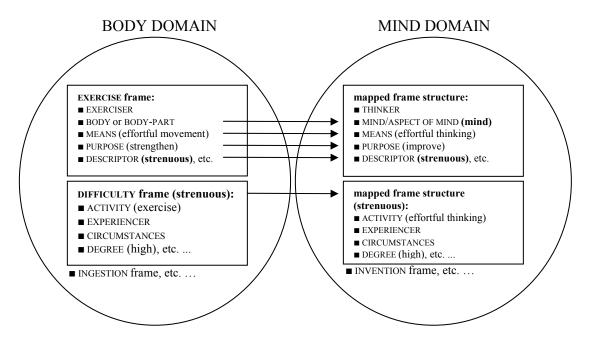


Figure (6.5) The phrase strenuous exercise for the mind evokes THE MIND IS A BODY

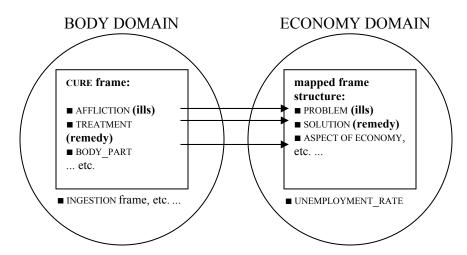
A complex constituent such as *strenuous exercise*, then, can include multiple source-domain items and still function as a source-domain, conceptually dependent, element in evoking metaphor.

The second way in which metaphoric phrases and clauses involve multiple sourcedomain items is more complex. This occurs when a phrase or clause combining a sourcedomain and a target-domain element is embedded in another construction, as in (6).

(6) A remedy for economic ills is suggested. *BNC*

In sentence (6), two source-domain items (*remedy, ills*) and one target-domain item (*economic*) together evoke AN ECONOMY IS A BODY. The source-domain items evoke the CURE frame, which maps to the target domain specified by the domain adjective *economic*, via AN ECONOMY IS A BODY. This process is shown below.

Figure (6.6) The phrase a remedy for economic ills evokes AN ECONOMY IS A BODY



In this case, *ills* and *remedy* both evoke the CURE frame, so only this frame structure needs to be mapped to the target domain. In most phrases and clauses with multiple source-domain items, the items evoke the same frame within a domain. Presumably, this is because metaphoric phrases and clauses are usually used with the intent of profiling structure from one particular frame – one which the speaker believes is especially useful in reasoning about the target domain. Additional source-domain items are more likely to

help fill in this pre-existing structure rather than bring in new frames from the source domain.

In this example, the phrase *economic ills* is one unit, with an autonomy/dependence relation between *economic* (the autonomous element) and *ills* (the dependent element), via the normal pattern for domain constructions explored in Section 4.1. This composite structure is autonomous relative to the element *remedy*. The element *remedy* is dependent because it does not elaborate any frame other than the one that it evokes (again, the CURE frame).

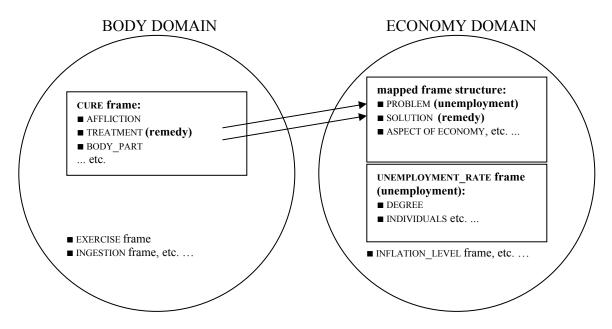
Sentence (4) brings up an important issue: when one metaphoric construction (such as *economic ills*) is embedded in another (here, *remedy for economic ills*), does the metaphoric construction fill the slot of a target-domain or a source-domain item? In sentence (4), *economic ills* is an NP within a PP, and hence could be expected to fill the target-domain position of the preposition phrase construction *remedy for economic ills* (Section 4.5). The phrase *economic ills* fills a target-domain slot in the preposition phrase construction, even though it contains a target-domain item *and* a source-domain item.

However, a metaphoric phrase such as *economic ills* can fill either a target-domain or a source-domain slot in another construction, via the Combinatory Constraint given in the previous section. Compare (6) above with (7):

(7) An economic remedy for unemployment is suggested.

This sentence, like (6), evokes the metaphor AN ECONOMY IS A BODY, but it profiles different frames and fills different roles, as shown below.

Figure (6.7) The phrase an economic remedy for unemployment evokes AN ECONOMY IS A BODY



In (6), the phrase *economic ills* fills the constructional slot of a target-domain item. But in (7), the domain construction *economic remedy* is the head of the preposition phrase construction, which is a source-domain position. Instead of elaborating a structure, as in (6), the phrase *economic remedy* instead is itself elaborated. The mapped frame structure evoked by *economic remedy* includes the role PROBLEM. The phrase in (7) allows this role to be filled by UNEMPLOYMENT, as shown above. This requires that the UNEMPLOYMENT_RATE frame be profiled in the ECONOMY target domain; then, the ECONOMY domain has the job of specifying that the same UNEMPLOYMENT involved in this frame should also fill the PROBLEM role in the mapped frame structure.

As in example (5), the preposition *for* in (7) helps define the relation between frame roles. Here, *for* makes it clear that UNEMPLOYMENT should fill the PROBLEM role rather than, for example, the SOLUTION role (the phrase *an economic remedy of unemployment* might suggest this relation).

These examples demonstrate an important corollary of the Combinatory Constraint: since the conceptually autonomous element in a metaphoric phrase or clause must simply contain a target-domain item, and the dependent element must contain a source-domain item, these elements can include other source-domain or target-domain material besides the requisite item. The corollary can be phrased like this:

Corollary of the Combinatory Constraint

Any metaphoric phrase or clause that can be understood out of context can fill either a source- or a target-domain slot in another metaphoric construction evoking the same metaphor (serving as either a dependent or an autonomous element relative to another element in the construction).

In (6) the domain construct *economic ills* evokes the complete metaphor AN ECONOMY IS A BODY. The NP *economic ills* evokes both domains of this metaphor, so it can either take the place of a target-domain-evoking item, as in (6), or a source-domain-evoking item, as in (7).

6.2.1 The xyz construction (Type 2)

Having examined other constructional combinations which permit multiple source-domain items, we're now in a position to examine the second type of *xyz* construction. We saw in 6.1.1 that the first type of *xyz* construction involved an equation and an embedded preposition phrase construction, which resulted in two target-domain items and one source-domain item.

The second type of *xyz* construction includes clauses such as Turner's examples: "the past is the best prophet of the future" or "She's an angel of God" (1991:196). These examples belong to the first class of construction discussed in this section, in which the

source-domain items are all found within one complex phrase or clause, which then functions as the dependent element in another construction.

For example, the clause *Iraq is a pit of quicks and*, in (8), follows this pattern:

(8) Her solutions are equally absurd because Iraq is a pit of quicksand. Struggling makes matters worse. www.lewrockwell.com/rozeff/rozeff116.html

Here, *Iraq* stands metonymically for the war in Iraq. The clause evokes the Location Event-Structure Metaphor, in which DIFFICULTIES ARE OBSTACLES. The situation in Iraq under the second Bush administration, which certainly qualifies as a DIFFICULTY, is here conceptualized as a special case of an OBSTACLE: a pit of quicksand. This special case brings the inference that greater efforts to overcome the difficulty (i.e., more troops and money in Iraq) will result in a worsening of the situation – just as efforts to escape quicksand result in worse entrapment. This clause is clearly a Type 2 *xyz* construction, since the entire phrase *a pit of quicksand* contains only source-domain items, and is dependent relative to the only target-domain item in the clause, *Iraq*.

The sentence *the past is the best prophet of the future* follows a similar pattern. Here, "the past" is personified, and the lessons we can learn from the past are conceptualized as the past speaking to us.²⁰ The past can therefore be metaphorically mapped, and can then fulfill the role of a PROPHET in the PROPHECY frame. Prophets, of course, always speak of the future, so the phrase *of the future* seems redundant. The phrase probably was used simply to set off the antonym *past* in the first part of the equation, and to emphasize the predictive role of prophets (as opposed to their religious function, etc.). In any case, the

172

²⁰ This conceptualization occurs via a special type of blending called "Fictive Interaction" (cf. Pascual 2002, 2006). In this case, the fictive interaction is metaphoric, because the "past" is personified.

only target-domain item in the phrase is *past;* the entire post-copular noun phrase *the best prophet of the future* functions to evoke the source domain. This behavior is consistent with the Combinatory Constraint and the other trends noted in this section. Type 2 *xyz* constructions seem to be very rare, and no examples were present in my corpus.

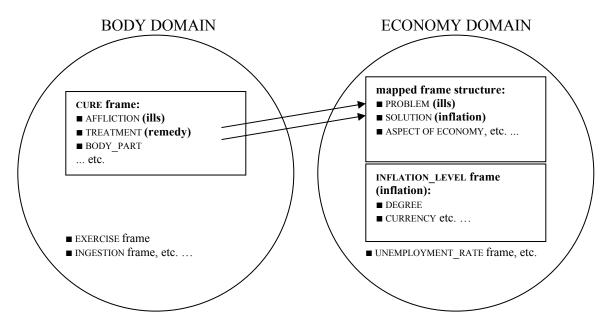
6.3 Multiple source- and target-domain items

A sentence can involve multiple target-domain items, as in (1)-(5); multiple source-domain items, as in (6)-(8); or both, as in (9) below.

(9) Inflation is a remedy for economic ills.

Here, the items *inflation* and *economic* relate to the ECONOMY domain, the target domain of THE ECONOMY IS A BODY, whereas the items *remedy* and *ills* evoke the source domain of this metaphor. Together, these items evoke the structure shown below.

Figure (6.8) The clause *inflation is a remedy for economic ills* evokes AN ECONOMY IS A BODY



Example (8) evokes a structure very similar to that evoked by the phrase *remedy for economic ills*, diagrammed in Figure (6.6). However, here the autonomous element *inflation* elaborates the "mapped frame structure" in the ECONOMY domain. It fills the SOLUTION role; it profiles the INFLATION_LEVEL frame in the ECONOMY domain; and it specifies that this SOLUTION role should be identified with the INFLATION_LEVEL (metonymically, with a change in the DEGREE of the INFLATION_LEVEL).

Each additional target-domain item, related by an appropriate grammatical construction, contributes further elaboration to a structure. Each additional source-domain item provides a structure that is itself elaborated by the (possibly very complex) structure evoked by the autonomous unit it is dependent on.

Example (9) is relatively straightforward compared to some of the metaphoric structures that can be evoked by combinations of metaphorically used constructions. Consider sentence (10):

(10) Some teachers departed to more luxuriant scholastic pastures. *BNC*

This example involves a complex metaphor that includes (as submappings) both the Location Event-Structure Metaphor and the Object Event-Structure Metaphor. The "pastures" (mapping to the state of having a steady job) are both a location and a provider of a desired object, FOOD. The verb *departed*, like the noun *pastures*, evokes the LOCATION domain of the Location Event-Structure Metaphor. The verb's subject, *teachers*, is technically domain-neutral, because teachers (as human beings) can either move towards a destination or act with the intent of achieving a goal (see Section 4.4.2). However, *teachers* is certainly compatible with the target domain of ACADEMIA. Once

this domain is evoked by context or other items (here, the domain adjective *academic*), then we know to interpret *teachers* in terms of their academic role and academic goals, rather than their physical attributes and physical movement.

The domain adjective *scholastic* is unambiguously target-domain. In the construction *scholastic pastures* the domain modifier makes it clear that the "pasture" is a special case of a LOCATION, and that the target domain is ACADEMIA, within which the goal location, a "pasture," maps to an ACADEMIC GOAL. Now, the predicating adjective *luxuriant* modifies the NP *scholastic pastures*, following the established predicating modifier pattern. Note that the source-domain predicating adjective *luxuriant* occurs outside the domain adjective *scholastic* in the NP *luxuriant scholastic pastures*. Predicating adjectives will always occur outside domain adjectives, both in non-metaphoric and metaphoric phrases (Levi 1978).

Each of these items (with the exception of the domain modifier *scholastic*) profiles an additional frame. The ambiguity of *teachers* is resolved once the Location Event-Structure Metaphor is evoked, because the *teachers* are clearly the MOVER in the LOCATION domain. The verb *departed* profiles the mapping ACTIONS ARE SELF-PROPELLED MOVEMENTS; *luxuriant* maps a positive quality of the DESTINATION onto a desirable quality of the GOAL; and *pastures* maps the DESTINATION itself onto the GOAL, a job in academia.

Clearly, speakers tend to reuse the same metaphor in multiple constructions in a sentence. This preference is consistent with the fundamental premise of conceptual metaphor theory, that metaphors are active in cognition. A person reasoning about a target domain keeps the source domain active. This is supported by several experiments

involving priming (Williams 1992, Brisard et al. 1997) eye-tracking (Pickering and Frisson 2001), and sorting tasks (Gibbs and Matlock 1997). The continued activation of the source domain serves to allow the online processing of inferences and their application to the target domain situation. The cognitive function of metaphor is further supported by the preponderance of examples in my corpus that "re-use" an already-evoked metaphor, which suggest that speakers choose to add mappings to already active metaphors rather than evoke new ones.

6.4 Combining conceptual metaphors

Although speakers tend to reuse an activated metaphor in an utterance, they sometimes do bring in new conceptual metaphors. Constructional combinations evoke multiple metaphors following a pattern that is just as regular and as compositional as the one involved in producing single metaphors. When a lexical item is part of two constructions, it may either evoke the target domain of both metaphors, or evoke the target domain of one metaphor and the source domain of another. The first of these possibilities is illustrated in (11).

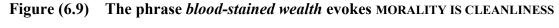
(11) His blood-stained wealth grew.

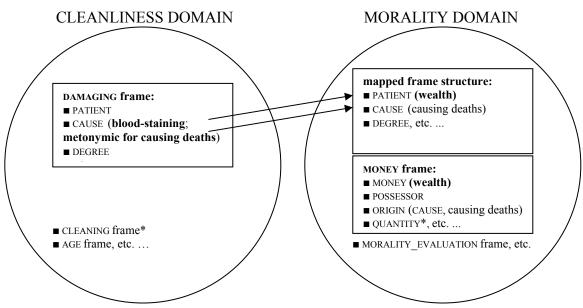
The predicating modifier construction *blood-stained wealth* evokes the metaphor MORALITY IS CLEANLINESS and the mapping IMMORAL IS UNCLEAN, as described in the introduction of this dissertation. The source domain CLEANLINESS includes the frame of DAMAGING, because "making unclean" is a special case of DAMAGING. The target domain

-

²¹ These experiments are discussed in section (9.6.1).

MORALITY is structured by the MONEY frame evoked by *wealth*. These frames and domains are show below.



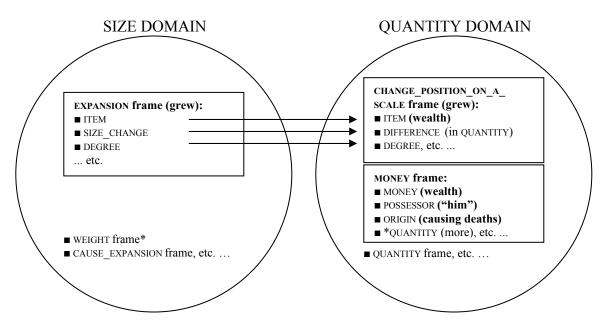


The noun *wealth* is also the subject of the verb *grew*, via a predicate-argument construction. Wealth cannot literally become larger, but it can increase in quantity; so there is a role in the WEALTH frame for quantity but not for size. Therefore *wealth* evokes the domain of QUANTITY, whereas *grew* evokes SIZE, together evoking the primary metaphor QUANTITY IS SIZE (also called MORE IS BIGGER). The noun *wealth* evokes the target domain of MORAL IS CLEAN and the target domain of QUANTITY IS SIZE, because the frame of wealth involves both QUANTITY of wealth and an ORIGIN, which can be evaluated as moral or immoral.²²

177

²² Other aspects of WEALTH can also be evaluated as moral or immoral; for example, some people believe that having a great QUANTITY of WEALTH is inherently immoral.





The phrase *blood-stained wealth* can evoke both the QUANTITY and MORALITY domains, because *wealth* evokes the MONEY frame, and this frame structures both QUANTITY and MORALITY. Note that this additional metaphor contributes a new filler for a role in the MONEY frame, but doesn't affect the structure that is provided by *blood-stained*. The metaphor CLEANLINESS IS MORALITY – as evoked by the combination of *blood-stained* and *wealth* – helps the ORIGIN role to be filled, because it maps the CAUSE of DAMAGING to the MORALITY domain, where it is identified as the element that should map onto the ORIGIN of wealth in the MONEY frame. These mappings make it clear that the *blood-stained wealth* was obtained by causing deaths.

The metaphor QUANTITY IS SIZE does not affect this information that is already present in the target domain, but it additionally maps the SIZE_CHANGE role in EXPANSION to the QUANTITY domain, where it is linked to the QUANTITY of WEALTH in the MONEY frame. In this way, the clause *his blood-stained wealth grew* uses two metaphors to tell us that the "wealth" was obtained via the causation of deaths, and that it is increasing in quantity.

(The possessive pronoun *his* in *his blood-stained wealth* indicates the POSSESSOR in the WEALTH frame, but there is nothing metaphoric about this.)

We can see from *his blood-stained wealth grew* that a single item can fill autonomous slots in two constructions, and can therefore evoke the target domain of two different metaphors. Alternatively, a lexical item can evoke the target domain of one metaphor and the source domain of another. These examples are rare, because source domains tend to be more concrete and target domains tend to be more abstract, and few lexical items evoke frames which structure both a source and a target domain. The combination is only possible when the lexical item in question can fill roles in many different frames and domains, as in example (12).

(12) The heroin tsar fumed.

This example uses the compound *heroin tsar*, which evokes the metaphor CONTROL IS REIGNING. The subordinate noun *heroin* evokes the target domain and the head *tsar* evokes the source domain of REIGNING.

However, a "heroin tsar" is a human being as well as a ruler. Human beings fill roles in countless frames and domains, among them the domain of ANGER. The phrase *heroin tsar* fills the autonomous slot in an argument-structure construction in (9), and can therefore evoke a target domain. Since the phrase denotes a human being, the phrase can evoke the domain of ANGER. The verb *fumed* evokes the source domain of FIRE, completing the metaphor ANGER IS FIRE.

The item *tsar*, by virtue of evoking both the frame HUMAN BEING and the more specific frame RULER, is able to participate in the evocation of two domains: the source domain of one metaphor and the target domain of another.

Examples such as (11)-(12) demonstrate that an addition to the Corollary of the Combinatory Constraint is needed to account for the combination of constructions involving multiple conceptual metaphors. The original Corollary is repeated here:

Corollary of the Combinatory Constraint:

Any metaphoric phrase or clause that can be understood out of context can fill either a source- or a target-domain slot in another metaphoric construction evoking the same metaphor (serving as either a dependent or an autonomous element relative to another element in the construction).

An addendum is needed to capture the limitation on combinations of multiple metaphors. It is always the *target* domain of the embedded metaphoric phrase or clause that serves as one of the metaphor input domains of the metaphoric construction in which it is embedded. This can be expressed in the following way:

Metaphor Embedding Constraint:

Any metaphoric phrase or clause that can be understood out of context can fill either a source- or a target-domain slot in a metaphoric construction evoking a different metaphor. The target-domain meaning of the embedded metaphoric phrase or clause must evoke the source domain of the larger metaphoric construction if it fills a source-domain slot, or the target domain of the larger construction if it fills a target-domain slot.

Complete metaphoric phrases such as *heroin tsar* or *blood-stained wealth* can either be embedded in phrases or clauses that re-use the same conceptual metaphors (via the Corollary), or in phrases or clauses that introduce additional conceptual metaphors (via the Metaphor Embedding Constraint). In either case these phrases must be situated in a

conceptually dependent slot, if they evoke a source domain; or a conceptually autonomous slot, if they evoke the target domain.

In this chapter we have seen a number of ways in which metaphoric sentences can include multiple source-domain items, target-domain items, or a combination of both. These combinations are compositional and follow certain rules introduced in this chapter: the Combinatory Constraint (in Section 6.1), the Autonomy-Dependence Constraint (also in 6.1), the Corollary of the Combinatory Constraint (in 6.2), and the Metaphor Embedding Constraint (in 6.4). The current section has demonstrated that even sentences that combine conceptual metaphors are bound by these constraints. However, we have not yet seen all the forms that metaphoric language may take: certain constructions that span two or more clauses can also evoke, or otherwise affect, metaphoric language. These constructions are the topic of the next chapter.

7 Metaphoric uses of subordination constructions

So far, the dissertation has focused on simple single-clause constructions (Chapters 4-5) and their combinations (Chapter 6). But metaphoric language also makes use of constructions that span multiple clauses, such as raising and equi constructions, relative clauses, and complement clause constructions. All of these are considered types of subordination constructions in CG. Conditionals, which are traditionally considered as subordination constructions, will also be mentioned here.

We will see in this chapter that metaphor in multi-clause constructions, as in simpler constructions, is communicated following a set pattern of conceptual autonomy and conceptual dependence. As in simpler constructions, conceptually autonomous elements tend to evoke the target domain of a metaphor, while the elements that are conceptually dependent on them evoke the metaphoric source domain. Conceptual autonomy and dependence can be more complicated to unravel in multi-clause constructions, which involve several levels of autonomy-dependence relations. Yet, once this analysis is complete, we can see that the generalizations about metaphoric language made in the earlier parts of the dissertation hold true for the complex constructions as well as for simple ones.

Since subordination constructions encompass more than one clause, these constructions always occur in combination with the constructions that make up their component clauses. Subordination constructions, therefore, never evoke metaphor on their own, but only are found in combination with the previously discussed constructions.

Some multi-clause constructions have little or no role in communicating metaphor, yet can interact in interesting ways with the constructions that do evoke metaphor. These

include relative clauses (Section 7.2) and raising and equi constructions (7.4). Anaphora (though unrelated to subordination) is similar to these types of subordination it that it has little role in communicating metaphor, yet can affect the structure of metaphoric language (7.6).

Other subordination constructions have a more direct role in evoking metaphor. This second type includes complement clause constructions (7.3); some equi constructions (7.4.4) and conditionals, which have traditionally been called "subordination" constructions, but which, I argue, more resemble coordination constructions in that they lack strong autonomy-dependence asymmetry (7.5).

I should note that this chapter covers only the constructions and strategies found in everyday language. Grammatical constructions and devices that are common only in literary and poetic language will be considered in Chapter 13.

7.1 Overview of subordination

What makes a clause "subordinate"? Langacker (1991) offers an intuitive yet definitive characterization when he defines "subordination" in terms of profiling. "A subordinate clause," he writes, "is one whose profile is overridden by that of the main clause. This way of characterizing the traditional notions is flexible (as it has to be) by virtue of not being tied to any particular structural configuration. At the same time, it captures the intuition that one clause is somehow subordinated to the other" (1991:436). For example, Langacker notes that:

In a typical complement clause construction, the two clauses combine directly and the main clause is clearly the profile determinant: *I know she left* designates the process of knowing, not of leaving" (1991:436). The main clause is likewise the head (aka. profile determinant) in its combination with an adjunct; at the composite structure level, *Alarms ringing, the burglar fled* profiles the act of fleeing. In the case of relatives, e.g. *The skirt she bought was too tight,* integration with the main clause is usually indirect – *she bought* first combines with the head noun *skirt,* and the full nominal elaborates the main-clause trajector at a higher level of organization. Still, the relative clause's processual profile is overridden even at the lowest level (*skirt she bought* designates the skirt), and that of the main clause prevails for the sentence overall.

These specific types of subordination will be explored in more detail in subsequent sections. Langacker's generalization, however, applies to all types of subordination, from relative clauses to raising. One clause in an English sentence will typically be profiled overall (be what the sentence is "about"). The other clauses in the sentence will be subordinate clauses of various types. As we will see, this does not appear to be the case in conditionals; which suggests that the traditional classification of conditionals as "subordination" is misguided.

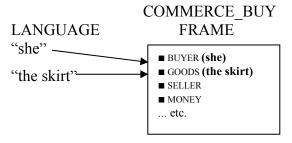
Subordination constructions have only one possible pattern of profiling, in that the main clause is the profile determinant (or "head"). However, these constructions have two potential patterns of conceptual autonomy and dependence. Some subordinate clauses are "modifiers" in Langacker's sense (2002:127), in that they are conceptually dependent relative to the head, the main clause. Relative clauses are "modifiers" in this sense. Other subordinate clauses are "complements" in that they are conceptually autonomous relative to the main clause. Unsurprisingly, complement clauses fall into this category.

Let us now see how these two patterns of autonomy-dependence surface in the various types of subordination constructions, and how these patterns affect metaphoric language.

7.2 Relative clauses

A relative clause (such as *she bought* in *the skirt she bought was too tight*) is one component of a nominal predication (*the skirt she bought*). The head of the nominal predication (*the skirt*) is the profile determinant, and causes the sentence as a whole to behave as a nominal (or noun phrase). This nominal head is conceptually autonomous, and typically elaborates a relational predication within the relative clause. In *the skirt she bought*, the verb *bought* evokes a relational predication and a COMMERCE_BUY frame with slots for a BUYER and GOODS. Here, the BUYER role is elaborated by *she* and the GOODS role is elaborated by *the skirt*, as shown below.

Figure (7.1) The item *bought* evokes the COMMERCE_BUY frame, while *the skirt* and *she* elaborate roles in this frame

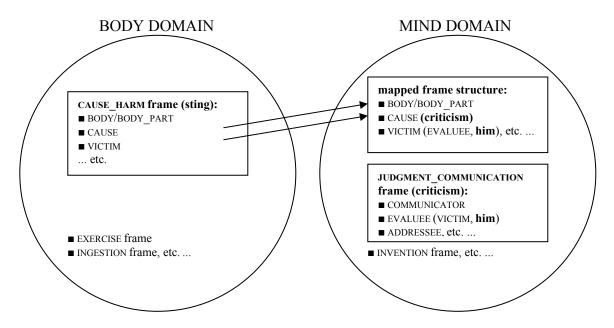


This process of elaboration is identical to that in the clause *she bought the skirt*. The profile determinant of *the skirt she bought* is *the skirt*, whereas the profile determinant of *she bought the skirt* is *bought*. However, the autonomy-dependence relations in the examples are the same.

Since the autonomy-dependence relations in relative clauses and nominal heads are the same as the relations between the predicate and subject in a predicate-argument construction, it follows that metaphor evocation would proceed similarly in the two types of construction. As an example, let's compare the structure of *the criticism that stung him* and the simple predicate-argument construction *the criticism stung him* (4.4).

We can immediately see the difference in profiling between these examples. The head, or profile determinant, of *the criticism stung him* is *stung*. The clause is "about" a process of stinging, in which *the criticism* and *him* respectively fill the CAUSE and VICTIM roles. The phrase *the criticism that stung him*, on the other hand, has *criticism* as its overall head. This difference in profiling/headedness does not affect the pattern of elaboration in the examples, however: in both cases, *stung* evokes a relation which is elaborated by the two NPs, as shown in Figure (7.2), adapted from (4.27).

Figure (7.2) Either the criticism stung him or the criticism that stung him will evoke THE MIND IS A BODY



The element *criticism* elaborates the CAUSE role in the CAUSE_HARM frame that is mapped to the MIND domain; the element *him* elaborates the role of VICTIM, which is also mapped from the CAUSE_HARM frame to the MIND domain. This is the same regardless of the profile determinant within the phrase or clause.

This difference in profile determinant does have an effect, predictably, on the ability of the phrase or clause to combine with other constructions. Since *the criticism that stung him* profiles a nominal predication, it fills the role of a noun phrase in other constructions, such as an equation, in *the criticism that stung him was bitter* (which additionally incorporates the metaphor EXPERIENCING IS TASTING, as is permitted in this type of combination by the Metaphor Embedding Constraint [Chapter 6]). The clause *the criticism stung him* of course cannot fill this slot, because it profiles a relational, processual predication.

The actual examples in my database were somewhat more complex than *the criticism* that stung his ego, but these also conformed to the rules for constructional combinations as outlined in the previous chapter. In (1), for example, the target domain items the boy and the man are given in a preposition phrase construction, which elaborates the structure evoked by *flowed*.

(1) Yes, he did envy the affection that flowed between the boy and the old man. *BNC*

The element *affection* also elaborates the structure evoked by *flowed*, even though *affection* is here the clausal head. This makes it acceptable for *affection* to join *the man* and *the boy* in representing the target domain of EMOTION (as part of EMOTIONS ARE

LIQUIDS IN A CONTAINER, by which the man and the boy are conceptualized as containers, and affection is the liquid that "flows" between them).

7.3 Overview of complementation

Predicates such as *claim, believe,* etc., evoke structure that can be elaborated by a complement clause. When a clause is an argument of a predicate, the predicate is the profile determinant, or head of the clause. The complement clause is simply a "main-clause participant" (Langacker 1991:440). As such, it elaborates part of the meaning of the relation evoked by the main clause. The complement clause can elaborate either the main-clause landmark (as in object-complement clauses, such as *he believes that God exists*), or the main-clause trajector (as in subject-complement clauses, such as *that God exists comforts him*).

The status of the complement clause can be marked in various ways. Langacker (1991) discusses four items that can fill this role in a complement clause construction: *that, to,* progressive-marker *ing,* and zero. Each of these complementizers brings different nuances to the meaning of a complement clause (although only the distinctions that lead to differences in metaphoric usage will be discussed here). All of these complementizers were documented in metaphoric examples in my database, occurring with object-complement clauses:

- (2) ...they were highly indignant when they heard that an official spokesman had smeared them with the suggestion of criminal activities.

 BNC
- (3) By this means he hopes **to heal the feud**... *BNC*

- (4) I'd like you to consider **removing from your life**, one by one, all those things that annoy you, that get you down, that upset you.

 BNC
- (5) I think all religions stink, actually, but Christianity stinks worse than any of them.
 BNC

Example (2) evokes the metaphor MORALITY IS CLEANLINESS, (3) evokes SOCIAL SYSTEMS ARE BODIES (in which fixing a social problem is conceptualized as healing a body); (4) evokes the Object Event-Structure Metaphor (in which the removal of an unwanted object maps to solving a problem); and (5) evokes SUSPICIOUS TRAITS ARE BAD SMELLS, a primary metaphor based on the correlation between bad smells and suspicious food.

Only *to*-complementizers occurred with subject-complement clauses in my database. The complement clause in (6), for instance, evokes the Location Event-Structure Metaphor, in which MEANS ARE PATHS and RULES ARE GUIDES that can help you follow a path.

(6) **To follow that rule** uncritically for Margery Kempe would make it virtually impossible to reach any conclusion about her... *BNC*

In examples (2)-(6), the metaphor is located entirely in the complement clause, and no main-clause items are involved in evoking the metaphors. This is typically the case in complement clause constructions that are used metaphorically.

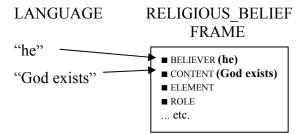
Logically, the main clause could evoke the source domain of a metaphor while the complement evokes the target domain, because the complement clause elaborates part of the meaning of the main clause. However, most main-clause predicates are difficult to

use as source-domain items. In most object-complement constructions, main-clause predicates are typically verbs or nouns related to cognition and communication, such as *believe*, *agree*, etc. These items have abstract meanings that are related to common target domains, such as MIND; but these items cannot normally evoke source domains. As we'll see in (7.4), two types of complementation with a *to*-complementizer, called *raising* and *equi*, occur with a wider variety of main-clause predicates than the other types. As a result, this kind of complementation has more possible uses in metaphoric language than complementation with *that*, *ing*, or zero.

7.3.1 *That*-complementation with metaphoric main clauses

Relational predications such as *think* or *believe*, and nominal predications such as *idea* or *belief*, normally take *that*-clause complements, as in *the belief that God exists*. This is natural because predications such as *belief* or *believe*, which refer to propositional attitudes, include a landmark (often a CONTENT role) that can be elaborated by the proposition, and a trajector (for example, a BELIEVER role) which can be elaborated by the being who experiences the propositional attitude toward the landmark. For example, *belief* or *believe* can evoke the RELIGIOUS_BELIEF frame, which includes a BELIEVER and the believed CONTENT:

Figure (7.3) The sentence *he believes that God exists* evokes the RELIGIOUS_BELIEF frame



In the sentence *he believes that God exists*, the BELIEVER role in the RELIGIOUS_BELIEF frame is elaborated by *he;* and the CONTENT role in the RELIGIOUS_BELIEF frame is elaborated by the proposition *God exists*. (The frame structure evoked by the noun phrase *the belief that God exists* is identical, except that the BELIEVER role is not elaborated.)

However, some predicative phrases can head a complement clause *only* when they are used metaphorically. Most nouns and verbs don't refer to propositional attitudes, and cannot normally take a *that*-complement. The noun *seed* falls into this category (we can say *the belief that God exists*, but not **the seed that God exists*). However, this can change when *seed* is used metaphorically, as in (7):

(7) This planted the seed in his mind that perhaps the work of a record producer could be interesting. *BNC*

In (7), the preposition phrase *in his mind* evokes the domain MIND, which when combined with the head of the NP, *seed*, evokes the metaphor IDEAS ARE PLANTS, as shown below.

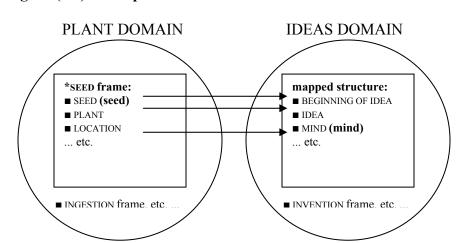


Figure (7.4) The phrase the seed in his mind evokes IDEAS ARE PLANTS

The target-domain meaning of the phrase *the seed in his mind* is, roughly, "the first stages of an IDEA". This target-domain meaning is compatible with a complement clause describing the IDEA, even though it is not possible to have this type of complement with a non-metaphoric use of *seed*. This discrepancy demonstrates, once again, that metaphor is a conceptual process that can affect grammar as well as word choice in language.

Langacker suggests that predicates like *see* are forced to have an evaluative meaning, rather than a purely sensory one, in *that*-complement constructions such as *I* {*see/hear/feel*} that the situation is becoming difficult (Langacker 1991:44). This would be a reasonable consequence of the semantics of the *that*-complement construction, which requires the *that*-clause to express a proposition. However, I cannot corroborate this conclusion with definitive data from my corpus. The only example of a sensory verb with a *that*-clause is given below:

(8) Her eyes were adjusting to the darkness, and now she could see that he had folded his arms over the enticing broadness of his chest and was watching her with a challenging glitter in his eyes.

BNC

The conclusion reached in (8) – "that he had folded his arms" etc., requires a minor amount of "evaluation," in that the main-clause subject *she* has to conclude, based on visual evidence, that "he had folded his arms" during the time that she was blinded. The sentence does not, however, refer only "secondarily (if at all) to visual perception" (Langacker 1991:440). Vision is still a crucial part of the meaning of *see* in this example.

I would argue that the *that*-complement construction does not force a metaphoric or extended reading on items such as *see* or *seed*; however, the construction *can* require that

an item be used in an extended or metaphoric sense in order for it to take a *that*-complement, as was the case for *the seed in his mind*, in (7).

7.4 Raising and equi

Complex metaphoric sentences frequently involve raising constructions, as in (9) below, which incorporates the raising verb *appear*. Metaphoric sentences can also involve equi constructions (also called "control") as in (10), in which the relevant verb is *persuade*:

- (9) Behaviour would appear to **depart from that predicted by the optimality theory**.

 BNC
- (10) The Parminter tale was utterly scandalous and she would have to persuade Wilmot to **skate around the libel laws if it were to get into print**. *BNC*

The question is, what role does the raising or equi construction itself have in determining the metaphoric meaning of the sentences in which it participates?

Langacker provides us with a thorough CG analysis of raising constructions in his 1995 *Language* article, "Raising and Transparency". This article analyzes the effect of raising and equi on meaning in general, and this analysis can be extended to encompass the effect of raising and equi constructions on metaphoric meaning.

In these diagrams and in the rest of this section, I will temporarily abandon my frame structure notation in favor of Langacker's original representation (I explain the distinction between these in Chapter 2). Langacker's diagrams of raising and equi capture certain nuances of meaning that are difficult to represent using frames. I will, however, directly compare the two types of representation to show how they use different means of

expressing the same semantic facts. Figures (7.5) and (7.6) use the Langacker notation; these will be followed by two frame-based diagrams of the same sentences.

Figure (7.5) diagrams *Don is leaving*, while Figure (7.6) illustrates the raising construct *Don is likely to leave*. The solid arrows indicate that one element is elaborating a substructure (a trajector or landmark) within another. The outlined arrow within the structure of *leaving* indicates that the trajector is moving outside the landmark. In each diagram, the complete structure is shown above its components. The semantic contribution of the copula is ignored in each case.

Figure (7.5) In the clause *Don is leaving*, the referent of *Don* elaborates the trajector in the structure evokes by *is leaving*

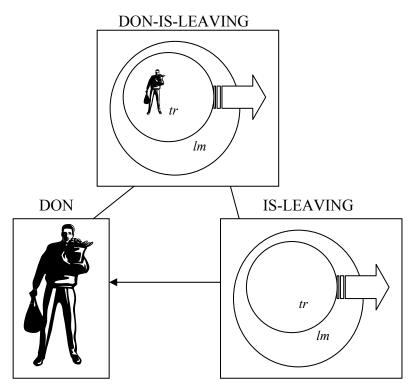


Figure (7.6) In the clause *Don is likely to leave*, the raising verb evokes a position on a scale of probability, which is elaborated by *Don*

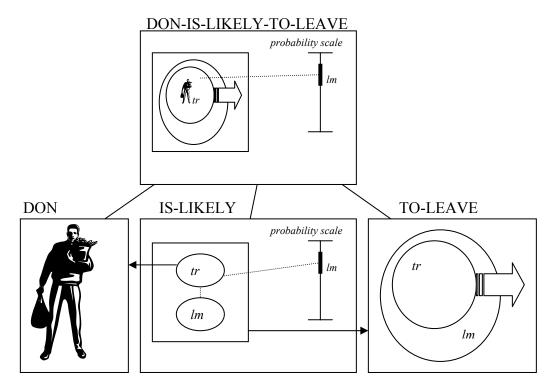


Figure (7.6), which is adapted from Langacker (1995:33), requires a certain amount of explanation. The adjective *likely* evokes a structure (shown in the lower center rectangle) that includes a relation and a scale. The relation, like all relations, includes a trajector and a landmark. The structure of *likely* tells us only that the trajector and landmark are related to each other in some way.

The scale evoked by *likely* is a probability scale, shown on the right side of the center rectangle in Figure (7.6). The region of above-average probability, shown by the darker region of the scale, is the landmark in the highest-level relation in the structure of *likely*. The trajector that is being equated with this landmark is the underspecified relation mentioned in the previous paragraph. In the clause *Don is likely to leave*, this relation is

elaborated by *leave*; and *Don*, which is already elaborating the trajector within that relation, now elaborates the trajector within the *leave* relation.

I will skip over the meat of Langacker's analysis, which is intended to explain how a subject such as *Don* can be the subject of a raising predicate, in contrast to the generative and transformational understanding of raising, in which the abstract structure [*Don leave*] is the subject. (I suggest that anyone interested in this argument read Langacker 1995.) For my purposes, the important part of Figure (7.6) is the composition of *Don* and *leave*, mediated by the structure of *likely*.

In Figure (7.6), *Don* elaborates the trajector of the relation in the structure evoked by *likely*. This relation as a whole is elaborated by *leave*, resulting in a substructure (the smaller box within the complete upper structure in [7.6]) that is identical to the structure shown in Figure (7.5). In Figure (7.6), the element *Don* is simultaneously elaborating substructures within both *likely* and *leave*. This simultaneous elaboration means that there are two possible ways that metaphor can be evoked in raising constructions: First, the element that elaborates the trajector (such as *Don*) can evoke a target domain, while the relation evoked by the complement clause verb (such as *leave*) evokes a source domain. This possibility is explored in (7.4.1). Alternatively, since the subject is also elaborating the structure evoked by the raising or equi predicate, the subject can evoke a target domain while the raising or equi predicate itself evokes a source domain. This is relatively rare, but the examples that exist are significant because they present a challenge for the generative account of equi (Section 7.4.4).

Some of Langacker's observations can be captured in a frame-based representation of raising. Figure (7.5), which illustrates *Don is leaving*, can easily be represented as the DEPARTURE frame evoked by *leaving*, in which the THEME role is elaborated by *Don*:

Figure (7.7) The clause *Don is leaving* evokes the DEPARTURE frame.

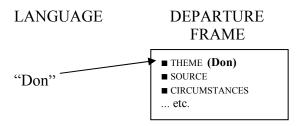
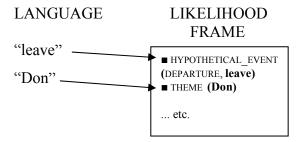


Figure (7.6) can be approximated by the combination of the DEPARTURE frame, shown above, and the *LIKELIHOOD frame evoked by *likely*, shown in Figure (7.8). In this frame, the HYPOTHETICAL_EVENT role is elaborated by *leave*, and the THEME role is elaborated by *Don*.

Figure (7.8) The clause *Don is likely to leave* evokes the *LIKELIHOOD frame.²³



As in the Langacker-style depictions in Figures (7.5)-(7.6), these frame diagrams capture the fact that *Don* elaborates the structure evoked by *leave* (the DEPARTURE frame in [7.7]) and the structure evoked by *likely* (the LIKELIHOOD frame in [7.8]). However, these diagrams fail to capture many of the nuances in Langacker's representation, such as

the elaboration of the entire trajector-landmark relation in the IS-LIKELY structure by the LEAVE relation. The relation between the two frames in Figures (7.7) and (7.8) is also less clear than the relation between the LEAVE and IS-LIKELY structures in Figure (7.6). In the rest of this section, therefore, diagrams will follow the Langackerian style, and will be discussed in terms of trajector-landmark relations rather than frame roles.

7.4.1 Subject-to-Subject raising and equi

Metaphoric sentences can incorporate raising predicates such as *seem, likely;* and equi predicates such as *want, intend*, etc. Normally these predicates have little role in the metaphor itself, but the structure they evoke enables the autonomous element to elaborate a substructure of the dependent element (in the indirect way shown in Figures [7.6] and [7.8]). This section will introduce Subject-to-Subject raising, then Subject-to-Subject equi. (The next subsection will address Subject-to-Object raising and equi.)

In CG there is no categorical distinction between raising and equi. In Langacker's 1995 article, he describes how the difference between raising and equi predicates is semantic, rather than syntactic. Briefly, equi predicates such as *persuade* and *expect* profile relationships involving mental processes, intention, and social forces. For this reason, these predicates' subjects must be "capable of envisioning a process, of engaging in a communicative exchange, of succumbing to social/psychological pressure, and of intending to do something" (1995:41). I will continue to refer to these processes as "raising" and "equi" out of respect for tradition, although I support Langacker's claim

²³ The depicted *LIKELIHOOD frame differs from the FrameNet LIKELIHOOD frame, in that the HYPOTHETICAL_EVENT and THEME roles here are separate. In the FrameNet version, both are subsumed by a single HYPOTHETICAL EVENT role, rendering the current type of analysis impossible.

that these processes are fundamentally more similar than is recognized in generative or transformational grammars.

The examples in my BNC mini-corpus included thirty-seven raising and equi constructions of various types. Six of these involved Subject-to-Subject raising, as in (9) above or (11) below:

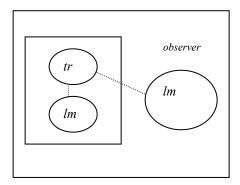
(11) Behaviour appears to depart from that predicted by the optimality theory. *adapted from BNC*

This type of raising is called "Subject-to-Subject" because the subject of the main clause, *behavior*, is also the subject of the subordinate clause. This means that the "behavior" is doing the "departing" (metaphorically). This example is classified as "raising," not "equi," because the verb *appear* does not profile a relationship involving a mental or social process, and so does not require an animate or volitional subject.

Example (11) involves the Location Event-Structure Metaphor, in which the behavior predicted by optimality theory is conceptualized as a path, and the deviation from this behavior is conceptualized as a departure from this path. Additionally, *behavior* is personified in this example (a mapping which is compatible with the other structure in the Location Event-Structure Metaphor). The predicate *appear*, like the predicate *likely* in Figures (7.5) and (7.6), evokes a trajector element that elaborates the structure of two relations, as shown in Figure (7.9).

Figure (7.9) The structure evoked by the predicate *appear* includes a trajector within a relation; this relation is evaluated by an observer

APPEAR



As with the trajector in Figure (7.6), we can see that the trajector in Figure (7.9) is part of two relations. The trajector element is the thing that the observer is seeing. However, the observer is seeing the trajector element within the relation in which it takes part.

The relation in the inner box is the relevant one in interpreting metaphoric examples such as (12), because this is what relates the subject (in [13], behavior) to the verb phrase depart from that predicted by optimality theory (for the other relevant constructions in this example, see Section 4.5 on preposition phrase constructions, and Section 7.6 on anaphoric pro-forms). The element designated by behavior elaborates the trajector of the structure evoked by depart. Therefore, behavior is autonomous relative to depart, despite the additional structure supplied by appear.

Like all autonomous elements in an autonomy-dependence relation that evokes metaphor, *behavior* evokes the target domain, while the dependent element *depart* evokes the source domain. The sentence in (11), repeated as (12a) below, undoubtedly has a different meaning than the simpler example in (12b). However, these two sentences evoke metaphor in the same way, because the relevant autonomy-dependence relations

are the same. The meaning contributed by the raising construction and by *appear* do not change the relative autonomy and dependence of *depart* and *behavior* in (12a) and (12b).

- (12) a. Behavior appears to depart from that predicted by the optimality theory.
 - b. Behavior departs from that predicted by the optimality theory.

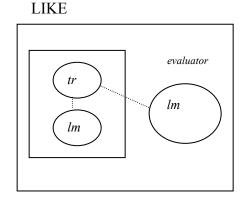
Metaphoric sentences using raising predicates such as *seem* and *appear* were rare in my database, compared to equi predicates. Only six of the twenty-nine Subject-to-Subject constructions that I found would be classified as "raising" by syntacticians in the generative and transformational traditions. The remaining twenty-three would be labeled as "control" or "equi".

Example (13) is representative of these Subject-to-Subject equi examples. This example is dubbed "equi" rather than "raising," because *like* requires an animate, volitional subject.

(13) Erm I'd like to pitch another figure into the debate ... BNC

The verb *like* evokes a structure similar to that evoked by *appear* in Figure (7.9), as shown below.

Figure (7.10) The structure evoked by the predicate like is similar to that of appear



The structure evoked by *like* includes a trajector within a relation (this relation, the interior box in [7.10], is evoked by *pitch*). In Subject-to-Subject equi involving *like*, this relation is evaluated by a participant who is co-referential with the trajector within the relation (the "*lm*" to the left in Figure [7.10]). Regardless of the presence of this observer, the trajector and landmark in (7.10) elaborate the relation evoked by *pitch*, and therefore are autonomous relative to *pitch*. The preposition phrase *into the debate* is not illustrated in (7.10); the preposition *into* brings in another relation, one in which the "*lm*" in (7.10) – as evoked by *another figure* – is the trajector, and *the debate* is the landmark.

These autonomy-dependence relations allow the sentence *I'd like to pitch another* figure into the debate to evoke the Conduit Metaphor, with pitch evoking the source domain OBJECT TRANSFERAL, and figure and the debate evoking the target COMMUNICATION. The equi construction does not directly affect the metaphoric meaning of this sentence, as shown by its similarity to *I pitched another figure into the debate*.

7.4.2 Subject-to-Object raising and equi

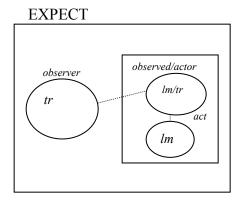
Alongside the many examples of Subject-to-Subject raising and equi in my database, I found one example of Subject-to-Object raising, and seven examples of Subject-to-Object equi. The lone example of Subject-to-Object raising in my mini-corpus appears (in a simplified form) below.

(14) He fully expected patriotic propaganda to **sweep the workers into fratricide** if war actually came. *adapted from BNC*

We can tell from (14) that Subject-to-Object raising is different from the Subject-to-Subject raising, in that the subject of the raising predication plays no role in the metaphor. In Subject-to-Subject raising, the subject can evoke the target domain, because it elaborates the structure evoked by the dependent predicate in the complement clause. In (11), behavior appears to depart ..., the element behavior elaborates depart, even though these elements also have roles in the structure evoked by the raising verb. Subject-to-Object differs from examples of Subject-to-Subject raising such as (11), in that the subject of the raising predicate in these examples (such as he in [14]) is never involved in the metaphor.

We can see why the subject of the raising predicate is not involved in metaphor if we look at the structure of a raising predicate, such as *expect*, shown below.

Figure (7.11) In the structure evoked by the predicate *expect*, the "observed/actor" is the landmark of the EXPECT process and the trajector of another process



The "observer" is the trajector of the *expect* relation, but it has no role in the *sweep* relation in the interior box. The "observer" *he* in (14) is therefore neither autonomous nor dependent relative to the *sweep* element. (Both elements are autonomous relative to the

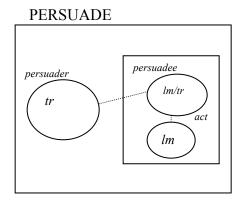
expect relation, but that is unimportant for the moment.) The observer cannot, therefore, participate in evoking the target domain of a metaphor in an example such as (14), since the observer is not involved in an autonomy-dependence relation with the predicate that evokes the source domain (*sweep*).

Instead, the trajector and landmark of the relation evoked by *sweep* are elaborated by *patriotic propaganda* and *the workers*, respectively. These noun phrases are therefore autonomous relative to *sweep*, and unsurprisingly, they evoke the target domain of CAUSES ARE FORCES. (The preposition phrase *into fratricide* is not shown here.) The predicate *sweep* itself evokes the source domain of CAUSES ARE FORCES (part of the Location Event-Structure Metaphor).

Subject-to-Object equi is similar to Subject-to-Object raising in its uses in metaphor. Examples such as (15) were typical:

(15) The Parminter tale was utterly scandalous and she would have to persuade Wilmot to **skate around the libel laws** if it were to get into print. *BNC*

Figure (7.12) In the structure evoked by the predicate *persuade*, the "persuadee" is the landmark of the PERSUADE process and the trajector of another process



The smaller rectangle in (7.12) represents the process evoked by the complement clause predicate. In (15), this is the metaphoric verb *skate*. Here, a "skater" ("*lm/tr*" above) and an "obstacle" ("*lm*") fill slots in this verb's structure: the skater is the trajector and the obstacle is the landmark. The skater is, in turn, the landmark of the *persuade* relation represented by the larger rectangle. The trajector of the *persuade* relation is the one doing the persuading (here, *she*).

Note, however, that the subject of *persuade* has no role in the relation evoked by *skate*. Like the subject of *expect* in (14), the subject of *persuade* in (15) cannot participate directly in evoking the metaphor. Subject-to-Object raising and equi are similar in this respect.

The landmark of the relation evoked by the equi predicate (here, the "persuadee") will often be domain-neutral, because of the semantic requirements that it be animate, probably human, etc., in order to be an appropriate landmark for the relation evoked by an equi predicate (for example, to be capable of being persuaded) (Section 4.4.2). There are exceptions in which the landmark element is not domain-neutral, however, as in (16):

(16) Four hours later the cottage had allowed the temperature to **rise a degree above freezing.**BNC

In (16), *cottage* is metonymic for the cottage's thermostat or heating system. In the complement clause, *temperature* fills the trajector role in the structure evoked by *rise*. It therefore elaborates *rise* and evokes the target domain of MORE IS UP, whereas *rise* evokes the source domain.

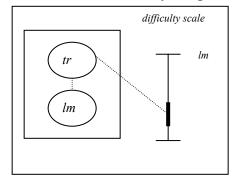
7.4.3 "Tough movement," or Object-to-Subject raising

The construction called "tough movement" in the generative tradition is considered a type of raising in CG, and can be termed Object-to-Subject raising (cf. Langacker 1995:33). There were no examples of metaphoric Object-to-Subject raising in my database, but they are common enough on the Internet, as in (17).

(17) His ego is easy to bruise! pets.webshots.com/album/31916266qbucnsGpvL

The structure evoked by *easy* (Figure 7.13) resembles that of *likely* (Figure 7.6) in that it involves a relation and a scale:

Figure (7.13) The structure evoked by the predicate *easy*



As in the other diagrams, the smaller rectangle in Figure (7.13) represents the structure of the predicate in the complement clause (in [17], *bruise*). The trajector in this structure is elaborated by the subject (the "raised object") *his ego*. Therefore, *his ego* in (17) is autonomous and should evoke the target domain of THE MIND IS A BODY – which it does (THE MIND IS A BODY shown in diagram [4.27] for *the criticism hurt his ego*). As expected, the dependent element *bruise* evokes the source domain.

7.4.4 Metaphoric uses of equi predicates

The raising and equi predicates we've seen so far have participated in metaphoric sentences, but have had no role in evoking either the source or target domain of a metaphor. These predicates are dependent relative to their subjects and their complement clauses, so raising and equi predicates might be expected to demonstrate source-domain uses where either their subjects or complement clauses would evoke the target domain.

In fact, equi predicates can be used to evoke a very limited range of personification metaphors, as in the clause *the car is trying to start* in (18).

(18) This car is fuel injected, meaning you should not be touching the accelerator at all while the car is trying to start.

www.weird-articles.com/car/start.htm

In (18), there is no metaphor involved in the complement clause verb (cars literally "start"). However, like all equi predicates, the predicate *try* evokes a structure with a role for an animate, volitional trajector. Personification metaphor allows *car* to fill this slot and this role. The subject in a Subject-to-Subject equi construction is autonomous relative to both the equi predication and the complement predication, so it makes sense that it can evoke the target domain of a metaphor whose source domain is evoked by one or the other of these predications.

The use of "dummy" pronouns in metaphoric equi predications is particularly significant, because of the historical analysis of "control" or "equi" constructions.

According to the generativists, equi constructions cannot take dummy subjects, because equi constructions require a thematic role in this slot, and dummy pronouns cannot supply a thematic role.

In CG, "dummy" pronouns are considered meaningful elements. Langacker (1991) suggests that *it* designates an "abstract setting" with "non-participant status" (1991:365). Whatever meaning we choose to ascribe to them, "dummy" pronouns clearly have *some* meaning, because that meaning can be metaphorically mapped. This occurs in equi constructions such as (19), in which *it* is the subject of the equi verb *decide* in the clause *it decided to rain*, even though *decide* normally requires an animate subject.

(19) So since we didn't get to see the Palace gardens on monday, we went tuesday – and it decided to rain, rain, rain. www.jasonmaurer.com/blog/?p=34

"Dummy" *it* can evidently be personified, as the item *car* is in (18). This suggests that "dummy" *it* has a referent of some kind, or there would be nothing for a personification metaphor to map onto, and uses such as (19) would be impossible.

In fact, the personification of "dummy" *it* can be extended in some interesting ways, as in (20) and (21).

- (20) It has been trying to rain all day, but it can't, because God and Rabbi Karpas won't allow it.

 www.salon.com/wlust/feature/1998/11/24feature.html
- (21) And it decided to rain. The rain god had apparently decided to keep us company. And we couldn't get rid of him the whole day. vinodgk.blogspot.com/2005_06_01_archive.html

In (20), *it* seems to refer to a force of nature that can be acted upon by other forces, such as "God" or "Rabbi Karpas". In (21), *it* is itself conceptualized as a god. The two sentences following the raising example refer anaphorically to the "dummy" *it* as a *rain*

god and as *him*. Again, this evidence suggests that "dummy" *it* has meaning, and that the traditional analysis of equi is inadequate.

7.5 Conditionals

There are three very different uses of conditional constructions in metaphoric language. First, there are conditionals in which the protasis, or *P-clause*, evokes one metaphor input domain and the apodosis, or *Q-clause*, evokes the other domain; second, there are metametaphoric conditionals, which combine compositionally with other constructions (usually equations) to evoke a more complex system of metaphoric mappings; and third, there are *as if*-conditionals, which are used to draw attention to subjective impressions, including those that are structured by metaphor. The first two uses seem to be relatively rare in everyday language, and neither type was found in my database. However, I will include examples from the Internet to demonstrate that these conditionals are found in everyday, informal usage.

7.5.1 Domain-evoking P-clauses and Q-clauses

Typical examples of the first pattern, in which the P-clause evokes one metaphor input domain and the Q-clause evokes the other, are shown in (22)-(23). These examples are also typical in that an element in the P-clause evokes the target domain and something in the Q-clause evokes the source (although we will see that this is merely a trend, and not the only possible pattern).

(22) if you aren't a radical individualist, you're a sheep ... Problem is, if you're a radical individualist, then you're also a sheep ... tunes.org/~nef/logs/forth/04.05.29

(23) ... if it's a Prescott, then it's a power hungry beast. www.techspot.com/vb/topic55774.html

In (22), the stereotypical follow-the-leader characteristic of sheep is mapped onto people who "follow" particular ideologies. In both conditional sentences in (22), the target domain is evoked by *radical individualist*, which necessarily refers to a sentient being and not a sheep. Even someone who is not a radical individualist, as in the first conditional in (22), must be a sentient being, because he or she has chosen to reject radical individualism. The source domain is evoked by *sheep* in each case.

In (23), the target domain is evoked by *Prescott* (a computer processor core); this processor core is metaphorically understood as a "power-hungry beast," as *hungry* and *beast* evoke the source domain, and *power* joins *Prescott* in evoking the target domain.

In both (22) and (23), the copula-linked noun phrases in the P-clauses of these conditionals evoke the target domain, while the copula-linked noun phrases in the Q-clause evoke the source domain. The copula constructions themselves play no direct role in metaphor evocation, because in each clause the head noun is a pronoun, and at best can be domain-neutral. Instead, it is the overall conditional construction that allows the copula-linked noun phrases in the P-clause and the Q-clause to be understood as co-referential; this co-referentiality, in turn, forces the noun in the Q-clause to be understood metaphorically, because it is co-referential with a referent in a different domain.

The pattern in (22)-(23) might suggest that the main clause (the Q-clause) is dependent, and the subordinate clause (the P-clause) is autonomous, since in these examples the source-domain item is found in the Q-clause and the target-domain item is part of the P-clause. Other metaphoric conditionals, however, these suggest that neither

clause in a conditional is strongly autonomous or dependent relative to the other. For example, the relative equality of the two clauses in a conditional is apparent when we look at metaphoric conditionals with *and* rather than with *if*. Metaphoric *and*-conditionals tend to take the idiomatic form *show me an X and I'll show you a Y*, such as (24)-(27).

- (24) You show me a capitalist, and I'll show you a bloodsucker.
 (Malcolm X)

 www.cybernation.com/victory/quotations/subjects/quotes_greed.html
- (25) Show me a polluter, and I'll show you a fat cat ... (R.F. Kennedy, Jr.) www.capewind.org/news458.htm
- (26) Show me a rose and I'll show you a girl named Sandy. www.metroactive.com/metro/05.24.06/da-vinci-decoded-0621.html
- (27) Show me a bottleneck, and I'll show you a programmer's assumption. *mjtsai.com/blog/2007/02/14/c-is-the-new-assembly/feed/*

The first two examples shown above behave as we would expect from the conditionals we've seen so far: the P-clause contains a target-domain item (*capitalist* in [24] and *polluter* in [25]), and the Q-clause contains a source-domain items that is coreferential with the target-domain item (*bloodsucker* and *fat cat*). The most common uses of this construction follow this pattern, in which a P-clause referent is associated with a derogatory term in the Q-clause.

However, the uses in (26)-(27) follow a completely different pattern. In these examples, the source-domain items are given in the P-clause (*rose* in [26] and *bottleneck* in [27]). The target-domain phrases *a girl named Sandy* and *a programmer's assumption* are found in the Q-clause. The "reversability" of the source- and target-domain positions

suggests that P-clauses and Q-clauses do not demonstrate a strong autonomy-dependence asymmetry.

7.5.2 Meta-metaphorical conditionals

The second use of conditionals in everyday metaphor consists of the "meta-metaphorical" conditionals observed by Dancygier and Sweetser (2005), who give examples such as:

(28) If the beautiful Golden Gate is the thoroughbred of bridges, the Bay Bridge is the workhorse.

San Francisco Chronicle, Nov. 11, 1996

Meta-metaphorical conditionals incorporate two equations or other appropriate constructions, one in each clause. The two equations perform their normal function, with the difference that the target-domain items in each clause belong to the same target domain, and the source-domain items belong to the same source domain. Example (28) additionally incorporates a preposition phrase construction to further clarify the target domain of BRIDGES. This extra construction isn't required; the sentence *If the beautiful Golden Gate is a thoroughbred (horse), the Bay Bridge is a workhorse* is also comprehensible.

The advantage of meta-metaphorical conditionals is that they profile two mappings from the source domain to the target, and also preserve the relations and associations of the two source-domain elements that are mapped. For example, in (28), we understand from the HORSE source domain that THOROUGHBREDS are valued and praised for their beauty and their lineage, whereas WORKHORSES receive less acclaim and yet perform more labor than thoroughbreds. These values are mapped to the target domain of

BRIDGES, where these mappings supply the inference that the GOLDEN GATE is valued for its beauty and its history, whereas the BAY BRIDGE is less famous, but actually is more heavily used. This correspondence between two source-domain items, each related by a copula construction to a target-domain item, is most efficiently expressed via a metametaphorical conditional.

More examples of meta-metaphoricals are discussed in Section 5.7 of Dancygier and Sweetser's (2005) book, *Mental Spaces in Grammar: Conditional Constructions;* and we'll also return to these conditionals in the chapter on poetic metaphor (Chapter 13).

7.5.3 The uses of as if

The most common type of conditional found in everyday metaphoric language are the metaphoric *as if* constructions. These follow two general patterns, with and without an *it*-cleft. The examples with *it*-clefts look like (29)-(30):

- (29) It was as if Lucie's pride had been purged away... *BNC*
- (30) At the time it seemed as if the government had crushed the nationalist movement by locking up its leaders for life.

 BNC

In these examples, the entire metaphor is evoked by the lexical items and constructions in the *as if*-clause. For example, in (29), the predicate heading the *as if*-clause, the phrasal verb *purged away*, here evokes the source domain of the Object Event-Structure Metaphor (because this predicate refers to the removal of a physical OBJECT or substance), while its argument, *Lucie's pride*, evokes the target domain (because this refers to an abstract ATTRIBUTE rather than an OBJECT).

Likewise, the *as if*-clause in (30) evokes the complete conceptual metaphor in this example. Once again, the head in this clause (*crushed*) evokes the source domain (here, the domain of PHYSICAL STRUCTURES in the metaphor SOCIAL SYSTEMS ARE PHYSICAL STRUCTURES, in which ending an abstract social system is conceptualized as the destruction of a physical structure). The predicate's arguments, *the government, the nationalist movement,* and the PP *by locking up its leaders for life* all evoke the target domain (these phrases are applicable to SOCIAL SYSTEMS but not to PHYSICAL STRUCTURES).

These *as if* examples somewhat resemble the "similes" with *as* and *like* discussed in Section 5.2.1. For instance, example (29) could be roughly paraphrased as *It was like Lucie's pride had been purged away*... These examples resemble similes in that *as if* draws attention to the metaphoric nature of the sentence, and consequently emphasizes the incompleteness of the mappings between the two domains. The sentence *It was as if Lucie's pride had been purged away* is a "weaker" statement than *Lucie's pride had been purged away*, in that it refers to a viewer's perception of an event, rather than committing to the existence of the event itself. The *it*-cleft example in (29), could, for example, suggest that Lucie's expression or stance reflect a "loss" of pride.

In example (30), which includes the raising verb *seem*, the content of the *as if*-clause is even more clearly marked as subjective. A sentence such as *at the time it seemed as if* X clearly gives the inference that X was not, in fact, the case, because the "seeming" is only asserted to have been the case "at the time" – that is, in the past.

Metaphoric *as if*-constructions without *it*-clefts generally involve a "main clause" that evokes a complete metaphor, and then an *as if*-clause that contains reference only to the source-domain, as in (31)-(32):

- (31) Labour has been feeling its way since Major's election, as if the corridor it was traversing was suddenly plunged into darkness.

 BNC
- (32) The seconds crawl past as if they were anchored to the clock face. *BNC*

In these examples, the metaphors involved are completely evoked by the main clauses. In (31), the clause *Labour has been feeling its way* evokes the Location Event-Structure Metaphor, in which movement towards a destination maps to progress. Since "feeling one's way" is typically done only in the absence of light or vision, *Labour has been feeling its way* also evokes KNOWING IS SEEING, in which DARKNESS maps to IGNORANCE. The subject *Labour* (metonymic for the Labour Party) evokes the target domain, since a political party cannot literally move or see. The temporal adverbial *since Major's election* (which modifies the main clause and which elaborates the structure evoked by the verb phrase *had been feeling its way*) also refers to the target domain.

Example (32) evokes the Moving Time metaphor (cf. Lakoff and Johnson 1999). The subject *the seconds* refers to the target domain TIME (because UNITS OF TIME cannot literally move through space), whereas *crawl past* evokes the source domain, as this verb phrase refers to physical motion through space.

The *as if*-clauses in both of these examples supply further source-domain structure, which can map to the target domain and supply inferences. In (31), the clause *as if the corridor it was traversing was suddenly plunged into darkness* adds two relevant

mappings, one via the Location Event-Structure Metaphor, and one via KNOWING IS SEEING. The phrase *the corridor it was traversing* adds the mapping that Labour is "following" a "corridor-like path," one with few "forks," or choices. The phrase *suddenly plunged into darkness* adds the implication that the Labour party's "inability to see" (metaphorically, its ignorance) happened suddenly, and that it was initiated by a cause outside the party itself. (Of course, the phrase *plunged into darkness* involves an additional metaphor, an image metaphor by which darkness is conceptualized as a liquid. This metaphor is integrated with KNOWING IS SEEING following the Metaphor Embedding Constraint, as discussed in Section 6.4).

In (32), the clause *as if anchored to the clock face* builds on the Moving Time metaphor evoked by the clause *the seconds crawl past*. Something that is "anchored" will move very slowly, if at all. This emphasizes the slowness implied by the verb *crawl*, and intensifies the mapping from slow movement through space to a perceived "slowness" of time.

The Moving Time metaphor in (32) is also interesting because *the seconds* are metonymically associated with the second hand of a clock, which physically moves around the clock face. The existence of clocks and second hands is the result of a metaphoric blend (cf. Lakoff and Johnson 1999), which allows the source and target domains of the Moving Time metaphor to be blended together in the measured movement through time and space of a single physical object, the hand of a clock.

As if-clauses appear to fulfill two functions, both of which are in keeping with their status as conditional clauses. First, a complete metaphor can be evoked within the as if-clause itself via other constructions, such as the predicate-argument constructions in (29)

and (30). This is not anything special, since a complete metaphor can be evoked within any clause in almost any type of multi-clause construction. The *as if*-construction merely draws attention to the metaphoric nature of the clause's content, and can emphasize speaker commitment only to the appearance of the event indicated in the *as if*-clause.

The second function of *as if*-clauses in metaphor, as in (31)-(32), is more unusual. Here, a complete metaphor is evoked in the main clause instead of in the *as if*-clause. Everything in the *as if*-clause refers to the source domain of the metaphor, rather than the target domain. Since *as if*-constructions often have the function of drawing attention to metaphor in the *as if*-clause, as in (29)-(30), these constructions provide an opportunity to profile further source-domain structure in a metaphoric sentence: the main clause establishes the metaphor input domains and evokes the metaphor, while the *as if*-clause supplies further material that can be mapped, and that can add to the richness of the structure and inferences that a sentence makes available in the target domain.

7.6 Observations on anaphoric pro-forms

Anaphora is a simpler matter in CG or CxG than in generative or transformational grammars. An anaphor in CG is not "deleted" or "reduced" from some "fuller" linguistic specification. For example, a pronoun in an anaphoric relation, and a pronoun that is not in such a relation, are given a completely identical treatment in CG. The co-referential antecedent of an anaphoric pronoun can elaborate underspecified parts of its structure, but it is not different in this respect from any contextually available information or common ground in discourse.

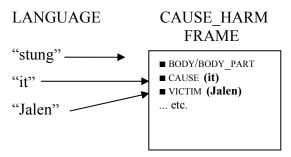
In order to see how a pronoun's structure can be elaborated, and how this can affect metaphoric language, let us begin by comparing the pronoun *it* in (33) with the noun phrase *the criticism* in (34). (Both examples are adapted from BNC example [33] in Chapter 4.)

- (33) It stung Jalen.
- (34) The criticism stung Jalen.

Pronouns are typically domain-neutral (4.4.2). In Langacker's terms, they refer to *things*, as opposed to *relations*; but pronouns generally tell us very little about the type of things they refer to. The pronoun *it*, in particular, is always domain-neutral. Unlike *he* and *she*, this pronoun does not usually refer to an animate, volitional being. Because *he* and *she* refer to animate beings, they can evoke frames and domains related to HUMAN BEINGS, such as the MIND domain. We can therefore say *he is bright* or *she is brilliant* and interpret these clauses as referring metaphorically to INTELLIGENCE rather than LIGHT-EMISSION. However, if we hear the clause *it is bright* out of context, the default interpretation will be related to literal brightness (rather than the intelligence of a computer, a robot, or an animal of unknown gender).

Because *it* does not evoke any particular frame or domain, we can't tell whether (34) is intended metaphorically without further context. For all we know, *it* could refer literally to a mosquito or a thorn, or metaphorically to criticism or disappointment. The referent of *it* fills a role in the CAUSE_HARM frame evoked by *criticism*, as shown below, but it does not evoke any particular domain of its own (*Jalen* here is also a domain-neutral item [4.4.2] and also fails to evoke a metaphoric domain).

Figure (7.14) The item *stung* evokes the CAUSE_HARM frame, while *it* and *Jalen* elaborate roles in this frame

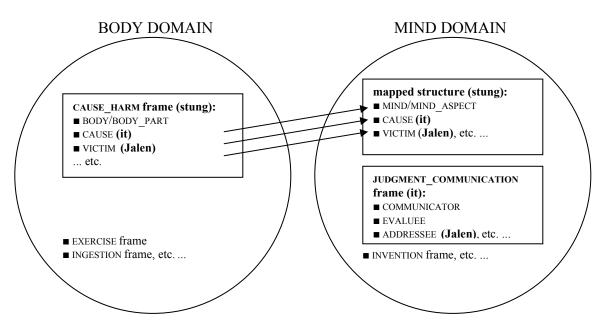


When the meaning of *it* is elaborated – whether by an antecedent, context, or a visual reference – we then know what sort of thing the pronoun *it* refers to. The pronoun can then evoke new frames and domains. For example, the clause *it stung Jalen* in (35) must be interpreted metaphorically, because we know from *it*'s antecedent that *it* refers to "criticism":

(35) The criticism was kindly, but it stung Jalen.

The metaphor evoked by *it stung Jalen* in this context is shown in Figure (7.15), adapted from (4.25).

Figure (7.15) The clause *it stung Jalen* evokes THE MIND IS A BODY in a context such as (35)



Given the context in (35), we know that we will need the JUDGMENT_
COMMUNICATION frame in order to interpret the meaning of *it* in this example. This frame is not part of the CAUSE_HARM frame evoked by *stung*, so we must bring in the MIND domain in order to interpret the combination of the structure from CAUSE_HARM and from JUDGMENT_COMMUNICATION. The CAUSE_HARM frame is mapped to the MIND domain; and the MIND domain then allows us to find correspondences between elements in CAUSE_HARM and JUDGMENT_COMMUNICATION.

The structure evoked by *it stung Jalen* in Figure (7.15) is very similar to the structure evoked by the sentence *the criticism stung Jalen*. Because of contextually available information (which happens to be supplied by an antecedent, in [35]), we know that *it* refers not just to any thing, but to a thing that can be identified as "criticism".

For this reason, anaphoric elements in metaphoric constructions (such as *it*) evoke the same domains as their antecedents (such as *criticism*). The anaphor can be within a

sentence, as in the complement clause construction in (36b); or the anaphor can extend across sentence boundaries, as in (37b).

- (36) a. Many countries are already proceeding towards democracy.
 - b. Many countries claim they are already proceeding towards democracy.
- (37) a. The university is the apex of the educational establishment.
 - b. We should fund the university better. It is the apex of the educational edifice

The meaning of an anaphor is not affected by where the "antecedent" is, as long as it can supply the needed elaboration. (There are, of course, much-studied limits on the placement of anaphors vs. antecedents. I will not try to tackle this issue here; it is mentioned briefly in Langacker 1991 [:493] and is the topic of Karen van Hoek's dissertation.) Sentences (36b) and (37b) therefore evoke the same metaphors as the non-anaphoric examples (36a) and (37a).

Certain relative pronouns are better suited to evoke particular domains than pronouns such as *it*. For example, *where* can evoke the LOCATION domain, *when* evokes TIME, and so forth. These pronouns are traditionally considered to be anaphoric to the head modified by the relative clause. In CG terms, this means that the head is used by a hearer to elaborate the schematic structure of the relative pronoun.

Relative pronouns' direct involvement in metaphor evocation can be seen from the uses of *where* to refer to life situations, via the LIFE IS A JOURNEY variant of the Location Event-Structure Metaphor, as in (38) and (39):

(38) Sweeping waves of desire were pitching Sarella headlong to the point where she knew she was leaving common sense behind.

BNC

(39) And if you build a reputation as such by making internal presentations this can lead to promotion to a position where you become an ambassador, making external ones to clients, customers and new business.

BNC

These pronouns' meaning is elaborated by context, allowing them to be understood as referring to specific kinds of "places". In (38), the "place" is a LOCATION reached as a result of FORCED MOTION, which maps to a SITUATION caused by factors other than Sarella's directed action. In (39), *where* refers to a desirable DESTINATION, which maps to a GOAL.

Even without the elaboration provided by *the point* in (38) and *a position* in (39), the use of *where* reflects the influence of metaphor, because *where* refers literally to a LOCATION of some kind, and only metaphorically refers to situations as in (38) and (39). The relative pronoun *where* therefore plays a greater role in metaphor evocation than *it* in (35) or (37).

My database contained numerous anaphoric pronouns of various kinds, but I found only one pro-verb with a coreferential antecedent:

(40) There was ample material on which the justices could reach the conclusion they did. *BNC*

The pro-form *do* "designates a schematic action" (Langacker 1991: 493). In (40), *do* can be interpreted as referring to ACHIEVING A PURPOSE that is metaphorically understood as REACHING A DESTINATION, thanks to its coreferentiality with *reach* and the predicate-argument construction relating *reach* and *the conclusion*.

Pro-forms such as pronouns (4.4.2) have a limited range of uses when it comes to metaphor. The possible uses of anaphoric pro-forms, however, is greatly expanded, because the structure of these pro-forms can be elaborated by their antecedents. A pro-form with elaborated structure of this kind is given all of the potential uses in evoking metaphor that its antecedent possesses; with the result that anaphoric pronouns, relative pronouns, and even pro-verbs, can evoke the source or target domain of a metaphor in the manner of a full noun or verb.

8 Metaphor in Finnish grammatical constructions and case endings

The previous chapters have shown that conceptual metaphors, when expressed in English, tend to be communicated following systematic grammatical patterns. But do these tendencies tell us anything about metaphoric language in general? Are these patterns simply part of the English language, or are they the result of more general trends in human cognition?

In this chapter, I use data from Finnish, a Finno-Ugric language, to argue that the tendency for conceptually autonomous elements to evoke metaphoric target domains, and for conceptually dependent elements to evoke source domains, are not specific to English. Of course, every language has different constructions; and so the uses of constructions in metaphoric language will be necessarily be different in any two languages we choose to compare.

In this chapter, I will first examine the metaphoric uses of Finnish constructions that are analogous to the English ones in Chapter 4. In general, constructions that are semantically similar to English constructions behave like their English counterparts. For example, predicate-argument constructions in English and Finnish, despite superficial differences, both involve conceptually dependent heads and conceptually autonomous arguments. As a result, I argue, predicate-argument constructions in both languages typically evoke metaphor by means of a source-domain head and one or more target-domain arguments.

The second part of this chapter will explore constructions that are unlike anything found in English. Finnish makes less use of adpositions than English, and instead relies on a system of case endings. This section will focus on the six local cases in Finnish as an

illustration of a method of metaphor evocation not possible in English. These cases are not, by any means, the only differences between English and Finnish, or between the ways that metaphor is communicated in these two languages. These differences would be impractical, and potentially impossible, to catalogue comprehensively. The discussion in 8.2 is intended as an example of a way in which a language can diverge from English – while still maintaining the trends of autonomy and dependence found in English, and drawing on underlying conceptual metaphors that are the largely the same as those used in English metaphor.

I have chosen to focus on the Finnish local cases because these all have central meanings related to spatial configurations and movement, but are also used with a variety of metaphoric meanings related to TIME, THE MIND, and other target domains. The Finnish local cases are used in many contexts where English would arrive at a similar meaning through the use of a preposition. In fact, we will see that the Finnish local cases behave like English prepositions both in their widespread use in metaphor, and in the limited range of conceptual metaphors that they can be used to communicate. I argue that these similarities arise because both Finnish case endings and English prepositions represent closed classes, have limited ranges of literal meanings, and so can evoke only a limited range of source domains.

Finnish is etymologically a non-Indo-European language, but it has calqued numerous metaphor and idioms from various Indo-European languages, notably Swedish and English. Generally, this calquing is not a problem for the current analysis of Finnish constructions, because the calquing makes use of the grammatical constructions that were already present in Finnish. For example, Finnish speakers presumably calqued the term

musta pörssi "black market" from Swedish or English, thereby profiling a new mapping from black objects to illegal or immoral transactions, via the metaphor MORALITY IS PURITY. Although the phrase musta pörssi is a calque, it nevertheless makes use of a Finnish grammatical construction: the Finnish predicating modifier construction. The calque musta pörssi involves this construction in the same way as any non-calqued instance of the construction. As in any instance of this construction, the adjective and noun in musta pörssi must agree in case and number; the head must be conceptually autonomous and the modifier must be dependent; and the phrase must adhere to all of the other patterns of form and meaning inherent in the Finnish predicating modifier construction. Calques, then, are legitimate instances of Finnish constructions, and phrases such as musta pörssi can be used as evidence for the behavior of Finnish constructions in metaphoric language.

8. 1 Comparison with English constructions

Many grammatical constructions in Finnish are similar in their form and meaning to constructions found in English. When a construction involves the same pattern of autonomy and dependence as one of the English constructions from the previous chapters, the Finnish construction can be expected to have the same potential metaphoric uses as the English construction. This section is intended as a brief overview of the Finnish constructions that are most similar to the English constructions that were explored in Chapter 4. I will not directly analyze conceptual autonomy and dependence in the Finnish constructions; in all of the relevant ways, this structure is identical to that of the English constructions in Chapter 4. Instead, I will give an overview of the Finnish

constructions' use in metaphor that results from these patterns of autonomy and dependence. I will analyze a couple of metaphoric examples of each Finnish construction, and compare these with the metaphoric uses of the corresponding English constructions.

Finnish examples in this chapter come from three sources. Unattributed examples in this chapter are from *Finnish: An Essential Grammar* (Karlsson 1983), which I used as a source of simple, correct sentences. Several examples were provided by a native speaker, Sirpa Tuomainen, as attributed in the footnotes. Most of the examples, however, come from Finnish websites. I only used data from websites that appeared to be written by native Finns, and the addresses of these sites are given in italics beneath the examples.

8.1.1 Domain constructions

Domain adjectives and adverbs in Finnish appear to operate much like those in English. As in English, these adjectives and adverbs are generally derived from nouns via the addition of a nominalizing derivational suffix. For example, *taloudellinen* "economic" in (1) is derived from *talous* "economy/finance"; and *poliittinen* "political" in (2) is derived from *poliittikka* "politics".

- (1) **Taloudellinen kasvu** vahingoittaa lopulta aina ympäristöä. **economic growth** harms finish.ABL always environment.PART "**Economic growth** always ends up harming the environment." pxweb2.stat.fi/sahkoiset_julkaisut/ymparistotilasto2005/data/asenteet.xls
- (2) ... tosin on sääli, että kaltaisenne hienon ihmisen pitäisi kärsiä **poliittinen kuolema** näin nuorena. however is pity that that.type excellent.GEN person.GEN should suffer.INF **political death** so young
 - "... however, it's a pity that an excellent human being like you should suffer **political death** so young."

 www.kanetti fi/~elmokki/nationstates/post.php?cat=1&fid=6&pid=29&orde

 $www.kanetti.fi/\sim elmokki/nationstates/post.php?cat=1\&fid=6\&pid=29\&order=fl\&page=1$

In examples (1) and (2), the phrases *taloudellinen kasvu* and *poliittinen kuolema* can be analyzed much as the English domain constructions we saw in Section 4.1. In (1), the domain adjective *taloudellinen* "economic" evokes the target domain ECONOMY in THE ECONOMY IS A PLANT (which in this case also involves the primary metaphor MORE IS UP, so that an abstract increase is seen as physical "growth"). The head noun that *taloudellinen* modifies, *kasvu* "growth," evokes the target domain of PLANT, since a plant can grow, bloom, have roots, etc. Just as in a metaphoric domain construction in English, then, the head evokes the source domain and the domain adjective evokes the target domain.

We see the same pattern in (2), in which the domain adjective *poliittinen* "political" informs us that the phrase is about a POLITICAL CAREER, and the head noun *kuolema* "death" allows us to conceptualize the CAREER as a type of ORGANISM that is capable of dying (via A POLITICAL CAREER IS AN ORGANISM). Again, the domain adjective evokes the source domain and the head of the phrase evokes the source domain.

Domain adverbs, like domain adjectives, also evoke the target domain when used in metaphoric language, as in *taloudellisesti* "economically" in (3):

(3) **Taloudellisesti terve** yritys pystyy toimimaan parhaiten. **economically healthy** company is.capable.of function.INF3 best "An **economically healthy** company is able to function best." www.proventia.fi/files/Yhteiskuntavastuu_rakennusteollisuudessa.pdf

The phrase *taloudellisesti terve* "economically healthy" allows an ECONOMIC SYSTEM to be conceptualized as an ORGANISM, which in turn allows a mapping from the organism's health to the robustness of the economy. Like the domain adjectives in (1)-

(2), here the domain adverb *taloudellisesti* has the function of evoking the target domain and communicating that the adjectival phrase *taloudellisesti terve* refers to an ECONOMIC SYSTEM. Of course, the entire adjectival phrase in turn modifies *yritys* "company," which also helps evoke the target domain ECONOMIC SYSTEM, this time as part of a predicating modifier construction.

8.1.2 Predicating modifier constructions

As we saw in Sections 4.1-4.2, English predicating modifier constructions are very different from domain constructions, even though both constructions call for an adjective and a head noun, or an adverb and a head adjective/verb, etc. When we compare Finnish domain constructions and predicating modifier constructions, we find a similar contrast. The predicating modifier constructions in (4) and (5), for example, demonstrate a very different pattern of source- and target-evocation than (1)-(3):

- (4) Ukrainan historia katoaa mustaan pörssiin. Ukraine.GEN history vanish black.ILL market.ILL "The Ukraine's history is disappearing on the black market." www.katajala.net/blog/jussi/archives/2005/11/
- (5) Se on koira, jolla on **terävä äly** ja **suuri sydän.** it is dog which.ADE is **sharp mind** and **big heart** "It's a dog with a **sharp mind** and a **big heart**." www.terhierin.com/index.php?sivu=harkitsetko

In the phrase *musta pörssi* "black market," the predicating modifier *musta* "black" evokes the PURITY source domain of the metaphor MORALITY IS PURITY, in which impurities, dirt, and darker colors are associated with immorality or wrongdoing. The head *pörssi* "market" (metonymic for a system of commerce) instead evokes the target

domain of MORALITY, because considerations of morality are part of what we know about commerce, but purity and color are not attributes of commerce.

There are two metaphoric uses of the predicating modifier construction in (5). The first of these, *terävä äly* "sharp mind," evokes the metaphor INTELLIGENCE IS SHARPNESS, by which an intelligent mind is conceptualized as a sharp object. The predicating modifier *terävä* "sharp" evokes the source domain and the head noun *äly* evokes the target. The second relevant phrase in (5), *suuri sydän* "big heart," evokes the metaphor MORE IS BIGGER. Here, *sydän* "heart" is metonymic for "capacity to love," which is culturally associated with the heart. The item *sydän* therefore evokes the target domain of MORE, since it is possible to demonstrate a significant capacity to love, but it is not literally possible to have a "large" capacity to love. The predicating modifier *suuri* evokes the source domain of BIGGER, because it refers to size.

In all three metaphoric uses of the predicating modifier construction in (4) and (5), the predicating modifier is responsible for evoking a metaphoric source domain, and the modifier's head indicates the target-domain referent of the phrase. This is the opposite pattern from that demonstrated by the Finnish domain construction, as in (1)-(2), in which the domain adjective evoked the target domain and its head evoked the source.

Predicating adverbs follow the same pattern as predicating adjectives. For example, in (6), the predicating adverb *lämpimästi* "warmly" evokes the source domain of WARMTH and the head verb *kiittää* "to thank" evokes the target domain of AFFECTION.

(6) Haluamme **lämpimästi kiittää** kaikkia ... want.1.pl **warmly thank** everyone.PART ... "We want to **warmly thank** everyone..." www.ort.fi/ortaid/uutiset.php?id=4

Examples (4)-(6) show that both predicating adjectives and adverbs have the function of evoking source domains in metaphoric phrases; while the modifiers' heads communicate the relevant metaphoric target domains. The pattern in Finnish predicating modifier constructions seems to be very similar to the pattern of English predicating modifier constructions (4.2).

8.1.3 Compounds

The use of compounds in Finnish appears to be less extensive and varied than in English, yet the compounds that exist in Finnish often involve metaphor, as in (7):

(7) Nuorten **mielikuva** teollisuudesta on yhä vanhanaikainen. young.PL.GEN **mind.picture** industry.ELA is still old-fashioned "Young people's **mental picture** of industry is still old-fashioned." *www.tat.fi/2003/perus/TET tiedote01092005.pdf*

Here, the modifier noun *mieli* "mind" evokes the target domain of KNOWING, while the head noun *kuva* "picture" evokes the source domain of SEEING. The compound as a whole evokes the metaphor KNOWING IS SEEING, and refers to a belief system (what young people think they know about industry), which is conceptualized as a visual system (a "picture"). The pattern of domain evocation in *mielikuva* resembles that found in most English compounds (4.3).

The compound "mind-picture" is not prevalent in English, and a domain construction (such as *mental picture* or *mental image*) would probably be preferred to communicate a meaning as in (7). Compounds and domain constructions share similar patterns of autonomy and dependence, as explored in Sections 4.1 and 4.3, so it is not too surprising

that one language might choose one of these constructions to express a given meaning, while another language might use the other.

8.1.4 Predicate-argument constructions

All of the common English predicate-argument constructions (4.4) are also found in Finnish (intransitives, transitives, and ditransitives). Finnish predicate-argument constructions differ from those in English in that they rely more heavily on case endings to identify the roles of their arguments; but in other respects, Finnish predicate-argument constructions can look very much like English ones, as in *minun sydän suli* "my heart melted" in (8).

(8) Kun nain hänet, **minun sydän suli**. when saw.1 him.ACC **my.NOM heart.NOM melted.3** "When I saw him, **my heart melted**."

Here, the phrase *minun sydän* "my heart" clearly evokes the target domain of AFFECTION in the metaphor AFFECTION IS WARMTH. The term *sydän* "heart" is used metonymically to indicate the emotions. Any phrase or clause involving *sydän* in this metonymic sense will be capable of evoking metaphor input domains related to the emotions, including the domain of AFFECTION. The verb *sulaa* "to melt" normally refers to the conversion of a solid to a liquid by the application of heat. The use of this verb, then, can evoke the domain of WARMTH.

Finnish differs from English in that Finnish pronouns are optional when personal endings supply the person and number of the subject argument. This means that a personal ending can be sufficient to communicate a metaphoric target domain, as in (9):

(9) Kun näin hänet, **sulin**. ²⁴ when I.saw him. ACC **melted.1** "When I saw him, **I melted**."

The normal interpretation of *sulin* "I melted" is a metaphoric one involving AFFECTION IS WARMTH. In the absence of further context, the speaker of the utterance is assumed to be a human being, and human beings do not usually melt. (A literal interpretation of *sulin* is possible if the speaker is a plastic robot or a talking snowman, for example, but this interpretation requires special context). This assumption makes a metaphoric interpretation of *sulin* preferable to a non-metaphoric one.

The subject of *sulin*, referenced only by the first-person ending –*n*, evokes the target domain of AFFECTION by virtue of being the speaker of the utterance, and therefore (most likely) human. Human beings are capable of experiencing overwhelming affection, love, or pity, but they do not physically melt when subjected to heat. As in (8), then, the subject argument of *sulin* in (9) evokes the target domain of AFFECTION IS WARMTH. In English, a preposition or noun phrase is normally required to evoke the target domain in a predicate-argument construction. In Finnish, a personal ending can be sufficient, since these endings communicate person and number just as pronouns do in either English or Finnish.

Finnish intransitives, then, show us that it is equally legitimate to use either overt arguments or personal endings to evoke metaphor in a predicate-argument construction. The personal endings, of course, have a limited range of metaphor input domains that they can evoke, just as English pronouns do; but first- and second-person personal

_

²⁴ Thanks to Sirpa Tuomainen for examples (8)-(9).

endings can evoke a small range of domains related to animacy and personhood, just as first- and second-person pronouns can.

Finnish personal endings are not directly marked for animacy, so third-person personal endings cannot evoke metaphor input domains in the same way as first- and second-person pronouns, which strongly imply animacy and personhood. However, Finnish third-person pronouns do traditionally contrast human *hän* "she/he" with non-human *se* "it," and plural human *he* "they" with non-human plural *ne* "they". The pronouns *hän* "she/he" and *he* "they" behave in metaphor in the manner of English *he* and *she*, which typically involve animate referents and so can evoke certain metaphor input domains (4.4.2, 7.6). In colloquial Finnish, *hän* and *he* are increasingly replaced by *se* and *ne*, so it is possible that the human/non-human contrast implied by these sets of pronouns will be lost. If this happens, then *hän* and *he* will be unavailable for use in communicating metaphor.

Other predicate-argument constructions in Finnish follow the same general pattern as in (8)-(9), in that the head evokes the target domain and one or more arguments evoke the source.

Finnish does not distinguish between a "ditransitive" and a "indirect object" construction, as in English; in Finnish, the RECIPIENT role in a transaction is simply marked with allative case, as in (10) or (11).

- (10) Annan lahjan **vaimolleni**. give.1 present.ACC **wife.ALL.my** "I'm giving a present **to my wife**."
- (11) Tarjoamme vieraille illallisen. offer.1.pl guests.ALL dinner.ACC "We offer the guests dinner."

In (10), *vaimolleni* ("my wife/to my wife") designates the RECIPIENT of a gift, and in (11), *vieraille* "guests/to the guests" designates the potential RECIPIENT of the dinner. Both RECIPIENTS are marked by the allative case (the morpheme -lle). The possessive ending -ni is also present in (10), but here plays no part in the metaphor evocation.

The allative case is also used to mark a metaphoric "recipient," as in (12):

(12) Mutta evankeliumi antaa meille toivon. but gospel gives us.ALL hope.ACC "But the gospel gives us hope." www.fin.om.org/nurkka/frank.php

In (12), the Object Event-Structure Metaphor maps GIVING AN OBJECT onto CAUSING A CHANGE. The source domain is indicated by the verb *antaa*, and the target domain is evoked by the arguments *evankeliumi* "the gospel" and *toivo* "hope". The allative-marked pronoun *meille* "to us" is here domain-neutral, because human beings can be either literal or metaphorical recipients. In this example, *meille* is metaphorically a RECIPIENT, but the pronoun is marked by the same allative case ending used to indicate a literal RECIPIENT. (We return to the metaphoric use of Finnish case endings in [8.2]).

Finnish constructions tend to evoke the same metaphors found in English, such as AFFECTION IS WARMTH as in (8)-(9), which is a primary metaphor and theoretically a human universal; or the mapping from a recipient to an affected party, as in (12), a mapping of the Object Event-Structure Metaphor. However, every culture has variations in the complex metaphors it uses, and Finnish is no exception. These differences tend to surface in predicate-argument constructions, since these are overwhelmingly the most common constructions used to communicate metaphor (Chapter 4).

For instance, (13) shows the verb *purra* "to bite" with a metaphoric meaning not possible in English:²⁵

(13) Parhaiten ongelmaan **puree** boikotti.
best problem.ILL **bites** boycott
A boycott **is the most effective way to deal with** the problem.

The use of *purra* "to bite" as in (13) profiles a mapping of the Object-Event Structure Metaphor that is not generally evoked in English. Here, seizing and physically affecting an object maps to taking control of, and abstractly affecting, an abstraction such as a "problem". Note that both *boikotti* "boycott" and *ongelma* "problem" refer to abstractions, and thus evoke the target domain of the Object Event-Structure Metaphor; whereas *purra* "to bite" refers to a physical action, and therefore *puree* in (13) evokes the source domain of the Object Event-Structure Metaphor. Even when a phrase or clause evokes a culture-specific metaphoric mapping, then, it will do so following the same constructional patterns used elsewhere.

8.1.5 Prepositions and postpositions

Adpositions are less common in Finnish than in English, since the Finnish case endings are capable of expressing most of the meanings communicated by adpositions in an inflectionally impoverished language like English. When prepositions and postpositions are used in Finnish, they must be used in combination with particular case endings.

Prepositions take either the genitive or the partitive case; the latter is found in (14).

²⁵ Thanks to Sirpa Tuomainen for pointing out this possibility and providing example (13).

236

(14) Ajan kohti Kuopiota drive.1 towards Kuopio.PART "I'm driving towards Kuopio"

Metaphoric uses of prepositions require the same case endings, as in (15):

(15) Olet nyt menossa **kohti ratkaisua** ... be.2 now going.INF1 **towards solution.PART** "You're now underway **towards a solution** ..." www.edu.ouka.fi/julkaisut/tievoksi/02/4 02.pdf

Example (15) evokes the Location Event-Structure Metaphor. The source domain is evoked by *menossa* "going" and the target domain is evoked by *ratkaisu* "solution". As in English preposition phrase constructions, the structure evoked by the head is dependent relative to the structure of the nominal within the preposition phrase, so the head evokes the source domain and the nominal evokes the target. Also as in English, the preposition itself conforms to the source domain of the metaphor; that is, the central sense of *kohti* refers to directional movement, not to the achievement of goals or solutions. Except for the case ending requirement, then, the use of prepositions in metaphoric language in Finnish is not too different from their use in English.

Finnish has more postpositions than prepositions. These take the genitive case, but some postpositions themselves inflect in three of the local cases (inessive, elative and illative; or adessive, ablative and allative).

Like prepositions, some postpositions have both spatial/force-dynamic meanings, such as the use of *kautta* in (16); and more abstract meanings, as in *kautta* in (17).

(16) Hän meni metsän kautta. he went forest.GEN by.way.of "He went through the forest." (17) Siten tiedämme, **deduktio logiikan kautta**, että niin pian. thus knowl.pl **deductive reasoning through** that so soon "In this way we know, **through deductive reasoning**, that it's that soon." www.ageac.org/finland/Astraalijakautuminen%20vihko.pdf

Example (16) uses a variation on the Location Event-Structure Metaphor sometimes known as THINKING IS MOVING. Specifically, the mapping MEANS ARE PATHS allows "deductive reasoning," a MEANS, to be conceptualized as a PATH. The postposition *kautta* can refer either to movement along a literal path, as in (16), or to progress along a metaphorical "path," as in (17).

A large proportion of Finnish postpositions have only abstract meanings, such as *vuoksi* "for the sake of," *eduksi* "for the advantage of," or *johdosta* "because of"; and many have only temporal meanings, such as *aikana* "during" or *sitten* "since". These postpositions, having no more "basic" meanings, cannot be claimed to synchronically involve metaphor.²⁶

It is the Finnish case endings, rather than the adpositions, that demonstrate the widest range of uses in metaphor. Let us now turn our attention to these.

8.2 The Finnish local cases

A crucial difference between Finnish and English is the extensive use of case endings in Finnish. The six local cases in Finnish (inessive, elative, illative, adessive, ablative and allative) are particularly active in metaphoric language. These case endings are summarized in Table (8.1).

Table 8.1: The six local cases in Finnish

CASE	ENDING	ROUGH GLOSS
INEssive	-ssa	"in"
ELAtive	-sta	"from/out of"
ILLative	-(h)Vn/-seen	"into"
ADEssive	-lla	"at/on"
ABLative	-lta	"from/off of"
ALLative	-lle	"to/onto"

The first three local cases listed above are called the "internal" local cases. They refer, in their most concrete senses, to a range of locations involving containment, such as boxes, houses and cities. The inessive indicates a static presence within this type of location, the elative designates movement out of such a place, and the illative marks movement into this kind of location.

The last three cases shown above are the "external" local cases. These have concrete senses denoting regions or surfaces that do not involve containment, such as tables, plazas and streets; and locations near a person or thing. The adessive refers to location at such a place; the ablative designates movement from this type of location, and the allative refers to movement to one of these areas.

However, all six of these cases have a range of extended meanings, many of which can be attributed to the influence of underlying conceptual metaphors. The range of metaphors the cases can express is, of course, limited to metaphors with source domains that can be evoked by the cases' central (spatial and/or directional) meanings.

²⁶ Many of these postpositions are morphologically complex, and incorporate endings such as the elative ending –*sta*. These constructs are considered postpositions because they demonstrate the same distribution as morphologically simple postpositions, such as *sitten*.

Nevertheless, these case endings demonstrate a range of meaning that is at least as varied as that of English spatial prepositions (4.5.4).

8.2.1 Space, time, and metaphor in the local cases

Fong (1998) observes that certain spatial uses of the Finnish local cases are related to certain temporal uses. She argues, however, that this is evidence that the temporal uses of these cases should *not* be taken as indication of metaphor, because these similarities show that the spatial and temporal uses are based on the same abstract structures. However, I suggest it is simpler to attribute the structural similarities between these cases' spatial and temporal uses to metaphor, rather than positing a hypothetical structure that underlies both spatial and temporal uses. This hypothetical structure would have to be more abstract than either SPACE or TIME, whereas in a conceptual metaphor explanation, the most abstract structure that needs to be posited is TIME (and we have *a priori* reasons to believe that people think about TIME, whereas there is little reason to suppose people need an even more abstract structure).

Moreover, I will show in this section that the Finnish local cases involve extensions to metaphoric target domains other than those involving TIME. These uses cannot be explained even by a hypothetical abstract structure that underlies the cases' spatial and temporal uses. For these reasons, I suggest that metaphor is the best explanation for many of the uses of the Finnish local cases. An explanation of these uses in terms of metaphor has the added advantage of unifying our account of these cases with that of closed-class items with a similar range of meanings, such as the English spatial prepositions (4.5.4).

8.2.2 Inessive case

In its most concrete sense, the inessive case refers to the status of being located in a bounded region or container, as in (18).²⁷

(18) Asuin yksin **isossa talossa**. "I lived by myself **in a big house**." *vaskitsa.blogspot.com/2005/05/olen-tll.html*

Like most of the local cases, the inessive can be used with temporal reference. When the inessive is used in this way, it refers to a bounded period of time, during which an activity took place, as in (19):

(19) Luin kirjan tunnissa.
read.1 book.ACC hour.INE
"I read the book in an hour."
sokl.joensuu.fi/aineistot/Aidinkieli/kielioppi/paiksija.html

This usage evokes the Moving Observer metaphor for TIME, in which TIME is conceptualized as a LANDSCAPE through which the observer moves. This metaphor includes the mapping A PERIOD OF TIME IS A BOUNDED REGION IN SPACE, which allows an activity completed within a span of time to be understood as an object contained within a bounded region of space. In other words, the meaning of the inessive in (19) can be obtained by metaphorically mapping its meaning in (18). In (18), the inessive case indicates that the "house" (*talo*) is a bounded region which contains the subject of the sentence; and in (19), the inessive case marks that the "hour" (*tunti*) is a span of time which "contains" the activity indicated in the sentence.

241

²⁷ Note that adjectives modifying a noun (such as *iso* "big," which modifies *talo* "house") share its case ending(s).

In (19), the only item representing the source domain is the case ending itself.

Otherwise, the sentence can be understood completely without recourse to metaphor.

Finnish case endings, then, share the property of English prepositions (4.5.4) in that they can be used metaphorically even if no other items in a sentence help evoke the metaphor's source domain. When they are used in this way, the metaphors they can express are limited, but any metaphor with a spatial or force-dynamic source domain is fair game.

For example, inessive case can evoke the metaphor THE MIND IS A CONTAINER, as in (20):

(20) Ainahan se on **mielessä**...Loma. always it is **mind.INE** vacation "It's always **in one's thoughts** ...Vacation." helmisimpukka.blogspot.com/2007/04/ainahan-se-on-mielessloma.html

Here, the inessive case of *mieli* "mind" allows the MIND to be conceptualized as a CONTAINER. In this case, the "container" is "filled up" with thoughts about *loma* "vacation".

A related use of inessive case evokes the Conduit Metaphor:

(21) **Puheessa** on mielestäni hyvää analyysia. **speech.INE** is mind.ELA.my good analysis

"There's a good analysis **in the speech**, in my opinion"

keskustelu.suomi24.fi/show.fcgi?category=110&conference=1500000000000105

&posting=22000000029087189

In (21), the SPEECH is conceptualized as a CONTAINER. This is consistent with the Conduit Metaphor, in which speech is conceptualized as a container for thoughts and ideas; this speech can then be "received" by a hearer who "retrieves" the ideas. (The

metaphoric use of the elative case in *mielestäni* "in my opinion," will be addressed in the next section.)

The internal local cases are particularly good at expressing metaphors with CONTAINER source domains, This is logical, since many non-metaphoric uses of external local cases refer to location in containers, or movement into and out of containers. As we'll see, the other two external cases (the elative and illative) share the inessive's ability to evoke metaphors with CONTAINER source domains.

8.2.3 Elative case

The elative case can involve movement from a bounded region, as in (22), or out of a container, as in (23):

(22) ... hän on **Amerikasta**! "He/she is **from America**!" *illusions.vuodatus.net/blog/category/Kirjaseikkailut*

(23) Mä juon **pullosta**. :)
"I drink from the bottle (emoticon)."

www.bileet.net/index.php?sivu=juontajat&juontaja=Mirka

The range of non-metaphoric meanings of the elative provide a set of possibilities for its use in metaphor. Like the inessive, the case can have temporal reference, as in (24):

(24) Hän on ollut täällä viime vuodesta. He/she has been here since last year.**ELA** "He/she has been here **since last year**." When the elative has temporal reference, it makes use of the Moving Observer for time, just as the inessive does when it is used to refer to TIME. Here, movement from a location maps to an event's duration beyond a period of time, such as "last year".

Like the inessive, the elative can help evoke THE MIND IS A CONTAINER, as in (25):

(25) Ne symboloivat tarvetta poistaa **mielestä** eläimelliset intohimot. these symbols necessary remove.INF **mind.ELA** earthly desires "These symbols are necessary to remove earthly desires **from the mind**." www.teosofinenseura.fi/artikles/burnier42000.htm

Unlike the inessive, which refers to simple "containment" of ideas or thoughts in the MIND, the elative refers to the "removal" of ideas or thoughts from the MIND. In (25), the thoughts to be removed are "earthly desires".

The elative very frequently evokes the Conduit Metaphor, especially in the phrase *mielestä*, literally "from the mind":

(26) **Minun mielestä** tämä kirja on huippu hyvä. **my.GEN mind.ELA** this book is summit good "**In my opinion** this book is the best." *www.ouka.fi/kirjasto/teuvo/kirjoja1.htm*

The elative noun *mielestä* means "in one's opinion" when preceded by a possessive pronoun such as *minun* "my" (or when followed by a possessive suffix; for example, *mielestäni* or *minun mielestäni* "from my mind," could be used in [26] instead of *minun mielestä*). The Conduit Metaphor maps the meaning of the elative case very differently than THE MIND IS A CONTAINER. In (25), the metaphor THE MIND IS A CONTAINER causes the meaning of *mielestä* "from the mind" to be understood as involving the removal of unwanted "content" from the mind. In the Conduit Metaphor (which includes THE MIND IS

A CONTAINER as a submetaphor) the phrase *mielestä* "from the mind" instead refers to the SOURCE of valued ideas or opinions that are "transferred" from the speaker's mind to the hearer's, via the use of language.

The Conduit Metaphor mappings evident in (26) can alternatively be evoked with a pronoun in place of the noun *mieli* "mind," as in (27).

(27) Minustä hän on sairas. me.ELA he is sick "In my opinion he is ill."

A simple pronoun with elative case can have the metaphoric meaning "in one's opinion". In (27), *minustä* "from me" means, roughly, "in my opinion". Here, reference to the speaker as a whole stands metonymically for the speaker's mind; since it is the MIND that is understood as the SOURCE of communication in the Conduit Metaphor.

The elative case can reflect other metaphors with CONTAINER source domains, such as MATERIALS ARE CONTAINERS, as in (28):

(28) Teen puvun **villasta**.
Make.1 dress.ACC **wool.ELA**"I'm making the dress **out of wool**."

Alternatively, the elative case can evoke the Location Event-Structure Metaphor, in which STATES ARE LOCATIONS, and the results of experiencing a state, such as exhaustion (as in [29]) are understood as movement out of a location:

(29) ...hän sanoo sen johtuvan vain **väsymyksestä...**he says that because of only **exhaustion.ELA**"...he's only saying that **because he's tired**..."

www.iltalehti.fi/osastot/seksologi/200602034035170 sx.shtml

The elative case demonstrates particularly clearly how certain metaphoric uses of an item are extended from particular more central senses of that item (as we saw in detail in Chapter 3). For example, we can tell that metaphoric uses of the elative as in (25)-(28), which map CONTAINMENT onto more abstract concepts, are extended from central senses such as *pullosta* "from the bottle," which refer to movement out of a CONTAINER. Uses such as (24) and (29), on the other hand, map from a LOCATION onto a TIME and a STATE, respectively. These uses do not draw on the "containment" sense of the elative to the same extent as the uses in (25)-(28). The metaphoric uses of the elative in (24) and (29), then, could be seen as more closely related to its non-metaphoric sense in *Amerikasta* "from America," as in (22), rather than its sense in *pullosta* "from the bottle" in (23).

8.2.4 Illative case

The illative is the last of the three internal local cases, and its central sense refers to movement into a bounded region or container, as in (30):

(30) Tänään täytyy ajaa **kaupunkiin**...
"Today he/she has to drive **into the city**..."

broccoli.vuodatus.net/blog/archive?m=11&v=2006

Generally speaking, the illative can be used in the same range of metaphors as the inessive and the elative. For example, it often evokes the Location Event-Structure Metaphor, as in (31):

(31) Pelko johtaa **suuttumukseen**...
fear leads **anger.ILL**"Fear leads **to anger**."
forum.pilvikaupunki.net/index.php?showtopic=2246&pid=68520&mode=threade
d&show=&st=&

Here, *suuttumukseen* "to anger" designates the initiation of a STATE, which is understood metaphorically as the entering of a LOCATION, via the mapping STATES ARE LOCATIONS in the Location Event-Structure Metaphor. This is the same metaphor frequently evoked by the elative case, as in (29); and in fact, the metaphoric meaning of the two cases is demonstrably compatible, as in the phrase *ryysyistä rikkauksiin* "from rags to riches" in (32), which uses both cases metaphorically.

(32) ... kaikilla on mahdollisuudet nousta **ryysyistä rikkauksiin**. everyone.ADE is opportunities rise.INF **rags.ELA riches.ILL** "...everyone has opportunities to rise **from rags to riches**." www.blogs.fi/srv/search/bd search tags posts.php?tag=Maailmanmenoa

It makes sense that the three internal local cases would tend to express the same range of metaphors, since all three of these cases refer to a certain type of location or container.

8.2.5 Adessive case

The adessive case is the first of the "external" local cases, meaning that it prototypically refers to the status of being located on a surface, or in an unbounded region, as in (33):

(33) Koira loikoo **lattialla** ...
"The dog sprawls **on the floor**..."

skblogit.fi/veloena/?cat=34

The adessive case is frequently used with temporal reference, as in (34)-(35):

(34) Ensi viikolla lähden Lappiin. next week.ADE go.1 Lapland.ILL "Next week I'm going to Lapland." (35) **Talvella** voi hiihtää. winter.ADE can ski "**In winter** one can ski."

These examples refer to an event ("going to Lapland" or "being able to ski") that occurs partially or completely within a span of time (such as "next week" or "winter"). These examples evoke the Moving Observer metaphor for TIME, via which being at a location (as centrally marked by adessive case) maps to experiencing a certain duration of time (during which events might happen such as "going to Lapland" or "being able to ski"). The duration of time marked by the adessive tends to be less bounded than that marked by the internal cases, as in the inessive in (19) and the elative in (24); and the activity or process does not have to occur completely within the specified time frame. For example, (35) states that it is possible to ski in winter, but does not assert that it is impossible to ski at other times. This distinction in meaning is at least partly responsible for the choice of the adessive, as opposed to the inessive, in (34)-(35). The choice is also partly constrained by convention, since the temporal uses of the internal and external cases are well-established. Because of this conventionalization, one case could be chosen over another even if both are equally well suited to express a given metaphor.

The adessive's use to mark spatial proximity has extended to other uses besides temporal marking. For instance, it has extended metonymically to mark possession (since possessions tend to be physically close to their owners). A typical example is given in (36), in which *minulla* "at my location" means "in my possession".²⁸

_

²⁸ The subject of the verb *rakastaa* always takes elative case, as in *Jeesusta* in (36). This use of the elative does not appear to involve metaphor.

(36) Rakastan Jeesusta ja **minulla** on rauha. love.1 Jesus.ELA and **me.ADE** is money "I love Jesus and I have money." ursuliinit.catholic.fi/ursula/5sivu-kirjoitukset.html

The possession-marking use of the adessive permits a further extension, this one involving metaphor. The metaphor ATTRIBUTES ARE POSSESSIONS (part of the structure of the Object Event-Structure Metaphor) leads to the use of the adessive in marking the "possessor" of abstract attributes, such as *krapula* "a hangover" in (37).

(37) Minulla on krapula. **me.ADE** is hangover "I have a hangover." www.exploresiberia.vbg.ru/rusinfo sanosta.htm

8.2.6 Ablative case

The ablative case is to the adessive much as the elative is to the inessive, in that the former member of each pair prototypically involves movement "away from" a location and the second member involves static presence "at" or "in" a location. The central, nonmetaphoric sense of the ablative designates motion from an unbounded region or surface, as in *pöydältä* "off the table" in (38).

(38) Iso kattila oli pudonnut **pöydältä** lattialle. big saucepan had fallen table.ABL floor.ALL "The big saucepan had fallen off the table onto the floor." www.alhainen.net/kummitus/html/kusipaa.html

Like the adessive, the ablative can refer to possession. The ablative refers to the loss of possession, as in (39).²⁹

²⁹ The English preposition off has been extended to similar uses in some dialects of English, as in *I bought* the car off a little old lady that used it to commute around town (www.carsurvey.org/review 93153.html).

(39) Ostan auton **Niemiseltä.** buy.1 car.ACC **Nieminen.ABL** "I'll buy the car **from Nieminen**."

Because the ablative can refer non-metaphorically to possession, it can be used metaphorically to evoke ATTRIBUTES ARE POSSESSIONS. Whereas the adessive indicated the "possession" of an attribute, the ablative marks the "loss" of a "possessed" attribute, as in (40).

(40) **Laulajalta** meni ääni. **singer.ABL** went voice "The singer lost his voice."

Other mappings from the Object Event-Structure Metaphor besides ATTRIBUTES ARE POSSESSIONS can also be evoked using ablative case. In (41), the relevant mapping is CAUSATION IS A TRANSFER OF POSSESSIONS.

(41) Kaikki jää **minulta** kesken. Everything continues **me.ABL** unfinished "I never finish anything."

The mapping CAUSATION IS A TRANSFER OF POSSESSIONS allows a person's actions to be conceptualized as objects that proceed from that person. This makes it possible for the speaker in (41) to describe his or her actions as continuing "from me" (*minulta*).

The contrast between (40) and (41) is interesting because the same case, the ablative, profiles different mappings in the same metaphor. In (40), the speaker's voice doesn't go anywhere. The important mapping is the loss of the ATTRIBUTE from the singer's

This usage is based on the same metonymic relation as the Finnish: physical proximity and/or physical support of an object/resource stands for possession of that object/resource.

"possession". In (41), the loss of an ATTRIBUTE is not mapped; here, what is important is that the "possession" is being "transferred" *to* someone or something else. This "transfer" maps to causing an effect on someone or something.

Like most local cases, the ablative can evoke the Conduit Metaphor, as in (42).

(42) Kysy häneltä, missä posti on. ask.IMP him.ABL where post.office is "Ask ('from') him where the post office is."

Here, communication is being solicited "from" someone. The person supplying information is conceptualized as a location from which an object moves.

It may seem surprising that both the internal and the external cases can be used to evoke the Conduit Metaphor, because the conversational participants must be conceptualized as different types of "origins" of information, in order for uses such as *minusta* ("from/in my opinion," elative case) in (27) to exist alongside uses such as *häneltä* ("from him," ablative case) in (42). This is possible because these uses profile different mappings. The metonymy in (27) allows the person as a whole stands for the person's mind. The MIND, of course, is conceptualized as a CONTAINER, so this use is completely compatible with the internal cases such as the elative. The use in (42), on the other hand, stems from the non-metaphoric uses of the ablative that refer to POSSESSION, such as (39). Here, the person is conceptualized as the POSSESSOR of the MIND that contains the needed information.

8.2.7 Allative case

The last of the external local cases, the allative, refers literally to entering a region or making contact with a surface, as in *lattialle* "onto the floor" in (43).

(43) Iso kattila oli pudonnut pöydältä **lattialle.** big saucepan had fallen table.ABL **floor.ALL** "The big saucepan had fallen off the table **onto the floor**." www.alhainen.net/kummitus/html/kusipaa.html

Like the other external local cases, the allative can also refer to POSSESSION and the transfer of possessions. The allative marks the RECIPIENT in this kind of transaction:

(44) Annan lahjan **vaimolleni**. give.1 present.ACC **wife.ALL.my** "I'm giving a present **to my wife**."

As a result of the allative's role in marking the recipient of a possession, the case can be used metaphorically to indicate the "recipient" of an abstract property or attribute, via the Object Event-Structure Metaphor:

(45) Mutta evankeliumi antaa **meille** toivon. but gospel gives **us.ALL** hope.ACC "But the gospel gives **us** hope." www.fin.om.org/nurkka/frank.php

Like the ablative, the allative is commonly used to evoke the Conduit Metaphor, as in (46). Here, the allative indicates that the addressee is the metaphorical "recipient" of the speaker's message.

(46) Puhun **sinulle.**I.talk **you.ALL**"I'm talking **to you**."

Clearly, the Finnish local cases can evoke the source domains of a number of metaphors, including metaphors for TIME, but also the Location Event-Structure Metaphor, the Conduit Metaphor, and THE MIND IS A CONTAINER. Fong (1998) is correct in observing that there are similarities between the spatial and temporal uses of these cases, but a conceptual metaphor explanation of the extensions *predicts* these similarities. A conceptual metaphor explanation also is able to generalize over the extensions involving TIME metaphors and those involving other metaphors, such as the Conduit Metaphor.

If we think of these temporal and other abstract senses of the local cases as metaphor, we can also see how the uses resemble those of other closed-class items, such as the English spatial prepositions. As we've seen, the English prepositions can evoke source domains related to spatial relations or force-dynamics, such as the source domains of the Moving Observer TIME metaphor or the Conduit Metaphor (4.5.4). Also like the Finnish local cases, English spatial prepositions can either evoke a source domain on their own, or in concert with other items that are dependent relative to one or more target-domain items (4.5). Based on this evidence, I suggest that the Finnish local cases can be used as source-domain items in metaphoric language, and that their use in metaphor is entirely in keeping with the use of other closed-class items and with the use of conceptually dependent elements in metaphoric language.

PART III

IDENTIFYING METAPHORIC EXTENSION

9 The roles of metaphoric extension and metonymic inferencing in semantic change

So far this dissertation has been concerned with formulating generalizations about metaphoric language. But what exactly *is* metaphoric language? What distinguishes metaphoric language from other "figurative" or non-literal language, where the generalizations made here might not apply?

I define **metaphoric language** as speech, signing, or writing that encodes and communicates the structure of a conceptual metaphor. A portion of the metaphor's structure may be provided by gesture or context, but linguistic forms must be responsible for evoking at least one of the metaphor's input domains. In this chapter, I'll refer to metaphorically used lexical items (i.e., a source-domain items) as **metaphoric extensions**, because items that represent a metaphoric source domain represent extended senses of their more central, non-metaphoric senses. For now, I won't differentiate between metaphoric extensions with greater and lesser degrees of conventionalization and lexicalization. We'll see in 9.6 that lexicalized and non-lexicalized metaphoric extensions do not differ substantially in terms of the characteristics discussed in this chapter.

According to the above definitions of metaphoric language and metaphoric extension, a great deal of language that seems "figurative" is not metaphoric. Most of this figurative language, I argue, can be ascribed to the results of the metonymic process variously called *invited inferencing* (Traugott and Dasher 2002) *pragmatic inference* (cf. Hopper and Traugott 1993), and *metonymic extension via inference* (Koch 1999); which I will refer to as **metonymic inferencing**. Metonymic inferencing can produce semantic

extensions that resemble metaphoric language. The resemblance between metaphoric extensions and metonymic inferencing has led proponents of inferencing to claim that metaphor is not an important force in semantic change (Traugott and Dasher 2002:80-1), and has also led metaphor theorists to maintain that metaphoric extension can explain many of the changes that I attribute to metonymic inferencing (cf. Sweetser 1990, Haser 2002).

I propose that metaphoric extension and metonymic inferencing should be considered as distinct forces in semantic change. I believe that the debate over the processes has been misguided, insofar as it has focused on a relatively small range of semantic changes that can be explained as *either* metaphoric extension or metonymic inferencing. Outside of this small range of examples, I hope to show that the distinctions between metaphor and inferencing are clear and indisputable.

I'll begin the chapter by summarizing the general idea behind metaphoric extension, metonymic inferencing, and the examples that can be explained as either process (Section 9.1). I also introduce a new model of metonymic inferencing using semantic frames (9.1.3). The bulk of this chapter (9.2-9.5), then, consists of a series of six tests to distinguish metaphoric language from metonymic inferencing. These tests show that metaphoric language and metonymic inferencing exhibit distinct sets of characteristics, and also make it apparent that examples that can be explained as either metaphor or inferencing share the defining characteristics of both processes. These shared characteristics show why certain examples of change have been difficult to categorize.

I'll suggest two possible explanations for the existence of these troublesome examples, but ultimately, I will argue that it's impossible to prove whether these

examples should be explained with metaphor alone, or whether *both* metaphor and inferencing are involved in these examples (an explanation that I'll refer to as **parallel chaining**). Finally, I'll address the "life cycle" of metaphoric language, from creation, through lexicalization, to metaphor "death". I'll also review a number of psychological experiments supporting this model of metaphoric language and metaphoric extension.

9.1 The processes in question

As a brief overview of metaphoric language and metonymic inferencing, let us compare how the two models explain the extensions *see* "know/understand," *warm* "friendly/affectionate" and the future-tense marker *going*. (See Sweester [1990] for a more in-depth explanation of metaphoric extension, and Traugott and Dasher [2002] for more details on invited inferencing.) The three extensions described in this section are all part of the range of examples that can be explained as either metaphoric extension or metonymic inferencing, so these extensions can help us understand the basis of the debate between proponents of metaphor and inferencing. At the same time, these examples will give us a feel for how the two processes are supposed to work.

The extended senses of the items *see*, *warm* and *going* are given in sentences (1)-(3).

- (1) Oh, I **see** what you're saying. www.whitehouse.gov/news/releases/2004/06/20040604-2.html
- (2) She always has a friendly and **warm** attitude... www.geocities.com/SouthBeach/Boardwalk/3265/DSindex2.html
- (3) I'm **going** to stay here in America. www.montereyrepublicans.org/PressReleases/index.cfm/ID/73.htm

These sentences clearly involve non-central senses of these familiar lexical items: In (1), the verb *see* must mean "know" or "understand," since no one can literally "see" what someone is saying (at least not in a spoken language). Likewise in (2), *warm* means "affectionate," because an attitude cannot literally be "warm"; and in (3), *going* refers to a future intention, not to literal motion, because the speaker of (3) cannot both "stay in America" and be going somewhere else. Clearly, the meanings of these items in (1)-(3) are extended from the older, more central senses. But how did the extensions occur?

9.1.1 The metaphor model

On the metaphor account, the "know/understand" extension of *see* reflects the conceptual metaphor KNOWING IS SEEING. This extension may have begun as far back as Proto-Germanic, when the item *sek* (> Eng. see) was used by a speaker as a novel metaphor to mean "know" (Sweetser 1990:33). The conceptual metaphor KNOWING IS SEEING was shared by both participants in this theoretical Proto-Germanic conversation, which allowed the hearer to understand the verb see as meaning "know" in a context consistent with KNOWING, such as in sentence (1), in which the relative clause what you're saying relates to KNOWING rather than to SEEING. The structured mappings of KNOWING IS SEEING then allowed the hearer to find the counterpart of the visual source-domain meaning of see in the target domain of KNOWING – namely, the meaning "know/understand".

Synchronically, a speaker communicates the metaphor KNOWING IS SEEING to a hearer in much the same way, using a lexical item from the source domain (*see* from SEEING) with a target-domain meaning ("know/understand" in KNOWING). Surrounding target-

domain item(s), inserted in the appropriate constructional contexts described in Part II, inform the hearer that the lexical item *see* refers to comprehension rather than vision.

The metaphor model offers similar explanations of the senses of *warm* and *going* in (2) and (3): *warm* reflects the metaphor AFFECTION IS WARMTH, and *going* involves CHANGE IS MOTION (Lakoff and Johnson 1999:50, 52-54).

9.1.2 The metonymic inferencing model

The metonymic inferencing account of the extended senses in (1)-(3) is qualitatively different from the metaphor model. On the metonymic inferencing account, the extended sense of *see* "know/ understand" as in (1) began with usages such as (4). (Of course, the extended sense predates written evidence of the item *see*, but the extension would have occurred in contexts similar to [4]).

(4) Nou wend and **seh** wher hit be. *c*1310. Anon.. *Marina*

Even before the item *see* had the extended meaning "know/understand," a speaker's use of the item *see* "visually see" enabled the addressee to obtain an inference of "knowing" in contexts such as (4). This is because if the addressee of (4) goes to "see where it is" (the central meaning), the addressee will also "know where it is" (the inferential meaning). The context is ambiguous as to which of these two interpretations is intended by the speaker. In fact, the speaker may have intended for the hearer to understand both the literal meaning and the inferential meaning.

Many of the ambiguous contexts that lead to metonymic inferencing, such as (4), contain grammatical ambiguities that assist the inferencing process. In (4), *wher hit be*

can be interpreted as a relative clause that is used as a direct object, in which the relative pronoun *where* designates the place the speaker is ordering the hearer to view. This interpretation is most compatible with the visual sense of *see*. However, *wher hit be* can also be understood as an indirect question, in which case the speaker is ordering the hearer to answer the question of "where it is". This interpretation is more compatible with the extended "know/understand" sense of *see*. This type of structural ambiguity encourages metonymic inferencing by helping produce ambiguous contexts in which the inferencing can occur. It is not, however, essential to metonymic inferencing, which sometimes occurs in the absence of this type of structural ambiguity.

Over time, the repeated use of *see* in ambiguous contexts such as (4) allowed the inferential pattern to spread throughout the language community, resulting in a stage of extension that Traugott and Dasher refer to as a *generalized invited inference* (2002). This widespread, partially conventionalized inference eventually became lexicalized as a semantically polysemous sense of *see*. I will not address the particulars of these stages of development here; but in principle I stand by the account given by Traugott and Dasher (2002:34-35, 44).

The metonymic inferencing account can explain the extended senses of *warm* and *going* in much the same way as it can *see* "know/understand". Examples (5)-(6) represent ambiguous contexts which permitted reanalysis of *warm* and *going*.³⁰

- (5) Oh take this **warme** kisse on thy pale cold lips. 1588, Shakespeare, *The lamentable tragedy of Titus Andronicus*
- (6) I'm **going** to seek him Love Gregory, / In's lands where eer he be. 1100-1500, Anon., *Love Gregory*

³⁰ Traugott and Dasher (2002:82ff) offer a variety of excellent examples of *going* at various stages of the inferencing process.

260

In (5), warm could mean either physically warm, or "affectionate," and in (6), going means physically traveling around the lands, but it also refers to a future action of seeking. Whereas sentence (5) lacks any particular grammatical ambiguity, sentence (6) involves an infinitival clause that can be read either as a purpose clause (the reason for the physical motion, via the central sense of *going*) or reinterpreted as a clause denoting the future action whose tense is indicated by the extended sense of *going*.

Examples such as these form the basis of the metaphoric extension/metonymic inferencing debate. I suggest that this debate is only possible because both metaphoric extension and metonymic inferencing provide plausible explanations of extensions such as *see* "know," *warm* "affectionate" and the future-marker *going*.

9.1.3 A frame-based model of metonymic inferencing

Most of this chapter will be devoted to a series of tests for distinguishing metaphoric extension from metonymic inferencing. But before discussing metonymic inferencing further, I would like to introduce a new model of this process that I believe is more explanatory than those currently available. This model can then inform and illustrate further discussion of metonymic inferencing and its relation to metaphoric extension.

I suggest that the contexts which give rise to metonymic inferencing can be represented as involving ambiguity between semantic frames. Semantic frames (introduced in Chapter 2) are conceptual models of recurrent situations, with structure including frame elements and the relations between them. Frames capture the contextual information that is crucial to the interpretation of a predicate's meaning. As such, frames

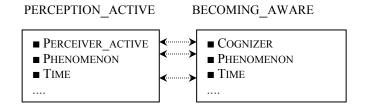
provide excellent tools for examining semantic changes such as metonymic inferencing, which occur in specific recurrent contexts.

I suggest that metonymic inferencing occurs in linguistic and situational contexts which are ambiguous between two frames. An ambiguous context such as (4) above, or (7) below, involves the co-occurrence of "seeing" and of "learning information". It therefore involves frames evoked by both verbs such as *learn* and by visual *see:* the BECOMING AWARE and PERCEPTION ACTIVE frames respectively.

(7) OK, now I **see** what you mean. forums.rpghost.com/showthread.php?p=343390

Ambiguous uses of *see* as in (7) involve awareness that is gained through visual perception, which is special case of perceiving (PERCEPTION_ACTIVE) and at the same time a special case of gaining awareness (BECOMING_AWARE). This ambiguity is only possible because the two frames share certain structural similarities. The two frames involve similar sets of roles, and because of this, different constituents in a sentence can be interpreted as filling roles in one or the other of the two frames. The correspondences between frame elements relevant in the interpretation of (7) are shown in Figure (9.1):

Figure (9.1) Frame element correspondences active in now I see what you mean



These correspondences between frame roles are not mappings of any kind. They merely indicate that it is possible for a given constituent to fill either of the two

corresponding roles in some context. The two possible annotations of sentence (7), based on the two frames in Figure (9.1), are given in Table (9.1) below.

Table (9.1) Two annotations of now I see what you mean

PERCEPTION ACTIVE interpretation

now	I	SEE	what you mean.
TIME	PERCEIVER_ACTIVE		PHENOMENON

BECOMING_AWARE interpretation

now	I	SEE	what you mean.
TIME	COGNIZER		PHENOMENON

In the two interpretations of (7) annotated in Table (9.1), notice how constituents which fill a role in the PERCEPTION_ACTIVE frame (according to the central, visual sense of *see*) fill the corresponding role in the BECOMING_AWARE frame according to the extended "know/understand" sense of *see*. These correspondences are what allow sentence (7) to be interpreted using the BECOMING_AWARE frame as well as the PERCEPTION_ACTIVE frame. If a single lexical item filled a role found in one frame but not in the other, the sentence wouldn't represent an ambiguous context, and wouldn't instigate metonymic inferencing.

When *see* occurred in historical contexts such as (7) – contexts that permitted an interpretation using BECOMING_AWARE as well as PERCEPTION_ACTIVE – this made the inferential "know/understand" meaning of *see* available alongside the central "visually see" meaning. Over time, the repeated use of *see* in this type of context allowed the inferential pattern to spread throughout the language community, resulting in a *generalized inference*. This generalized inference then eventually became lexicalized as a

semantically polysemous sense of *see* (for more on these stages of development, see Traugott and Dasher 2002:34-35).

The frame-based account of metonymic inferencing can explain the extended senses of *warm* and *going* in the same way as *see*. Examples (5)-(6), repeated as (8)-(9) below, represent ambiguous contexts which permitted reanalysis of *warm* and *going*.³¹

- (8) Oh take this **warme** kisse on thy pale cold lips. 1588, Shakespeare, *The lamentable tragedy of Titus Andronicus*
- (9) I'm **going** to seek him Love Gregory, / In's lands where eer he be. 1100-1500, Anon., *Love Gregory*

The frames active in these extensions are illustrated in Figures (4) and (5), with arrows representing the correspondences between the relevant frame elements.

Figure (9.2) SENSATION/EMOTION DIRECTED correspondences

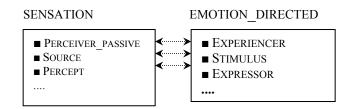
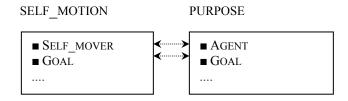


Figure (9.3) SELF_MOTION/PURPOSE correspondences³²



³¹Traugott and Dasher (2002:82ff) offer a variety of excellent examples of *going* at various stages of the inferencing process.

³² The further extension of *going* from "purpose" to "future" will not be discussed here, though the potential for contexts that are ambiguous between these meanings, and hence for metonymic inferencing, is evident.

The two possible interpretations of the ambiguous contexts in (8) and (9) are given in the annotated sentences in Tables (9.2) and (9.3).³³

Table (9.2) Two annotations of take this warm kiss

SENSATION INTERPRETATION

(You)	take this	WARM	kiss	(from me)
PERCEIVER_PASSIVE			PERCEPT	SOURCE

EMOTION DIRECTED INTERPRETATION

(You)	take this	WARM	kiss	(from me)
EXPERIENCER			Expressor	STIMULUS

Table (9.3) Two annotations of *I am going to seek Love Gregory*

SELF MOTION INTERPRETATION

I	am	GOING	to seek Love Gregory
Self_mover	Copula		GOAL

PURPOSE INTERPRETATION

I	am	GOING	to seek Love Gregory
AGENT	Copula		GOAL

The addition of frames to the metonymic inferencing account, as demonstrated in this section, adds clarity and precision to the role of ambiguous contexts in the metonymic inferencing model. The use of frames in modeling metonymic inferencing will also come in handy later as we compare the characteristics and structure of metaphoric language and metonymic inferencing.

Whether or not metonymic inferencing is modeled using frames, the process provides a plausible explanation of extensions such as *see* "know," *warm* "affectionate" and the future tense marker *going*. Proponents of inference-based semantic change therefore have

³³ The parenthetical items in Table (5.2) represent frame elements that are semantically accessible from the construction or from context. The second-person pronoun is omitted from the imperative construction via constructional null instantiation; the optional PP *from me* that would denote the Source/Stimulus element

claimed this type of example as evidence of metonymic inferencing, just as the proponents of metaphoric extension have been able to claim these extensions as the result of conceptual metaphor. The next two sections put the metaphor/inferencing debate in perspective, by considering extensions which unambiguously represent metonymic inferencing, and those which unambiguously reflect metaphoric extension.

9.2 Identifying metonymic inferencing

Some semantic extensions can be explained as metonymic inferencing but not as metaphoric extension. As an illustration, let us look at the sense of *seeing* that refers to romantic "dating," as in (10) below, a quote from an internet chat room.

(10) I am **seeing** this really hot girl named Sarah. She is awesome. I just had to tell everyone. www.fordtruckworld.com/Trucksnducks/

On a metonymic inferencing account, the extension *seeing* "dating" arose in two steps. First, the verb *see* accrued the extended sense "meet with," as in (11) below.

(11) Look, I can't **see** you now ... so you're going to have to come back later. www.northshire.com/siteinfo/bookinfo.php?isbn=0-671-01988-0&item=0

The speaker of (11) is face-to-face with the addressee and can literally "see" the addressee, so until the extended meaning "meet with" became a lexical sense of *see*, an utterance such as (11) would not have been interpretable.

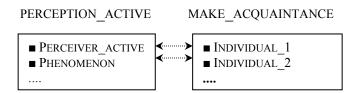
may be omitted via definite (or *anaphoric*) null instantiation. These types of null instantiation are discussed in Ruppenhofer et al. 2005:21-22.

The meaning "meet with" first arose as an inference in certain contexts because visually perceiving someone is usually an essential and salient part of meeting with that person. As a result, ambiguous contexts such as (12)-(13) below were frequent.

- (12) This is the Ladie which you came to **see**. c1593 Anonymous (Elizabethan), *Faire Em, A pleasant commodie of* 1592
- (13) For he knew wel that Raymondyn his brother wold neuer loue hym nor **see** hym. c1500 *Melusine*, compiled by J. D'Arras, tr.

In (12) it is unclear whether the addressee is more interested in meeting with the lady in question or merely in seeing her. In (13) it seems evident that "Raymondyn" wants to avoid a meeting, as well as visual contact, with his brother. Both contexts are fully interpretable with either the central visual sense of *see* or the reanalyzed sense *see* "meet with". This ambiguity is made possible by two frames, PERCEPTION_ACTIVE and MAKE_ACQUAINTANCE, which each allow a plausible interpretation of *see* in (12)-(13). These frames are shown (in much abbreviated form) below:

Figure (9.4) PERCEPTION ACTIVE/MAKE ACQUAINTANCE correspondences



These correspondences between frame elements allow items in an utterance such as (12) to be interpreted as denoting elements in one frame or the other, as in the annotated sentences in Table (9.4).

Table (9.4) Two annotations of *This is the Ladie which you came to see*

PERCEPTION ACTIVE interpretation

This is	the Ladie	which	you	came to	SEE
	PHENOMENON		PERCEIVER_ACTIVE		

MAKE ACQUAINTANCE interpretation

This is	the Ladie	which	you	came to	SEE
	Individual_2		Individual_1		

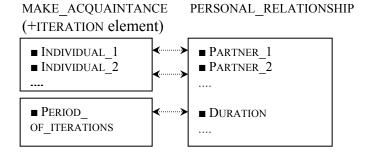
Around four hundred years after the generalization of *see* "meet with," a second inference-based change gave rise to *seeing* "dating". Imperfective *seeing* "meeting with" referred to repeated meetings, which created inferences of a romantic rationale for the meetings, because such meetings are stereotypically repeated over a period of time. The "dating" extension of *seeing* began in contexts such as (14) below, a quotation from one of the Pollyanna books. The context prior to the direct quote makes it especially clear that Pollyanna is deriving an inference of romantic interest based on the fact that the two other characters are seeing and meeting each other repeatedly.

- (14) Being so sure now that Jimmy and Mrs. Carew cared for each other, Pollyanna became peculiarly sensitive to everything that tended to strengthen that belief. And being ever on the watch for it, she found it, as was to be expected. First in Mrs. Carew's letters.
 - "I **am seeing** a lot of your friend, young Pendleton," Mrs. Carew wrote one day; "and I'm liking him more and more..."
 - 1914, Eleanor H. Porter, Pollyanna Grows Up

The inference of romantic interest here is still dependent on the larger context, and not yet a generalized inference or part of the lexical meaning of imperfective *seeing*. The inference of "romantic meetings" is dependent on an iterative interpretation, because romantic relationships stereotypically involve repeated meetings. This iterative interpretation could be encouraged by the use of imperfective aspect, by other items or

phrases (particularly adverbials such as *a lot of, often, every weekend*) or by the larger context in which the utterance takes place. The distinction between uses such as (14) and more standard examples of the MAKE_ACQUAINTANCE frame, as in Figure (9.4), is the addition of the extra-thematic frame element PERIOD_OF_ITERATIONS (Ruppenhofer et al. 2005:84). The evocation of this element, in addition to the standard MAKE_ACQUAINTANCE elements, encourages ambiguity between MAKE_ACQUAINTANCE and the PERSONAL_RELATIONSHIP frame, which encompasses romantic relationships such as dating. A PERSONAL_RELATIONSHIP has DURATION, which corresponds with the extra-thematic element PERIOD_OF_ITERATION, as shown in Figure (9.5).

Figure (9.5) MAKE_ACQUAINTANCE/ITERATION/PERSONAL_RELATIONSHIP correspondences



The addition of the PERIOD_OF_ITERATION element permits one more correspondence between MAKE_ACQUAINTANCE and PERSONAL_RELATIONSHIP, and thus multiplies the number of contexts which will be ambiguous between these two frames. As we saw with the extensions discussed in the previous section, ambiguity between two available frames – permitting a central and an extended, inferential interpretation – lays the groundwork for metonymic inferencing. The "dating" sense of *seeing*, which arose repeatedly through this process of inferencing, became generalized throughout the English-speaking

population and eventually was lexicalized, making it possible to use *seeing* "dating" unambiguously.

9.2.1 Extralinguistic evidence test

The "dating" sense of *seeing* has several characteristics that make a metaphoric extension explanation impossible. If the extension *seeing* "dating" were based on a conceptual metaphor, we would first have to postulate the existence of a metaphor such as "DATING IS SEEING". To evoke this metaphor, a speaker would use the item *seeing* in a context consistent with the target-domain meaning "dating," trusting that an addressee who shares the conceptual metaphor "DATING IS SEEING" will draw on the structure of this metaphor to retrieve the target-domain meaning "dating" from its counterpart in the source domain, the central meaning "seeing".

However, if the metaphor "DATING IS SEEING" actually existed, we would find the same kinds of evidence that supports documented metaphors such as KNOWING IS SEEING. Evidence of this metaphor could come from non-linguistic sources, or from systematic semantic extensions that indicate an underlying conceptual structure.

Non-linguistic sources provide us with evidence that metaphor is a phenomenon not limited to language. Genuine metaphors such as KNOWING IS SEEING are apparent in artwork and gesture, as well as in language; for example, most of us have seen artwork in which thinkers or books are shown as surrounded by light, via the metaphor KNOWING IS SEEING and the mapping INTELLIGENCE IS LIGHT-EMISSION. A number of authors have addressed visual metaphor in depth (for example Forceville [2002] writes on metaphor in film, and McNeill [1992, 2005] and Cienki [1998] discuss metaphor in gesture). But

although KNOWING IS SEEING is common in visual metaphor, there are no documented visual examples of metaphor relating SEEING and DATING, which suggests that there is no conceptual metaphor relating these two domains.

Unfortunately, relatively little extralinguistic data has been collected on most metaphors, so lack of documentation cannot be taken as proof that a given "metaphor" does not exist. Linguistic data is more readily available, and with this in mind, the next subsection will discuss a linguistic test which shows that the extension *seeing* "dating" cannot be conceptual metaphor.

9.2.2 Systematic extensions test

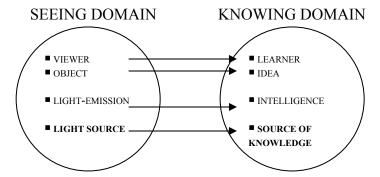
The second of type of evidence of metaphoric mappings – the systematic extension of lexical items from a source domain – is the most commonly cited evidence of metaphoric mappings. It is an assumption of conceptual metaphor theory that the correspondence between lexical items' source-domain (central) and target-domain (extended) meanings provide evidence of underlying metaphoric mappings. Most of what we know about metaphoric structure, starting with the work of Lakoff and Johnson (1980), has come from collections of related semantic extensions that are taken as evidence of conceptual metaphoric structure.

When several metaphorically used items provide evidence of systematically related mappings, these generally indicate that a conceptual metaphor underlies the extensions. By the same token, if a semantic extension is *not* part of a systematic set of extensions, it is probably not a metaphoric extension at all. Analogy can cause a new extension to follow the path of an older one without involving metaphor, but true metaphoric

extensions should be part of a system of extensions without gaps. Any item from the source domain should be able to used metaphorically, if the item's meaning relates to part of the structure that can be mapped by the underlying conceptual metaphor.

An examination of semantically related lexical items can therefore answer the question of whether a given semantic extension is metaphoric or not. If the semantic extension is part of a system of related extensions, it is likely to be the result of metaphor. If related items have not undergone extensions, then the extension of one item (or just a few items) is unlikely to be the result of metaphor. The extension *see* "know/understand," for example, is part of large system of related extensions that are cited as evidence of KNOWING IS SEEING. For instance, a source of light (which enables SEEING) maps to a source of knowledge (which enables KNOWING), via the mapping SOURCES OF KNOWLEDGE ARE LIGHT SOURCES, shown below.

Figure (9.6) KNOWING IS SEEING and SOURCES OF KNOWLEDGE ARE LIGHT SOURCES



In the SEEING source domain, LIGHT SOURCES may be described by adjectives such as *bright, brilliant* and *illuminating*. These adjectives are used metaphorically to describe a book, idea, or person that makes knowledge more accessible, as in examples (15)-(17).

- (15) Often it was someone from the community with a **bright** idea that triggered a new activity.

 www.ptreyeslight.com/stories/sept20_01/dance_palace.html
- (16) I have taken what that **brilliant** reading teacher taught me and applied it to the way I teach.

 www.mathchannel.com/Portals/0/3of3lesson.pdf
- (17) We had an **illuminating** discussion on that particular work. *www.geocities.com/mizzenwood/features.htm*

The metaphoric uses of *bright, brilliant* and *illuminating* reflect the mapping SOURCES OF KNOWLEDGE ARE LIGHT SOURCES. Other items from SEEING provide evidence of further mappings. For example, the ABILITY TO SEE maps to the ABILITY TO COMPREHEND, so that people who are unable to understand something are called *dim, myopic* or *blind*.

There is no evidence of mappings such as these from SEEING to DATING. A source of light never maps to anything in the realm of "DATING," such as a source of dates. In example (18), *illuminating* cannot mean that the singles club is a good source of dates.

(18) ?That singles club is so **illuminating**.

Likewise, the ABILITY TO SEE cannot map to "the ability to date," and people who cannot get a date are not called *dim, myopic* or *blind* for that reason. In fact, no items or phrases other than *seeing* "dating" hint at a conceptual metaphor "DATING IS SEEING". The absence of systematic extensions from SEEING to "DATING" suggests that "DATING IS SEEING" does not exist, and that *seeing* "dating" cannot be a metaphoric extension.

These first two tests (extralinguistic evidence and the systematic extensions test), cannot prove that an extension is metonymic inferencing. Other processes, such as

technological changes that alter the referent of an item, can result in semantic changes without extralinguistic evidence of an underlying conceptual metaphor, and without systematic extensions. These two tests can prove that a semantic extension is *not* pure metaphoric extension, but the tests cannot prove that an extension *is* metonymic inferencing. In the case of *seeing* "dating," however, a metonymic inferencing explanation is readily available. Since these tests rule out a metaphoric interpretation, metonymic inferencing can be considered a highly plausible explanation of the change.

Besides ruling out a metaphor-based explanation of extensions such as *seeing* "dating," the tests discussed in this section highlight some crucial differences between metonymic inferencing and metaphoric extension, summarized below (setting aside, for the moment, controversial examples such as *see* "know/understand").

Table (9.5) Characteristics of metaphoric extension and metonymic inferencing

	Metaphoric extension	Metonymic inferencing
Metaphor evidenced in art, gesture, etc. (Extralinguistic evidence test)	YES	NO
Related items undergo extension (Systematic extensions test)	YES	NO

Unlike metaphor, metonymic inferencing shows no extralinguistic evidence of an underlying conceptual metaphor, and no evidence of systematic mappings, such as systematic semantic extensions.³⁴

_

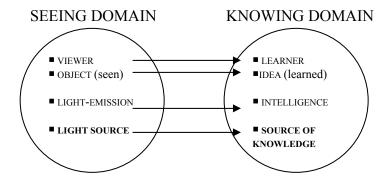
³⁴ According to these criteria, the epistemic meanings of modal verbs (as in English) cannot be considered as metaphoric extension, contrary to claims in Sweetser (1990), Haser (2003), and Goossens (2003). Extensions such as epistemic *must* (from deontic *must*) do not share the characteristics of metaphoric extension demonstrated by *brilliant* "intelligent" or even by the disputed extensions such as *see* "know/understand". It would be difficult to find an extralinguistic instantiation of a metaphor like "EPISTEMIC IS DEONTIC"; and extensions between these domains are instantiated only by the modal verbs themselves, failing the systematic extensions test.

9.3 Identifying metaphoric extension

Now that we have looked at the extension *seeing* "dating," which clearly has the characteristics of metonymic inferencing, let us turn to an unequivocal example of metaphoric extension. For this, we need look no further than the familiar domain of SEEING, and the uses of *bright*, *brilliant* and *illuminating* in *bright idea*, *brilliant teacher* and *illuminating discussion* in (15)-(17), which refer metaphorically to the demonstration of intelligence.

According to the metaphor explanation, extensions such as *brilliant* "intelligent" are linguistic instantiations of the conceptual metaphor KNOWING IS SEEING. As part of this metaphor, LIGHT SOURCES map to SOURCES OF KNOWLEDGE, as in Figure (9.7).

Figure (9.7) KNOWING IS SEEING and SOURCES OF KNOWLEDGE ARE LIGHT SOURCES



The mapping SOURCES OF KNOWLEDGE ARE LIGHT SOURCES captures the fact that a light source makes objects visible, which maps to the situation in which a thinker, book or idea makes knowledge more accessible to others. The mapping SOURCES OF KNOWLEDGE ARE LIGHT SOURCES allows speakers to retrieve the target-domain meaning "intelligent" from the source-domain "light-emitting" meaning of *brilliant*, following the mapping from the source-domain meaning to the target-domain meaning. It does not matter whether intelligence and light-emission are co-occurring phenomena; and it is not

necessary for *brilliant* to ever be used in a context which is ambiguous between a "lightemission" and an "intelligence" interpretation.

In fact, we've seen in previous chapters that metaphorically used items such as brilliant "intelligent" occur in particular source-domain constructional slots. In (15)-(17), the source-domain items such as brilliant modify target-domain heads such as teacher.

Constructions such as the predicating modifier construction in (15)-(17) have the function of relating source- and target-domain items and assuring that a metaphor will be communicated. Metaphoric language which is encoded in this way is usually unambiguous and difficult to misinterpret, and is therefore often easily distinguishable from metonymic inferencing. This distinction forms the basis for our next test to distinguish metaphoric extension from metonymic inferencing: the "ambiguous contexts" test.

9.3.1 Ambiguous contexts test

The lack of ambiguous contexts between "light-emission" and "intelligence" renders it impossible to explain the extension *brilliant* "intelligent" as metonymic inferencing. People who are smart never literally radiate light, so "emitting light" never leads to inferences of "demonstrating intelligence". Light-emission and intelligence do not cooccur in the way of, for example, visual experience (SEEING) and awareness (KNOWING) of a phenomenon. As a result, there are no linguistic contexts which can be ambiguous between light-emission and intelligence. There are no historical examples of the kind of ambiguous context that could have led to metonymic inferencing and resultant semantic extension.

As further evidence, let us compare the frames evoked by *brilliant* "light-emitting" and *brilliant* "intelligent," as in Figure (9.8) and the example sentences in Table (9.6).

Figure (9.8) LIGHT MOVEMENT/MENTAL PROPERTY comparison

LIGHT_MOVEMENT

BEMITTER
BEAM
SOURCE
PATH
GOAL

MENTAL_PROPERTY

PROTAGONIST
BEHAVIOR
PRACTICE
....

Table (9.6) Annotated examples of LIGHT_MOVEMENT/MENTAL_PROPERTY LIGHT MOVEMENT

The	BRILLIANT	light	of the sun
		ВЕАМ	EMITTER

MENTAL PROPERTY

This	INTELLIGENT	idea	of yours
		BEHAVIOR	PROTAGONIST

Note the incompatibility of the most closely corresponding elements in each of the two frames. The EMITTER in the LIGHT_MOVEMENT frame is a source of light, whereas the PROTAGONIST in the MENTAL_PROPERTY is a sentient being. These two requirements are incompatible outside of science fiction (and this genre alone is unlikely to contribute enough ambiguous contexts to result in semantic change). Likewise the BEAM in the LIGHT_MOVEMENT frame consists of some type of light, whereas the BEHAVIOR in the MENTAL_PROPERTY frame is an "action, utterance, belief, or artifact thereof" (FrameNet website). Even in science fiction, light is generally incompatible with being an action or belief, and actions and beliefs are not confusable with light.

Not only do these frames rarely co-occur, but their elements are of fundamentally different types, eliminating the possibility of linguistic contexts which are ambiguous

between the two frames. Without ambiguous contexts, metonymic inferencing is impossible. The use of frames to model these contexts simply makes it clearer why these contexts fail to occur.

The importance of ambiguous contexts can be added to our summary of metaphoric extension/metonymic inferencing characteristics, as in Table (9.7).

Table (9.7) Characteristics of metaphoric extension and metonymic inferencing

	Metaphoric extension	Metonymic
		inferencing
Metaphor evidenced in art, gesture,	YES	NO
etc. (Extralinguistic evidence test)		
Related items undergo extension	YES	NO
(Systematic extensions test)		
Possibility of ambiguous contexts	NO	YES
(Ambiguous contexts test)		

Without ambiguous contexts, metonymic inferencing can't happen. So if no imaginable linguistic context could be ambiguous between a central and an extended meaning, the extension cannot have been the result of metonymic inferencing. In the case of extensions such as *brilliant* "intelligent," the inapplicability of an metonymic inferencing explanation leaves metaphoric extension as the best description of these changes.

9.4 Secondary metaphor/inferencing distinctions

The fundamental distinctions between metaphor and inferencing, summarized in Table (9.7), are useful in more ways than one. Some of these differences give rise to secondary characteristics that can be used alongside the more basic distinctions to identify and distinguish metaphor and metonymic inferencing. The presence of conceptual metaphor underlying metaphoric extensions can make itself known through the synchronic

comprehensibility of metaphoric extensions, and also through evidence that extended (target-domain) senses are synchronically accessed via their central (source-domain) senses. These two characteristics of metaphor are never shared by metonymic inferencing. Moreover, metaphoric extensions always reflect the unidirectionality of their underlying conceptual metaphors. Inferencing-based extensions have strong unidirectional tendencies, but these tendencies have exceptions. The presence or absence of these exceptions is another secondary test that can help distinguish metaphoric language from metonymic inferencing.

9.4.1 Synchronic comprehensibility test

Metaphoric innovations – even taken out of context – can be understood by the general population almost instantaneously, due to the underlying conceptual metaphor shared by the speakers. For example, the first attested use of *spectacle* "eyewear with temples" is found in 1415:

(19) Right as a spectacle helpith feeble sighte, Whan a man on the book redith or writ.Just as a spectacle helps feeble sight when a man reads or writes in a book.

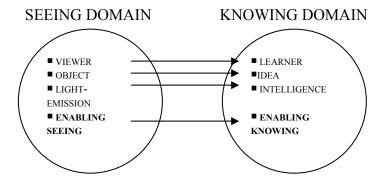
1415, Thomas Hoccleve, To Sir J. Oldcastle

The first attested metaphoric usage of *spectacle*, example (20), is from circa 1386 – actually preceding the first surviving literal use of *spectacle*. Logically, the non-metaphoric usages of *spectacle* as in (19) must have preceded metaphoric uses such as (20). However, I was unable to find earlier non-metaphoric uses of *spectacle* meaning "eyewear with temples".

(20) Povert a **spectacle** is, as thinkith me, Thurgh which he may his verray frendes se. As I see it, poverty is a **spectacle** through which he may see his true friends. *c*1386, Geoffrey Chaucer, *Canterbury Tales*

These examples show that the extension from uses such as (19) to uses such as (20) must have happened very fast, in order to leave behind a surviving metaphoric example and a surviving literal example that are from the same time period. This speed was possible because the metaphoric use of *spectacle* as in (20) would have been immediately comprehensible to all English speakers who knew what a spectacle was, even if they had never heard the metaphoric use of the word before. All these speakers shared the metaphor KNOWING IS SEEING, which maps ENABLING SEEING onto ENABLING KNOWING, as shown below. All these speakers also understood that the equation construction in (20) can relate a source-domain item (here, *spectacle*) and a target-domain item (here, *poverty*) to evoke a complete conceptual metaphor.

Figure (9.9) KNOWING IS SEEING and INTELLIGENCE IS LIGHT-EMISSION



Given the conceptual metaphor diagrammed above, a spectacle (an instrument for enabling SEEING) could be mapped onto an instrument enabling KNOWING. In the case of sentence (20), the equation construction and target-domain item *poverty* specify that this instrument is POVERTY, which according to Chaucer helps you "know" who your real friends are (for more on equation constructions, see Section 5.2).

Metaphor can operate almost instantaneously when speakers recognize the usefulness of a particular lexical item in evoking a particular metaphor. In contrast, metonymic inferencing requires decades, and more usually centuries, to produce an extended sense that can be understood in an unambiguous context by all speakers of a language. For example, unambiguous *see* "meet with" as in (11), repeated as (21) below, would have been nonsensical in the 1500s, when ambiguous contexts such as (12)-(13) were just beginning to increase in frequency.

(21) "Look, I can't **see** you now ... so you're going to have to come back later. ..." www.northshire.com/siteinfo/bookinfo.php?isbn=0-671-01988-0&item=0

Likewise unambiguous *seeing* "dating," as in (22), would not have made sense in the early 1900s when imperfective-aspect *seeing* began to invite inferences of "dating," as we saw in (14).

(22) I know you're not married, but are you **seeing** anyone right now? *elektronicsurveillance.homestead.com/interviews RazinBlack.html*

The speaker and addressee in (22) are face-to-face in an interview context, meaning that the addressee is visually "seeing" at least one person, namely the speaker. The question is relevant because the "dating" sense of *seeing*, rather than the visual sense, is intended.

Metonymic inferencing requires a period of generalization, resulting in a generalized (conventional) inference; followed by a period of lexicalization (called "semanticization" by Traugott and Dasher 2002:44) during which the inference-based sense develops its own lexical entry. Lexicalization results in a lexical polysemy which can be understood

in an unambiguous context (Traugott and Dasher 2002:34-35, 44). All of this takes a certain amount of time. Therefore, any extension that was *immediately* comprehensible and unambiguous, such as *spectacle* "poverty" in (20), cannot have been metonymic inferencing and must have involved metaphoric extension.

9.4.2 Test for dependence on central sense

The immediate comprehensibility of metaphoric language goes hand-in-hand with certain limitations on metaphoric extensions. Metaphoric extensions are immediately comprehensible because the speaker and hearer share an underlying conceptual metaphor, which allows the speaker to use source-domain lexical items (such as *brilliant* from SEEING) with a target-domain reference (such as "intelligent" in KNOWING). Metaphoric extensions can later be generalized and become a lexical sense of an item, but they need not be lexicalized to be understood. Metonymic inferencing-based extensions, on the other hand, must be generalized and lexicalized before the inferencing-based sense can be understood outside of specific ambiguous contexts.

Metaphoric extensions which have not been lexicalized are fragile. The extended target-domain senses are synchronically extracted from the central, source-domain senses. As a result, if the central sense of an item disappears, the extended sense will disappear as well.

For example, the word *leome* "flash, ray, gleam" is documented in English from around 725 to 1895. This item could be used metaphorically to refer to a source of joy or comfort via HAPPINESS IS LIGHT and GOOD IS LIGHT, as in (23) and (24).

- (23) Ihesu mi leof, mi lif, mi **leome**. Jesus my love, my life, my **light**. *a*1240, *Ureisun*
- (24) Of be welle of bat place he hadde be **leme** of byleve. In the hollow of that place he had the **light** of faith. 1387, John de Trevisa, tr., *Polychronicon Ranulphi Higden*

However, when the literal uses of *leome* disappeared from English in the late 19th century, the metaphoric uses vanished too. The last attested use, in (25), refers to literal light.

(25) The flickering **leme** of pale lightning. 1895, Samuel R. Crockett, *Men of Moss Hags*

The disappearance of the metaphoric uses alongside the literal ones indicates that the former were not a lexical polysemy in their own right, but were dependent on their literal counterparts. Conventionalized metaphoric extensions can indeed survive their source domain counterparts: this is how "dead" metaphors arise (cf. Section 9.6). However, a metaphoric extension will only survive the loss of the central sense if the metaphoric use has been common enough, over a long enough period of time, to develop an independent lexical entry. Metonymic inferencing-based extensions that are comprehensible in unambiguous contexts always have independent lexical entries, and therefore won't disappear if their central senses die out.

We know from the "ambiguous contexts tests" that metaphoric language rarely occurs in ambiguous contexts. This test can sometimes rule out a metaphor-based explanation for a given change, as it did for *seeing* "dating". However, the ambiguous contexts test cannot tell us that a given extension *is* metaphoric language. An extended sense of an

item that is found in unambiguous contexts may be either a metaphoric extension or a lexicalized metonymic inference.

The "test for dependence on central sense," which builds on the ambiguous contexts test, can test for metaphoric extension as well as for its absence. If a semantic extension was found in unambiguous contexts, yet died along with its parent sense, it was almost certainly a metaphoric extension and not metonymic inferencing. For example, *leome* "flash, ray, gleam" can refer to HAPPINESS or GOODNESS in unambiguous contexts, such as (23)-(24). It may or may not be metaphor according to the ambiguous contexts test. However, when the extended sense disappeared along with the central sense a hundred years ago, this proved that the extension involved metaphor.

9.4.3 Unidirectionality test

The next test hinges on the fact that metaphoric extensions are always unidirectional. Inference-based changes have strong unidirectional tendencies, but are not exceptionlessly unidirectional.

Metaphoric extensions preserve the unidirectionality of their underlying conceptual metaphors (cf. Sweetser 1990), which usually means that a metaphoric extension will be completely unidirectional. For example, items related to "intelligence" never refer metaphorically to "light-emission". It would be nonsensical to call a lamp *intelligent* or *genius* because it emits a great deal of light, and this type of extension is undocumented in any of the world's languages. Extensions such as *brilliant* or *bright*, meaning "intelligent," pass the unidirectionality test because there are no documented extensions with the opposite directionality, such as *intelligent* meaning "emitting bright light".

The "unidirectionality" test is useful because it demonstrates that some extensions that have been claimed as metaphor must, in fact, be the result of metonymic inferencing. For example, the extension of *oversee* from "viewing" > "monitoring" has been called "metaphor" (Sweetser 1990:34, Haser 2002:177). The "viewing" sense of *oversee* is illustrated in (26); a context which is ambiguous between "viewing" and "monitoring" is given in (27), and the modern "monitoring" sense is in (28).³⁵

- (26) Eala min Drihten, bu be ealle zesceafta **ofersihst**. Alas my lord, you **witness** the whole creation. *c*888, K. Ælfred, *Boeth*. iv
- (27) [He] prayed hym hertyly hit to **ouerse**. He prayed him heartily to **oversee** it. *c*1420, LYDG. *Assembly Gods*
- (28) Although she became ill she continued to **oversee** the restoration from afar. *www.lighthousedepot.com/Newsletter.cfm?val=132*

The presence of ambiguous contexts such as (27) demonstrates that the extension *oversee* passes the ambiguous contexts test. The extension therefore appears to be the result of metonymic inferencing and not metaphor.

The results of the ambiguous contexts test are confirmed by the unidirectionality test. Alongside extensions such as "viewing" > "monitoring," we find semantic changes of the opposite progression "monitoring" > "viewing attentively". As noted by Sweetser (1990:33), the verb *watch* demonstrates this progression, as in (29-31):³⁶

The "monitoring" sense of *watch* arose via metonymic inferencing from an earlier sense meaning "keep awake". However, this change is not immediately relevant for the current discussion and will not be examined here.

285

³⁵ The progression "viewing" > "monitoring" is also demonstrated in English by the verb *monitor*, which once referred exclusively to visual monitoring, and which lacked the versatility of the modern sense (in Modern English, we can "monitor" distant situations, stock prices, global warming, and other things that we cannot literally see).

- (29) He dide sette in wardes seers Knyghte to **wachem**, & squiers. He set as protection knights to **guard**, and squires. *c*1330, R. Brunne, *Chronicle Wace*
- (30) By this arrangement ... the operations ... are more conveniently **watched**. 1827, Faraday, *Chemical Manipulation* xix.
- (31) Forcing us to **watch** commercials at the movie theater is just wrong. *blog.tmcnet.com/blog/tom-keating/voip/voip-blog/bootleg-dvd-drivein-theater.asp*

Clearly, *watch* demonstrates a progression which moves in the direction opposite to that of *oversee*. Early examples can have the "monitoring" sense, as in (29); next, ambiguous examples such as (30) appear, and only then do examples of "visual attentiveness" such as (31) arise. The speaker of (31) is not monitoring the commercials, and cannot in fact affect them in any way (which is the reason for his complaint).

It appears from examples such as (26)-(31) that polysemies which arise through metonymic inferences can exhibit some bidirectionality. Metaphoric extensions, on the other hand, are completely unidirectional, insofar as they reflect conceptual metaphors which are completely unidirectional.

The only metaphoric extensions which are not unidirectional are those based on the rare conceptual metaphors that are not unidirectional, such as the synaesthesia metaphors SEEING IS HEARING and HEARING IS SEEING, apparent in the use of *loud* in example (32) and *clear* and *bright* in (33) below.

- (32) I don't like **loud** colors when it comes to undergarments. *www.createblog.com/forums/lofiversion/index.php/t111975.html*
- (33) This piano has a **clear bright** sound. *www.pianohouseltd.com/piano stock.htm*

The extension *loud* "bright" in (32), which evokes HEARING IS SEEING, contrasts with the extensions *clear* and *bright* in (33), which refer to sound qualities via SEEING IS HEARING. These extensions represent opposite directionalities only because their underlying conceptual metaphors map in opposite directions (from HEARING to SEEING, vs. from SEEING to HEARING). Conceptual metaphors of this kind are rare, and metaphoric extensions based on these metaphors are proportionately rare.

The "unidirectionality test," then, can help identify an extension as metonymic inferencing. Any type of semantic extension which is not exceptionlessly unidirectional, and which does not fit the pattern of synaesthesic metaphors as in (32)-(33), cannot be metaphor and is probably the result of metonymic inferencing.

The three tests discussed in this subchapter – synchronic comprehensibility, source domain dependency, and unidirectionality – are listed in Table (9.8) alongside previously discussed tests.

Table (9.8) Characteristics of metaphoric extension and metonymic inferencing

	Metaphoric extension	Metonymic
		inferencing
Metaphor evidenced in art, gesture,	YES	NO
etc. (Extralinguistic evidence test)		
Related items undergo extension	YES	NO
(Systematic extensions test)		
Possibility of ambiguous contexts	NO	YES
(Ambiguous contexts test)		
Extended sense is immediately	YES	NO
comprehensible to all speakers		
(Synchronic comprehensibility test)		
Extended sense can disappear along	YES	NO
with central sense (Test for source		
domain dependency)		
Exceptionlessly unidirectional	YES	NO
(Unidirectionality test)		

9.5 Explaining extensions such as see "know/understand"

Based on examples such as those in the previous sections, metaphoric extension and metonymic inferencing seem like fundamentally different processes. But if we accept both metaphoric extension and metonymic inferencing as valid types of semantic change, extensions such as *see* "know" pose a problem, because we must decide whether to categorize them as metaphoric extension, metonymic inferencing, or some combination of the two.

We might expect that the characteristics of the unequivocal metaphor and inferencing should help us understand these disputed extensions. If these extensions share most of the characteristics of unequivocal metaphoric extension such as *bright* "intelligent," then we would have reason to call them metaphoric; whereas if the extensions have more in common with inferencing-based extensions such as *seeing* "dating," then we would feel justified in grouping them with metonymic inferencing-based extensions. Unfortunately the situation is more complex.

In fact, extensions such as *see* "know/understand" share the most important characteristics of both metaphoric extension and metonymic inferencing, as shown in Table (9.9), expanded from Table (9.8).

Table (9.9) Characteristics of metaphoric extension, metonymic inferencing, and extensions such as *see* "know/understand"

	Metaphoric extension	Metonymic inferencing	Extensions such as see "understand"
Metaphor evidenced in art,	YES	NO	YES
gesture, etc. (Extralinguistic			
evidence test)			
Related items undergo extension	YES	NO	YES
(Systematic extensions test)			
Possibility of ambiguous contexts	NO	YES	YES
(Ambiguous contexts test)			
Extended sense is immediately	YES	NO	YES
comprehensible (Synchronic			
comprehensibility test)			
Extended sense can disappear	YES	NO	not documented
along with central sense (Test for			
source domain dependency)			
Exceptionlessly unidirectional	YES	NO	exceptions not
(Unidirectionality test)			documented

Extensions such as *see* "know/understand" certainly display the most crucial characteristics of conceptual metaphor. As we have seen, the extensions *see* "know/understand," *warm* "affectionate," and future-tense *going* appear to instantiate extensions from the source domains to the target domains of the metaphors KNOWING IS SEEING, AFFECTION IS WARMTH, and CHANGE IS MOTION. These metaphors are all documented extralinguistically: for example, light-emission in paintings and cartoons (indicated by rays of light or a light bulb over someone's head) represents intellectual awareness via KNOWING IS SEEING; likewise the use of colors that are metonymically associated with warmth, such as reds and yellows, can give an impression of friendliness via AFFECTION IS WARMTH. The metaphor CHANGE IS MOTION is frequently used in gesture, even in the absence of linguistic instantiation of the metaphor (Cienki 1998). Extensions such as *see* "know/understand" therefore pass the "extralinguistic evidence test" for metaphor.

The extensions also pass the "systematic extensions test". Section 9.2.2 discussed a number of items instantiating KNOWING IS SEEING, such as *illuminating*, *myopic* and *blind*. The metaphor AFFECTION IS WARMTH is expressed, for example, by adjectives such as *icy*, *frigid*, and *cold*, which have the extended sense "unfriendly"; and CHANGE IS MOTION participates in expressions such as *we're coming up on/hurtling towards/getting close to finals week;* or even in discussions of the *distant past* and the *near future*. ³⁷ These tests indicate that extensions such as *see* "know/understand" instantiate well-documented conceptual metaphors.

However, extensions such as *see* "know/understand" also share the most critical characteristic of metonymic inferencing. Crucially, all of these items can occur in ambiguous contexts. We saw examples of these contexts in (4)-(6) in Section 9.1.2, repeated below as (34)-(36).

- (34) Nou wend and **seh** wher hit be. *c*1310, Anon., *Marina*
- (35) Oh take this **warme** kisse on thy pale cold lips. 1588, Shakespeare, *The lamentable tragedy of Titus Andronicus*
- (36) I'm **going** to seek him Love Gregory, / In's lands where eer he be. 1100-1500, Anon., *Love Gregory*

Apparently, extensions such as *see* "know" share some of the characteristics of metaphor, and some of the traits of metonymic inferencing. Why does this happen, and how can we categorize these extensions? The next subsections will explore two possible explanations for these extensions and their characteristics.

-

³⁷ In these examples, as in most of its instantiations, the primary metaphor CHANGE IS MOTION participates in more complex metaphors, such as the Moving Time or Moving Observer metaphors for time (Lakoff and Johnson 1999).

9.5.1 Primary metaphors and primary scenes

One well-known process combines metaphoric structure with the potential for ambiguous contexts: the "primary" metaphors (see Chapter 4 of Lakoff and Johnson [1999] for a good introduction to these metaphors). Primary metaphors form the basis of both of the explanations for extensions such as *see* "know/understand" that I offer in this chapter. The first explanation I will introduce involves only primary metaphors, whereas the second involves a combination of primary metaphors and metonymic inferencing. I will argue that any explanation of extensions such as *see* "know/understand" must involve primary metaphors to a greater or a lesser extent – making an understanding of primary metaphors essential to explaining extensions such as *see* "know/understand".

Primary metaphors are different from complex metaphors in that they have a direct experiential basis. For instance, children develop the conceptual metaphor KNOWING IS SEEING by experiencing recurrent situations in which KNOWING and SEEING co-occur, such as when they SEE an object and KNOW something new as a result, such as its shape, color, or location (Johnson 1997). I will follow Grady and Johnson (1998) in calling these co-occurring experiences **subscenes**. The combination of two (or more) co-occurring subscenes is called a **primary scene**.

Primary scenes lay the groundwork for primary metaphors such as KNOWING IS SEEING. Once children can distinguish between the experiences of KNOWING and SEEING, thereby **differentiating** the domains (Johnson 1997), they are able to recognize the elements in each domain as separate. For example, they distinguish between the OBJECT that is seen and the new information or IDEA that is learned. The connection between these differentiated elements is reinterpreted as a metaphoric mapping, such as IDEAS ARE

OBJECTS in Figure (9.10) below. Differentiation is also accompanied by the ability to recognize additional structural similarities between the domains. New metaphoric mappings can be created based on these similarities, such as SOURCES OF KNOWLEDGE ARE LIGHT SOURCES and INTELLIGENCE IS LIGHT-EMISSION, also shown below.

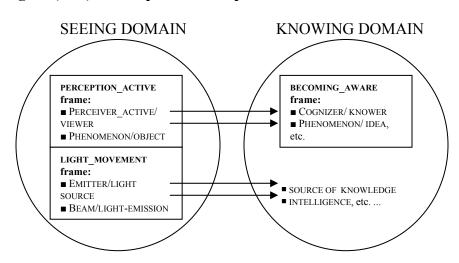


Figure (9.10) The expanded metaphor KNOWING IS SEEING

Figure (9.10) is identical to earlier diagrams in this chapter, such as (9.9), except that it includes the internal frame organization of the mappings in question. The labels in Figure (9.10) are somewhat lengthy because the elements in Figure (9.10) have traditionally been given different names in Frame Semantics and in Conceptual Metaphor Theory. In Figure (9.10), the Frame Semantic names of the elements are listed first, and the elements' traditional names in metaphor are listed second. For example, the last element listed in the SEEING domain is labeled "BEAM/LIGHT-EMISSION," because this element in the LIGHT_MOVEMENT frame is referred to as "BEAM," but the element is called "LIGHT-EMISSION" when it is referred to as part of the mapping INTELLIGENCE IS LIGHT-EMISSION.

Primary scenes represent the experiential basis on which primary metaphors are built. Complex metaphors do *not* result directly from an experiential basis. These are instead built from combinations of primary metaphors and from abstract structural correspondences between domains – including domains that are rarely experientially linked, such as THEORIES and BUILDINGS in THEORIES ARE BUILDINGS.

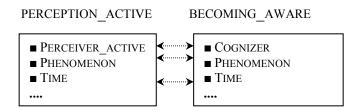
The basis and structure of primary metaphors are crucial to the categorization of extensions such as *see* "know/understand," because all the examples of this type fit the source domain/target domain patterns of various primary metaphors. For instance, *see* "know/understand" reflects the primary metaphor KNOWING IS SEEING; *warm* "affectionate" fits the pattern of AFFECTION IS WARMTH; and the future-marker *going* matches the structure of CHANGE IS MOTION. All the semantic extensions that, like these, can be explained as either metaphoric extension or metonymic inferencing, match the structure of primary metaphors.

The following two subsections will lay out two possible explanations for the origins of extensions such as *see* "know/understand". One of these explanations involves only primary metaphor, and the second involves a combination of primary metaphor and metonymic inferencing. Both of these hypotheses, however, recognize that the situations and utterances that give rise to metonymic inferencing and primary metaphor have certain commonalities, and that these have led to the confusion surrounding the categorization of extensions such as *see* "know/understand".

The similar bases of metonymic inferencing and primary metaphor can be illustrated using frames. Metonymic inferencing happens only in contexts which involve two co-occurring situations, one which is literally referred to and one which is implied. These

two situations can be represented by frames with corresponding roles, as explained in Section 9.1.3 and shown below.

Figure (9.11) Selected frame element correspondences between PERCEPTION_ACTIVE and BECOMING_AWARE



A convergence of two situations – such as perceiving a phenomenon and learning something as a result – is a prerequisite for metonymic inferencing. A similar convergence of "subscenes" – perceiving a phenomenon and learning something – is an essential part of primary scenes. The subscenes of SEEING and KNOWING are structured by the frames PERCEPTION_ACTIVE and BECOMING_AWARE, so a co-occurrence of these frames is involved in producing both metonymic inferencing, and the primary scenes that give rise to primary metaphors such as KNOWING IS SEEING.

Of course, there are a number of differences between primary scenes and the type of contexts that lead to metonymic inferencing. Some co-occurring situations that result in metonymic inferencing never lead to primary metaphors, because the prerequisite structural correspondences between domains are absent (as in *see* "meet with" [Section 9.2]). Additionally inferencing requires an ambiguous *linguistic* context (as in the sentence *Go and see where it is!*), as well as an ambiguous situational context (such as seeing an object and learning its location). Ambiguous situational contexts alone can contribute to the development of primary metaphor, but cannot lead to metonymic inferencing.

Primary metaphors also differ from metonymic inferencing processes in that they can produce semantic extensions in contexts that are not ambiguous. Once a primary metaphor has been established, it is a conceptual structure in its own right, and can facilitate semantic extensions in the same range of linguistic contexts as complex metaphors. This includes unambiguous linguistic contexts in which metonymic inferencing would be impossible (some of which we will see in the next section).

Primary metaphors can additionally accumulate purely structural mappings which are not part of their experiential basis, and these complex mappings – like complex metaphors – lead to extensions that cannot be confused with metonymic inferencing. For example, the mapping SOURCES OF KNOWLEDGE ARE LIGHT SOURCES – shown in Figure (9.10) and evident in *brilliant*, *bright* and *illuminating* in (15)-(17) – is not part of the experiential basis of KNOWING IS SEEING. As we saw in Section 9.2.2, this mapping does not represent a correspondence between real-life situations of "sources of knowledge" and "light sources," but is instead based on structural similarities between KNOWING and SEEING. These complex mappings, like complex metaphors, are learned later in life than the primary mappings, as Lakoff and Johnson discuss regarding the item *illuminate* (1999:49). Complex mappings, like complex metaphors, do not occur in ambiguous contexts and can never be confused with metonymic inferencing.

An understanding of the bases of metonymic inferencing and primary metaphor, then, can help us delineate the boundaries of the range of extensions that can be explained either as metaphoric extension or as metonymic inferencing. An understanding of these bases is also fundamental to any explanation of the origins of examples such as *see* "know/understand," including the two possible explanations that follow.

9.5.2 Hypothesis 1: straightforward primary metaphor

Once we accept that both metaphoric extension and metonymic inferencing play a role in semantic change, I argue that we can rule out pure metonymic inferencing as the cause of extensions such as *see* "know/understand". The "extralinguistic evidence" and "systematic extensions" tests show us definitively that extensions such as *see* "know/understand" are part of a structured system of metaphoric usages that reflects an underlying conceptual metaphor. These extensions' perfect fit in a metaphoric system would be impossible to achieve accidentally. Conceptual metaphors are constantly active in our reasoning and thinking-for-speaking; KNOWING IS SEEING is activated when we merely reason internally about KNOWING, so it's likely that we also activate the domain of SEEING and the metaphor KNOWING IS SEEING when we use the item *see* to talk about KNOWING. Conceptual metaphor has to enter the story at some point.

On the other hand, extensions such as *see* "know/understand" could theoretically result purely from metaphoric extension, in the manner of *bright* "intelligent". Even the characteristics that extensions such as *see* "know/understand" share with metonymic inferencing are possible to account for using a purely metaphoric extension explanation, given what we know about the primary metaphors. Primary scenes often involve the co-occurrence of two frames, one structuring each subscene. For example, the subscenes of SEEING and KNOWING are structured by the frames PERCEPTION_ACTIVE and BECOMING_AWARE. We would expect this co-occurrence of frames to sometimes, by chance, appear in an ambiguous linguistic context. This kind of context *can* give rise to metonymic inferencing; but it is also possible that metaphoric extensions based on the

primary metaphors might happen to produce this type of ambiguous context without involving metonymic inferencing.

Further evidence supporting metaphor's involvement in these extensions is provided by the extended senses' early occurrence in unambiguous contexts, which suggests that ambiguous contexts (and hence, metonymic inferencing) were not entirely crucial in the development of extensions such as *see* "know/understand". All of the extensions such as *see* "know/understand" occurred in ambiguous contexts, but unambiguous examples occur surprisingly early in the extensions' development. For example, compare the early ambiguous contexts in (4)-(6) with the early unambiguous examples below.

- (37) "Lauerd," he said, "now **see** i well Mi sin me has seit in vnsell." *a*1300, *Cursor M*.
- (38) ... **warm** wordes ... bryng louers warm hartes / And so haue your wordes warmed my harte euyn nowe ... 1534, John Heywood, *A play of love*
- (39) The Queen's faen sick, and very, very sick, / Sick, and **going** to die... 1100-1500, Anon., *Queen Eleanor's Confession*

The abstract realization in (37) cannot be visually "seen"; likewise *words* in (38) cannot literally be "warm"; and (39) does not mean that the Queen is literally journeying to a location to die, but rather that she will die in the future.

The examples of *see* "know/understand," *warm* "affectionate," and the future-marker *going* in (4)-(6) are dated within a few decades of the unambiguous examples of the same extensions in (37)-(39). If metonymic inferencing alone were operating in these extensions, unambiguous examples such as (37)-(39) would only be predicted to occur after lengthy processes of generalization and lexicalization. However, contexts such as

(37)-(39) clearly indicate the target domains of KNOWING IS SEEING, AFFECTION IS WARMTH, and CHANGE IS MOTION, and therefore represent the kind of contexts where metaphoric extension could occur. The early evidence of these contexts suggests that metaphor was active even in the earliest stages of these extensions. Whether or not metonymic inferencing was involved at all is an open question.

9.5.3 Hypothesis 2: "parallel chaining"

The characteristics of extensions such as *see* "know/understand" make even more sense if we think of metaphor and metonymic inferencing as *cooperating* in the production of these extensions. Goossens (2003) has suggested the term "parallel chaining" to describe metonymic processes that operate in tandem, rather than sequentially. I will adopt this term to refer to a similar relationship between metaphor and metonymic inferencing. ³⁸ In parallel chaining, two (or more) processes of change that lead to the same outcome take place at once, each contributing to that final outcome. One process may play a greater role for some speakers, and a different process, with similar effects, may play a greater role for others.

A parallel chaining analysis cannot be ruled out in the analysis of extensions such as *see* "know/understand," because these extensions meet the prerequisite conditions for both metaphoric extension and metonymic inferencing. Like metaphoric extensions, the central and extended meanings of items such as *see* must match the source and target domains, respectively, of a conceptual metaphor. Alongside these restrictions, the

_

³⁸ I will not limit my use of the term "parallel chaining" to processes that are "partially sanctioned" (Goossens 2003), meaning that they are only viable in combination. According to my expanded definition, parallel chaining can encompass processes (like metaphoric extension and metonymic inferencing) which can individually produce semantic extensions, but which can also occur in tandem.

extensions also display the prerequisites for metonymic inferencing. These include, as we have seen, the possibility of situational *and* linguistic contexts which are ambiguous between central and extended interpretations.

A parallel chaining account would also explain why extensions such as *see* "know/understand" are so common, both in English and cross-linguistically. Eve Sweetser (1990) cites examples of this type of extension in a number of Indo-European languages, and Verena Haser (2003) lists examples of this extension in over a hundred non-Indo-European languages. The parallel chaining explanation predicts that extensions such as *see* "know/understand" will be frequent and ubiquitous – despite the fact that this type of extension requires more stringent preconditions than either metaphoric extension or metonymic inferencing alone. The cooperation of two potential processes of change would encourage the change to occur in different languages, and facilitate the propagation of a change through a population. The details of the interplay between "chained" processes requires more in-depth study, but inescapably, two cooperating processes will encourage a given extension more than either process alone.

9.5.4 Summary

In conclusion, I believe we need to refocus the debate over metaphoric extension and metonymic inferencing specifically on examples that can legitimately be debated, such as *see* "know/understand". It is pointless to act as if metaphoric extension can explain all semantic change, and it is equally inaccurate to argue that metonymic inferencing can replace it. Before we can make further progress in characterizing semantic change, we need to recognize both metaphor and inferencing as two different processes with different

characteristics. This is easily demonstrated by examples of metaphoric extension such as *brilliant* "intelligent," which lack the defining characteristics of metonymic inferencing; and by examples of metonymic inferencing such as *seeing* "dating," which lack evidence of an underlying conceptual metaphor.

Once we recognize metaphoric extension and metonymic inferencing as distinct types of semantic change, we can narrow down the debate over metaphor versus metonymic inferencing to the examples that matter: extensions such as *see* "know/understand," *warm* "affectionate," and the rest. We can then use the characteristics of metaphoric extension and metonymic inferencing to decide whether we should pursue a "parallel chaining" explanation of these examples; to refine our understanding of how metaphor and inferencing interact in these extensions; and ultimately, to resolve the debate between adherents of metaphoric extension and proponents of metonymic inferencing.

9.6 Novel, lexicalized, and "dead" metaphors

This dissertation makes little distinction between novel metaphors, lexicalized metaphoric extensions, and all the stages in between. For the most part, metaphoric language tends to follow the same constructional patterns, and evoke conceptual metaphor in the same way, whether or not items' metaphoric senses have been added to the lexicon. When a lexical item is frequently used metaphorically, the metaphoric (target-domain) sense may be given its own lexical entry. For example, *bright* "intelligent" undoubtedly has its own entry in the lexicon of almost every speaker of English. However, when *bright* "intelligent" became lexicalized, this did not substantially

affect the contexts in which the sense was used, and there is reason to believe that the lexicalization did not eradicate the ability of *bright* to evoke the SEEING domain.

Even before *bright* "intelligent" was lexicalized, the central light-emission sense of *bright* could be used metaphorically to mean "intelligent" in an appropriate constructional setting, such as (40) below.

(40) You'll certainly print this **bright** Conversation. 1709, Steele, *Tatler*

The earliest uses of *bright* to mean "intelligent" or "witty" necessarily precede conventionalization of this sense of *bright*. Any metaphoric extension begins as a novel metaphor, which becomes lexicalized only with time and repetition. Example (40), the earliest example in the OED, probably precedes any substantial degree of lexicalization of *bright* "intelligent". The predicating modifier construction in (40), which relates source-domain *bright* and target-domain *conversation*, suffices to communicate KNOWING IS SEEING; and the sense of *bright* meaning "intelligent" is synchronically derived from mapping the literal meaning of *bright* to the target domain of KNOWING, via the mapping INTELLIGENCE IS LIGHT-EMISSION (shown in Figure 9.10), and obtaining the meaning "intelligent".

Modern *bright* "intelligent" has a greater degree of lexicalization than the early novel uses of *bright* to mean "intelligent". Nevertheless modern uses of *bright*, such as (41) below, do not differ substantially in their context and metaphor evocation from early uses such as (40).

(41) I confess that, as the days sped by and I listened to her witty expressions and **bright** conversation, I found myself falling in love with her... *www.burnettcounty.com/oldnews/carrie.html*

Modern English speakers have heard *bright* used to mean "intelligent" throughout their lives. As a result, most speakers have established a lexical entry for *bright* "intelligent". But *bright* "intelligent" continues to be used in contexts similar to those in which it arose – for example, modifying a noun that ultimately evokes the domain of KNOWING, such as *conversation* in (40) and (41).

I argue that modern *bright* "intelligent" continues to evoke KNOWING IS SEEING in much the same way as it did 300 years ago. The central "light-emission" sense of *bright* continues to exist, and speakers connect the extended "intelligent" sense with this central sense. Priming experiments, such as those discussed in the following subsection, support the hypothesis that metaphoric extensions maintain a link to their central senses.

If the "light-emission" sense of *bright* were to disappear from English, it is possible that the "intelligent" sense would persist, because it is now part of the lexicon. However, the death of the central sense of *bright* would sever the item's link to the SEEING domain, and would make *bright* unavailable as a source-domain item in evoking KNOWING IS SEEING. The item *bright* "intelligent" would then be a **dead metaphor**: a lexical item that achieved its current meaning through metaphoric extension, but which subsequently lost its ties to the metaphoric source domain.

A dead metaphor may co-occur with the use of metaphoric reasoning (it is still possible to say *comprehend* "understand" while reasoning using UNDERSTANDING IS GRASPING, even though *comprehend* is not used to mean "physically grasp" in English) but the use of the item does not directly evoke a metaphor and does not guarantee that the

metaphor will be communicated to a hearer. The loss of a central "source domain" sense of an item, then, results in the "death" of any lexicalized metaphoric extensions from that central sense. Non-lexicalized metaphoric extensions, of course, will disappear along with the central sense, as we saw in the case of *leome* "flash, ray, gleam" in (23)-(25).

Although some metaphoric extensions end as dead metaphors, most lexicalized metaphoric extensions maintain their connection to their central senses and retain their ability to evoke conceptual metaphor. Let us turn now to some experimental evidence supporting this claim.

9.6.1 Processing metaphoric language

The defining attributes of metaphoric extension – conformance to constructional patterns, evidence of "systematic extensions," and the lack of historical ambiguous contexts – all result from the close relationship between metaphoric language and conceptual metaphor. Psychological studies also indicate that metaphoric language activates conceptual metaphor.

So far no study has directly addressed the difference in processing metaphoric and non-metaphoric polysemies (such as those resulting from metonymic inferencing) but implications for this issue can be extrapolated from the results of studies comparing kinds of polysemy and homonymy. This section will discuss several studies involving priming and sorting tasks, and their relevance to the model of metaphoric language and metaphoric extension presented in this dissertation. All of these studies are applicable only to the contrast between metaphoric language and lexical homonymy. Even though these studies do not address the polysemies which result from metonymic inferencing, the

difference in processing metaphoric language versus homonymy can shed light on how metaphorically used items help evoke conceptual metaphor, which should in turn help distinguish metaphor from processes such as metonymic inferencing which – like homonymy – do not involve metaphor evocation.

Williams (1992) sets out the results of a series of priming experiments which address the processing of central vs. non-central senses of polysemous items. In Williams' study, the *centrality* of a polysemy is measured in terms of reaction-time and statistical frequency. According to these criteria, metaphoric senses of an item will almost always be less "central" than the senses that they are extended from, since the original senses predate the metaphoric ones. In fact, almost all of Williams' "non-central senses" are metaphoric extensions, such as the sample sentences in Table (9.10) below, which Williams designed in order to test the priming effects of central versus non-central senses of a polysemous item.

Table (9.10) Sample sentences from Williams (1992)

	category	prime	target
a	Central target, related prime:	The schoolteacher was criticized for not being firm.	SOLID
b	Central target, unrelated prime:	Nobody went to the pub because the music was so loud.	SOLID
c	Non-central target, related prime:	The couple wanted a bed that was firm.	STRICT
d	Non-central target, unrelated prime:	The orchestra hated the symphony because it was so long.	STRICT

I've suggested that non-central senses of an item – those that evoking a metaphoric target domain – are synchronically tied to central senses that can evoke the metaphor's source domain. For example, the target-domain sense of *firm* ("strict") is synchronically dependent on the source-domain sense ("hard"). This means that every time *firm* is used

to mean "strict" via the metaphor BEHAVIORS ARE PHYSICAL QUALITIES, in which UNCOMPROMISING BEHAVIOR IS HARDNESS, the item *firm* evokes the PHYSICAL QUALITIES domain due to its central sense "hard". Other items, related by appropriate constructions — such as the item *teacher* in *firm teacher* — can evoke a target domain such as BEHAVIORS and cause *firm* to be interpreted metaphorically. The metaphoric sense of *firm* "strict" synchronically derives much of its meaning from the central sense *firm* "hard".

Williams' studies seem to support my view of metaphorically used items. According to Williams' data, non-central polysemies prime contextually irrelevant central meanings, but central meanings do not usually prime non-central polysemies. For example, Table (9.10) gives a sample of Williams' test sentences and primes from the first of a series of experiments (1992:198). He found that both types of sentences with related primes (exemplified in [a] and [c] in Table [9.10]) demonstrated priming effects, but these effects were only significant for the examples with a central target, as in (a). Furthermore, while an increase in the delay of the presentation of the central target had very little effect on the effectiveness of the priming, a delay in presenting the non-central target further diminished the nonsignificant priming effect of these examples. In Williams' second study, he found that both non-central polysemies and unrelated homonyms inspired priming effects, but these effects disappeared with delays of 200 msec, whereas central polysemies continued to be primed after much longer delays.

The model of metaphor in this dissertation provides one explanation for Williams' results: the metaphoric usages activate the source domain of their underlying conceptual metaphor. Constructional encoding and conceptual metaphor combine to activate the target meaning (the non-central meaning), while the source polysemy remains activated

for the purposes of metaphoric reasoning. Williams' observation that a delay does not diminish the priming supports the hypothesis that the source domain of a conceptual metaphor remains active during reasoning involving the target domain. The fact that central meanings do not prime non-central ones predicts the unidirectionality of metaphoric extension: metaphor-based semantic extension will only be possible from source meaning to target and not vice versa.

A study performed by Brisard, Rillaer and Sandra (1997) supports some of Williams' findings and sheds further light on the processing of different types of polysemy. Their study aims to differentiate homonymy, polysemy and vagueness, categories which Brisard et al. define in the following way:

... a homonymous item displays two unrelated *meanings*, a polysemous item has one meaning with two or more *senses*, and a vague item has one meaning with only one sense that can be slightly refined, yet not fundamentally altered, through semantic integration with additional contextual material. (1997:262)

Brisard et al. also note that these categories represent a continuum, rather than rigidly defined classes, and that items can move from one class to another (for example, a polysemous item may become homonymous over time). To make the arbitrary distinction between these categories, then, participants in the study were asked to rate the similarity of instances of two uses of an adjective on a scale of 0 (no similarity) to 6 (extremely similar). All pairs with averages between 2 and 4 were considered polysemous. Items with lower scores were considered homonymous, and those with higher scores were "vague".

Table (9.11) Adjectival uses labeled as "polysemous" in Brisard et al. (1997)

prime / "subordinate polysemy"	target / "dominant polysemy"
scherpe kritiek "sharp criticism"	scherpe tand "sharp tooth"
hoge functie "high function"	hoge boom "high tree"
fris idee "fresh idea"	frisse wind "cool wind"

Brisard et al. give only three of the instances of "polysemy" they used in their experiments, and these are listed in Table (9.11) above. Note that all three instances are metaphoric. This trend suggests that speakers consciously relate metaphorically used words to their source-domain meanings, and rate these as more closely related than true homonyms, but less related than two non-metaphoric uses of the same lexical item.

The preponderance of metaphor in the input data of Brisard et al. also suggests that their study, like those of Williams, may be more relevant to the study of metaphoric language than to polysemy in general. And in fact, their results mesh cleanly with Williams. In Williams' study, as we saw, unrelated homonyms and non-dominant polysemous primes ceased to have priming effects after a 200 msec delay. Brisard et al. consistently use a 240 msec delay, and throughout their experiments, homonyms failed to result in priming effects. They do find, however, that both "polysemous" subordinate meanings and "vague" items result in significant priming effects. Facilitation effects in the experiment comparing vague and polysemous items achieved almost the same level of facilitation for polysemous as for vague items (69 msec as compared to 71 msec), whereas homonymy resulted in a facilitation of 10 msec – a nonsignificant result. "Polysemous" metaphoric language, therefore, demonstrates a strong and lasting activation of the source domain, which does not occur with homonyms. This is consistent with the view that metaphoric language synchronically evokes a conceptual metaphor that is used in reasoning and language processing.

A series of eye-tracking studies involving "polysemous" metaphoric verbs lends further credence to this analysis. Pickering and Frisson (2001) test "verbs with multiple meanings" (homonyms), "verbs with multiple senses," which are intentionally all metaphoric, and unambiguous verbs (loosely corresponding to Brisard et al.'s "vague" items). The studies compare dominant/source vs. subordinate/target meaning priming effects in both "supportive" contexts – in which the domain is made clear in the sentence before the presentation of the verb – and "neutral" contexts, in which the domain ambiguity is resolved only after the verb in the sentence.

Pickering and Frisson's studies, like those conducted by Williams and Brisard et al., find that multiple-sense items behave more like monosemous items than homonyms. The resolution of meaning for both multiple-sense verbs and unambiguous verbs was observed to occur late in processing, in that the effects of neutral vs. supportive contexts became apparent later in the processing of these sentences than those with homonymous verbs (2001:565-7). Pickering and Frisson argue that "the late preference effect is ... due to integrative processing rather than ambiguity resolution" (2001:567).

This tendency meshes with the observations of Williams and Brisard et al., that unsupported homonymous meanings do not remain active long in processing as opposed to metaphorically related polysemies. Homonymous ambiguity is resolved immediately, and the inappropriate meaning is no longer activated. Related senses – particularly dominant/source-domain senses, as noted in Williams' study – instead remain active longer in the processing, and incorporate the effects of context at a later stage. At this stage in processing, I argue, H/R is no longer deciding between meanings, but is rather deciding whether to apply his domain-specific processing either to the literal domain, or

the metaphorically related target domain. Overall, the process involving related senses is faster, because regardless of the domain indicated by context, the H/R can make use of the source domain processing that he has already completed.

So far we have seen from Williams and Brisard et al. that a source domain remains active longer in processing than an unrelated meaning. Pickering and Frisson's studies lead to the conclusion that the details of domain come into play late in the processing of both metaphoric and unambiguous verbs. These studies support the model of an active source domain in metaphoric processing. As long as the target domain is evoked, even if this is late in the sentence, the source domain processing will not be wasted, but is instead applied to the target.

A series of studies by Gibbs and Matlock (1997) more directly addresses the relation between literal and metaphoric processing. Gibbs and Matlock asked subjects to sort instances of the verb *stand* into groups based on meaning similarity. In all of the three experiments, subjects did not tend to separate the literal from the metaphoric instances of *stand*. Rather, they grouped the sentences by "image schema" – the structure which is shared between source and target in a metaphor. That is, metaphoric instances of *stand* were judged to be more similar to their source-domain meanings, than to other metaphoric uses in the same target domain. These results support the hypothesis that metaphoric meanings are derived from their source-domain meanings. The target meaning is decoded only after substantial processing using the source domain has already been completed. Therefore, the source domain remains active (as shown by Williams and Brisard et al.), domain differentiation occurs late in processing (as Pickering and Frisson

demonstrate), and target interpretations are judged to be similar to source meanings, because they are derived from these meanings (as Gibbs and Matlock show).

These characteristics of metaphoric language have several implications for modeling semantic extension. First, the fact that metaphoric language relies on an activated source domain explains how metaphoric extensions are dependent on source domain vocabulary, as noted in Section 9.4.2. The availability of source domain material explains why novel metaphoric uses are comprehensible, as described in Section 9.4.1. The fact that target-domain uses of an item maintain activation of the source meanings, but not vice versa, explains the unidirectionality of encoded processes, as discussed in Section 9.4.3. As previously noted, these studies do not directly compare metaphoric extension and other types of polysemy, such as inference-based extensions. The present studies are, however, suggestive of the characteristics of metaphoric language that need to be tested by future research comparing the types of polysemy.

PART IV IDIOMATIC CONSTRUCTIONS

10 Metaphor and the semantic idiosyncrasies of constructions

Out of the thousands of English constructions, it may seem surprising that so few constructions – predicate-argument constructions, copula constructions, and the others examined in Part II – are normally involved in evoking metaphor. Although my corpus contained no examples of metaphor which did *not* involve one of the constructions discussed in Part II, the corpus also demonstrated that less common constructions can affect the possible combinations of source and target domain items. Specifically, I found that constructional restrictions on the form and/or meaning of lexical items are carried over into the constructions' metaphoric uses. For example, if a construction requires an animate filler in a particular slot, metaphoric uses of this construction will require a filler that is either literally or metaphorically animate. This type of requirement generally builds on the constraints already present on the metaphoric uses of constructions (as explored in Part II), and the combination of general and specific constraints can result in a very narrow range of metaphoric uses for a particular construction.

To get a feel for the sort of influence that these idiosyncratic constructions can wield, this section will return to the ditransitive construction, and then explore the family of metaphoric resultative constructions. The constructions examined in this chapter will lay the groundwork for the extensive study of idioms in Chapter 11, whose effects on metaphoric language are even further removed from the quotidian constructions in the earlier chapters of this dissertation. However, we will see that even the most idiomatic constructions demonstrate regular, explicable patterns of usage in metaphor.

10.1 The ditransitive revisited

The ditransitive construction, introduced in Section 4.4.4, is here re-examined with a focus on the limitations specific to this construction (and not shared by, for example, transitives and indirect object constructions), as a segue into the issue of constructional meaning and metaphor.

We saw in Section 4.4.4 that the ditransitive construction imposes some unusual constraints on the domains that can be evoked by the arguments in its argument-structure slots. These constraints are general semantic requirements rather than specific requirements on metaphoric uses, but they nevertheless have particular ramifications for metaphoric language.

One of these constraints was explored in depth in Chapter 6 of Adele Goldberg's groundbreaking book *Constructions* (1995), where it is noted that the ditransitive construction requires a volitional subject DONOR and usually requires a volitional indirect-object RECIPIENT. This is a requirement unique to the ditransitive construction, and is not shared by semantically similar constructions such as the indirect object construction.

The ditransitive construction is unacceptable with a non-volitional recipient, as in (1), whereas a similar usage of the indirect object construction, shown in (2), is unproblematic. (Both constructions are compatible with an appropriate volitional recipient, such as *me* or *Janice*.)

- (1) *John shipped Alaska (me/Janice) a polar bear.
- (2) John shipped a polar bear to Alaska (me/Janice).

The ditransitive's strict requirement on its indirect object renders this slot incompatible with a PLACE FOR PERSON metonymy, as in (1). This constructional requirement also affects the metaphoric uses of the construction, because an item denoting a volitional being can evoke only a limited range of metaphoric domains. Any constraint such as this one, which affects the range of items that can fill a slot, is likely to have implications for the metaphoric uses of items in that slot.

For example, we've seen that the ditransitive can evoke the Conduit Metaphor (COMMUNICATION OF IDEAS IS OBJECT TRANSFERAL, a submapping of THE MIND IS A BODY), as in sentences such as (3) (repeated from [21] in 4.4.4). This type of usage is possible because the source domain of COMMUNICATION involves volitional participants.

(3) Gwen gave Ian a great idea.

It is not possible for the ditransitive to be used to evoke certain uses of the Location Event-Structure Metaphor (and the mapping CAUSATION IS MOVEMENT), because locations are not volitional entities. Non-metaphoric caused-motion constructions, as in (4a), cannot be rephrased as ditransitives, as in (4b); and the same holds for caused-motion constructions involving CAUSATION IS MOVEMENT, as shown in (5a) and (5b). In both (4b) and (5b), the infelicity results from the inappropriateness of a location as a "volitional recipient," as required by the ditransitive construction.

- (4) a. Dave pushed the boy into the alligator pit. b.*Dave pushed the alligator pit the boy.
- (5) a. Dave pushed the boy into criminal behavior. b.*Dave pushed criminal behavior the boy.

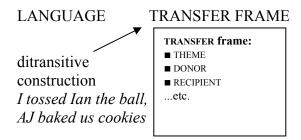
The ditransitive's requirements for a volitional recipient and subject additionally result in a preponderance of domain-neutral subjects and indirect objects (refer to Section 4.4.4 for an in-depth explanation of this phenomenon). In sentence (3), for instance, if the direct object no longer evokes the target domain, the sentence will be read as non-metaphoric, as in (6). This demonstrates that the subject and indirect object in (3) are not instrumental in evoking the target domain.

(6) Gwen gave Ian a great book.

General constructional requirements, such as the "volitional recipient" requirement, can clearly have an effect on the possible metaphoric uses of a construction.

The ditransitive construction has an additional constructional requirement, in that it must involve transfer or intended transfer. Any use of the construction must therefore evoke the TRANSFER frame, repeated below from Figure (4.21):

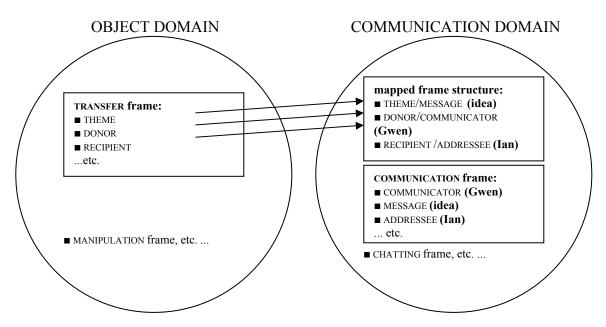
Figure (10.1) The ditransitive construction evokes the TRANSFER frame



In the first place, it is interesting that a *construction* can evoke a frame at all. In every other construction we've seen, frames are evoked by lexical items. These other constructions, unhindered by a constructional restriction of this kind, could include any lexical items of the appropriate types, and could be used to evoke any metaphor.

Ditransitives' constructional requirement that the TRANSFER frame be profiled has serious implications for the metaphoric uses of these constructions. The TRANSFER frame structures a limited range of source domains, which map to a limited range of target domains. For example, the Conduit Metaphor (COMMUNICATION OF IDEAS IS OBJECT TRANSFERAL, a submapping of THE MIND IS A BODY), maps the TRANSFER frame from the BODY domain to the MIND domain, as in metaphoric sentences such as (3) above, illustrated here:

Figure (10.2) The clause *Gwen gave Ian a great idea* evokes COMMUNICATION OF IDEAS IS OBJECT TRANSFERAL (the Conduit Metaphor)



The OBJECT domain is structured by the TRANSFER frame, and is therefore an appropriate source domain for a metaphoric use of the ditransitive construction. Any domain that is not structured by TRANSFER cannot take part in this metaphor. This rules out the use of ditransitives to communicate a slew of metaphors, such as LOVE IS A JOURNEY, HAPPY IS UP, or any image metaphor.

In conclusion, the ditransitive's constructional semantics constrain its metaphoric uses by: (1) requiring that potential metaphoric source domains involve volitional, animate elements that can be mapped to RECIPIENT and DONOR role; (2) encouraging domain-neutral subjects and indirect objects; and (3) limiting the potential metaphoric source domains to those involving TRANSFER. The ditransitive demonstrates that constructional semantics have the power to delimit the input domains of the metaphors that a construction can communicate, and also to restrict the items within a construction that can be used to communicate these domains. The following sections and chapters explore additional effects of constructional semantics on metaphoric language.

10.2 Resultative constructions

Like the ditransitive construction, the family of resultative constructions imposes certain constraints on the domain evocation of these constructions' constituents. Two types of resultative need to be distinguished in terms of their behavior in evoking metaphor: PP-resultatives and AP-resultatives. This section will begin with the idiosyncrasies of PP-resultatives, then tackle the more unusual behavior of metaphoric AP-resultatives.

10.2.1 The PP-resultative

Most of the basic constructions in Chapter 4 involve one lexical item that evokes the source domain of a metaphor, and one that evokes the target domain. In more complex constructions, such as the resultative, it can be more difficult to attribute the source domain evocation to only one item. This difficulty is illustrated by the PP-resultative,

shown in sentences (7) and (8) below³⁹. Metaphoric uses of PP-resultatives always involve a metaphoric PP with a image-schematic source domain such as CONTAINMENT or LOCATION, such as *into a boat* in (7) and *to exhaustion* in (8).

- (7) Lucy folded the paper into a boat. (A SHAPE IS A CONTAINER)
- (8) The boss worked her to exhaustion. (STATES ARE LOCATIONS)

The PP-resultative appears to be extended from the (non-metaphoric) caused-motion construction (Goldberg 1995:81ff). Non-metaphoric caused-motion examples are given in (9)-(10) below for comparison.

- (9) He threw the napkin off the table.
- (10) He sneezed the napkin off the table.

In (9), a central example of the caused-motion construction, the verbal semantics of *throw* require that the agent causes the movement of the patient, which ends up in a new location. In (10), on the other hand, the verb *sneeze* does not carry this implication (and in fact does not accept a patient at all in other constructions). The caused-motion construction itself imposes the patient role, and specifies that the patient follows a PATH to the LOCATION designated in the PP.

Grammatical constructions are meaning-bearing units. They can supply meanings such as PATH, LOCATION, and potentially the whole range of closed-class, image-schematic meanings listed by Bowerman (quoted in Section 4.5.4). If constructions can evoke these meanings, then the meanings ought to be available for use in evoking source

318

³⁹ The PP-resultative, containing a PP designating a result state or location effected by the process indicated by the predicate, is distinguished from the AP-resultative, which is discussed in the following section.

domains in metaphor. It seems, then, that we have two explanations for the metaphoric source domains of CONTAINMENT and LOCATION evoked in (7) and (8): one based on the domain-evoking properties of the closed class of prepositions, and one based on the domain-evoking potential of the closed class of grammatical constructions.

The first explanation is that the prepositions *into* and *to* evoke the source domains CONTAINMENT and LOCATION in (7) and (8). Prepositions are entirely able to evoke domains of this kind, as discussed in Section 4.5.4. In this case, the resultative construction simply has a slot for a preposition, which evokes the source domain of the metaphor. The subordinate noun (*boat* in [7] and *exhaustion* in [8]) evokes the target domain, just as the subordinate NP in a PP usually evokes the target domain in a metaphoric preposition phrase construction.

The second explanation is that the PP-resultative construction itself, by virtue of its extension from the caused-motion construction, supplies the source domain material. Constructions, like prepositions or the case endings discussed in Chapter 8, are closed-class items, and so could be expected to evoke the set of concrete, image-schematic domains listed by Bowerman. Since the preposition phrase in the caused-motion construction involves a location or container, the LOCATION and CONTAINMENT source domains could be evoked in the resultative construction – if the PP-resultative is indeed metaphorically extended from the caused-motion construction, as Goldberg claims.

A third possibility is that both the preposition and the construction play a role in source domain evocation. Metaphor input domains, both sources and targets, are typically given by more than one construction (as shown by the statistics in the Chapter 6). It reinforces a conceptual metaphor when a domain is evoked multiple times. It cannot be

determined from these examples whether the resultative construction is itself metaphoric (as Goldberg maintains [1995:81ff]), whether the preposition supplies the metaphoric source domain, or both.

10.2.2 The AP-resultative

Whether or not the resultative construction is itself metaphoric, it certainly can impose restrictions on metaphoric usage. This is made clear by a second type of resultative construction, which occurs with an adjective instead of a preposition phrase. The AP-resultative is exemplified in (11)-(12).

- (11) She hammered the metal flat.
- (12) The fabric wore thin.

Sentences such as (11)-(12) historically involved a STATES ARE LOCATIONS metaphor. Somewhere in the history of English, AP- and PP-resultative uses presumably arose from their caused-motion counterparts, via a STATES ARE LOCATIONS metaphoric extension. These resultatives may still synchronically evoke the LOCATION source domain, though this domain is not reflected in any lexical items within the construction. However, the contemporary AP-resultative *cannot* itself express literal locational meaning. Sentences such as (13) and (14) are impossible.⁴⁰

- (13) *He threw the napkin table (/off the table).
- (14) *She hammered the metal table (/onto the table).

-

⁴⁰ Adverbials such as *tablewards* do not indicate a result location. *He threw the napkin tablewards* does not entail that the napkin reached the table, or any given location – it is more analogous to *He threw the napkin north* than to example (13).

The failure of (13)-(14) leaves open the possibility that the AP-resultative calls for a STATE directly, without recourse to metaphor. This question could be resolved through priming or similarity judgment experiments. These could determine if the end states *flat* and *thin* in (11) and (12) prime the LOCATION source domain or are judged similar to source domain material, which would indicate whether the STATES ARE LOCATIONS metaphor is synchronically active in these examples.

Regardless of whether the AP-resultative obligatorily involves a STATES ARE LOCATIONS metaphor, the construction can certainly be used to express other metaphors, as in (15)-(16).

- (15) She hammered his ego flat (with her criticisms). (MORE IS UP, IMPORTANCE IS SIZE, CAUSES ARE FORCES)
- (16) His patience wore thin. (EMOTIONAL STATES ARE FABRICS)

In the metaphoric AP-resultative, the source domain is evoked by the verb (hammered and wore in [15] and [16]) following the predicate-argument pattern. The verb's role might be reinforced by constructional meaning, just as the source domain evocation in the PP-resultative might be attributed to the construction or the preposition. The adjective is also source-domain (flat and thin in [15] and [16]).

The AP-resultative has a domain restriction that would not be predicted if the adjective merely modified the noun, as it superficially appears to do. The AP-construction must have an adjective and a verb from the same domain of a metaphor (either from the target domain, as in [11] and [12] above; or from the same source domain, as in [15] and [16]). It is not acceptable to have a target domain verb and a

source domain adjective, as in (17) below; nor to have a verb and adjective instantiating different source domains, as in (18).

- (17) *She criticized his ego flat.
- (18) *His patience wore short.

This domain restriction must be attributed to the constructional meaning of the AP-resultative. Like the ditransitive construction, the AP-resultative appears to restrict the metaphor input domains that lexical items can evoke.

10.3 The *crazy* constructions

A further constructional type, usually classed with the AP-resultatives (cf. Goldberg 1995:196), appears to violate the same-domain constraint imposed on verbs and adjectives in AP-resultatives. The construction in question consists of examples such as (19)-(22) below. The most cited example involves the VP *go crazy*, as in (20b), so I will call these constructions the *crazy* constructions. I argue here that the *crazy* constructions are distinct from the AP-resultatives, and that these constructions therefore exhibit different ranges of metaphoric uses, and distinct semantic constraints on these usages.

- (19) a. The coffee went cold.
 - b. The milk went sour/bad.
- (20) a. The crowd went quiet/silent/speechless. 41
 - b. He went crazy/mad/insane/suicidal/Republican.

⁴¹ This class of adjectives can occur with *fall* as well as with *go*, as in this BNC example: "She **fell silent**, unable to speak openly – especially to this man – of the torment writhing within her." This flexibility is probably related to ACTIVE IS UP, since this class of adjectives is the only one which implies a ceasage of volitional activity (speech).

322

- (21) I was shocked, **went speechless** and tried to get out of there. *www.brookeburke.net/other/fhm401.html*
- (22) marxist_thug: I have problems with that because **you went Republican**, ON YOUR OWN ADMISSION, because it was the "indie" thing to do. www.livejournal.com/community/conservatism/1610306.html?thread=2608774

Crazy constructions involve a limited set of source-domain verbs, paired with a limited set of target-domain adjectives. The verbs include intransitive examples with go, as in (19)-(22). Note that no other motion or manner verb may be substituted for go in these examples. Verbs such as became and turned are possible, however, which suggests the possibility that the crazy constructions are extended from constructions such as He became crazy, and need not be related to the resultatives at all. If the crazy constructions are not resultatives, this would further support my case that they are not counterexamples to the same-domain constraint on metaphoric AP-resultative constructions, as introduced in the previous section.

Whether related to the resultatives or not, the *crazy* constructions impose restrictions all their own, proving that they are a separate class of constructions. For example, all the adjectives in (19)-(22) denote non-canonical states which can be reached by "entropy," or the passage of time, and which are not evaluated positively. It is the normal state of affairs that over time (barring human effort to reverse these trends) coffee will become cold, milk will become sour, and voices will become silent, as in (19), (20a) and (21). ⁴²
Apparently, a folk model also presumes that the preservation of sanity requires an active

⁴² The verbs of motion are particularly appropriate for this usage due to the metaphor that a canonical state is here, and good is here; a non-canonical, less good state is conceptualized as being away; and degeneration towards this state is movement away (*go, went,* etc.) Positive progress, on the other hand, is movement towards, as in *come to your senses*.

effort, as evidenced by (20b). The preservation of one's political ideals may be conceptualized the same way, as in (20b) and (22).

In these examples, the constraint on AP-resultatives discussed in the previous section – that the verb and adjective instantiate the same domain – fails to apply. The verb *go*, independent of any particular construction, activates the source domain material MOTION TO A LOCATION in its metaphoric uses, as in A CHANGE OF STATE IS MOTION TO A LOCATION. The meaning of *go* is very general, however, and does not evoke a more specific source domain (as do *hammer*, *wear*, *swim*, *dance* etc.). The state denoted by the endpoint of the motion of *go* can therefore be interpreted as a LOCATION, but it is not otherwise restricted to a particular domain. The verb *go* does restrict the range of target-domain adjectives, in that *go* requires the MOTION to occur without the impetus of an outside FORCE. This maps, in the target domain, to a requirement that the CHANGE OF STATE occur without an outside CAUSE.

However, an outside CAUSE may be implicated in the *transitive* crazy construction, which is parallel to the intransitive version with *go*. This transitive crazy construction occurs with a very restricted set of verbs, such as *drive* and *send*. These verbs may be used with the same set of adjectives as occur in the intransitive constructions with *go* in (20)-(22). Compare (21) and (22) above with (23) and (24) below (which are acceptable in some U.S. dialects, including my own). In (23)-(24), unlike in (21)-(22), the agent of causation is specified. Apparently, however, the set of possible result states in usages such as (23)-(24) is limited to those that can be reached by "entropy," just as intransitive *crazy* constructions such as (21)-(22) are constrained by this consideration.

- (23) "Well, that was quite a show there you guys, Rain, you **sent everyone speechless!**"

 members.tripod.com/~rbap612/stories/lorrianech23.html
- (24) ... when I got to Champaign, the repulsive liberalism here drove me Republican.

 heylisten.blogspot.com/2003_10_01_heylisten_archive.html

Some result states found in intransitive *crazy* constructions, such as *sour*, do not normally occur in transitive *crazy* constructions, because the states rarely have an animate agent of causation (people don't usually *cause* milk to become sour, for example). However, even these examples can occur with *send* and *drive* in a special context, such as in the fantasy setting in (25) below, in which the characters are discussing a magician with supernatural powers.

(25) "Careful, Mr. King sir. You must humor him," the old wizard interrupted the King. "If you anger him he will torment your home. His smile can curdle your blood. **His laugh will send milk sour** and knock fruit from trees. He will tip over pails, spin signposts and hide your valuables. He will pester you to the edge of insanity."

www.quantummuse.com/feb04 elf.html

In conclusion, English constructions such as the PP-resultative, AP-resultative, and *crazy* construction demonstrate a range of constraints on source- and target-domain lexical items. The AP-resultative requires that its verb and adjective represent the same domain, whether source or target. The *crazy* construction requires a specific range of verbs expressing the source domain MOTION TO A LOCATION, along with a specific range of target-domain adjectives.

Given the central role of grammatical constructions in metaphoric language, it should not come as a surprise that a variety of grammatical constructions play a role in expressing metaphoric language. The evidence from the resultative constructions and the *crazy* constructions reinforces the conclusion that grammatical constructions are directly responsible for the target and source domain requirements on linguistic metaphor. These domain requirements are not simply tied to lexical categories (for example, it would not be adequate to label all predicating adjectives as "source-domain items," and so forth). An important role of constructions is to delimit and guide the interaction of lexical semantics. The resultatives and *crazy* constructions, like the simpler constructions in Part II, fulfill this role. As a consequence, *all* of these constructions involve constructional semantics that delimit the use of lexical items in evoking metaphor input domains. Certain constructions, such as the resultatives and *crazy* constructions, simply have more semantic constraints and therefore have more specific uses in metaphoric language.

11 Metaphor in idioms

Many have noted the connection between metaphor and idiomaticity (cf. Lakoff 1987, Nunberg et al. 1994, Geeraerts 2003), but few have questioned why this connection exists. In this chapter, I argue that metaphor does *not* lead to idiomatic characteristics such as limited syntactic or semantic productivity, which are due to processes such as metonymic inferencing and lexical change. Instead, I will show that an idiomatic trait called *lexical filledness* makes idioms statistically more likely than non-idioms to be metaphoric (11.2-11.3); and that idioms are more suited to retaining a metaphoric meaning over time than non-idioms (11.4-11.5). These tendencies, I argue, are responsible for the well-known preponderance of metaphor in idioms.

Before we can compare idioms to non-idiomatic constructions, it is necessary to differentiate between the two. The CG definition of *construction* and the traditional definition of *idiom* have a lot in common. According to Goldberg, "a construction is posited in the grammar if it can be shown that its meaning and/or its form is not compositionally derived from other constructions existing in the language" (1995:4); while according to Nunberg et al., idioms are characterized by meaning that "cannot be predicted on the basis of a knowledge of the rules that determine the meaning or use of its parts when they occur in isolation from one another" (1994:495). If both idioms and constructions involve non-compositional form and meaning, what makes idioms special?

The term "idiom" is usually associated with certain characteristics besides non-compositionality, such as syntactic and semantic inflexibility (Nunberg et al. 1994).

Some authors use the term "idiom" to refer only to a subset of constructions with certain characteristics of idiomaticity (Gibbs 1990), while others envision a cline of idiomaticity

based on particular characteristics of idioms (Fillmore et al 1988, Fillmore and Kay 1999). I propose that all of the characteristics of idioms which set them apart from other constructions can be traced back to one characteristic: that of being *lexically filled* in the sense of Fillmore et al. (1988).

A **lexically filled** construction requires one or more specific lexical items to evoke a particular constructional meaning. For example, *He popped the question* requires the verb POP^{43} and the NP *the question*. The meaning of *pop the question*, "propose marriage," depends on the use of these two lexical items in a predicate-argument construction. A speaker who is familiar with the items POP and *question* and the predicate-argument construction (including the metaphor evocation potential of this construction) would not produce *pop the question* "propose marriage" without learning the phrase. The phrase *pop the question* is not merely an instantiation of the predicate-argument construction, but has its own entry in the construction; and because it requires specific lexical items, it is an idiomatic construction. Of course, not all lexically filled idioms are metaphoric. For example, the idioms *kith and kin, breathe one's last,* and *slam the door* are usually non-metaphoric, as will be discussed later in the chapter.

Unlike idioms, **lexically open** constructions such as the intransitive draw from the complete set of English nouns and verbs. The meaning of any non-idiomatic intransitive construct, such as *the boy somersaults* or *a steamboat crashed*, is compositionally derived from the semantics of the lexical items and the intransitive construction. The intransitive construction is therefore lexically open and non-idiomatic. According to the above definitions, all idioms are constructions, because both involve non-compositional form

4

⁴³ Lexical items in italicized uppercase letters, such as *POP*, designate the set of all inflected forms of a stem. Lexical items in lowercase letters, such as *popped*, designate that particular inflected form.

and meaning; but not all constructions are idioms, because idioms are lexically filled while non-idiomatic constructions are lexically open.

Out of the thousands of English constructions it seems safe to say that most are idioms. The number of constructions that are completely lexically open, such as the intransitive, the transitive, predicating modifier constructions, etc., could be listed on a single sheet of paper – whereas any good dictionary of idioms will have thousands of entries. Because idioms are so common, idiomatic metaphor evocation is an important part of constructional metaphor evocation.

Idiomaticity itself does not create exceptions to the patterns of metaphor evocation discussed in Part II. However, some of the traits associated with idiomaticity –lexical filledness, limited syntactic productivity, and so forth – do require special explanation. In this chapter I will address the effects of each idiomatic trait on metaphoric language using English sample cases. I am not interested in subcategorizing idioms – this has been done by numerous authors (Gibbs' normally decomposable, abnormally decomposable and non-decomposable idioms [1990]; Fillmore et al.'s encoding vs. decoding idioms [1988]; Nunberg et al.'s idiomatic combining expressions vs. idiomatic phrases [1994]). Instead, I will focus on the family resemblances characterizing the category of idioms and the implications of each of these resemblances for the evocation of metaphor.

11.1 Decomposability and syntactic productivity

Idioms, as constructions, are necessarily characterized by non-compositional form and meaning. However, idioms surpass most lexically open constructions in terms of the levels and types of non-compositionality that they may possess.

Idioms generally share all of the semantic idiosyncrasies of lexically open constructions, because most idioms **inherit** lexically open constructions. For example, the idiom *x shoot the breeze*, as in *the aunts shoot the breeze*, inherits the more general transitive predicate-argument construction. It shares the Subject-Verb-Object form of this construction, and the pattern of conceptual autonomy and dependence of this construction, but it differs from transitive constructs such as *the aunts pour coffee* or *the scholars write a review* in that its meaning not predictable from the lexical items *shoot*, *breeze*, and the semantics of the predicate-argument construction. (The construction *shoot the breeze* will be the topic of Section 11.5.2.)

The most compositional idioms behave much like their inherited lexically open constructions in evoking metaphor, whereas in less compositional idioms, the inherited lexically open constructions may be scarcely recognizable. The compositionality of idioms, in turn, correlates with the idioms' syntactic productivity (Gibbs 1990); and we will see that these differing levels of syntactic productivity correlate with greater and lesser degrees of flexibility in metaphor evocation.

Idioms such as *pop the question* or *zip your lips* are more semantically compositional than idioms such as *shoot the breeze* or *by and large*. I will follow Gibbs (1990) in calling the more compositional idioms semantically *decomposable*. It would be inaccurate to call any idiom *compositional* because all idioms involve some noncompositional form and meaning. An idiom is **semantically decomposable** if part of its meaning can be broken down into the contributions of its component lexical items and constructional inheritance. The idiom will necessarily have additional non-compositional meaning and must include certain lexical items, but these restrictions will exist alongside

a semantic inheritance from lexical items and a lexically open construction. This inheritance will be more or less apparent based on the complications imposed by the idiom's constructional form and meaning.

The directness of an idiom's semantic inheritance can be measured. One way to evaluate this inheritance is to manipulate the idioms' lexically filled items. In Gibbs' experiments (1990:425-6), subjects rated the similarity of meaning between unchanged idioms and the same idioms with an altered noun, verb or both (for example, *pop the question* was compared with *burst the question, pop the request,* and *burst the request*). If the idiom's meaning was rated as similar after the changes, this indicated that the idiom inherited much of its meaning from its lexically open construction (which remained unchanged despite the replacement of certain lexical items) and the meaning of its lexical items (which were substituted with items of similar meaning). If the idiom had a very different meaning after the changes, this showed that the idiom's meaning was not directly achieved through inheritance and the idiom was not decomposable.

The clearest results appeared when both noun and verb were changed, in which case decomposable idioms such as *pop the question* were significantly more interpretable than non-decomposable idioms such as *kick the bucket* or *shoot the breeze* (with mean acceptability judgments of 3.23 and 2.50, respectively). These results suggest that even a construction which is lexically filled can still be **lexically flexible**, in the sense that lexical changes will result in reduced acceptability – but not necessarily incomprehensibility. Lexical changes make the idiom less recognizable, but by virtue of its inheritance from a lexically open construction, the sentence may still be understood. Lexical flexibility is a key indicator of semantic decomposability because it demonstrates

that an idiom's meaning is derived to some extent from its lexical items and inherited lexically open construction.

This concept of lexical flexibility is crucial in understanding how metaphor is evoked in different types of idioms. Just because an idiom requires that certain words be used does not mean that the semantic contribution of these words is necessarily irregular; and lexical flexibility provides a rubric for measuring the regularity of this contribution. The lexical items' semantic contribution is important because it correlates with the items' ability to evoke metaphoric domains in a compositional way; with the syntactic productivity of the idiom; and with the subsequent flexibility of the idiom's metaphoric usages.

When lexically flexible, decomposable idioms are metaphoric, they evoke metaphor in a manner very similar to the lexically open constructions discussed in Part II. For example, the idiom *glutton for punishment* behaves like an ordinary preposition phrase construction (*punishment* evokes the target of EXPERIENCES ARE FOOD⁴⁴, and *glutton* the source); and *pop the question* behaves like a normal predicate-argument construction (*question* evokes the target domain of the Conduit Metaphor, and *pop* evokes the source). ⁴⁵

In fact, decomposable idioms such as *pop the question* resemble the lexically open constructions according to the most famous indicator of compositionality: **syntactic productivity**, or compatibility with constructions such as the passive (*my lips are sealed*,

44 As in *life is a banquet, to be starving for adventure,* etc.; in this case the relevant mapping is EXPERIENCING IS EATING, so that an eager experiencer is an eager eater.

⁴⁵ The Conduit Metaphor (Reddy 1979) is also known as COMMUNICATION IS OBJECT TRANSFERAL. Specifically in this example, the sudden/startling presentation of an object maps to a sudden/startling communication. In this idiom *the question* stands metonymically for a specific type of question – a marriage proposal – but this constructional specification does not affect the pattern of metaphor evocation.

the question was popped). Gibbs (1990:424-5) describes a series of studies testing idiomatic expressions in different syntactic constructions (such as the passive, present participle, adjective insertion, and gerund nominalization). In these experiments, subjects judged whether the idiomatic meaning was preserved in the new constructions. The most decomposable idioms, such as *pop the question*, were rated more acceptable (averaging 5.08 out of 7) than less decomposable idioms (Gibbs' *abnormally decomposable idioms*) and non-decomposable idioms (averaging 4.62 and 4.60), and can as such be considered more syntactically productive than the other classes of idioms.

High levels of syntactic productivity are only achieved by idioms that are *partially*, not completely, lexically filled. For example, *glutton for punishment* is partially lexically filled because it is compatible with any determiner, and the phrase *glutton for punishment* may be a subject, an object, etc. (as in *the glutton for punishment asked for more homework*, or *she loves a glutton for punishment*) – although it is usually found in an equation (see Chapter 5), as in *Dave is a glutton for punishment*. Likewise *pop the question* is a VP which accepts any subject NP (*Nick/some guy/the mysterious woman popped the question*). The construction *button X's lips* is slightly more flexible than *glutton for punishment* or *pop the question*, in that it permits a range of verbs: *button, seal, zip* (#weld your lips, #velcro your lips, ?shut your lips); though it requires the object N lips (#button your teeth, #seal your mouth, #zip your glottis). Any subject NP and coreferential possessor are acceptable (*button your lips!*, I sealed my lips, he zipped his lips) so the idiom is only partially lexically filled. An idiom such as the shit hit the fan, in contrast, is completely lexically filled and will never be fully syntactically productive: the

fan was hit by the shit is not an acceptable use of the idiom and can only refer to a non-metaphoric scenario (Gibbs 1990). 46

Idioms' syntactic productivity carries over into their metaphoric uses. For example, instances of the lexically open predicate-argument construction such as *he built power* and decomposable idioms such as *he popped the question* both evoke the same metaphors as their passive counterparts: *power was built (by him)* and *the question was popped (by him)*. This is not the case for non-decomposable idioms such as *kick the bucket*, in which *the bucket was kicked (by him)* can only refer to a physical bucket and an act of kicking; or *shoot the breeze*, in which *the breeze was shot by them* is not a preferred usage. A syntactically productive idiom can inherit from a wide variety of constructions, such as the passive, and still continue to evoke metaphor. If the lexical items that fill a less syntactically productive idiom are used in a construction such as the passive, the idiomatic meaning will typically be lost, as in *the fan was hit by the shit* or *the breeze was shot*.

Clearly, an idiom's level of decomposability, and its subsequent degree of syntactic productivity, predict some of its ability to evoke metaphor. Although highly decomposable idioms such as *pop the question* evoke metaphor according to the compositional patterns of lexically open constructions, less decomposable idioms deviate from these patterns in several ways, as we will see in Sections 11.4-11.5.

_

⁴⁶ The only Google hits found in a 10/31/07 search for "the fan was hit by the shit" were from linguistics papers and talks (10 hits). The idiom *shoot the breeze* can apparently be passivized for some speakers, but it never appears to take an oblique agent in these instances; there were no hits on Google (10/31/07) for "the breeze was shot by them". However, several passive uses such as this one appeared: *As always the breeze was shot for a few minutes, life, the weather, penis envy, the usual.* (wasitsomethingiwrote.blogspot.com/2006 05 01 archive.html).

11.2 **Inherent metaphoricity**

Lexically open constructions, such as normal preposition phrase and predicate-argument constructions, have both metaphoric and non-metaphoric uses. Many idioms, on the other hand, always evoke metaphor. I will call these idioms inherently metaphoric, because they must evoke metaphor in any context. Inherent metaphoricity stems from the defining characteristic of idioms: lexical filledness. When a construction necessarily involves lexical items from a source and a target domain, it will always evoke metaphor.

Idioms with lexical items from two different domains only make sense under a metaphoric interpretation. For instance, glutton for punishment will never mean someone who literally eats punishment, and pop the question cannot mean that a marriage proposal literally springs out from concealment.⁴⁷ Idioms with lexically filled items from a source and a target domain cannot be interpreted within a single domain, and as such must be metaphoric.

Even idioms that permit a small range of lexical items can be inherently metaphoric. The idiom button X's lips, as we have seen, accepts a small range of verbs, such as button, seal, and zip. However, all of these verbs refer to artificial fastenings on manufactured items. Human *lips* cannot be literally *buttoned*, *sealed* or *zipped*. Whichever of these verbs is chosen, it will invoke the source domain of an image metaphor, and will map the complete, secure closure of a manufactured fastening to a complete, secure closure of the human lips. The closure of the human lips is then framemetonymic for refraining from speaking, since most speech requires parting the lips. The

⁴⁷ Except in an unusual context in which *question* stands metonymically for an object that can literally be popped, such as a balloon with a marriage proposal written on it.

idiom *button X's lips* could only refer to literal buttoning of the lips in a magical or mythological setting.⁴⁸

Some idioms that lack a lexically filled item from the target domain can still be inherently metaphoric. These idioms have at least one lexically filled item that evokes the source domain and at least one lexically open item that evokes the target domain. For example, the idiom *push X's buttons* has no lexically filled target-domain items. The filled items *push* and *button* both evoke the MACHINE source domain. The item *X* is not lexically filled, but it has one idiomatic requirement: it must refer to a thinking being, usually a human being, as in *that kind of thing always pushes Mary's buttons*. Human beings do not have buttons (even the bellybutton is only one button) so the idiom has no interpretation within a single domain. Human minds do, however, have reactions to stimuli, so the possessive noun denoting a human being will evoke the MIND target domain. The idiom *push X's buttons* as a whole evokes THE MIND IS A MACHINE, ⁴⁹ via a possessive construction and a predicate-argument construction. Despite the fact that *X* can be filled by an open set of lexical items, the idiom *push X's buttons* has no interpretation in a single domain and will always be metaphoric.

The inherent metaphoricity of idioms has important ramifications for the question asked at the beginning of this chapter, as to why idioms are so often metaphoric.

Inherently metaphoric idioms, of course, cannot be non-metaphoric. This fact alone considerably raises the percentage of idioms used metaphorically, compared to that of lexically open constructions. Additionally, the fact that so many idioms *necessarily* evoke

_

⁴⁸ For example, in the Studio Ghibli fantasy film "Spirited Away," a witch uses magic to create a zipper on the main character's mouth, and then zips the zipper to prevent the character from speaking. This sort of situation concretizes the metaphor in *zip X's lips*.

metaphor probably causes many speakers to associate idiomaticity with metaphor regardless of the overall frequency of metaphoric idioms.

11.3 "Non-metaphoric" idioms: slam the door, kith and kin, etc.

What about the "non-metaphoric" normally decomposable idioms? Since the metaphoric idioms *must* be metaphoric, it might be tempting to assume that non-metaphoric idioms *must* be non-metaphoric. But this is not the case. For example, note the idiom *slam the door* in (1) below.

(1) **Slam the door** on Indian IT oligarchs; stop them from exploiting you ... www.indiadaily.com/editorial/4324.asp

The usage in (1) is unsurprising when we stop to consider the rules of metaphor evocation. As it turns out, an apparently non-metaphoric idiom such as *slam the door* may contribute to a metaphoric sentence if it is used compositionally with a metaphorevoking construction, according to the rules of constructional combination described in Chapter 6.

In (1), the idiomatic VP *slam the door* means "block from achieving a purpose," by virtue of the Location Event-Structure Metaphor, in which ACHIEVING A GOAL IS REACHING A DESTINATION and DIFFICULTIES ARE OBSTACLES, such that the creation of an obstacle (such as a closed door) for someone moving towards a destination maps to the creation of a difficulty for someone trying to achieve a purpose (such as 'exploiting you'). The usage in (1) works because the idiom *slam the door* is inserted in an appropriate lexically open construction: a preposition phrase construction in which the

⁴⁹ Pushing buttons on a machine causes certain predictable effects. This maps to provoking certain

VP *slam the door* fills the source-domain role of the head modified by the PP (evoking REACHING A DESTINATION), and the NP within a PP, *Indian IT oligarchs*, evokes the target domain of ACHIEVING A GOAL.

The usage in (1) follows the pattern of countless non-idiomatic examples. Compare (2) below (a declarative version of [1]), with (3)-(4) (adapted from the BNC), in which a predicate-argument and a preposition phrase construction conspire to give a complex metaphoric meaning.

- (2) You slammed the door on the Indian IT oligarchs.
- (3) The priests shepherded their flock through the controversy. 50
- (4) He fought his opponent for re-election.

In (2)-(4), the NP within a PP (*Indian IT oligarchs, the controversy, re-election*) evokes the target domain. The PP can then contribute target domain evocation to the otherwise source-domain VP-PP (*slammed the door, shepherded their flock, fought his opponent*). The subject of the sentence either evokes the target domain (*the priests*) or is domain-neutral (*you, he*) (see Section 4.4.2 on domain-neutral items).⁵¹ If the subject is domain-neutral, as in (2) and (4), then the PP is solely responsible for the target domain evocation: *you slammed the door* and *he fought his opponent* need not be understood metaphorically in isolation, but could refer to literal door-slamming and physical

predictable emotional effects on a human being.

⁵⁰ Here *priests* and *through the controversy* evoke the target domain of the Location Event-Structure Metaphor, while the VP *shepherded their flock* evokes the source domain (via intransitive predicate-argument and preposition phrase constructions). Movement through obstacles maps to progress despite difficulties (the controversy), and guides helping others through the obstacles (such as shepherds leading a flock) map to leaders helping others through the difficulties (priests leading their adherents through the controversy).

⁵¹ In (1), the second-person pronoun is omitted from the imperative construction via constructional null instantiation (cf. Ruppenhofer et al. 2005).

fighting. The behavior of the idiom *slam the door* is no different in (2) than that of the non-idiomatic phrase *fight his opponent* in (4); both VPs contain only items which evoke the source domains. It seems, then, that even the metaphorical usage of a normally non-metaphoric decomposable idiom differs little from the use of a non-idiomatic construction: both phrases can be used as source-domain elements in appropriate contexts (for more on these contexts, see Part II, and particularly Chapter 6).

Although an idiom such as *slam the door* can compositionally evoke a source domain as in (1)-(2), it is unlikely that it will ever evoke a target domain, simply because such idioms tend to be concrete – idioms evoking more abstract concepts are usually inherently metaphoric. And of course, all the lexically filled items in an idiom such as *slam the door* must evoke the same domain, or the idiom would itself be inherently metaphoric. Therefore two possibilities exist for idioms such as *slam the door*: either the idiom may be without metaphor, or it may be used in a lexically open construction in such a way that all its lexically filled items are in the correct positions to evoke a metaphoric source domain, as we saw in examples (1)-(2).

Most non-metaphoric idioms can be used metaphorically in the appropriate context. For example, *kith and kin* ('friends/countrymen and relatives') is not inherently metaphoric, as shown in (5) below. However, certain contexts, as in (6), ensure a metaphoric interpretation of the idiom.

- (5) You're not so different from your father as you'd like to believe, boy ... hard to believe the pair of you are **kith and kin** to me. *derekloffin.anifics.com/avst37.txt*
- (6) That Greek and Latin were of the same kith and kin as the language of the black inhabitants of India. 1861, Max Müller, Lectures on the Science of Language

In (6), the idiomatic phrase *kith and kin* evokes the source domain of FAMILIES, whereas the language names *Greek* and *Latin*, and the NP headed by *languages*, evoke the domain of LANGUAGE CATEGORIES, via an equation and a preposition phrase construction. These constructions evoke the metaphor LANGUAGE CATEGORY STRUCTURES ARE FAMILIES, a special case of CATEGORY STRUCTURES ARE FAMILIES.

Likewise, the idiom *breathe X's last* is typically non-metaphoric, as in (7) below. The idiom means to "die" via a frame metonymy, in which taking ones last breath is one stage of dying.

- (7) As the Pontiff **breathed his last**, the first prayers of the feast of Divine Mercy were said at his bedside. www.cwnews.com/news/viewstory.cfm?recnum=39699
- (8) In the decade after the end of the Cold War, ... apartheid had **breathed its last**. *observer.guardian.co.uk/worldview/story/0,11581,977745,00.html*

In (8), the idiomatic VP evokes DYING and the subject NP *apartheid* evokes ENDING – because the apartheid frame includes a role for apartheid's end, but not for its death. The predicate-argument construction allows these items to evoke the metaphor ENDING IS DYING. The idioms *breathe X's last* and *kith and kin* behave in the same manner as *slam the door*: the idioms are not inherently metaphoric, but they are capable of evoking a metaphoric source domain when they are combined with target domain items in metaphor-evoking constructions.

The metaphoric usages of "non-metaphoric" idioms further contribute to the preponderance of metaphoric idioms noted at the start of this chapter. Not only are some idioms *always* metaphoric, as we saw in the previous section; but even those idioms which are not inherently metaphoric can evoke metaphor under the right conditions.

Some idioms are metaphoric *all* of the time, and *all* idioms are metaphoric *some* of the time; whereas *no* non-idiomatic constructions are metaphoric all of the time. It follows, then, that many speakers will associate idioms with metaphor.

11.4 The preservation of metaphor in anomalous idioms

Some common idioms are semantically anomalous, involving juxtapositions of lexical items that fail to make sense from a compositional viewpoint. How do these idioms arise? And how can these idioms continue to evoke metaphor? Some preliminary answers to these questions are offered by the idioms *take advantage of* and *perish the thought*, as in (9)-(10) below.

- (9) Students can **take advantage of** local hotel accommodations. www.lanl.gov/news/index.php?fuseaction=home.story&story_id=1937
- (10) Well, **perish the thought**, because this will be no Tour de Lance part II he's taken his bike and gone home.... *classic.mountainzone.com/mtbiking/99/mercurytour/*

Gibbs calls the idiom *perish the thought* "ill-formed" (I will use the term "anomalous") and presumably he would classify *take advantage of* the same way (1990:428). However, Gibbs demonstrates that despite their anomalousness, these idioms are syntactically productive in that they can accept an adjective, as in (11)-(12); passivize, as in (13)-(14); and they also pass Gibbs' other tests for syntactic productivity (1990:425).

(11) Worldcom and Enron **took unfair advantage** of their customers, their employees and their stockholders ... www.strategyletter.com/CD0404/featured_article.asp

- (12) **Perish the ghastly thought**. www.atinitonews.com/jan2004/fromthepublisher.html
- (13) In the final year of the pilot, **advantage was taken** of the World Wide Web. www.dlib.org/dlib/april96/loc/04c-arms.html
- (14) Close to narrowing his eyes in suspicion at Ino's excitement, **the thought was perished** (yet again) when he almost tripped over a rock ... www.fanfiction.net/s/2031652/1/

The productivity of these idioms suggests that they are still decomposable despite their strangeness. The two idioms would not be even marginally compatible with the passive construction, for example, if *advantage* and *the thought* were not still recognized as thematic patients. In fact, only a few hundred years ago the now-idiomatic phrases were completely compositional. The idioms' anomalousness can be traced back to a few recent changes in the lexical items which fill them.

These lexical changes may have left the idioms' syntactic productivity intact, but the same cannot be said for the idioms' evocation of metaphor. The idioms' evocation of metaphor fossilized before the lexical changes took place, leaving the idioms to evoke the same metaphors as they had before – even though the lexical items' modern meanings no longer evoked the appropriate input domains of these metaphors. It is a special characteristic of idioms that allows them to preserve old patterns of metaphor evocation, and this characteristic is particularly relevant because it contributes to the preponderance of metaphoric idioms noted at the beginning of the chapter. Let us begin our analysis with *take advantage of,* and then move on to the slightly more complicated cases of *perish the thought* and *pull strings*.

11.4.1 The origin of take advantage of

First of all, I dispute Gibbs' claim that *take advantage of* "clearly fit(s) the 'dead metaphor view'," in that it does not synchronically evoke metaphor (1990:418). I believe the idiom's evocation of the Object Event-Structure Metaphor is made clear enough by *take* (evoking the domain ACQUIRING AN OBJECT, and profiling the submapping CAUSATION IS TRANSFER OF POSSESSIONS) and *advantage* (evoking ACHIEVING A PURPOSE, and profiling the submapping ATTRIBUTES ARE OBJECTS). Additionally a preposition phrase construction seems indicated by *of*, which is a preposition (even if its meaning in this context is presently unclear), and the daughter NP (*local hotel accommodations, their customers, the World Wide Web* in examples [9], [11] and [13] respectively), also evoking the target domain. Both in terms of its syntactic productivity and its evocation of metaphor, therefore, *take advantage of* demonstrates considerable regularity.

The idiom *take advantage of* is only anomalous in that *of* cannot otherwise head a PP indicating the SOURCE (starting point) of a PATH or metaphorical PATH (part of the SOURCE-PATH-GOAL schema [Lakoff 1987:278]). For example, **I came of New York* or **Can she borrow a dollar of you?* make little sense in modern English. As recently as 1849, however, this type of usage was acceptable, as in (15) below.

(15) You're not going to **take money of** me, and you a gentleman? 1849, William Makepeace Thackeray, *The History of Pendennis*

In (15) the PP *of me* designates the speaker as the source (of money). The OED describes this obsolete usage of the preposition *of* as "Expressing separation or removal of something from an owner, or an affected person or thing. In Old English expressed by *of, from*, or the genitive case." In present-day English, the preposition *from* has retained

this meaning while the preposition of has not; so that the PP in (15) would be more appropriately rephrased as from me. In fact, of and from overlapped in their reference to the SOURCE of SOURCE-PATH-GOAL for many years. During this overlap, either preposition could be used with take and advantage to evoke the Object Event-Structure Metaphor. This can be seen in comparing (16) below with (9) and the other examples of take advantage of.

(16) I would not take Advantage from the Misfortunes of any; but surely, not of the Woman I love.

1732, Henry Fielding, The modern husband

Examples (15)-(16) demonstrate the historical well-formedness of the sequence take advantage of from two angles. Example (15) shows that take X of was an acceptable use of the lexically open indirect object construction, and (16) makes it clear that take advantage PP was also an acceptable use of the same construction. 52 From these two pieces of information it is inescapable that take advantage of was also an appropriate use of this lexically open construction.

Example (16) also proves that the prepositional slot in take advantage of was not lexically filled until the 18th century. Possibly, take advantage of had not yet been established as an idiom at all by this point, and merely existed as a usage of the lexically open indirect object construction. 53 However, the semantic change of the preposition of suggests that the idiom take advantage of was established as an idiom when of still

⁵² The indirect object construction combines a predicate-argument and a preposition phrase construction (chapter 4). Constructional combinations are discussed in chapter 6.

Google results (116,240 hits on 10/31/07) indicate that take advantage from (with any tense/aspect/person /number marking) is still acceptable to many speakers, presumably those who are ignoring the option take advantage of and reconstructing the phrase compositionally (or trying to use the idiom but getting it wrong). Related metaphoric usages of from as in take hope/courage from are fully acceptable.

carried the older meaning designating "separation or removal" from a SOURCE. The repeated use of the open construction with the specific items *take advantage of* led to the independent storage of the latter – and thus its emergence as a lexically filled construction – all before *of* lost its "separation or removal" reference.

Back when the phrase *take advantage PP* was a simple instantiation of a lexically open construction, the phrase already required that its preposition be capable of indicating the SOURCE of a SOURCE-PATH-GOAL schema. The preposition had to meet this requirement in order to be compatible with the ACQUIRING AN OBJECT source domain of the Object Event-Structure Metaphor (recall from Section 4.5 that prepositions in a preposition phrase construction must be compatible with the phrase's source domain). As noted, the predicate-argument construction *take advantage* by itself evokes both domains of the Object Event-Structure Metaphor. The preposition in the PP must be compatible with the ACQUIRING A DESIRED OBJECT domain of this metaphor, and its daughter NP will be designated by the preposition as the 'SOURCE' of the desired object. Specifically, the NP will profile a mapping from SOURCE OF AN OBJECT in the ACQUIRING A DESIRED OBJECT domain, as in Figure (11.1) below.

ACQUIRING A DESIRED OBJECT

ACHIEVING A PURPOSE

SOURCE

FROM
OBJECT/POSSESSION
ACQUIRING OBJECT
(taking)

ACHIEVING A PURPOSE

ACHIEVING A PURPOSE

Figure (11.1) Mappings evoked by take advantage of

The mappings evoked by *take advantage of* did not change when it became a lexically filled idiom, nor when the preposition *of* no longer regularly referred to the SOURCE of a SOURCE-PATH-GOAL schema. Once the preposition *of* had become part of the lexically filled idiom *take advantage of*; the semantics designating the NP within the *of*-PP as a SOURCE could be preserved in the constructional semantics of *take advantage of*. The change in the meaning of the preposition *of* did not change the idiom's evocation of metaphor or its syntactic productivity – which explains why *take advantage of* is syntactically productive, and why its evocation of metaphor conforms to the rules for the lexically open predicate-argument and preposition phrase constructions.

11.4.2 When *perish* lost its transitivity

More subtle diachronic processes can render an idiom anomalous without substantially affecting its syntactic productivity or its evocation of metaphor. Like the idiom *take* advantage of, the idiom *perish the thought* seems anomalous because of a change in a lexical item: in this case, the verb *perish*. The semantic change in *perish* is complicated by a reduction in the potential valence of the verb *perish*, which once could be used transitively, but in Modern English can occur only in intransitive constructions. The idiom *perish the thought* is therefore irregular in that the verb *perish* has a direct object (the thought). This irregularity is not the result of metaphoric extension, but as we will see, the transitivity of *perish* does affect the metaphor evocation of *perish the thought*.

The now-obsolete transitive use of *perish*, according to the OED, meant "To bring to destruction, destroy; to put to death, kill (a person, etc.), wreck (a ship, building, etc.)," as in (17)-(18) below. The KILLING or DESTROYING frame evoked by this verb involved a

VICTIM or UNDERGOER role, filled either by the person who is killed (*me* in [17]) or object which is destroyed (*six houses* in [18]).

- (17) For she ... let the waters perish me. 1100-1500, Anon.
- (18) A fire at Broken wharfe ... brent and **perished aboue six howses**. 1549, Charles Wriothesley, *A chronicle of England during the reign of the Tudors*

Like other transitive verbs, transitive *perish* could be used in imperatives with a direct object, as described in (19) and instantiated in (20).

- (19) ... when in their hellish fury they say, *God-damme me*, *God perish me*, or the like, they ... curse themselves, and that with a Wish that Damnation might light upon themselves ... 1680, John Bunyan, *The Life and Death of Mr. Badman*
- (20) **Forbid it, Gods; perish the Tyrant** rather, Let Samos be no more. 1706, Nicholas Rowe, *Ulysses*

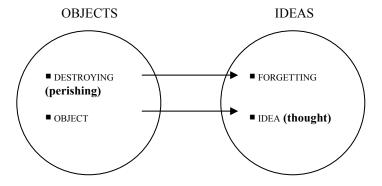
When a speaker directed the imperative form of *perish X* at gods or other "powers that be" as in (19)-(20), it created a strong inference that the speaker wished that *X* should be killed or destroyed. This wish or imprecatory meaning became conventionalized as part of the meaning of *perish NP* through **metonymic inferencing** (discussed in Chapter 9). Examples (21)-(22) are clearly imprecatory uses of *perish NP*. Like other uses of transitive *perish*, these examples involve a patient role (*the man* in [21] and *the baubles* in [22]).

- (21) **Perish the man**, whose mind is backward now. 1599, William Shakespeare, *Henry V*
- (22) **Perish the baubles!** Your person is all I desire. 1773, Oliver Goldsmith, *She Stoops to Conquer*

The imprecatory meaning of *perish NP* was associated only with the construction involving the specific verb *perish*. Related phrases such as *kill NP* or *destroy NP* lacked the imprecatory meaning found in (21)-(22): for example, *kill the man* did not have the meaning in (21), but would have been a simple command to murder; and *kill the baubles!* or *destroy the baubles!* would have been nonsensical as a replacement for *perish the baubles* in (22). The imprecatory meaning of *perish NP* depended on the inclusion of the specific verb *perish* – meaning that *perish NP* was partially lexically filled, and was an idiom.

The idiom *perish NP* could still compositionally be used to evoke metaphor via its inherited predicate-argument construction. Following the rules of that construction, *perish* evoked the source domain and the NP evoked the target. In *perish the thought*, these items evoked IDEAS ARE OBJECTS, profiling the mappings IDEAS ARE OBJECTS and FORGETTING AN IDEA IS DESTROYING AN OBJECT, as in Figure (11.2) below.

Figure (11.2) IDEAS ARE OBJECTS as evoked by perish the thought



Modern *perish the thought*, as the only surviving instantiation of imprecatory *perish NP*, continues to evoke the mappings in Figure (11.2). The modern idiom deviates from compositional metaphor evocation in the mapping profiled by *perish*. Modern non-

idiomatic uses of *perish* no longer evoke a frame with a VICTIM/UNDERGOER role, and have a meaning closer to intransitive "die" than transitive "destroy/kill". However, in the source domain of IDEAS ARE OBJECTS, the verb *perish* continues to evoke this frame and its mapping to the target domain. The source-target pattern of the lexically open predicate-argument construction is otherwise preserved.

Like *take advantage of*, the idiom *perish the thought* is anomalous – but not because of any irregularity originating in its evocation of metaphor. Instead, the lexical items which became fixed in both idioms later underwent semantic changes which rendered the idioms' meaning less transparent. These semantic changes involved metonymic inferencing, not metaphor, although they resulted in irregularities in the mappings evoked and profiled in the idioms *take advantage of* and *perish the thought*.

In the case of *take advantage of*, the preposition *of* lost its "separation or removal" sense, but retained this sense when used in the preposition phrase construction *take* advantage of NP, and can map to the target domain (as in Figure 11.1). In *perish the* thought, the verb frame for *perish* lost its VICTIM/UNDERGOER role, though this role is preserved in *perish the thought* and allows the UNDERGOER of destruction to map to the MENTAL_CONTENT of forgetting, "the thought," in the target domain. These case studies demonstrate that the metaphoric mappings evoked by a phrase can be preserved in the construction's semantic entry, even if they disappear from that of a lexical item. The next section will explore another type of metaphor preservation specific to idioms, demonstrated by *pull strings*.

11.4.3 Extra source-domain items in *pull strings*

At first glance, few people would call the idiom *pull strings* anomalous, especially in comparison with *take advantage of* and *perish the thought*. After all, the idiom *pull strings* exists alongside the non-metaphoric, non-idiomatic phrase *pull strings* (as in *a puppeteer pulls strings to make the puppets move)* and that phrase is completely compositional. But on a deeper level, *pull strings* is the strangest idiom we have discussed so far. In this section I argue that *pull strings* belongs to a small class of idioms whose target domain can be evoked solely by constructional meaning. ⁵⁴ In most metaphoric uses of constructions, the metaphor's target domain is evoked by target-domain lexical items (such as *student* in *bright student*, or *thought* in *perish the thought*). Idioms such as *pull strings* are unusual in that they can be understood metaphorically even without target-domain lexical items.

The idioms we have seen so far, such as *take advantage of* and *perish the thought*, behave like non-idiomatic metaphoric constructs in that both the source and target domains are evoked by lexical items. In *take advantage of*, the verb *take* evokes ACQUIRING AN OBJECT, while *advantage* evokes ACHIEVING A PURPOSE. In *perish the thought*, the noun *thought* evokes IDEAS and the verb *perish* evokes OBJECTS. In both idioms, the source domains are evoked by a verb, and the target domains by its argument, just as in the lexically open predicate-argument construction (Section 4.4).

The idiom *pull strings*, on the other hand, flouts the normal source-target pattern of the transitive construction (Section 4.4.3). The VP *pull strings*, as in (23) below, has the

⁵⁴ Other common idioms with this characteristic include the NP fat cat(s), the VPs bear fruit, roll out the red carpet, be six feet off the ground, bark up the wrong tree, hit the ceiling, blow X's top, and the sentence

the shit hit the fan.

complicated meaning "to use ones influence, within an institution or hierarchy, to cause people to act on ones behalf".

(23) I don't control the president and I don't control Donald Rumsfeld. In the end, you don't **pull strings** here. You don't have favors done. news.minnesota.priprod.publicradio.org/features/200205/09 zdechlikm crusader

This idiom instantiates the Object Event-Structure Metaphor (ACHIEVING A GOAL IS ACQUIRING A DESIRED OBJECT), specifically the mappings CAUSING IS MOVING and the CAUSAL LINK mapping. 55 The act of pulling strings which are attached to people, thus forcing the people to move, maps to using ones influence over people to cause a desired change. As predicted by the source-target pattern of the transitive predicate-argument construction, the verb *pull* refers to the physical movement of an object, evoking the source domain ACQUIRING AN OBJECT. However, according to the transitive pattern strings should evoke the target domain ACHIEVING A PURPOSE, but it does not. Instead, strings, like pull, also evokes the source domain ACQUIRING AN OBJECT (strings are connected to objects in the source domain, which maps to influence over people in the target domain). This is strange, because the idiomatic, target-domain meaning of pull strings is available even when the subject is domain-neutral, as in (23) and in almost all examples of *pull strings* (since the subject is usually animate and human, and hence usually domain-neutral [4.4.2]). Theoretically, a source-domain VP such as *pull strings*, without a target-domain subject, should not be able to evoke metaphor.

-

⁵⁵ The CAUSAL LINK mapping is described by Lakoff and Johnson (1999:211). Briefly, it maps TWO TIED OBJECTS (acquiring one of which will acquire the other) onto TWO CORRELATED ATTRIBUTES (having one of which will result in having the other). In the case of *pull strings*, OBJECTS TIED TO STRINGS maps to PEOPLE AFFECTED BY INFLUENCE. The system of STRINGS is inside a contraption or machine, which maps to the system of INFLUENCE within a hierarchy or institution.

Given what we know about the typical metaphoric transitive construction, we would expect *pull* to instantiate the source domain, while *strings* and the subject of the verb should evoke the target domain. These expectations are in fact fulfilled by similar idioms, such as *pull rank* as in (24) below.

(24) Spock demands that the first officer, General Korrd, **pull rank** and beam Kirk up to the Klingon warbird and fire upon the mysterious being. www.startrek.com/startrek/view/library/episodes/MOV/detail/85.html

Example (24), like (23), evokes the Object Event-Structure Metaphor. In the case of *pull rank*, the "rank" (metonymic for the influence of rank) is conceptualized metaphorically as being attached to ones goal. ⁵⁶ By pulling the "rank," one also reels in the goal. In both *pull strings* and *pull rank*, the subject of the verb is target-domain or domain-neutral. But *rank*, as an INFLUENCE which helps in ACHIEVING A GOAL, evokes the target domain of the Object Event-Structure Metaphor as in (23); whereas in (24), *strings* evokes the source domain ACQUIRING AN OBJECT. *Strings* can be literally tied to objects and pulled, whereas *rank* cannot literally be tied or pulled.

The Object Event-Structure mappings profiled in *pull rank* and *pull strings* are illustrated in Figures (11.3) and (11.4), respectively. Note that I am here characterizing the target and source domains of the Object Event-Structure Metaphor as ACHIEVING A PURPOSE and ACQUIRING A DESIRED OBJECT.

-

 $^{^{\}rm 56}$ Objects tied to a string maps to People affected by Rank.

Figure (11.3) Mappings evoked by *pull rank*

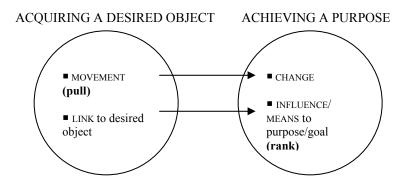
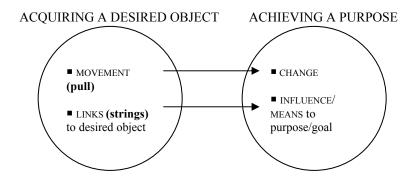


Figure (11.4) Mappings evoked by *pull strings*



The pattern in Figure (11.3) *pull rank* is the one shared by the lexically open predicate-argument construction discussed in Section 4.4. The verb evokes the source domain and profiles a mapping from that domain to the target (note that the verb *pull* is indicated in boldface in the source domain, which indicates that it fills a role in this domain). The idiom *pull strings*, in Figure (11.4), evokes the same metaphor as *pull rank*, but both *pull* and *strings* evoke the source domain ACQUIRING AN OBJECT (note that both *pull* and *strings* are in boldface in the source domain, because both fill roles in this domain).

The evocation of metaphor in *pull strings* is compositional in the sense that both the verb *pull* and the NP *strings* fill roles in metaphoric domains, but the evocation is non-compositional in that both items fill roles in the source domain (and therefore both

participate in evoking the source domain). Only idiomatic constructions have these extra source-domain items. We saw from the resultative (10.2) and the *crazy* construction (10.3) that constructions can overrule the domain evocation patterns of the constructions they inherit, but these constructional overrides generally consist of domain restrictions that are tighter, not looser, than those of the constructions which are inherited. Idioms are special because they can have a conventionalized target-domain meaning, which frees up their lexical items from needing to evoke a target domain.

Idioms can accumulate this conventional target-domain meaning only by being associated with this target domain in recognizable ways; that is, through repeated compositional metaphor evocation. And indeed, even an idiom such as *pull strings* usually occurs in combination with regular domain evocation strategies. In the case of *pull strings*, the target-source predicate-argument pattern is preserved, so that in some instances the subject will evoke the target domain. This is the case in (25) below, in which *the President* evokes a political power frame, which is far more compatible with the domain ACHIEVING A PURPOSE and the element INFLUENCE, than with ACQUIRING AN OBJECT and the element LINKS.

(25) The President **pulled strings** to get into the Texas Air National Guard. *www.essentialliberties.com/archives/000828.php*

However, the idiom *pull strings* more often involves a domain-neutral subject, as in example (26).

(26) She admits on the show that Navi Rawat is her friend and that she had to **pull strings** to get her into the film. boards.bravotv.com/bb/showflat.php?Cat=&Number=46070&page=&view=&sb=5&o=&fpart=40

Both ACHIEVING A PURPOSE and ACQUIRING AN OBJECT require an animate, volitional agent, so the subject of the VP *pull strings* will usually be a pronoun, noun, or name which is neutral between the domains – meaning that it will usually be domain-neutral as in (26).

Perhaps partly to compensate for domain-neutral subjects, the idiom *pull strings* usually occurs with an infinitival complement, as in (25) and (26), above. This complement always includes target-domain material. Like the subject of *pull strings*, the complement serves to evoke the target domain ACHIEVING A PURPOSE. In (26), the subject *she* is domain-neutral and cannot evoke the target domain. In this case, the complement *to get her into the film* is the only lexical material that could be responsible for evoking the target domain.

Sometimes an idiom such as *pull strings* is used with a domain-neutral subject (such as *you* in the sentences below) and an absent complement, as in (27) (repeated from [23]) and (28) below.

- (27) I don't control the president and I don't control Donald Rumsfeld. In the end, you don't **pull strings** here. You don't have favors done. news.minnesota.priprod.publicradio.org/features/200205/09_zdechlikm_crusader
- (28) Judge, listen I'm out on a pass. I go back inside, I'm back in for a long time. Can't you **pull some strings**. www.fortunecity.com/lavender/poitier/1005/id18.htm

In (27)-(28), the context makes clear that literal string-pulling is unlikely to be involved (see Chapter 13 for the "negation of the literal" evocation strategy). These sentences therefore activate the idiomatic construction *pull strings* and not the lexically open transitive construction (which might happen to occur with the lexical items *pull* and

strings, resulting in a literal meaning, as in the puppeteer pulled strings to move the puppets).

The idiomatic use of *pull strings* is inherently metaphoric, as discussed earlier in this chapter. Every use of this idiom that a speaker has encountered has evoked the Object Event-Structure Metaphor. As a result of these uses, the constructional meaning of the idiom *pull strings* came to include a tie to the target domain ACHIEVING A PURPOSE, in addition to the source domain ACQUIRING AN OBJECT which is overtly evoked by the items *pull* and *strings*. The idiomatic construction needs to be activated in some way (as by the context in [27]-[28] making a literal interpretation unlikely), and the metaphor is complete. Interestingly, examples such as (27)-(28) are rare. In the majority of instances of *pull strings*, the subject, the complement, or both, serve to evoke the target domain.

Only idioms can evoke a target domain without the assistance of lexical items, other constructions, or non-linguistic domain evocation strategies. Idioms acquire this special characteristic through their ability to be inherently metaphoric. All lexically open constructions can be used either metaphorically or non-metaphorically, and they can all be used to evoke many different metaphors. This bars them from acquiring constructional semantics specific to any one target domain. Inherently metaphoric idioms, on the other hand, always refer to one particular target domain. They will therefore tend to be associated with that target domain in speakers' minds and in the construction, even to the extent that the idioms themselves can evoke that target domain when other means of evocation are absent.

This impressive ability of idioms to evoke domain information no doubt contributes to the preponderance of metaphoric idioms. In an idiom, lexical changes do not always kill a metaphor (as in *take advantage of* and *perish the thought*) and a metaphor can survive even the absence of target-domain items, as in *pull strings*. These characteristics of idioms often let idiomatic metaphors survive even when the non-idiomatic metaphoric uses of items die. But the constructional semantics of idioms has its limits. The next section will investigate the boundaries of constructional domain evocation as shown by the idioms *by and large* and *shoot the breeze*.

11.5 Metaphor death and reanalysis in idioms

What happens when more drastic semantic changes rattle an idiom's lexical items? How much evocation information can be stored in an idiom's semantic entry, once it is gone from the entries of the lexical items? Clearly, a construction can cause a lexical item to continue to evoke a mapping which the item no longer would evoke in non-idiomatic metaphorical uses (such as *of* in *take advantage of* [11.4.1]); and in some cases an idiom can become so associated with a target domain that it can evoke the domain on its own (as in *pull strings* [11.4.3]). However, idioms' evocation of metaphor is not completely immune to changes in the lexicon. These changes can cause a metaphor to die.

Once an idiom has lost its ability to evoke a metaphor, the idiom's opacity typically gives way to folk etymologies and partial metaphoric remotivation, but the original metaphoric meaning is gone forever. The following subsections illustrate the process of metaphoric death and remotivation in the idioms *by and large* and *shoot the breeze*.

11.5.1 By and large, a metaphoric reinterpretation

The modern idiom by and large "in general aspect" (OED) is probably understood metaphorically by most speakers. The item large forms most of the basis for this understanding, as various senses of the item large evoke the domains SIZE and WIDTH, which are the source domains of PRECISION IS WIDTH (demonstrated in hedges such as broadly/narrowly speaking, in a broad/narrow sense) and GENERALITY IS SIZE (largely, a large/big/broad topic), respectively. The item by contributes little to the metaphoric understanding of modern by and large other than, perhaps, encouraging speakers to associate the idiom's form with that of the lexically open preposition phrase construction. Preposition phrase constructions involve a preposition and a source-domain item or items. If large is construed metaphorically in the idiom by and large (and one ignores the conjunction and) the idiom also consists of a prepositional item preceding a source-domain item.

For speakers who make these associations and interpret *by and large* as evoking PRECISION IS WIDTH or GENERALITY IS SIZE, the metaphor nonetheless remains vague. The item *large* evokes the source domain of the metaphor, and whatever sentence or VP the adverbial phrase *by and large* modifies will evoke the target domain, via a predicating modifier construction. In *by and large*, only the item *large* will fill a role in the source domain that is mapped to the target domain (the WIDTH role mapped in PRECISION IS WIDTH; or the SIZE role mapped in GENERALITY IS SIZE), giving an impression of either "imprecision" or "generality". These impressions are certainly part of the modern meaning "in general aspect" of *by and large*, but they barely hint at the metaphoric richness that the idiom once possessed.

The idiom *by and large* arose from a nautical expression based on two sailing terms, *by* and *large*. A ship is *sailing large* if it is traveling with the wind, on any course within 90 degrees of the wind's direction. Likewise a *large wind* is one which blows within 90 degrees of a ship's intended course, as in (29).⁵⁷

(29) As we got Southerly and the Wind grew large, we might alter our Course when we would. 1669, Sir John Narborough, *Journal*

The term *large* itself has a clear metaphorical origin in PRECISION IS WIDTH, because sailing with the wind permitted more leeway and imprecision than sailing against it. This leeway is suggested by the context in (29) above.

The nautical sense of *by* means "in the general region or direction of, towards" (OED); and *by the wind* therefore means sailing into the wind, as in the definition in (30).

(30) *By the wind* is when a ship sails as nearly to the direction of the wind as possible.

1867, William Henry Smyth, *The sailor's word-book*

Until the 1800s, the item by could occur without an NP, and maintain the sense "sailing into the wind". Since *large* meant "sailing with the wind" and by meant "sailing against the wind," non-idiomatic by and large meant "both when sailing with the wind and when sailing against it," as in (31)-(32) below.

(31) Thus you see the ship handled in fair weather and foul, **by and learge**. 1669, *Fraser's Magazine* VIII

359

⁵⁷ The definitions of *by* and *large* and the nautical origins of the idiom *by and large* as discussed here are based partly on information from the "World Wide Words" site at http://www.worldwidewords.org/qa/qa-bya1.htm, and partly on definitions found in the OED.

(32) They soon find out one another's rate of sailing, **by and large**. 1833, Samuel Sturmy, *The Mariner's Magazine* 17

The uses of *by and large* arrived at the modern meaning "in general aspect" via the Location Event-Structure Metaphor (also called REACHING A DESTINATION IS ACHIEVING A PURPOSE), in which DIFFICULTIES ARE OBSTACLES and more generally, CIRCUMSTANCES ARE TRAVELING CONDITIONS (here, the special case CIRCUMSTANCES ARE SAILING CONDITIONS). The set of all possible wind directions maps to the set of all possible circumstances, giving *by and large* the metaphoric meaning "under any circumstances," or simply "in general".

For some time after the metaphoric extension of *by and large*, speakers appear to have recognized the idiom's nautical origins, as indicated by the quote in (33).

(33) Taking it "**by and large**," as the sailors say, we had a pleasant ten days' run ... 1869, Mark Twain, *The Innocents Abroad*

Since the nautical meaning of *by and large* was available to speakers using the idiom up until the 1800s, these speakers had the ability to map the nautical source-domain meaning "in all wind conditions" to the target-domain meaning "in any circumstances". The Location Event-Structure Metaphor was therefore alive and well, at this point, in the idiom *by and large*.

Interestingly, most early metaphoric uses of *by and large* had the form *TAKE X by* and large, as in (33) above, and (34)-(35) below.

(34) A man who feels rather perplexed on the whole, **take it by and large**. 1833, John M. Neale, *Down-Easters* I. 23

(35) "Well, **taking you by-and-large**, you do seem to be more different kinds of an ass than any creature I ever saw before..."

1870, Mark Twain, *Life on the Mississippi*

The verb *TAKE* was preferred in this idiom because it presented another opportunity for metaphor. The sense of the verb *TAKE* meaning "steer, direct" is found in nautical uses, as in (36)-(38) below.

- (36) Oh, if Lieutenant Decatur could but **take** the ship out to sea! But he cannot. 1882, Charles Carleton Coffin, *Building the Nation*
- (37) On Monday morning he was again ... ordered to **take** the ship further up the inlet, where a sampan met the pirates.

 1939, Henry G. H. Woodhead and Henry T. M. Bell, *The China Year Book*
- (38) He had chosen to **take** the ship north of Sicily rather than south, forcing them into an ambush in the Strait of Messina. 2003, Neal Shusterman, *Shattered Sky*

The verb *TAKE* was therefore meaningful in the nautical expression *TAKE X by and large*, as a ship could be steered ("taken") either into the wind or against it.

The verb *TAKE* also has the more common sense "grasp, obtain". This sense is used in the metaphor UNDERSTANDING IS GRASPING (*I took that idea from a book, take what you can out of this paper, taken as a whole*). The metaphoric "understand/consider" use of *TAKE* is compatible with metaphoric *by and large,* meaning "in general," because it is quite possible to "understand/consider" something in a general way.

The construct *TAKE X by and large* is not strictly compositional, because the metaphoric extension of *take* "grasp" > "understand/consider" evokes a different source domain than *by and large* (UNDERSTANDING IS GRASPING rather than the Location Event-Structure Metaphor). A PP and a head verb should either (1) evoke the same domain or

(2) evoke the target and source domains of a single metaphor, via a preposition phrase construction (Section 4.5). The use of *TAKE*, in *TAKE X by and large*, suggests that the phrase *by and large* already had its target-domain reference encoded as part of its idiomatic meaning. In this case *by and large* would evoke the target domain, despite its lack of target-domain items, just as we saw in idioms such as *pull strings* (Section 11.4.3).

This analysis is supported by the fact that the verb *TAKE* only became common in the *by and large* construction in the 1700s, presumably after the idiom *by and large* was already established. The earliest metaphoric use of *by and large* I found, in (39), lacks the verb *TAKE*.

(39) But what went nearest to my Gizard,
In spite of Prayers, the blundering Wizard,
To shew his malice **by and large**,
And save the Parish of a Charge,
He sends the Bastard to the Bogs,
To be a Breakfast for the Dogs.

1680, Matthew Stevenson, Conace to Macereus

After the heyday of *TAKE X by and large* in the 1800s, the verb *TAKE* once again faded from common usage with *by and large*. In the 19th century texts in the Chadwyck corpus, *TAKE* occurs with 60% of *by and large* tokens, but in the 20th century texts, this percentage falls to 10%.

The decline of *TAKE X by and large* probably coincided with the decline in speakers' familiarity with the nautical origin of *by and large*. The phrase *by and large*, with its nautical source domain, doubtless helped speakers to connect *TAKE* with its nautical sense as in (36)-(38), and therefore to understand the phrase *TAKE X by and large* as

cleverly ambiguous between a nautical expression and a metaphorical comment. Without the connection to nautical *TAKE*, the metaphorical use of the verb in *TAKE X by and large* made less sense, and fell into disuse.

Speakers' growing unfamiliarity with the nautical senses of *by* and *large* rendered the original metaphoric meaning of the idiom *by and large* inaccessible. Unlike the idioms we saw in the previous sections – which maintained their metaphoric meanings despite lexical changes – the loss of the nautical senses of both *by* and *large* obliterated the idiom's ability to evoke the source domain REACHING A DESTINATION (BY SHIP), and thus the Location Event-Structure Metaphor as a whole.

The loss of metaphoric meaning in *by and large* reveals a crucial limitation of metaphor evocation in idioms. We saw in the idiom *pull strings* (11.4.3) that idiomatic meaning can evoke a target domain without the assistance of a lexical item. However, *by and large* demonstrates that idiomatic meaning alone *cannot* evoke metaphoric source domain. If semantic changes eradicate the source-domain meanings of all the lexical items in an idiom, that idiom will be unable to evoke its original source domain or its original metaphor. Its "target domain" meaning will become its lexical meaning. This occurred when *by and large* lost its nautical source-domain meaning and could no longer evoke the Location Event-Structure Metaphor. Idioms accumulate meaning (including associations with a particular domain) through usage, and inherently metaphoric idioms can only be used in reference to a target domain situation, as discussed in Section 11.2. Therefore idiomatic meaning can include reference to a target domain, but not to a source domain.

The vestiges of metaphorical meaning assigned to *large* are clearly the result of folk etymology, not idiomatic meaning, since *large* currently evokes a different metaphor than it did in early *by and large* (as discussed, *large* currently evokes PRECISION IS WIDTH or GENERALITY IS SIZE in the idiom). Metaphoric reanalysis of this type is dependent on the domain-evocation potential of individual lexical items such as *large*, and does not depend on idiomatic meaning.

Clearly, then, idiomatic meaning can only preserve metaphor under certain conditions. We will explore another limitation of idiomatic meaning in the next section.

11.5.2 How shooting the breeze killed a metaphor

The idiom *shoot the breeze*, meaning "to chat idly" (OED), is another case of metaphor death and reanalysis. Psychological experiments indicate that speakers do not attribute separate meanings to *shoot* and *breeze* in the idiom *shoot the breeze* (Gibbs 1990:424), and the idiom's limited syntactic productivity also suggests that it is non-decomposable (Nunberg et al. 1994:497). Some modern English speakers seem to ignore the meanings of the individual items *shoot* and *breeze* in understanding *shoot the breeze*. These speakers simply store the meaning "to chat idly" as the idiom's literal meaning, without deeper analysis. However, even those modern English speakers who do break down the meaning of *shoot the breeze* cannot retrieve the metaphor that was available to speakers over a hundred years ago. I argue in this section that *shoot the breeze* originally meant "to urgently convey news" and evoked the Conduit Metaphor (COMMUNICATION IS OBJECT TRANSFERAL). Modern *shoot the breeze* has lost this meaning and does not typically evoke this metaphor.

Modern speakers who understand *shoot the breeze* figuratively do so via the image metaphor MEANINGLESS SPEECH IS WIND. This metaphor is based on a metonymy, in which the AIRFLOW element in the SPOKEN COMMUNICATION frame stands for the whole. Airflow is certainly part of speaking, but it is usually less salient to speakers than, for example, the INFORMATION which is communicated. The PART FOR WHOLE metonymy AIRFLOW FOR SPEECH emphasizes the salience of AIRFLOW as opposed to INFORMATION, which suggests that the instance of SPEECH has a low information content (a similar metonymic process underlies expressions such as *full of hot air*). The metonymy AIRFLOW FOR SPEECH also contributes to the image metaphor MEANINGLESS SPEECH IS WIND. This image metaphor maps the strong, continuous airflow of wind onto the continuous airflow of profuse speech. This image metaphor appears in the expressions *long-winded* and *windbag*. The image metaphor allows a speaker to interpret the idiom *shoot the breeze* as referring to the production (*shooting* [out]) of great quantities of meaningless chitchat (*breeze*).

We will see that this modern interpretation of *shoot the breeze* is very different from the phrase's original metaphoric meaning involving the Conduit Metaphor. In the American English of the 1800s, the noun *breeze* could be used to mean "(a) breath of news, whisper, rumour" (OED), as in (40)-(41).

- (40) There came a breeze that Spirit Séguier was near at hand. 1879, R. L. Stevenson, *Trav. Cevennes*
- (41) Give us a breeze on the subject. 1884, *Denver* (Colorado) *Tribune* Aug.

The uses in (40)-(41) arose from the "wind" polysemy of *breeze* via a frame metonymy reinforced by an image metaphor. The frame metonymy involves the scenario in which the progression of sound waves is facilitated by a breeze, making noises and words perceptible at a greater distance. This "sounds-on-the-wind" frame is reflected in (42)-(43) below.

- (42) ... **the bells** of Alfredston Church **could be heard on the breeze** from the north. 1894-1895, Thomas Hardy, *Jude the Obscure*
- (43) ...the breezes still brought from the Vega cries of anger, wails of sorrow. 1922, Mary Johnston

In example (42), the SOUND role in the sounds-on-the-wind frame is filled by the sound of church bells. Sentence (43) involves this same frame, but since the SOUND element role is filled by *cries* and *wails*, this type of sounds-on-the-wind frame inherits from the COMMUNICATION frame. I will call the frame that inherits from both sounds-on-the-wind and COMMUNICATION "voices-on-the-wind". This frame inherits the element of INFORMATION from COMMUNICATION (in [43], this information involves *anger* and *sorrow*). Now, since both BREEZES and INFORMATION are elements in the voices-on-the-wind frame, *breeze* can refer to INFORMATION via a frame metonymy, BREEZE FOR VOICES BORNE BY BREEZE, and a second common metonymy, WORDS FOR THE CONCEPTS THEY EXPRESS (Lakoff and Turner 1989; Radden and Kövecses 1999).

In (40)-(41) *breeze* cannot mean simply "information," but refers specifically to a "rumor". This limitation is due to the influence of an image metaphor, relating the hushed, enigmatic sound of a whisper to the sound caused by a breeze (usually as it rustles tree leaves). Sentences (44)-(46) below illustrate this image metaphor

independently of the voices-on-the-wind frame. In (44) this frame is brought in as an extension to the image metaphor, so that the conveyance of information is attributed to the breeze along with the gestalt mapping of a whispering sound.

- (44) ...for on such a night there are sounds in the breeze of human tones, like persons talking at a distance...1832, John Pendleton Kennedy, Swallow Barn; or, A Sojourn in the Old Dominion, Volume 2
- (45) But, as **the breeze** grew stronger, **its voice among the branches was as if it said, "Hush! Hush!"**1852, Nathaniel Hawthorne, *The Blithedale Romance*
- (46) You cannot confide to the breeze. The whispers of the grove seem to repeat the secret ...
 1853, William Gilmore Simms, Vasconselos: A Romance of the New World. By Frank Cooper

The sound of the breeze resembles distant human voices (44), or a human whisper (45)-(46), more than any other type of vocalization. Both the overhearing of voices and the whisper phonation type are associated with secrets and rumors. As a result the noun *breeze*, which could already refer to a vocalization via frame metonymy, came to refer specifically to a rumor, as in (40)-(41). Because the new polysemy of *breeze* developed primarily through metonymic inferencing, and was only secondarily influenced by metaphor, the new polysemy was not dependent on the metaphor-evoking constructions discussed in this dissertation (see Chapter 9 on the distinction between metonymic inferencing and metaphor).

Once *breeze* meant "news" or "rumor," it could evoke the COMMUNICATION domain.

The NP *the breeze* could then participate in a predicate-argument construction to evoke the Conduit Metaphor (COMMUNICATION IS OBJECT TRANSFERAL) in conjunction with the

verb *shoot*, which evokes OBJECT TRANSFERAL (a projectile object is shot [transferred]). The verb *shoot* regularly evokes the source domain of COMMUNICATION IS OBJECT TRANSFERAL with an object NP that evokes the COMMUNICATION domain, such as *the question* and *the words* in (47)-(48) below.⁵⁸

- (47) Muldoon **shot the question** at her as though he were accusing her of the murder. www.erbzine.com/mag0/0045.html
- (48) I **shot out the words** that I'd been burning to tell these guys for the past year. www.inthemix.com.au/p/np/viewnews.php?id=4149&printstory=1

The verb *shoot* refers particularly to the swift, sudden propulsion of an object as in (47)-(48). In the COMMUNICATION domain this is mapped to a swift, sudden outburst of speech. Thus, *shoot the breeze* meant "to swiftly/urgently tell a rumor/news".

However, the "rumor" polysemy of *breeze* was short-lived, and did not survive the 19th century. The idiom *shoot the breeze* persisted, but it no longer evoked the COMMUNICATION IS OBJECT TRANSFERAL metaphor. The COMMUNICATION IS OBJECT TRANSFERAL meaning of *shoot the breeze*, shown in Figure (11.5) below, was replaced by the modern interpretation, shown in (11.6).

-

⁵⁸ And in fact *shoot* has fulfilled this function for many centuries, as in this example from Chadwyck: **Scheoteð forð sum word**, & let us onswerien. (*Leg. Kath.*, a1225)

Figure (11.5) Compositional shoot the breeze of the 1800s

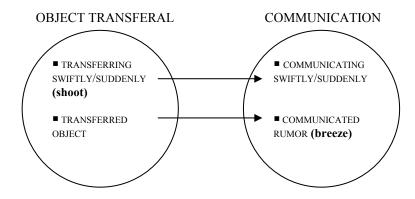
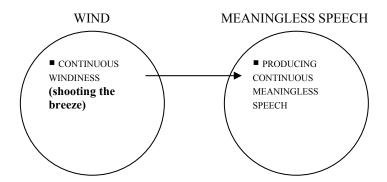


Figure (11.6) Modern idiomatic shoot the breeze



Several substantial changes are evident in the comparison between Figures (11.5) and (11.6). Most obviously, Figure (11.6) involves a different metaphor than Figure (11.5). The loss of the "rumor/news" sense of *breeze* in the 1800s meant that *breeze* no longer evoked the target domain COMMUNICATION. Since *shoot the breeze* was already an idiom at this point, it was acceptable for the phrase to lack a target-domain item (as in *pull strings* in 11.4.3). However, the mapping A RUMOR IS A TRANSFERRED OBJECT, evoked by the item *breeze*, disappeared along with *breeze* "rumor/news". This mapping was the only one that explicitly involved INFORMATION, an element which is an obligatory element of COMMUNICATION, but an optional part of SPEECH (communication presupposes the "transfer" of information, but speech does not). As such, the target domain evoked by the idiom *shoot the breeze*, as a whole, could be reinterpreted as (MEANINGLESS) SPEECH.

The items *shoot* and *breeze*, if they were to be understood metaphorically at all, had to be understood as source-domain items evoking WIND in MEANINGLESS SPEECH IS WIND. In this source domain, *shoot the breeze* is simply a strange way of referring to wind "shooting" along (blowing) from a source. This new WIND-domain interpretation of *shoot* and *breeze* completely barred any mapping to the domain of COMMUNICATION, because there is no conceptual metaphor that maps from WIND to substantive COMMUNICATION. The cognitive purpose of the metonymy AIRFLOW FOR SPEECH (which forms the basis of the image metaphor MEANINGLESS SPEECH IS WIND) is expressly to de-emphasize the salience of COMMUNICATION in the SPEECH domain.

Another difference between Figures (11.5) and (11.6) is that in (11.5), the verb *shoot* fills a role that is mapped from swift/sudden transferal (of a projectile) to a swift/sudden manner of communication. A literal breeze, in the domain of WIND as in (11.6), cannot blow with the same speed and force as a projectile object is shot (note that in [11.5], a projectile OBJECT maps to RUMOR, as evoked by the "rumor/news" sense of *breeze*).

Modern uses of *shoot the breeze* reflect this change, and lack the same urgency as the compositional metaphorical uses of *shoot* in (47)-(48). To *shoot the breeze* is to chat or gossip nonchalantly as in (49)-(50), not to make a swift, sudden outburst.

- (49) Many just hang in their rooms, **shooting the breeze**. www.kenyon.edu/x1141.xml 24k Sep 19, 2005
- (50) Afterward, we just **shot the breeze** for awhile before deciding to call it a night a few minutes ago.

 *www.northflams.org/programs/social/bonnie.htm

It is not surprising that the mappings profiled by *shoot* and *breeze* in Figure (11.5) are missing in the image metaphor in Figure (11.6). Like most image metaphors,

MEANINGLESS SPEECH IS WIND lacks systematic mappings. Only the gestalt impression of a large, continuous airflow is mapped. For some speakers, of course, *shoot the breeze* does not evoke the WIND domain at all. These speakers simply assign the meaning in the right-hand domain in Figure (11.6) to the construction *shoot the breeze*, without evoking any kind of metaphor or metonymy.

In either case, the modern idiom *shoot the breeze* generally fails to evoke the Conduit Metaphor or any of its mappings. The idiom *shoot the breeze*, then, differs from the idioms *take advantage of* and *perish the thought* – both of which have retained their original metaphor evocation patterns despite semantic changes to their lexical items. The difference is that the semantic changes affecting *take advantage of* and *perish the thought* did not affect the items' ability to evoke the metaphoric domains. In *take advantage of*, the verb *take* evokes the source domain ACQUIRING AN OBJECT, while *advantage*, as a desirable attribute, evokes ACHIEVING A PURPOSE. The change to *of* did not affect these items. In *perish the thought*, the noun *thought* evokes IDEAS, while the verb *perish* evokes the DESTROYING frame, which evokes the OBJECTS domain. The loss of the transitive sense of *perish* did not change the item's frame or domain evocation. In *shoot the breeze*, on the other hand, the item *breeze* completely lost the sense which could evoke the COMMUNICATION domain.

This idiom *shoot the breeze* also shows that although idiomatic meaning can evoke a target domain, as in *pull strings*, it cannot force a target-domain interpretation on a particular lexical item. Idiomatic meaning, by definition, is the meaning of the idiom as a whole. The item *shoot* does not evoke either the COMMUNICATION or SPEECH domain in modern English. The idiomatic meaning of *shoot the breeze* cannot restore the sense

"rumor/news" to the item *breeze*. However, since the item *breeze* continues to have the sense "wind," the item can be reanalyzed as mapping structure from the WIND domain. The idiom *shoot the breeze*, as a whole, can evoke MEANINGLESS SPEECH IS WIND, but it cannot give the item *breeze* a target-domain interpretation that the item otherwise lacks.

The idioms by and large and shoot the breeze demonstrate that idioms' metaphor evocation has certain limits. We saw in by and large that despite idioms' ability to evoke a metaphoric target domain, idiomatic meaning alone cannot evoke a source domain. The idiom shoot the breeze reveals a second restriction on metaphor evocation in idioms. If a semantic change erases a lexical item's ability to evoke the target domain, such as the loss of the sense of breeze meaning "news," that lexical item will either be reanalyzed as a source-domain item, or the item will cease to have a role in metaphor evocation. Idiomatic meaning can evoke a target domain, but it cannot ascribe meaning from that domain to particular items in the idiom.

The special advantages idioms possess for preserving metaphor might be taken to suggest that idioms' semantic entries can contain any sort of metaphor evocation information. But idioms such as *by and large* and *shoot the breeze* demonstrate that idiomatic meaning has certain limitations, and that metaphors in idioms can die.

11.6 Conclusion

This chapter has uncovered a number of reasons that idioms might tend towards metaphoricity. First of all, idioms with lexically filled items from a source and target domain (such as *pop the question*) are inherently metaphoric and will always evoke metaphor; and even idioms which do not usually evoke metaphor (such as *slam the door*)

can be used compositionally in evoking metaphor. These facts alone predict that idiomatic constructions would tend to evoke metaphor.

Furthermore, idioms allow for the preservation of lexical meaning as part of constructional meaning, which can include lexical meaning that affects metaphor evocation. When a lexical change blurs or obliterates an item's ability to evoke a metaphoric mapping, the item's former meaning – and hence its mapping – can be maintained in the idiom's semantic entry, as we saw in *take advantage of* and *perish the thought*. Additionally, idioms can become so associated with a particular target domain that it becomes part of their constructional semantics. As a result, idioms such as *pull strings* can evoke a target domain even without the help of a lexical item. The ability of idioms to continue to evoke metaphor despite lexical changes contributes to the preponderance of metaphoric idioms, since these usages persist in evoking metaphor even when this evocation is no longer strictly compositional.

Clearly, idiomaticity encourages the evocation of metaphor. It remains an open question whether the reverse is also true, and metaphoric constructs are more likely than others to become idioms. This seems less likely: we have seen in this chapter that idiomatic characteristics, such as anomalousness and limited productivity, are the result of metonymic inferencing, analogy, and semantic loss – but never metaphor. These characteristics can affect the evocation of metaphor but are never its result. Metaphor evocation does not create irregularities. Even when irregularities exist, as they do in idioms, only certain minor divergences from the expected patterns are acceptable. Too great a divergence eliminates the metaphor, as occurred in the idioms *by and large* and

shoot the breeze. Overall, the evocation behavior of the metaphoric idioms reinforces, rather than weakens, the argument for regularity in metaphor evocation.

How much is metaphor? Case studies of the WXDY and way constructions

We have now seen how metaphor is evoked in non-idiomatic constructions (Chapters 4-7), and how it is evoked in idioms (Chapter 11). Most constructions fall neatly into one class or the other. However, a few constructions combine the traits of idioms and non-idioms. These constructions provide an ideal opportunity to synthesize the previous observations concerning metaphor in idioms and non-idioms, and to put the analyses of these constructions to the test.

The constructions that combine characteristics of idioms and non-idioms are partially lexically filled, like idioms, but additionally involve lexically open items that evoke both the target and source domains of a metaphor, as in non-idiomatic constructions. In English, the most prominent of these are the *what's X doing Y* construction, or **WXDY construction**, as in *what's this fly doing in my soup?*, and the *way* **construction**, as in *he shouldered his way through the crowd*. In these constructions, it becomes particularly problematic to delineate the construction's role in evoking metaphor, and to decide which of the construction's lexically filled items are involved in evoking metaphor.

Both the WXDY construction and the *way* construction involve at least one lexically filled item, technically qualifying them as "idioms" (*way* is lexically filled in the *way* construction; *what*, *BE*, and *doing* are lexically filled in the WXDY). However, both constructions additionally have lexically open slots, which can contain items that evoke the source and target domains of a metaphor. Example (1) illustrates this kind of metaphoric usage of the *way* construction, and (2) does the same for the WXDY construction.

- (1) Technology stocks inched their way higher Wednesday ... futures.profinanceservice.com/news.asp?news=14420
- (2) What's that lyric doing in my mind now? astrofish.net/weblog/comments.php?id=1281 0 1 0 C

Example (1) involves the MORE IS UP metaphor (*higher* and *inched* evoke the source and *stocks* evokes the target), while (2) exemplifies THE MIND IS A CONTAINER (*in* evokes the source and *mind* and *lyric* evoke the target).

Clearly, the WXDY and *way* constructions can evoke metaphor, but the role of the lexically filled items in each construction may not be immediately obvious. For example, *way* in (1) plainly does not refer to a physical route or path, and *doing* in (2) manifestly does not mean that the lyric is performing any activity – both *way* and *doing* deviate from their usual lexical meanings. But is this the result of metaphor, or simply part of constructional semantics?

The following subsections will address the above question in two ways: first, diachronically, by looking at the constructions' origins and earliest examples; and second, synchronically, by looking at the possible uses of the *way* and WXDY constructions, related English constructions, and the filled lexical items' range of usages. Based on these various types of evidence, I will argue that the lexically filled item *way* in the *way* construction synchronically evokes metaphor, whereas none of the filled items in the WXDY construction do so.

12.1 The way of the way construction

Intuition alone cannot always determine whether a "figurative" meaning should be attributed to metaphor or idiomatic constructional meaning. Fortunately, intuition can be

tested or supplemented in several ways. First of all, an idiom's origins can provide insight into its current metaphoricity. As discussed in Section 9.6, metaphoric extensions are often lexicalized without being "dead". Lexically filled items in constructions, whose current semantic contribution originated as metaphoric extensions, may likewise be very much "alive". On the other hand, semantic extensions that did not happen through metaphoric extension are less likely to synchronically evoke metaphor. As a result, an examination of an idiom's roots can help delineate its metaphoricity.

Another approach is to look at the synchronic metaphoric uses of the lexically filled item(s) in question when they occur outside of the idiom. Items which are used metaphorically elsewhere in the language are more likely to be interpreted metaphorically in an idiom. And finally, one can examine the synchronic variations in the metaphors the construction evokes, and consider whether or not a lexically filled item is compatible with these metaphors. If the idiom is restricted to evoking metaphors with the same range of source domains that the lexically filled item evokes, this restriction probably indicates that the idiom's semantic entry requires the lexically filled item to participate in the idiom's metaphor evocation. This section will apply all of these tests in turn to the way construction; the following section will apply them to the WXDY construction.

There are several theories about the early stages of the *way* construction's evolution. Goldberg argues that the first *way* constructions involved the verb *MAKE* as in *he made his way to Rome*, and points out that the first example of the *way* construction in the OED is from 1400, and uses *MAKE* (1995:203). The Chadwyck corpus demonstrates no earlier examples with the verb *MAKE*. In fact, its earliest example is from 1565, in (3) below.

(3) But through y^e mydst of swarming soules, / wyth force **I make my way** ... 1565, Barnabe Googe (trans.) *The Zodiake of Life*

Although the Chadwyck corpus lacks earlier examples of *MAKE X's way OBL*, the corpus contains a wealth of early examples of the pattern *GO X's way OBL* (OBL is an oblique directional, often a PP), as in (4)-(6) below.

- (4) Ser darell toke his leve, and **went his way** / Into the lande of perse ... 1100-1500, Anon.
- (5) Out of his lond he went his way / burch mani diuers cuntray ... 1100-1500, Anon.
- (6) ... And to her logyng went her way. 1100-1500, Anon.

Goldberg argues that the *way* construction typically disallows "high-frequency, monomorphemic ... motion verbs," and cites (7) below as justification (her example [20], from Napoli 1992, also cited in Jackendoff 1990):

(7) *She went/walked/ran her way to New York.

However, examples (4)-(6)show that *GO* has been acceptable in the pattern *GO X's* way *OBL* at least since Middle English. The Chadwyck corpus even has several close parallels to the supposedly unacceptable (7), such as (8) below.

(8) Irving ... went his way to New York ... 1865, Mary Jane Holmes, *Hugh Worthington*

In contrast to Goldberg, Michael Israel (1996) recognizes the *GO X's way OBL* construct. He argues that constructs of the types *GO X's way OBL* and *CUT/DIG X's way*

OBL, which I will call "motion" and "path-creation" way constructions, evolved separately but have converged in modern English – resulting in the range of uses currently available to the way construction. According to Israel, the "motion" constructions involved a few basic-level verbs such as go, ride, run, etc., up until 1700, when manner verbs such as sweep, creep and plod first appeared (1996:221-2). The "path-creation" constructions, on the other hand, evolved from verbs of path creation such as cut, furrow out, etc., beginning in the late 1500s. Like the motion way constructions, the path-creation way constructions extended to a much wider range of verbs in the 1700s.

I believe that Israel's analysis of the path-creation and motion way constructions overlooks two important connections between these two types. The first of these is the verb make, which I argue helped unify the motion and the path-creation constructions into one overarching way construction. The second connection is related to the historical frequency of the oblique phrase in the two types of way construction, which suggests that the path-creation uses were the most direct inspiration for the modern range of way constructional uses.

The verb *make* has abounded in the *way* construction since at least the 1500s, and indeed occurs with a greater frequency than any other verb in the modern *way* construction (Goldberg 1995:206). At the time of the *way* construction's evolution, the item *make* had several polysemous senses which permitted the verb to be compatible with either a path-creation or a motion interpretation. This compatibility, I argue, facilitated the extension of the motion to the path-creation variants of the *way* construction.

At the time when the verb *make* first took part in the early *way* constructions, the verb frequently had the sense "motion along a path" even outside of the *way* construction, as in (9)-(10) below.⁵⁹

- (9) ... hearing the pitifull shrickes of a woman, (Brusanus) **made to the place** from whence he hard the voice ... 1592, Barnabe Rich, *Brvsanvs*
- (10) In the meane time, the Kings Coach-man having escaped the waters, with a frightfull countenance **made to the banke** ... 1625, Kingsmill Long (trans.), *Barclay His Argenis*

The sense of the verb *make* as in (9)-(10) could be used compositionally in the motion *way* construction, alongside other motion verbs such as *go, ride, run,* etc. At this time *make* additionally had the "create" sense which is more common in modern English. As such, *way* constructions involving *make* could be interpreted as involving path creation. This inference is strongly suggested in many early uses of *make* in the *way* construction, as in (3), repeated as (11) below.

(11) But through y^e mydst of swarming soules, / wyth force **I make my way** ... 1565, Barnabe Googe (trans.) *The Zodiake of Life*

In (11), the need to use force, and the presence of obstacles (*swarming soules*), suggest that a path must be created through the obstacles in order for motion to occur.

Given the "creation" and "motion" senses of *make*, and the verb's frequent occurrence in the *way* construction, it seems probable that the verb facilitated the

380

⁵⁹ The extension of MAKE to mean GO probably originated in the metaphor CAUSATION IS CREATION, as in *he made me do it,* possibly with the additional influence of the Location Event-Structure Metaphor. However, since MAKE is not a lexically filled part of the modern *way* construction, the semantic extension of MAKE is not especially relevant here.

extension from the motion way construction to the path-creation way construction. The extension was grounded in ambiguous contexts such as (11), which are compatible with either sense of make, and either a motion or a path-creation interpretation. The path-creation construction then extended by analogy to include other verbs of path creation, such as cut and dig. The path-creation and motion constructions might therefore be more related than Israel suggests.

The second connection between the motion and path-creation constructions is the OBL phrase, which Israel observes is "essentially obligatory" in the modern *way* construction (1996:226). Prior to the inclusion of *make* in the *way* construction, OBL phrases were rare in motion *way* constructions, as illustrated by the frequency counts from the Chadwyck corpus for *way* constructions with *went* in Table (12.1).

Table (12.1) Oblique phrases in *way* constructions became increasingly rare with the verb *went*, and increasingly common with the verb *made*

Authors living in the years:	1000-	1400-	1500-	1600-	1700-	1800-
	1400	1500	1600	1700	1800	1900
went his/her/my way (with OBL)	10	14	9	7	8	55
	(17%)	(10%)	(9%)	(6%)	(7%)	(9%)
went his/her/my way (without	50	37	91	103	107	537
OBL)	(83%)	(90%)	(91%)	(94%)	(93%)	(91%)
made his/her/my way (with OBL)	-	-	16	59	250	1114
			(70%)	(76%)	(91%)	(97%)
made his/her/my way (without	-	-	7	19	26	30
OBL)			(30%)	(24%)	(9%)	(3%)

The constructions involving *made* have clearly preferred an OBL at every stage, whereas the usages with *went* have preferred the opposite. This indicates that the *made* examples are probably ancestral to both path-creation and motion usages of the modern *way* construction, both of which prefer an OBL phrase (Israel 1996:226). Even if Israel is

correct that the path-creation and motion types evolved individually, the path-creation uses (such as with *make*) must have encouraged the inclusion of the OBL in the modern motion uses (such as with *sweep*, *creep*, *plod*), which generally take an OBL phrase. It is admittedly odd that the modern uses of *went X's way* (rare though they are) seem to have escaped the influence of the path-creation *way* constructions, and frequently omit an OBL phrase. These uses probably constitute a separate idiom and require further examination.

In any case, the verb *make* clearly facilitated the extension from the motion to the path-creation uses of the *way* construction; and *way* constructions with path-creation verbs such as *make* also shaped the form of modern uses of the *way* construction by encouraging the incorporation of an OBL phrase. The path-creation and motion usages have therefore been interwoven since the origin of the latter type.

So far we have only seen non-metaphoric examples of the *way* construction, which involve literal motion and a literal path, or *way*. These examples show that the *way* construction is not inherently metaphoric, because the only lexically filled item in the construction, *way*, can be used with a non-metaphoric meaning in the construction.

Throughout its history, however, the *way* construction has been used in evoking metaphor. The first metaphoric uses of the construct *MAKE X's way OBL* appeared in the late 1500s, only a few years after the first non-metaphoric uses of the construct in the Chadwyck corpus. The metaphor evoked by these usages was always the Location Event-Structure Metaphor (also called ACHIEVING A GOAL IS REACHING A DESTINATION), and the target domain usually involved the special case ACHIEVING A SOCIAL GOAL, as in (12) below.

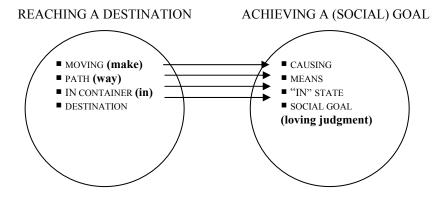
(12) I did not think so soone to haue displayed my determination vnto you, but to haue **made my way first in your louing iudgement**.

1593, Sir Philip Sidney, *The Covntesse of Pembrokes Arcadia*

The metaphor evocation pattern in (12) is compositional, combining a predicate-argument construction, a possessive construction, and a preposition phrase construction. The target domain ACHIEVING A SOCIAL GOAL is evoked by *loving judgment*. The subject *I* (in a raising construction; see Section 7.4) and the possessive pronoun *my* are domain-neutral.

We saw that *made* (as in [9]-[10]) and *way* (as in [3]-[6]) typically referred to non-metaphorical motion in Middle English. As such, the items could evoke the REACHING A DESTINATION source domain. The source domain in (12) is therefore evoked by *made*, *way*, and *in*. Note that the noun *way* evokes the source domain compositionally and regularly, as part of the preposition phrase and possessive constructions. The evocation is illustrated in Figure (12.1) below (domain-neutral items have been omitted).

Figure (12.1) *I ... made my way ... in your loving judgment* evokes ACHIEVING A GOAL IS REACHING A DESTINATION



In the 1600s, other verbs besides MAKE and GO began to take part in the VX's way OBL construction, as in (13)-(14) below.

- (13) Of Balysard Rogeroes trustie sword, / Which through the Pagas steele had beat his way ...
 - d. 1637, Gervase Markham (trans.)
- (14) He **fought his way** with many wounds **unto the Volga**; in whose rough streams we judge him drown'd.

1671, Edward Howard, The womens conquest

Countless more verbs appeared in the construction in the 1700s, as in (15):

(15) Jugurtha murder'd, brib'd, and fought his Way / From Subject Station to imperial Sway ...

1736, Thomas Catesby Pagett, An Essay on Human Life

As discussed, the vast majority of verbs appearing in the *way* construction involved an OBL, as in (13)-(15). At the same time that these new verbs were admitted into *VX's* way *OBL*, total uses of *MAKE X's* way *OBL* skyrocketed, while uses without the OBL steadily dropped, as we saw in Table (1). These changes indicate that the phrase *VX's* way *OBL* had developed into the modern way construction.

Metaphoric uses of the construction, such as (15), continued to follow the pattern as in (12), represented in Figure (12.1) – with one important exception: metaphoric uses of the construction no longer required a source-domain verb. Sentence (15), for example, makes use of the target-domain verbs *murdered* and *bribed*.

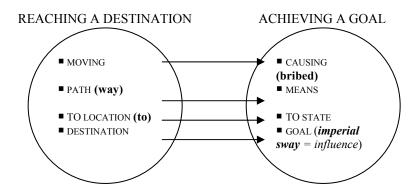
The use of target-domain verbs in the *way* construction may be partly the result of a change in the verb *MAKE*. The verb *MAKE* ceased to frequently refer to motion outside of the *way* construction, rendering sentences such as (9)-(10) impossible. This change may have weakened the *way* construction's requirement for a source-domain verb in this position, since the most common use of the *way* construction, *MAKE X's way OBL*, appeared to lack one.

The PP in most metaphoric way constructions evokes a complete metaphor by itself. For example, in your loving judgment (example [12]) evokes STATES ARE LOCATIONS/CONTAINERS, a crucial submetaphor in the Location Event-Structure Metaphor. The preposition in evokes the CONTAINMENT domain, while your loving judgment evokes STATES (since loving judgment is clearly not a literal container or location, but rather a state). As discussed in Chapter 6, any phrase or clause which obligatorily evokes one domain may optionally contain items evoking either the source or target domain, if these are related by an appropriate metaphor-evoking construction. It is therefore unclear from these PPs, which evoke both domains, which domain is required by the way construction. The PPs in non-idiomatic metaphoric preposition phrase constructions obligatory evoke the metaphoric target domain, so we might expect these OBL PPs to do the same.

Surprisingly, the domain that the OBL phrase in the *way* construction obligatorily evokes is the source, not the target domain. This is illustrated by sentences such as *he murdered and bribed his way to the top* (STATUS IS UP) and *stocks inched their way higher* (MORE IS UP), both of which evoke the source but not the target domain in their OBLs (*to the top, higher*). This behavior is not compositional, since a preposition phrase should normally evoke a target domain, and the behavior certainly originated after the *way* construction became an idiom and after it permitted target-domain verbs. The idiom *pull strings* (11.4.3) demonstrated that idioms can involve extra source-domain items. The source domain oblique directional of the modern *way* construction seems to share this idiosyncrasy.

Nevertheless, most instantiations of the *way* construction evoke both source and target domains in their OBL phrase. This is true of sentence (15), *He ... bribed ... his way* to imperial sway, whose domain evocation is represented in Figure (12.2) below. ⁶⁰ (The diagram ignores the second metaphor evoked by the domain construction imperial sway).

Figure (12.2) *He bribed his way to imperial sway* evokes ACHIEVING A GOAL IS REACHING A DESTINATION



The lexically filled item way in the way construction clearly originated as a source-domain item that mapped PATH to MEANS in the MAKE X's way OBL construct, as shown in Figure (12.2). The item way helped evoke metaphor in the more compositional constructs that were ancestral to the way construction, which suggests that the item way also participates in the modern way construction's metaphor evocation. But before passing a final judgment on way, let us supplement the historical evidence with two synchronic arguments.

The first argument involves the noun *way* itself. Unlike lexical items in the idioms discussed in Section 11.4, the noun *way* maintains a similar meaning both in and outside

between the types of way construction but the domain evocation is identical.

386

⁶⁰ The example here represents the path-creation interpretation *way* construction, not the motion interpretation *way* construction (Goldberg's *means* and *manner* interpretations 1995:202-212). In the former case, represented here, means-of-motion maps to means-of-causation (such as *bribery*); in the latter case, manner-of-motion maps to manner-of-causation. The nature of the profiled mapping differs slightly

of the *way* construction. In instances of the *way* constructions such as (15), diagrammed in Figure (12.2), the construction evokes the Location Event-Structure Metaphor. The noun *way* specifically is interpreted via the mapping MEANS ARE PATHS. The noun *way*, when it is used outside of the *way* construction, also evokes this metaphor and is understood via MEANS ARE PATHS. Examples (16)-(17) are typical.

- (16) SignWriting is a **way** to read, write, and type the movements of signed languages. www.edu-cyberpg.com/Linguistics/signwriting.html
- (17) BF Skinner suggested a **way** that the United States' energy shortage could be alleviated.

 aldaily.com/darwin and political theory.html

The noun *way* both maintains its source-domain meaning "road, path" (OED), and also exhibits the target-domain meaning "means" in appropriate constructions for evoking metaphor such as in (16)-(17).⁶¹ These facts virtually assure that the noun *way* can synchronically evoke metaphor, since its source domain polysemy is alive and well (see Section 9.6); and that the item *way* can therefore contribute to source domain evocation in an idiom such as the *way* construction.

Both diachronic and synchronic evidence suggest that *way* could be actively involved in the *way* construction's domain evocation. A further piece of evidence proves that not only can *way* be involved, but it necessarily participates in the *way* construction's metaphor evocation.

The *way* construction can only evoke metaphors with a limited range of source domains. In fact, it is limited to precisely those source domains which the noun *way* itself

387

⁶¹ An equation and infinitival complement in (16) and a predicate-argument and complement clause in (17)

[–] see Chapters 5, 7 and 4 for more information on these constructions.

can evoke. Some typical metaphoric usages of the *way* construction are given in (18)-(20) below ([20] is repeated from [1]).

- (18) Jeremy Clyde **acted and sang his way to** stardom. *movies.yahoo.com/shop?d=hc&id=1800144842&cf=gen*
- (19) Bin Laden is now in Palestine because he **paid his way out** of his danger. www.teamphotoshop.com/forum/vbforum/showpost.php?p=68814&postcount=69
- (20) Technology stocks **inched their way higher** Wednesday... *futures.profinanceservice.com/news.asp?news=14420*

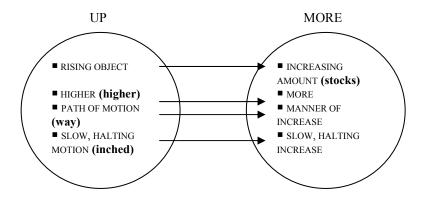
Observe that (18)-(19) involve the Location Event-Structure Metaphor. The Location Event-Structure Metaphor, as discussed, involves the mapping MEANS ARE PATHS, the mapping typically evoked by the noun *way* as in (16)-(17), since *way* fills the PATH role in REACHING A DESTINATION. With or without the assistance of the item *way*, the Location Event-Structure Metaphor is evoked by the lexical items in (18)-(19): the subjects, head verbs and PPs evoke the target, and the prepositions evoke the source. Given that the Location Event-Structure Metaphor is active in these examples, it seems inescapable that the noun *way* helps evoke the source domain and profiles the mapping MEANS ARE PATHS, as the noun typically does in metaphor.

Sentence (20), on the other hand, evokes the metaphor MORE IS UP. The verb *inched* profiles a mapping from slow, hesitant motion (UP) to a slow, halting increase (MORE). I argue that in this metaphor the noun *way* fills the PATH role that is mapped via PATH OF MOTION IS MANNER OF INCREASE, as in Figure (12.3).

388

⁶² Quite plausibly, the semantics of the *way* construction also help evoke the source domain, as we saw in the case of the PP-resultative (10.2).

Figure (12.3) The clause stocks inched their way higher evokes MORE IS UP



Goldberg (1995:202-212) observes that both the *way* construction and the noun *way* can refer to manner, as well as means, as in (21) (her example [30]) and (22) (her example [41]). ⁶³

- (21) [They were] clanging their way up and down the narrow streets..."
- (22) He had a pleasant way about him.

Sentence (20), and specifically the phrase *stocks inched their way higher*, represents a metaphoric extension of a manner-verb *way* construction such as (21). Sentence (20) also involves a metaphoric use of the manner sense of *way* as in (22). The use of *way* in (20) involves manner more than means, just as it does in (21)-(22). The metaphor evoked by (20), MORE IS UP, includes the mapping MANNER OF INCREASE IS MANNER OF MOTION; in (20) this mapping is profiled by the manner verb *inched*, which profiles a mapping from slow, halting motion to a slow, halting increase. The item *way* reinforces the MANNER mapping that the manner verb *inched* elaborates.

389

⁶³ The polysemy of *way* probably arose through the frame metonymy MEANS OF MOTION FOR MANNER OF MOTION. However, since metonymy operates within a single frame and a single domain, it does not effect the domain evocation of *way*, but only the mapping that *way* profiles.

The way construction never evokes a metaphor whose source domain is incompatible with way. The construction can evoke a metaphor such as THE MIND IS A CONTAINER (and the mapping IDEAS ARE OBJECTS), as in (23b), but it cannot evoke KNOWING IS SEEING (and the mapping IDEAS ARE LIGHT-SOURCES), as in (24b).

(23) a. An idea entered Boromir's mind.

www.libraryofmoria.com/boromirfaramir/shiningone.txt

- b. A moment later an **idea wedged its way into her mind**. www.geocities.com/symbolicangel/journey_part2_s1.html
- (24) a. Then a sudden **idea illuminated his mind**, blinding in its sickening fascination.

www.drislink.com/slink/horn/Teledild/chap08.htm

b. *An idea illuminated/shone its way in/into/around/through his mind.

The domain evocation pattern of the metaphoric *way* construction, as in (23b), is relatively compositional, if we consider the noun *way* as a source-domain item. In the new pattern, the possessive noun and the preposition phrase continue to evoke the target domain for which *way* evokes the source – manifesting a compositional combination of two preposition phrase constructions, one with a possessive and one with a PP or other oblique.

In conclusion, the noun way in the way construction must be considered to evoke the source domain when the construction is used metaphorically. The item way participated in the construction's metaphorical extension historically; the item can still be used to evoke metaphor outside of the way construction; and it constrains the possible metaphors that can be evoked by the way construction as a whole.

12.2 The WXDY construction

The WXDY construction, as in what's this scratch doing on the table?, poses even more of a problem than the way construction in discriminating between metaphor and idiomatic meaning. It may not be clear at first glance whether sentences such as what's this scratch doing on the table? involve metaphor or not. Fortunately, the same diachronic and synchronic resources which illuminated the metaphor evocation patterns in the way construction can be brought to bear on the WXDY. The current section will begin with a study of the origins of two types of WXDY construction. The discussion will then lead into a synchronic evaluation of the domain evocation potential of the lexically filled items in WXDY, and the metaphor evocation patterns of the WXDY itself. These investigations will reveal which items in a WXDY can evoke metaphoric domains, and will answer the question of whether WXDYs such as what's this scratch doing on the table? involve metaphor at all.

Fillmore and Kay (1999), who provide the most thorough examination of the WXDY construction to date, maintain that "the WXDY construction may have had its origin in conversational implicature (metonymic inferencing) – through situations in which an individual A is clearly up to no good and B asks what A is doing" (1999:5). There are several subtypes of WXDY construction, and at least two of these have separate origins in distinct metonymic processes such as Fillmore and Kay describe. The first of these is what's X doing Locative, as in what's this fly doing in my soup? The second is what's X doing VERBing, in which the Y-element is a present participle phrase, as in what are you doing using my toothpaste? I will abbreviate these two constructions as WXDLoc and

WXDPart, respectively. Although the two constructions have a common inheritance, they underwent separate metonymic extensions to arrive at their current form and meaning.

The common origin of all the WDXYs lies in the rhetorical use of the question *what's X doing?* with the illocutionary force of a question (Grice 1989). Although the original meaning, questioning X's current activity, is still available in these questions, the exclamations tend to focus on the inference that X perhaps should not be doing whatever he or she is doing. The emphasis on this inference is often signaled in written English by the use of an exclamation mark rather than a question mark, as in (25) below.

(25) Har. **What are you doing!** 1736, William Popple, *The double deceit*

The WDXLoc construction's extension by metonymic inferencing first became apparent in WDXLocs with the deictics *here* and *there*. The fact that this extension occurred through metonymic inferencing is indicated by an abundance of examples in ambiguous contexts, which – as we saw in 9.3.1 – are a precondition for metonymic inferencing. For example, (26) raises a question about Mr. Painter's activity in his location.

(26) How now Mr. Painter, **what are you doing there**? 1675, Mr. [John] Crown, *The countrey wit*

On the surface, the speaker of (26) is inquiring as to the nature of Mr. Painter's activity in his current location. The question could evoke inferences questioning whether Mr. Painter should be "there" at all, but this inference is entirely optional. The sentence is well-formed and comprehensible with only the surface interpretation.

Most of the examples of *what's X doing here/there* from the late 17th and early 18th centuries have an exclamatory character that makes the inference stronger than in (26), as in (27)-(29). The second clause in sentence (30) makes this inference especially powerful.

- (27) What do you mean! **what is he doing there**? 1665, Howard, Robert, Sir, *The vestal-virgin*
- (28) Sister! What are you doing here? 1671, Aphra Behn, *The amorous prince*
- (29) What Violence is / this? **What are you doing there to the Gentlewoman?** 1720, Charles Shadwell, *The plotting lovers*
- (30) Why Colonel, **what are you doing here by your self**, and the / Parlor below full of Company?

 1718, John Breval, *The play is the plot*

When the inferences in examples such as (27)-(30) were conventionalized, through the process discussed in Chapter 9, the WXDLoc construct became a construction and an idiom.

The other subtype of WXDY construction, WXDPart, arose in similar circumstances to the WXDLoc, albeit over a century later. Conversational exchanges such as (31) below suggest the first hint as to the WXDPart's origins.

(31) Mel.: What is he doing? / Kite.: Writing your Name in his Pocket-book. 1706, George Farquhar, *The recruiting officer*

The conversational exchange in (31) consists of a question and an answer, with both speakers using progressive aspect. The second speaker's answer elides the subject and copula of the progressive construction.

Later examples involve a speaker answering his or her own question, as in (32)-(33).

- (32) What are you doing hearing Harry's lies! 1842, Susanna Blamire, *Stoklewath; or, the Cumbrain Village*
- (33) **What are you doing? getting thus serious** and about a man, too? for shame! 1836, Charles Dance, *A match in the dark*
- (34) Why, you sot! **What are you doing, loitering about here**? you idle rapscallion! 1809, Everard Hall, *Nolens Volens*

Like the earlier WXDLoc constructs in ambiguous contexts, the constructs in (32)-(34) involve a rhetorical question with the illocutionary force of an exclamation. In (32)-(34), the speaker follows up on this "question" with a second exclamation, elaborating on the observed behavior which the speaker finds so shocking. The punctuation in these examples hearkens back to their origins in exchanges such as (31) – note that the exclamation *what are you doing* is followed by a question mark or other punctuation suggesting a pause between the exclamation and the following participle, mimicking the pause between the utterances of two conversational participants.

This progressive-aspect verb phrase, with an elided subject and copula, was subsequently reanalyzed as the Y-element in a WXDY construction. Like the locative phrases in the WXDLoc construction, the present participle in the WXDPart belongs to a class of elements similar or identical to the set of secondary predicates (Kay and Fillmore 1999:23-24). Quite probably, the reanalysis of examples such as (32)-(34) was encouraged by analogy with the WXDLoc construction. Nevertheless, the progression of uses in (31)-(34) argue that the WXDPart developed through a process of metonymic inferencing separate from that of the WXDLoc.

The modern WDXY involves a wider range of Y-elements than the locatives and participles discussed here. Some of these seem to have also involved individual processes

of inference. For example, a construct with an instrument PP, such as *what are you doing* with that crossbow? can create inferences of incongruity, leading to WXDY constructions in which with can be paraphrased by "having," as cited by Fillmore and Kay (1999:24).

All the WXDY variants seem to have involved similar processes of metonymic inferencing. These processes may have taken place in different centuries, but they all made use of the same inference, by which a question becomes an exclamation remarking on an incongruity. This type of inference involves no metaphor.

The WXDY construction appears to have developed entirely through inference, not metaphoric extension. Its lexically filled items, as a result, are unlikely to evoke metaphor. This unlikelihood is reinforced by the synchronic behavior of these lexical items and of the WXDY construction as a whole.

The fixed lexical items in *What BE X doing Y* consist of *what, doing,* and the copula. The last of these, *BE*, often takes part in domain-evoking constructions (notably copula constructions [Chapter 5]) but never evokes a domain itself. As such it can be omitted from this discussion. We saw in 7.6 that the *wh*-words, such as *what* and *where,* conform to the source domain when they take part in a metaphor-evoking construction. They are, however, usually domain-neutral, and *what* is always domain-neutral. The WXDY item *what* does not therefore play a role in the WXDY's metaphoric usages.

This leaves the item *doing*. Is the verb *DO*, and especially its participle *doing*, found widely in metaphoric usages? In fact *DO* is very limited in its domain evocation potential. Most of the limitations of *DO* are the result of its extremely general meaning. For example, the OED glosses transitive *DO* as meaning "to put; to bestow/render; to

perform, effect" and intransitive verb *DO* as "to put forth action, to act". These actions described by *DO* share only one defining trait: all involve an animate agent.

As we have seen, verbs usually evoke a source domain, as part of a predicate-argument or preposition phrase construction. Based on this observation, and on the meaning of *DO* noted above, metaphoric uses of *DO* can be predicted (1) to evoke a source domain, and (2) to evoke a source domain inheriting from frames with an animate agent. This limits *DO* to evoking the source domain of metaphors which map animate characteristics and motivations to inanimate forces and causes – most commonly, the mapping in the personification metaphor called CAUSATION IS ACTION TO ACHIEVE A PURPOSE (Lakoff and Johnson 1999:217).

Examples (35)-(38) illustrate a range of instances of this metaphoric mapping. All the chosen examples involve the participle *doing*, to aid in comparison with the WXDY construction.

- (35) Range and pasture conditions declined again last week, with **cool temperatures doing little to promote grass growth**. www.nass.usda.gov/sd/cw/cw5i19.htm
- (36) Motor sports well that is a tough one to compete against ... but, give me a break, **the motor is doing most of the sport**. www.worldtennisratings.com/wtr_magazine_publisher_3.html
- (37) **The fire is doing things** that are very hard for the fire crews to anticipate, the flare-ups happening here, there and everywhere. www.abc.net.au/am/stories/s741980.htm
- (38) **Hurricane Katrina is doing serious damage**, flood water and sewage is everywhere, and people are dying. stupidevilbastard.com/.../comments/using_an_abandoned_bus_tosave_yourself_a nd_many_others_equals_looting/

Examples of *DO* evoking the domain ACTION TO ACHIEVE A PURPOSE tend to involve transitive constructions, as in (35)-(38). The object of *DO* in these cases will evoke the target domain and the mapping A CAUSED EVENT IS A PERFORMED ACTION.

Intransitive metaphoric usages of DO usually evoke the source domain BODY, as in (39)-(40) below. These uses tend to take the form of progressive *doing* with an adverb, as in (39), or in questions with *how*, as in (40).

- (39) **GE is doing just great, Disney is doing terrific** so those guys are telling us **the economy is doing well**. www.radioproject.org/archive/1999/9901.html
- (40) So, Art, **how's the real estate market doing?** www.hispanianews.com/archive/2001/August03/04.htm

Sentence (39) evokes the metaphors A COMPANY IS A BODY and THE ECONOMY IS A BODY; the subjects *GE*, *Disney* and *the economy* evoke these target domains, and the source domain BODY is evoked by *doing* (specifically the sense of *doing* that refers to bodily well-being, as in *how's the bum knee doing?*) These items are related via a predicate-argument construction. Example (40) evokes a special case of THE ECONOMY IS A BODY, in which a particular segment of the economy, the real estate market, is mapped from BODY.

The verb *DO* usually evokes one of two source domains: ACTION TO ACHIEVE A PURPOSE or BODY. The metaphoric uses of *DO* provide a test for the evocation behavior of *doing* in metaphoric uses of the WXDY construction. If we find that the WXDY construction evokes the same metaphors as can be evoked by *DO*, then it will be logical to conclude that *doing* is helping evoke metaphor in the WXDY.

As it turns out, metaphoric uses of the WXDY can evoke a much wider range of source domains than the verb *DO*. In these uses, the X-element evokes the target domain and the Y-element evokes the source. We saw this pattern in (2), repeated below as (41).

(41) What's that lyric doing in my mind now? astrofish.net/weblog/comments.php?id=1281_0_1_0_C

Example (41) evokes the metaphor THE MIND IS A CONTAINER, with *lyric* and *mind* evoking the target domain and *in* evoking the source domain. In this example, the Y-element evokes both target and source domains, via a preposition phrase construction.

Despite the presence of the item *doing*, the construction in (41) does not evoke CAUSATION IS ACTION TO ACHIEVE A PURPOSE. The *lyric* is not a cause of anything, nor is it metaphorically performing any action. The *lyric* fills the role mapped from the CONTAINED OBJECT, passively located in the CONTAINER that maps to the MIND. The WXDY construction does not even permit a direct object of *doing*, which in (35)-(38) helped evoke the CAUSATION domain and A CAUSED EVENT IS A PERFORMED ACTION.

Further examples of the WXDY, as in (42)-(45) below, confirm that the construction is not limited to evoking the source domains permitted by *DO*.

- (42) What's he doing, throwing away hard-won opportunities and over a white girl?

 www.timeout.com/film/69791.html
- (43) **What was I doing wasting time** in the Chestnut Hill Mall just hours before the giant blizzard struck? homepage.mac.com/gravitate/iblog/C1518932783/
- (44) Makes me wonder **what I was doing wasting my time** playing the tuba at that age when I should have been rocking out! www.people.cornell.edu/pages/sec36/rantsMAR04.HTM

(45) **What is my TV doing blinking** like that? london.pm.org/pipermail/london.pm/Week-of-Mon-20020729.txt

These examples evoke, respectively, the Object Event-Structure Metaphor (42), TIME IS A RESOURCE (43)-(44), and an image metaphor mapping a flickering television screen to a blinking eye (45). All of these examples have the WXDPart form, as opposed to the WXDLoc form in (41).

Examples (42)-(45), like (41), have Y-elements which evoke both their source and target domains. In (42)-(45), the Y-elements consist of a predicate-argument construction with a source-domain head (*throwing away, wasting*) and a target-domain argument (*opportunities, time*). However, the Y-element only obligatorily evokes the source domain. This is shown in (93), in which *blinking* evokes the source and *TV* evokes the target domain of the image metaphor. The item *doing* is not needed to evoke metaphor in these WXDYs, as the X and Y elements adequately evoke the target and source domains at least once, and possibly more than once, in WXDYs which combine with predicate-argument or preposition phrase constructions.

The WXDY construction, then, differs significantly from the *way* construction in its evocation of metaphor. Whereas the item *way* in the *way* construction is involved in metaphor evocation, the lexical items in the WXDY construction have idiomatic function and meaning, but cannot synchronically evoke metaphor. This is demonstrated by the lexical items' limited or nonexistent domain evocation potential outside of the WXDY construction. Even the verb *DO*, which can evoke the source domain of certain metaphors, cannot evoke the source domains of most metaphors evoked by the WXDY construction. The filled item *doing* in the WXDY construction cannot therefore be

considered metaphoric. These observations, in turn, make the determination that intuition alone could not: sentences such as *what's this scratch doing on the table* are not metaphoric – only idiomatic.

The WDXY and way constructions, despite their similarities, involve lexically filled items with very different roles in metaphor evocation. In every metaphoric use of the way construction, the item way evokes the source domain of the metaphor. In all metaphoric uses of the WXDY construction, none of the lexically filled items (what, BE, and doing) play any role in metaphor evocation. The difference between the WXDY and way constructions highlights the inadequacy of intuition in analyzing metaphor in complicated constructions, especially when metonymy and constructional semantics cause items to deviate from their usual meanings.

The WXDY and way constructions also demonstrate the applicability of diachronic evidence to a synchronic analysis of metaphor, and they prove the efficacy of pinning down an idiom's semantics by comparing it to related lexically open constructions and lexical items. The metaphor evocation of the WXDY and way constructions may be less intuitive than in some of the other constructions we have seen, but despite these constructions' complexity, both their lexically filled and lexically open items can be shown to follow predictable patterns of metaphor evocation.

Partially filled idioms, like the WXDY and way constructions, can evoke metaphor in two ways. They can use the methods found in certain idioms, evoking metaphor through their lexically filled items or through constructional meaning; or they can use the method that is available to lexically open constructions, in which items in particular slots evoke the source and target domains of a metaphor. The WXDY and way constructions

demonstrate that the lexically open items in idioms can evoke metaphoric domains with or without the assistance of the lexically filled items. Idioms like these simply have more avenues for domain evocation than lexically open constructions.

PART V METAPHOR IN LITERATURE AND ART

13 Poetic metaphor

Our experience of metaphor in poetry can be substantially different from our experience of metaphor in everyday language. We are often more conscious of metaphor in poetry, and we may expect more novel and unusual uses of metaphor than are found in everyday conversation. Nevertheless, several researchers have found significant evidence that all metaphoric language, whether in poetry, email or conversation, is built on the same underlying conceptual metaphors. For example, Lakoff and Turner explore the conceptual similarities between poetic and everyday metaphoric language in great depth in their "field guide to poetic metaphor," *More than Cool Reason* (1989), and explain how the same conceptual metaphors (such as THE MIND IS A BODY, KNOWING IS SEEING, etc.) underlie both poetic and everyday metaphor. Additional evidence that poetic and everyday language utilize the same conceptual metaphors is found in Turner's *Death is the Mother of Beauty*, which focuses on metaphors with the source domain of GENEALOGY (1987).

If the conceptual metaphors in poetry and in conversation are the same, then what gives poetic metaphor its richness, subtlety and diversity? Lakoff and Turner (1989) offer a partial answer, when they summarize the major differences between everyday metaphor and the range of metaphor uses in literature and poetry. The first characteristic of literary metaphor that they identify is **extension**, meaning the addition of novel mappings to a conventional metaphor. This occurs, for example, when the concept of DREAMING is added to the metaphor DEATH IS SLEEP, as when Shakespeare's Hamlet says, "To sleep? Perchance to dream!" Dreaming is not normally mapped to anything in the domain of DEATH when we speak of putting an animal "to sleep," for instance. The next

characteristic Lakoff and Turner identify is **elaboration**, referring to the use of special cases of source-domain elements, such as referring to LOVE as specifically a ROSE GARDEN rather than simply a LOCATION (via STATES ARE LOCATIONS). A further characteristic of poetic metaphor is **questioning**, which is the process of drawing attention to the unmapped portions of a source domain, as occurs in elaboration, but without actually adding mappings from this unmapped portion of the source domain. The final characteristic that Lakoff and Turner name is **composing**, which refers to the integration of multiple metaphors in a novel manner. Throughout this chapter, I will draw attention to these four differences between everyday and poetic metaphor.

I will also discuss two additional distinctions between poetic language and informal language. First, I find it relevant that many genres of poetry use a different subset of English vocabulary than everyday language. In particular, some poetic genres draw on a larger number of low-frequency items than is found in most language use. This distinction between poetic and informal genres is not limited to metaphor, but I believe that word choice is an important part of what sets poetic metaphor apart from everyday metaphor.

Second, I believe that an increased use of image metaphor can set poetry apart from everyday language. Although poetry, like all language, makes ample use of structured conceptual metaphors such as KNOWING IS SEEING, some poetic genres additionally incorporate large numbers of gestalt-based **image metaphors**, such as mapping the shape of a half-eaten cookie onto the shape of the moon, or mapping the glimmer of sapphires onto the shine of blue eyes. Lakoff and Turner pay a great deal of attention to image metaphor (1989), but do not include its use in their taxonomy of differences such as

extension and elaboration. Image metaphor is certainly found in everyday language, but it can achieve a special salience in poetry. Image metaphor is also more complex in poetry, and is more often integrated with other types of metaphor and/or metonymy via Lakoff and Turner's process of "composing". I will therefore consider image metaphor alongside Lakoff and Turner's distinctions as a crucial part of what differentiates poetic metaphor from the uses of metaphor that we encounter in our everyday lives.

The intent of this chapter is to show that the unique effects of poetic metaphor are achieved through the frequency with which certain metaphors are used; the creativity with which metaphors are combined and extended; and the choice of words, constructions, and other devices used to express these metaphors. The distinctions between poetic and everyday metaphor are *not* based on underlying differences in the conceptual metaphors that the two types of language use draw on. I will not repeat here the arguments made in *More than Cool Reason* and *Death is the Mother of Beauty* supporting the assertion that poetry and conversation draw upon the same underlying conceptual metaphors. However, I have seen no counterevidence to Lakoff and Turner's hypothesis; and all the examples of poetic metaphor in this chapter can be analyzed as involving the same types of conceptual metaphor that are also documented in everyday language.

At first glance, poetic metaphor and everyday metaphor might seem similar in their surface structure as well as their conceptual structure. For example, poetic and everyday language often make use of the same constructions and words to express a given metaphor. Metaphoric phrases such as *bright idea* appear in both poetry and informal language, as in (1) and (2) below.

- (1) So when the faithful pencil has designed Some **bright idea** of the master's mind ... Alexander Pope, *An Essay on Criticism*, 1709
- (2) Often it was someone from the community with a **bright idea** that triggered a new activity.

 www.ptreyeslight.com/stories/sept20_01/dance_palace.html

Example (1) is from Pope's *An Essay on Criticism*, whereas sentence (2) is from a more informal context – a bulletin discussing the anniversary party of a dance venue.

Both instances of *bright idea* express the same conceptual metaphor (KNOWING IS SEEING) via the same mechanism (a predicating modifier construction).

As a rule, any metaphoric device found in everyday language will be adopted by poets, who tend to draw upon all the linguistic resources at their disposal. However, I argue that poetry is not *limited* to these devices. In this chapter, I hope to show that the poetic incarnations of conceptual metaphors can take a number of forms that that are not found in conversation, emails, or even most scholarly writing. These indirect and lengthy devices are impractical in everyday language, but are valued by poets for their subtlety, beauty, or complexity. The current chapter, then, explores both the similarities and differences of metaphor evocation in poetic and everyday language.

13.1 Everyday constructions in poetic metaphor

Poetry and everyday language utilize many of the same constructions to express their shared conceptual metaphors. In fact, we'll see in this chapter that *all* of the major constructions described in this dissertation are also used metaphorically in poetry. For example, the predicating modifier construction, exemplified in *bright idea* in (1)-(2), appears frequently in both everyday language and in poetry.

If a construction is used metaphorically in everyday language, it will be used in much the same way in poetry. When the uses of these constructions in poetry do differ from those found in everyday language, these distinctions can be shown to fall out from more general differences between poetic metaphor and everyday metaphor, such as those listed above (extension, image metaphor, etc.). I will focus on two of these distinctions here: the ubiquity of low-frequency items in poetry, and the use of image metaphor in poetry.

For each of the basic classes of construction discussed in this dissertation, I will first show how poetic metaphor can behave *exactly* like everyday metaphor, by giving an example of the *same* phrase or clause evoking the *same* conceptual metaphor in an informal context and in a poetic context. Then, I will note an example of poetic metaphor using obscure vocabulary, and one involving image metaphor. Some of these examples will additionally incorporate the traits discussed by Lakoff and Turner: extension, elaboration, questioning, or composing. I hope to demonstrate with these examples that poetic metaphor can differ greatly from everyday metaphor, while still utilizing the same grammatical constructions.

Of course, different genres of poetry diverge from conversational language in different ways. For example, the metaphysical poets tended to build up intricate metaphoric mappings using conditional constructions that are rare in everyday language; whereas Emily Dickinson appears to have delighted particularly in metaphorical poems that never mention a target domain; and some experimental poetry involves daring image metaphors that would seem strange in spontaneous conversation. However, the purpose of this chapter is not to identify the particular techniques of metaphor communication in certain genres of poetry or verse. Instead, the chapter is intended to give a feel for the

breadth of techniques available to writers who choose to use language for creative or aesthetic purposes. These poetic devices, then, will be introduced with relatively little discussion of the specific genres in which they are found.

13.1.1 Predicating modifier constructions

Many genres of poetry are likely to draw on a wider vocabulary than the average conversation. Even rare words, however, tend to be used metaphorically following established patterns. For example, *effulgent intellect* as in (4) reflects the same metaphor and follows the same predicating modifier pattern as *bright idea* in (3), even though *effulgent* is a much lower-frequency item than *bright*.

(4) Here throve the **effulgent intellect** of matchless Verulam. Edgar Fawcett, *The Rivers*, 1884

Metaphoric language in poetry, like non-metaphoric poetic language, tends to make greater use of low-frequency lexical items than is found in everyday conversation. This is evident in the poetic uses of all the constructions discussed in this dissertation, including predicating modifier constructions such as (4).

Poetry is also more likely to use predicating modifier constructions to express image metaphors, as in (5).

(5) As o'er a **billowy field** of ripened wheat ... Paul Hamilton Hayne, *The Wife of Brittany*, 1882

This quotation imagistically compares the shape and motion of ocean waves to the movement of wind-blown wheat. The noun *field* (along with the preposition phrase *of*

ripened wheat) evokes the target domain, while billowy evokes the source domain of a wave-filled ocean.

We will see that all the common constructions used in metaphor, like the predicating modifier constructions, evoke image metaphor more often in poetry than in everyday language. This, I argue, is simply because image metaphor is more frequent in poetry than in everyday contexts. This distinction is not specific to the meaning or usage of these particular constructions in evoking metaphor.

13.1.2 Domain constructions

Metaphorically used domain constructions, like predicating modifier constructions, are as common in literary language as in everyday language. Domain constructions include metaphoric uses of nouns modified by domain adjectives, as in (6). This can be compared with the more informal example (7).

- (6) Epistolary writing should comprise Part of your pupil's **mental exercise** ... Thomas Green Fessenden, *The ladies monitor*, 1818
- (7) Here's a **mental exercise** that you can do to help you understand how important backups are. www.pcguide.com/care/bu/exer-c.html

Domain adverbs, as well as domain adjectives, are also found in poetry. An example appears in (8), alongside a similar usage in a less formal context, in (9).

(8) I began to get **verbally sliced** again
challenged again
mocked again ...
Charles Bukowski, my big moment, 1999

(9) Stein was **verbally sliced** and diced to a pulp in that interview! He came off looking pretty bad.

themadpigeon.blogs.com/diary_of_the_mad_pigeon/2006/01/
mogs_sorry_folk.html

In addition to the domain modifiers found in everyday speech, poetry also draws on some modifiers that more indirectly evoke a given domain. For example, consider the phrase *Lethean veil* in (10).

(10) But with our Names our Mem'ories flt away: A Black Lethean Veil our Works shall hide ... Robert Gould, *The Atheist*, 1709

Here, the adjective *Lethean* – which is surprisingly common in poetry, appearing 208 times in 200 poems in the Chadwyck corpus – does not predicate anything of *veil*.

Instead, it metonymically stands for the domain of forgetfulness, because water from the mythological river Lethe causes one to forget. The fact that a veil can visually obscure objects evokes the target domain of KNOWING IS SEEING; while *Lethean* evokes the MEMORY frame and the domain of KNOWING. (The predicating modifier *black* then modifies *Lethean veil;* and as we would expect of a predicating modifier, *black* relates to the source domain of SEEING, and reinforces the evocation of this domain.)

The obscurity of this metaphoric phrase makes it unlikely to occur in conversation. Nevertheless, the phrase is made interpretable by a domain construction, a standard means of communicating metaphor; and it involves the extremely common conceptual metaphor KNOWING IS SEEING.

Domain constructions are also commonly used to express image metaphors, as in (11).

(11) Her hand he seis'd, and to a shadie bank, Thick overhead with **verdant roof** imbowr'd He led her nothing loath ... John Milton, *Paradise Lost*, 1674

Here, the gestalt image of a solid roof overhead is mapped onto a solid mass of branches and leaves. The modifier *verdant* is here used as a domain indicator, because the green color of leaves is one of their most salient characteristics. The modifier is a more subtle domain indicator than, for example, *arboreal* in the phrase *arboreal roof*, because *verdant* is metonymic for trees' foliage rather than evoking it directly. The surrounding context in (11) – for example, the background knowledge that the characters, Adam and Eve, are living in a world without literal roofs – makes it possible for *verdant* to operate as a domain modifier in (11). Conversation or other informal language probably would not rely on this tenuous evocation process, and probably would not express the given image metaphor at all. In many genres of poetry, however, image metaphor is important; and more fragile and context-dependent domain evocation is expected.

13.1.3 Predicate-argument constructions

Like predicating modifier and domain constructions, predicate-argument constructions are frequently used to communicate metaphor both in everyday language and in poetry.

For example, (12) and (13) compare instantiations of the transitive construction in a poem and in a blog.

(12) There, I maddened! her **words stung** me. Elizabeth Barrett Browning, *Lady Geraldine's Courtship*, 1806-1861

(13) I went to my room and secretly cried, 'cause the **words** really **stung** me and they still do if I think about it today.

pecosgirl.blogspot.com/2006 01 01 pecosgirl archive.html

In both cases, the verb *stung* and the noun *words* evoke THE MIND IS A BODY and the mappings WORDS ARE WEAPONS and MENTAL SUFFERING IS PHYSICAL PAIN. In both examples, the object *me* is domain-neutral (see Section 4.4.2).

The intransitives in (14)-(15) behave much like the transitive constructions above.

- (14) I was angry with my foe ... my **wrath** did **grow**. William Blake, *A Poison Tree*, 1794
- (15) The **anger** just **grew** and in the end I felt I needed to return to England ... and basically get my act together. www.eatingdisorders.org.nz/Being in my Body.46.0.html

Both examples evoke INTENSITY IS SIZE, in which the subject noun (*wrath* or *anger*) evokes the EMOTION frame, which structures the INTENSITY target domain; whereas the verb *grow* evokes the source domain of SIZE.

Predicate-argument constructions can, of course, be used more creatively in poetry than in informal language. For example, it would be hard to find a word such as *cauterize* used metaphorically in prose, as it is in (16):

(16) ... That's much better, that's approaching the gazebo and deliberately, fiercely writing on it, words that will cauterize the delicate, the wan and sickly passerby ... James Tate, Revenge of the Jagged Ambush Bug, 1997

The verb *cauterize* here evokes the source domains of two metaphors. First, it evokes
THE MIND IS A BODY and the mappings WORDS ARE WEAPONS and MENTAL SUFFERING IS

PHYSICAL PAIN, the same mappings that we saw active in *the words stung* in examples (12)-(13). The more novel use of *cauterize*, as compared to *stung*, brings in an additional inference: we know that cauterizing a wound causes physical pain, but it ultimately prevents worse suffering. This structure maps from the BODY domain to the inference in the MIND domain that a certain amount of mental discomfort (here, seeing irreverent graffiti) can ease future mental afflictions (in this context, the discomforts caused by the restrictions of authority). This novel mapping constitutes an "extended" mapping, in Lakoff and Turner's terminology, which is fitted onto the conventional metaphor THE MIND IS A BODY.

The item *cauterize* in (16) also evokes the HEAT domain of the metaphor ANGER IS HEAT, while *words* evokes the ANGER domain. This fits neatly with the previous metaphor via the attribute of "composing," and contributes the inference that the "cauterizing" graffiti was written in anger, and that this anger – like fire – can be used to "cauterize" and limit future suffering.

The metaphoric use of a relatively uncommon word such as *cauterize* is more typical in poetry than in everyday conversation. The addition of "extended" mappings to conventional metaphors, such as the "cauterizing" effect of carefully administered mental pain, is also more typical of creative language such as poetry; and finally, the evocation of two metaphors with one phrase or clause, via "composing," is also characteristic of much poetic metaphor.

Like the other constructions we've seen, the predicate-argument construction is often used to communicate image metaphor in poetry, as in (17) below.

(17) And flood the flats with a shining lake,
Which the proud ship ploughs ...

J. T. Trowbridge (John Townsend), *The Old Lobsterman Cape Arundel, Kennebunkport, Maine*, 1903

Here, the item *ploughs* evokes the imagistic source domain of a plough parting the earth as it progresses. This maps to the target image of a ship forcefully parting the waters of a lake. Since this kind of complicated imagery usually plays a greater role in poetry than in everyday language, image metaphors such as in (17) tend to be preferred in poetry regardless of the devices employed to evoke them.

13.1.4 Preposition phrase constructions

The preposition phrase constructions follow the same trends in their poetic usages as the other constructional types. As expected, the same preposition phrase constructs that appear in informal contexts are also found in poetry. For example, the phrase *taste of victory* appears in a poem in (18) and in a blog in (19):

- (18) The sound of ten-thousand throats raised in song. The rich **taste of Victory** in every mouth. Edward Dorn, *The re-PUBlicans!!!*, 1990
- (19) Then again, the 2006 election is only 112 days away, and the **taste of victory** will be very sweet indeed.

 blog.washingtonpost.com/thefix/2006/07/minnesota senate not so close 1.html

In both cases, contexts makes it clear that the "victory" referred to is a political one.

This victory can be metaphorically "tasted" via the metaphor EXPERIENCING IS INGESTING, in which the first hint of a pleasurable experience is conceptualized as the first taste of something delicious.

Like the other basic constructions we've examined, preposition phrase constructions are used more creatively in poetry than in everyday language. In (20) below, the phrase haunted ruins of the mind is an expression that is unlikely to occur in normal conversation:

(20) While scorn smiles darkly o'er the Past – The **haunted ruins of the Mind!** Sumner Lincoln Fairfield, *The Lozel*, 1841

This passage includes low-frequency items, such as *haunted* and *ruins*. Additionally, the conceptual metaphors involved in this passage are somewhat unusual: for example, instead of the common metaphor THE MIND IS A CONTAINER, we find a related, but rarer, metaphor, THE MIND IS A LANDSCAPE. This metaphor can combine, via "composing," with the metaphor IDEAS ARE BUILDINGS, which here demonstrates the unusual "elaborative" mapping OLD MEMORIES ARE RUINS. In fact, this mapping is further elaborated in this passage into DISTURBING OLD MEMORIES ARE HAUNTED RUINS.

The target domain MIND is evoked by *mind*, while the source domain of LANDSCAPE (which includes the concepts BUILDING and RUIN) is evoked by *haunted ruins*, following the normal pattern of preposition phrase constructions. What is *not* normal, however, is the complex, "elaborated" mappings such as DISTURBING OLD MEMORIES ARE HAUNTED RUINS. Unusual and specific mappings of this kind, which draw on low-frequency lexical items, are more apt to be found in poetry rather than in informal language.

As we've seen, a variety of constructions are used to evoke image metaphor in poetry. The preposition phrase constructions are no exception, and frequently communicate image metaphor, as example (21) demonstrates.

(21) All adown the **pale blue mantle of the mountains** far away Stream the **tresses of the twilight** flying in **the wake of day**. George William Russell, *The Dawn of Darkness*, 1926

This passage uses *three* preposition phrase constructs, each communicating a separate image metaphor. The phrase *pale blue mantle of the mountains* compares the blue far-off mountains to the shape and opacity of a mantle draped in front of the sunset. The expression *tresses of the twilight* compares the flowing, curvaceous colors and clouds of sunset to the gestalt shape and form of flowing hair. Finally, *wake of day* "composes" a conceptual metaphor with an image metaphor. The conceptual metaphor is the Moving Time Metaphor, in which events are conceptualized as objects moving through space towards the observer. A special "elaborated" case of a MOVING OBJECT, a SHIP, is mapped to a period of time which is nearly over, the DAY. The image metaphor, then, compares the streaming shape of the colors and clouds left behind the DAY to the pattern of ripples and foam left in the wake of a passing SHIP. The quantity and complexity of the image metaphors in example (21) can only be found in poetry. Few conversations, emails or instant messages include even *one* preposition phrase expressing an image metaphor, let alone the three found in this passage.

The comparison of basic constructions in poetic and informal language, as presented in this section, can be further summarized as two generalizations: first, that poetry makes use of all the basic metaphoric communication strategies found in everyday language; and second, that the ways in which these strategies differ in poetry follow from more general distinctions between poetic and everyday metaphor. These more general tendencies include the more frequent use of obscure and infrequent vocabulary in poetry;

the preponderance in poetry of image metaphors; and the qualities of "composing," "elaboration," and "extended" mappings.

13.1.5 Equations

The rarest of the basic metaphorically used constructions, equations such as *time is money* (accounting for 1.5 percent of the metaphoric constructs in my corpus), appear to figure larger in poetry than in most types of language use. Christine Brooke-Rose devotes most of Chapters 4-6 of *A Grammar of Metaphor* to this family of constructions, and gives numerous examples such as (22):

(22) Folly is an endless maze.
William Blake, *The Voice of the Ancient Bard*, 1965

This example evokes the Location Event-Structure Metaphor, in which GOALS ARE DESTINATIONS and DIFFICULTIES ARE OBSTACLES. The concept of FOLLY, a behavioral trait which hinders a person from reaching any particular goal, is mapped from MAZE, an obstacle which hinders a person from reaching any particular destination (the modifier *endless* simply emphasizes that no ultimate destination will be reached). MAZE and FOLLY are "elaborations," in that they represent specific and unusual subcases of a behavioral trait and of an obstacle, respectively. The mapping FOLLY IS A MAZE, which is obtained through these elaborations, could also be considered an "extended" mapping, because it is not a standard mapping in the Location Event-Structure Metaphor. As in most equations, the two NPs evoke elements in their respective domains which are connected by a mapping (MAZE maps onto FOLLY). However, (22) is typical of poetry in

that it includes lower-frequency items such as *folly* and *maze*, and that it evokes a novel "extended" mapping, FOLLY IS A MAZE.

The most telling difference between everyday and poetic equations comes to light when we consider image metaphor. As we saw in Section 5.2, equations excel at expressing image metaphor, because equations precisely specify a mapping that must be evoked (such as FOLLY IS A MAZE). This directness is useful in image metaphor, which can otherwise be difficult to communicate, because it is less structured than conceptual metaphor. Section 5.2 discusses image metaphors such as that evoked by (23):

(23) A pallid sun appeared like a nosy neighbour spying from behind lace curtains. *BNC*

In poetry, of course, image metaphors abound. This is the main reason that equations enjoy a greater prominence in poetry than in everyday language. As is typical of imagemetaphoric equations, equations in poetry often are hedged with *like* or *as*, which has the function of emphasizing the partiality and gestalt structure of the mappings involved (5.2.1). The mapped image structure may involve any perceptual modality: the "image" is visual in (24), but audio in (25).

- (24) And some (morning-glories) are clouded crimson, like a goblet stained with wine.
 Elizabeth Akers Allen, *Morning-Glories*, 1886
- (25) Thy prate is like the buzzing of some fly ... Oscar Fay Adams, *Sir Evergreen*, 1886

Example (24) maps the shape and color of a wine-stained goblet onto the bloom of a morning-glory. Sentence (25) maps the persistent, monotonous, and uninteresting drone

of an insect onto the addressee's speech. Both metaphors map a gestalt rather than a systematic set of mappings. The partial nature of the mappings is accentuated by the hedge *like*, which helps the addressee to recognize that no greater structural congruence is implied, and that the image gestalt is all that should be mapped.

Section 5.2 describes the structure and variation of metaphoric equations in everyday language, and this material will not be repeated here. A few variations need to be added to this taxonomy, however: usages that occur in poetry, but which are rare or absent in everyday language. First of all, equations involving apposition, such as (26) below (Brooke-Rose 1970:93) are rare in informal genres such as conversation:

(26) Praise alone, that gaudy flower ... John Dryden, *Absalom and Achitophel*, 1882-1892

The quote in (26) evokes IDEAS ARE OBJECTS and the mapping PRAISE IS A DECORATION. The modifier *gaudy* adds an "elaborative" submapping from tasteless, overly showy, decorations to uncalled-for praise. The apposition serves the same function as a copula, in that the referent of the NP *that gaudy flower* (a special case of a tasteless, showy decoration) maps to the referent of the NP *praise*. The demonstrative article *that* helps to emphasize that *praise* is the antecedent of the NP *gaudy flower*, and that PRAISE and FLOWER should be equated.

Another variation on the equation involves copular verbs such as *make* instead of the copula. Brooke-Rose devotes all of Chapter 6 in *A Grammar of Metaphor* to these uses, citing examples such as (27):

(27) Make not your thoughts your prisons ... William Shakespeare, *Antony and Cleopatra*, 1564-1616

Shakespeare's passage evokes the metaphor THINKING IS MOVING, in which obstacles to thinking – such as unproductive thoughts – are conceptualized as obstacles to motion, of which a PRISON is a special "elaborated" case. Like other equations, here the referent of the source-domain noun, *prison*, maps to the referent of the target noun, *thoughts*. We saw in Section 5.2 that clauses with copular verbs are semantically related to copular equations, and involve similar patterns of conceptual autonomy and dependence.

Examples such as (27), then, can be considered as "equations" even though they lack a copula or a comma, and even though they are rare in everyday conversation.

A final type of equation is even rarer and stranger. This type involves *and*-coordination of a target-domain noun and a source-domain noun, as in (28):

(28) Then all the woes, and wrecks that I abide ... Edmund Spenser, *Amoretti and Epithalamion*, 1552-1599

Here the first noun, *woes*, is literal and target-domain. The second, *wrecks*, is metaphoric, evoking the source domain of ACHIEVING A PURPOSE IS REACHING A DESTINATION, in which DIFFICULTIES ARE OBSTACLES. Crashing into an obstacle, which ends forward motion, maps onto the failure to overcome a difficulty, which ends one's progress towards achieving a purpose. In this example, then, *woes* and *wrecks* both denote difficulties and sources of suffering. However, the first item evokes the source domain, and the second evokes the target domain; which puts coordinated examples of this nature in the class of equations.

Poets have innovated a number of further variations on the equation. A particularly unusual one is found in the passage in (29).

(29) Love equals swift and slow,
And high and low,
Racer and lame,
The hunter and his game.
Henry David Thoreau, Love Equals Swift and Slow, 1849

Focusing on the metaphor evoked by the first and last lines (*Love equals ... The hunter and his game*), we can see that Thoreau is entirely conscious of the poetic possibilities of the equation construction. In these lines he evokes the standard metaphor LOVE IS HUNTING in an original way. Rather than merely stating *love is hunting*, he lists two elements in the frame of HUNTING: the HUNTER and the HUNTED. This is completely sufficient to evoke the frame of HUNTING, making it unnecessary to explicitly name this frame. For once, the equated phrases (*love* and *the hunter and his game*) do not fill roles that are mapped onto each other. Here, *the hunter and his game* evoke the frame of HUNTING, so that HUNTING can be mapped onto the process of courting a romantic partner, via LOVE IS HUNTING. Thoreau's use of the verb *equals* instead of the less-explicit copula also draws extra attention to the structure of the equation he is constructing – attention that may be necessary to decode and understand the unusual usage.

The passage in (29) demonstrates that poets consciously manipulate their use of constructions in evoking metaphor. Thoreau's passage does not directly violate the constructional requirements of metaphor, but he certainly challenges the usual structure of an equation, by metonymically substituting two frame elements of HUNTING for HUNTING itself.

13.1.6 "Qualifying phrases"

Along with equations, several other constructions are used more creatively, and more frequently, in poetic metaphor than in everyday metaphor. We have seen that unusual and low-frequency vocabulary is much more common in poetic metaphor than in everyday metaphor. The same, it appears, is true of rare constructions. Constructions such as equations, relative clauses and conditionals are only occasionally used in everyday metaphor, but are frequently drawn on by poets for their aesthetic advantages, such as the usefulness of equations in expressing image metaphor.

One class of construction that seems to be more common in poetic language is the relative clause, such as the *that*-clause in (30).

(30) There they discours'd upon the fragile bar That keeps us from our homes ethereal ... John Keats, *Endymion*, 1818

Brooke-Rose (1970) refers to relative clauses such as in (30) as "qualifying phrases," presumably since these clauses "qualify" the meaning of a head NP that would otherwise be understood literally, such as *the fragile bar* in (30). In (30), the relative clause evokes the target domain, which is appropriately indicated in this clause with a domain adjective, *ethereal*. It is this clause, then, that indicates the target domain of the sentence as a whole, and makes the source-domain main clause metaphorically interpretable. In this respect the passage is no different than uses in informal language, such as (31):

(31) The monkey that became president ... www.blogsofwar.com/2006/09/12/address-by-the-president-to-the-nation

Here, the relative clause (and the equation within it, using the copular verb *became*) tells us that the phrase refers to the current president (George W. Bush) and that the noun *monkey* is a source-domain term that should be interpreted metaphorically. (Relative clauses are explored in more depth in Section 7.2). Metaphoric relative clauses are both more common and more varied in poetry. The passage in (32) is another example cited by Brooke-Rose:

(32) The merchandise which thou hast brought from Rome Are all too dear for me.

William Shakespeare, Antony and Cleopatra, 1564-1616

A combination of context and construction make it clear that the *merchandise* is actually "news," which a character has "brought" from Rome. This example evokes a special case of the Conduit Metaphor (COMMUNICATION IS OBJECT TRANSFERAL) in which the OBJECT is specifically MERCHANDISE, and the COMMUNICATION specifically involves NEWS. The AdjP *all too dear for me* refers again to the source domain of OBJECTS, which specifies that MERCHANDISE consists of OBJECTS that are purchased for a PRICE. The emotional toll, or "price" of hearing this news, is therefore inferred to be "costly" and painful.

13.1.7 Conditionals

Conditionals are occasionally used as a means of metaphor evocation in everyday language. We saw in Section 7.5 that only a few uses of conditionals are generally found in everyday language. One of these uses is the idiom *show me a (target-domain N) and*

I'll show you a (source-domain N), as in this quote from Malcolm X, cited by Mark Turner (1991:186) and repeated from example (24) in chapter 7:

(33) You show me a capitalist, and I'll show you a bloodsucker.
(Malcolm X)

www.cybernation.com/victory/quotations/subjects/quotes_greed.html

We saw that in conditionals such as (33), the referents of the two nouns are interpreted as co-referential, and hence as identity-linked elements in different domains, with the second generally mapping to the first. Generally, the noun in the protasis, or P-clause (here, *capitalist*) is target-domain and the noun in the apodosis, or Q-clause (here, *bloodsucker*) is source-domain.

Conditionals with a target-domain item in the protasis and a source-domain item in the apodosis seem to be rare in poetry, perhaps because they require two clauses to make a point that can be made with a simple equation. They can be found in literature, however, as in this example cited by Brooke-Rose:

(34) A: Would I had never seen her!E: Oh sir, you had then left unseen a wonderful piece of work.William Shakespeare, *Antony and Cleopatra*, 1564-1616

Antony's line supplies the protasis and the pronoun *her*, which has a target-domain antecedent (Cleopatra). The second speaker, Enobarbus, supplies the apodosis and a source-domain NP which he wishes to be mapped onto Cleopatra: *a wonderful piece of work*. As in everyday uses of conditionals, the target tends to be given first in metaphoric conditionals used in literature. The opposite ordering is theoretically possible: "You

would have left unseen a wonderful piece of work, if you had never seen her" is also comprehensible, although I found no examples of this type in any genre.

The other use of conditionals in everyday metaphor consists of the "metametaphorical" conditionals observed by Dancygier and Sweetser (2005), who give examples such as:

(35) If the beautiful Golden Gate is the thoroughbred of bridges, the Bay Bridge is the workhorse.

San Francisco Chronicle, Nov. 11, 1996

Meta-metaphorical conditionals incorporate two equations or other appropriate constructions, one in each clause. The two equations perform their normal function, with the difference that the target-domain items in each clause belong to the same target domain, and the source-domain items belong to the same source domain. The structure of these conditionals is discussed further in Section 7.5.2; and in even more detail in Section 5.7 of Dancygier and Sweetser (2005).

Although simple metaphorical conditionals appear to be avoided in poetry, metametaphoricals abound. Some of these are as straightforward as those found in everyday language, as in (36).

(36) ... if Love be Hell
Then Hate is Heaven!
Sir Arnold Edwin, *Amber! You shall have amber beads to bind*, 1889

Here, LOVE and HATE are both EMOTIONAL STATES; the metaphor STATES ARE LOCATIONS maps to these target domains from the source domain LOCATIONS, in which the biblical locations HEAVEN and HELL represent the extreme positively-evaluated and

negatively-evaluated locations. The equations in the P-clause and Q-clause of (36) have a very simple structure similar to that found in everyday language.

Other meta-metaphorical conditionals are taken to a whole new level. Example (37) begins with a simple image-metaphoric equation in the P-clause (*the sunset is a spotlight*) but then continues to build onto this structure:

is a spotlight then she steals the finale with a bow, not a curtsy.
Simon Armitage, *The Gleaners*, 1992

In the Q-clause, the performer who is in the spotlight/sunset maps to a stalk of millet grain (*she*; millet stalks are anthropomorphized throughout the poem and described as women, via an image metaphor mapping posture and gesture). This allows the author to map the bold movement and attitude of a performer (bowing rather than curtsying) onto the bold impression of the millet's bending poise. The SPOTLIGHT and PERFORMER elements evoke the PERFORMANCE frame; and in this frame the end of the PERFORMANCE is mapped to the end of the sunset's display, and the concurrent end of day.

An even more elaborate example is given below:

(38) Let man's soul be a sphere, and then, in this, Th' intelligence that moves, devotion is, and as the other spheres, by being grown Subject to foreign motions, lose their own, ... John Donne, *Good Friday*, 1613, Riding Westward, 1633

The P-clause is here introduced with *let*, rather than *if*. This sets up the same conceptual structure as an ordinary conditional, but with a more contemplative, hypothetical feel. In the first line, a *sphere* ("planet") is mapped onto *man's soul*. This is

a novel metaphor, and so requires further structure in order to produce meaningful inferences. This additional structure is provided by the next three lines.

The line *Th' intelligence that moves, devotion is,* maps the sphere's motion onto the actions brought about by devotion, via ACHIEVING A PURPOSE IS REACHING A DESTINATION, in which CAUSES (such as devotion) ARE FORCES (such as those that move the spheres). The last two lines "elaborate" this mapping to make it more specific, explaining that the FORCES involved are other spheres' gravitational pull. This results in the inference that, just as these FORCES overwhelm the inherent inertia of a given sphere, so other CAUSES in the world can overwhelm the intentions of an individual. Clearly, this intricate and drawn-out structure is one that is unlikely to be found in everyday language.

Certain genres of poetry build unusually complicated metaphoric structures, such as the one evoked by (38). The metaphysical poets, such as Donne, created these structures in order to offer precise, logical metaphoric correspondences and inferences. These complex metaphoric structures are unlike anything found in everyday language; however, human language is clearly up to the task of expressing them, and even in poetry these complex metaphors are evoked using the same tools, metaphors and constructions that are employed in everyday language.

13.2 Devices unique to literary language

Poetry uses all the constructions found in everyday language, but poetic metaphor is not limited to these devices. The next two methods of metaphor evocation we will examine, "parallelism" (13.2.1) and "negation of the literal" (13.2.2), occur rarely, if ever, in everyday language. These are not grammatical constructions, but may be considered

"constructions" in a broader sense, since they are form-meaning pairs with a certain degree of conventionalization. The current section will also address an even more subtle use of metaphor in literary language, in which an entire passage or poem can be interpreted either literally or metaphorically, using a strategy that I will call "allegory" (13.2.3). Finally, I will mention another aspect of metaphoric language that distinguishes literary language from everyday language: the tendency to re-use a given metaphor throughout a text, passage or poem (13.2.4).

13.2.1 Parallelism

Parallelism arises when repeated syntactic constructions present material from a series of source domains, all of which can map to one target domain. The repeated source domains allow the addressee/reader to figure out the intended target domain, even though this domain is never referred to directly. Christine Brooke-Rose noticed this metaphoric technique, and described it as a device in which "there is no pointing to the proper term (target domain concept) at all, but the repetition of the same construction, ... or other methods, implies that it is equal to the metaphoric term" (Brooke-Rose 1970:79). Here is one of her examples:

(39) Till a lioness arose breasting the babble, A prophetess towered in the tumult, a virginal tongue told. Gerard Manley Hopkins, *The Wreck of Deutschland*, 1918

The courageous nun described in this passage is neither a lioness nor a prophetess.

These two terms, however, both refer to powerful female beings, which give us to

understand that the referent is a noteworthy woman who is brave in the manner associated with lionesses, and who is guiding others in the manner of a prophetess.

The domain modifier *virginal* denotes a salient, identifying characteristic of nuns, which allows *virginal* to stand metonymically for nunhood. The *tongue*, as a salient part of the vocal tract, metonymically stands for the speaker. The clause *a virginal tongue told*, then, further clarifies that the speaking woman is one of the nuns who are the subject of this poem. The clauses evoking different metaphoric source domains and metonymic vehicles are presented in parallel, which helps the reader understand that the domains and vehicles should map to a common target: the courageous nun who is speaking.

Another example of parallelism is found in *Antony and Cleopatra*:

(40) The crown o' the earth doth melt. ...
O, wither'd is the garland of the war,
The soldier's pole is fall'n ...
William Shakespeare, *Antony and Cleopatra*, 1564-1616

The *crown o'* the earth and the garland of the war and the soldier's pole all refer to Antony, and the intransitive verb phrases predicated of each of these refer to Antony's death. Without directly saying "Antony is dead," the passage in (40) makes this meaning abundantly clear by repeating several source-domain clauses that can be mapped to the target-domain meaning "Antony has died". The structure of the passage and the repeated source domains allows the reader to obtain the target-domain meaning, even though no particular item evokes the target domain of human DEATH. The phrases of the war and soldier's definitely help evoke this target, however, because the domain of DEATH structures the domain of WAR; but since WAR can literally involve victory garlands, as in garland of the war, and standards carried on poles, as in soldier's pole, these phrases do

not necessarily evoke the domain of human DEATH. The parallel format of the lines in (40) is needed to fully communicate this meaning.

13.2.2 Negation of the literal

Another device rarely found in casual language is the process Brooke-Rose (1958) calls **negation of the literal**. This technique for evoking metaphor is, in essence, very simple: a source-domain term is used, but a relative clause, coordinated clause, modifier, or other structure is added which instructs the reader that this source-domain meaning is *not* the one intended. As in parallelism, no actual target-domain terms are needed to communicate a metaphoric meaning.

Here are two examples, the first from poet Dylan Thomas and the second from a novel included in the BNC.

- (41) Light breaks where no sun shines.

 Dylan Thomas, *Light breaks where no sun shines*, 1937
- (42) And yet ... the sun might shine, but it did not shine in her life. Jean Bow, *Jane's Journey*, 1991

These two passages have opposite meanings: in (41), hope exists despite the darkness, whereas in (42), it is sunny but without the "light" of happiness. However, both passages evoke the metaphor HAPPINESS IS LIGHT, and the metaphor is evoked with the help of a clause indicating that literal LIGHT is not the intended referent. In (41), the clause *where*

construction offers its own unique contribution to the metaphoric interpretation of sentences like (41).

430

⁶⁴ It has been observed that negation evokes the negated material (such that *unhappy* evokes "happy" in a way that *sad* does not). This has been most thoroughly explored using Mental Spaces (cf. Fauconnier 1998, Sweetser 2004, Verhagen 2002). A phrase containing negation, such as the relative clause *where no sun shines*, might therefore be seen as related to other target-domain evoking relative clauses (Chapter 7). However, the default "opposite" evoked by *where no sun shines* is a space in which the sun (literally) shines, rather than a space involving metaphoric hope or happiness. Therefore the "negation of the literal"

no sun shines has this function, and in (41), the clause it did not shine in her life serves the same purpose.

In both (41) and (42), the "negation of the literal" device emphasizes the strength of the metaphorically indicated condition of happiness or unhappiness. HAPPINESS IS LIGHT exists because of our experientially-based association of light with happiness. To have a happy feeling without light, or unhappiness despite it, accentuates the intensity of those emotions. This emphasis is one of the advantages of negation of the literal.

Another purpose of this device is to underscore the momentousness or taboo nature of the target domain. Unlike most methods of target domain evocation, negation of the literal allows the poet to completely avoid mentioning the target domain. The negation of the source-domain meaning allows the reader to access the target domain without the use of target-domain items. This can emphasize the enormity of the target-domain concept, as in (43).

(43) A clock stopped – not the mantel's;

Geneva's farthest skill Can't put the puppet bowing That just now dangled still. ... Emily Dickinson, #287, ca.1861, 1896

In this poem about DEATH, Emily Dickinson never explicitly mentions death or dying. Instead, her reference to a *clock* – one that isn't found on a mantel, like a normal clock – evokes THE BODY IS A MACHINE, and specifically an image-metaphoric mapping which compares the heart's beating to a clock's ticking. The fact that Dickinson never mentions DEATH underscores the irreversibility of human death, as compared to the trivial winding-down of clockwork.

Finally, negation of the literal makes it possible to leave the target domain entirely unspecified. In the passage below, Dickinson uses this device much as she does in (43), except that in this case there are several possible target-domain interpretations.

(44) I taste a liquor never brewed –
From Tankards scooped in Pearl –
Not all the Vats upon the Rhine
Yield such an Alcohol!
Emily Dickinson, #214, ca.1860

This passage encourages a metaphoric interpretation by describing the most esteemed methods of alcohol production, but stating that her "liquor" was not manufactured in this way and yet surpasses all "alcohol" that was. If a "liquor" is not the best literal alcohol in existence, and yet is better than any other alcohol, then it cannot be a literal "alcohol" at all. Instead, the reader is encouraged to evoke the metaphor EXPERIENCING IS INGESTING.

The poem does not make it explicit what type of EXPERIENCE is referred to. Because the ingested substance is an alcohol, the most obvious interpretation of the poem draws on the metaphor LOVE IS INTOXICATION, which can combine with EXPERIENCING IS INGESTING to form the complex mapping EXPERIENCING LOVE IS INGESTING AN INTOXICANT. The poem, then, refers to romantic love. However, negation of the literal leaves other interpretations open; the poem could easily be read to refer to some other positive and exciting experience, such as writing poetry.

Parallelism and negation of the literal are not, by any means, the only metaphor devices found in poetry which are absent in everyday speech. A variety of additional rare strategies are documented in Brooke-Rose's *A Grammar of Metaphor*. However, I will not attempt to represent every one of these here. The devices explored here are intended

to provide a sample of the intricate and subtle methods of domain evocation that poets have at their disposal.

13.2.3 Allegory and parable

Poets and other authors sometimes leave a domain intentionally underspecified. A poet may intend for the reader to wonder, for example, if a poem is about winter, or if it is a metaphor for old age, or a metaphor for the slow fading of a once-passionate relationship. This ambiguity increases the potential for blending between the source and target domain: if the reader is not told outright the target domain, the source domain remains increasingly activated, as the reader simultaneously processes the source-domain material and attempts to identify the domain in which this material should be understood. This ambiguity exists on a smaller scale in negation of the literal and in some qualifying phrases, in which the delayed presentation of the target domain encourages the reader to question whether the source-domain material is meant metaphorically.

In the process I am calling "allegory," the author/poet never mentions a target domain, nor negates the literal meaning of a word or phrase. Allegories tend to be poemlength or book-length, giving plenty of room to develop the source domain, which a reader may then map intermittently to one or more potential targets.

When the metaphor involved in allegory is a highly conventionalized one, the target domain may be perfectly clear, as in Frost's famous poem, *The Road Not Taken*.

(45) Two roads diverged in a yellow wood, And sorry I could not travel both And be one traveler, long I stood ... Robert Frost, *The Road Not Taken*, 1916 Frost is describing a life decision via LIFE IS A JOURNEY, in which DECISIONS ARE FORKS IN THE ROAD. ⁶⁵ This metaphor and its mappings are so conventional that it is almost impossible to interpret the poem differently – for example, as describing the choice between two potential lovers. Whereas LOVE IS A JOURNEY is also a conventional conceptual metaphor, the mapping "CHOICES BETWEEN LOVERS ARE FORKS IN THE ROAD" is not typically part of this metaphor. Normally, in Western culture, the JOURNEY involves a single fellow-traveler (ones romantic partner), with the travelers likely sharing a vehicle together (which maps to the LOVE RELATIONSHIP).

Sometimes an allegory serves the same purpose as negation of the literal, in that the unstated target domain assumes a certain momentousness by being left unsaid.

Tennyson's *Crossing the Bar* can be compared with Dickinson's *A clock stopped* (example 43), which involves a different source domain for the same target domain, DEATH:

(46) Sunset and evening star,
And one clear call for me!
And may there be no moaning of the bar,
When I put out to sea ...
For tho' from out our bourne of Time and Place
The flood may bear me far,
I hope to see my Pilot face to face
When I have crost the bar.
Tennyson, Crossing the Bar, 1889

Tennyson's use of the metaphor DEATH IS DEPARTING is well-established and abundant in poetry. It is especially clear in this case, because the line *For tho' from out our bourne of Time and Place* suggests that the passage does not refer to a literal sea

⁶⁵ Lakoff and Turner offer a more in-depth analysis of LIFE IS A JOURNEY in *The Road Not Taken* (1989:3-4).

434

voyage. The line *sunset and evening star* also helps evoke the domain of DEATH via the metaphor A LIFETIME IS A DAY, in which the END OF DAY, marked by the sunset, maps to DEATH. ⁶⁶ The line *I hope to see my Pilot face to face* is also evocative, in that God is often metaphorically understood as a leader guiding his followers. The DEATH domain includes the structure that according to the Judeo-Christian belief system, the soul meets God after death. This reference to GOD therefore helps evoke the DEATH domain. The poem *Crossing the Bar* illustrates a common strategy used in connection with allegory, in which several source domains for a single target domain are evoked in sequence. The evocation of these source domains helps the reader to identify the target domain to which all the source domains can map (in this case, the domain of DEATH). This is similar to the process used in parallelism, but more subtle, because it lacks the parallel syntactic structures that help a reader to recognize the relevant source domains.

Frequently, the title of a poem is the only indication of the target domain in an otherwise-allegorical passage. This is clear in a poem such as Kipling's *Destroyers in Collision*:

(47) For fog and fate no charm is found
To lighten or amend.
I, hurrying to my bride, was drowned –
Cut down by my best friend.
Rudyard Kipling, *Destroyers in Collision*, 1919

The target domain of SHIPS would be almost impossible to pinpoint without the title. In fact, without the title, the poem might be interpreted as a rather banal literal narrative. This use of a title is another means of target domain indication, one which is patently unavailable in informal genres of language use.

⁶⁶ Lakoff and Turner cite this verse as an example of A LIFETIME IS A DAY (1989:12).

Occasionally the target domain of an allegory will be revealed at the end. This is rare in modern poetry and literature. However, this structure is used very self-consciously in *A Fable*:

```
(48) A Fable.
```

In Aesop's tales an honest wretch we find, ... He in two wives had two domestic ills; ... One plucked his black hairs out, and one his gray, ...

The Moral.

The parties (Tories and Whigs), henpecked William (King William III), are thy wives,

The hairs they pluck are thy prerogatives...

Matthew Prior, A Fable, 1703

Some poems never reveal the target domain, and leave it up to the reader to imagine how the source-domain structure should be understood. Emily Dickinson is a master of this type of allegory:⁶⁷

```
(49) Over the fence –
Strawberries – grow –
Over the fence –
I could climb – if I tried, I know –
Berries are nice!
```

But – if I stained my Apron – God would surely scold! Oh dear, – I guess if He were a Boy – He'd – climb – if He could!

Emily Dickinson, #60, c.1861

This passage involves the Location Event-Structure Metaphor, in which PURPOSES ARE DESTINATIONS and DIFFICULTIES ARE OBSTACLES. But the specifics of the intended

436

⁶⁷ Thanks to Eve Sweetser for drawing my attention to this example.

target domain, particularly the PURPOSE or PURPOSES that are forbidden to women, are intentionally vague. Like Dickinson's #214 (example [44], which involved negation of the literal), Dickinson once again leaves open several possible interpretations of the metaphoric target domain. The PURPOSE is clearly an appealing one, because the sweet flavor of berries maps to a pleasurable experience via EXPERIENCING IS INGESTING. This PURPOSE could, however, be one of many that were considered inappropriate for women in Dickinson's time: illicit sexual activity, writing poetry, or a combination of unfeminine behaviors. This ambiguity forces the reader to consider the full range of behaviors that are forbidden to women, rather than merely focusing on one — which is almost certainly part of the effect that Dickinson intended.

Poem #60 differs from #214 in that a literal reading is actually possible. The poem does not incorporate a device such as negation of the literal, which would ensure a metaphoric reading. The poem could hypothetically be read as the simple narrative of a little girl wanting to climb a fence to eat strawberries. The childlike vocabulary and simple, fragmented sentence structure of the poem seem intended to encourage this literal interpretation. The continued activation of this non-metaphoric interpretation – even once the reader has activated the Location Event-Structure Metaphor and is considering potential target domains – allows the reader to understand that the restrictions placed on women begin in childhood, when little girls face expectations and rules that boys are exempt from. These constraints, which are patently unfair for children, are equally unjust for adults.

The use of allegory in this poem allows Dickinson to heighten the comparison between the source-domain structure (restrictions on little girls' movements) and the target-domain structure (restrictions on women's activities). At the same time, the lack of a clearly defined target domain allows Dickinson to evoke the full range of women's activities that are constrained. Allegory therefore allows Dickinson to simultaneously emphasize the duration of gender inequality, which begins in childhood, and the breadth of this inequality, which extends across a range of adult activities.

Allegory can take a number of forms and serve a number of purposes for poets and authors. However, in conversation and other informal contexts, allegory is not an effective strategy. In any form, the intent of allegory is to prolong ambiguity and uncertainty. In a linguistic context with the primary function of communicating information, allegory is generally an inefficient strategy. Allegory could be expected to appear in informal language only in specific contexts, such as the discussion of taboo topics, or in language play.

13.2.4 Revisited metaphors

We've seen that language tends to "re-use" metaphor; for example, about two-thirds of the metaphors in my corpus involved multiple items from either the source or the target domain. But in some poetry, this "recycling" reaches a whole new level. While this is not precisely a "metaphor evocation device," I mention it here because it entails that many more source-domain items will be used per conceptual metaphor, via whatever means of evocation, than is typical in everyday language.

William Blake is a master of extending and building onto a previously-established metaphor, as in *The Garden of Love*.

(50) I went to the Garden of Love, And saw what I never had seen: A Chapel was built in the midst, Where I used to play on the green.

And the gates of this Cahpel were shut, And "Thou shalt not" writ over the door; So I turn'd to the Garden of Love, That so many sweet flowers bore,

And I saw it was filled with graves, And tomb-stones where flowers should be: And Priests in black gowns, were walking their rounds, And binding with briars, my joys & desires.

William Blake, The Garden of Love, 1794

The metaphor STATES ARE LOCATIONS, and the special case LOVE IS A GARDEN, is evident from the preposition phrase construction *Garden of Love* in the first line of this poem. After this initial evocation of LOVE IS A GARDEN, the poem mostly involves source-domain language relating to this garden. The target domain is only mentioned after this in the repeated phrase *Garden of Love*, and in the phrase *my joys and desires* in the last line (which takes part in a transitive predicate-argument construction).

The continual revisiting of the GARDEN source domain allows Blake to construct a vivid, intricate set of mappings. The chapel represents structure and restrictions where there should be freedom and openness. Via LOVE IS A JOURNEY, obstacles to movement (such as a building with a locked door) map to restrictions on romantic relationships. Since the obstacle is a chapel, we can assume that the restrictions are imposed by the church, and that the chapel metonymically stands for the religious establishment.

Flowers, which stand metonymically for romance, are replaced with graves, which bring in a personification of LOVE and the mapping ENDING IS DYING; therefore,

opportunities for romance have been replaced with the "death" of these chances for joy. By continually revisiting, extending and elaborating LOVE IS A GARDEN, Blake creates a set of mappings that are not part of the standard conceptualization of LOVE via STATES ARE LOCATIONS. Blake's poetry often presents complicated metaphors in this fashion; another excellent example is *A Poison Tree* (1794), which lays out the novel metaphor ANGER IS A TREE in great detail.

Especially in 19th-century poetry, the most commonly revisited metaphors involve personification. Brontë's *Hope* is typical:

(51) Hope was but a timid friend; She sat without the grated den ...

False she was, and unrelenting; When my last joys strewed the ground ...

Hope, whose whisper would have given Balm to all my frenzied pain, Stretched her wings, and soared to heaven, Went, and ne'er returned again!

Emily Brontë, Hope, 1843

Throughout the twenty lines of this poem, HOPE is personified, allowing sensations of hope – or lack thereof – to be understood as Hope's presence or absence. This personification allows the reader to attribute motivation to Hope's behavior, which can then be understood as callous or cruel. Personification is especially well-suited to revisitation of the same metaphor, because it allows a poem or passage to become a narrative, and allows an abstract quality to map to the narrative's protagonist or antagonist. Lakoff and Turner note the commonality of personification in poetic

metaphor (1989:72-80), and in particular cite some good examples of the personification of DEATH (1989:15-17, 78-80).

When we compare the metaphor-evocation devices we've seen in this chapter, a pattern begins to emerge: parallelism, negation of the literal, allegory, and revisited metaphor all have the potential for greater subtlety than other devices; and all also present opportunities for more complex sets of mappings from source to target. These are not advantages in most everyday language. Informal language, such as conversation, is constrained by concerns of clarity and brevity (as summarized by, for example, the Gricean Maxims). Many poetic genres are not constrained in the same way. Readers expect poetry to make them think; and very often, the techniques poets use to achieve this are different from those found in everyday language.

In this chapter we've seen that poets make use of all the normal means of evoking metaphor. Poets are able to bend and twist the same constructions and vocabulary found in everyday language, achieving novel results and building elaborated and extended conceptual and image-metaphoric structures. But poets also have invented a number of more complicated and obscure methods of metaphor evocation, such as those described in the latter half of this chapter: parallelism, negation of the literal, and allegory.

I have not attempted to present an exhaustive list of the devices used for communicating metaphor in poetry. This undertaking would require at least one book and possibly several. Instead, I have tried to give a sense of the type of device that is available to poets, but which is rare in everyday language. The existence of these varied devices does not diminish the importance of grammatical constructions' role in evoking metaphor, because this type of evocation is still the staple of poetic metaphor. Instead,

these poetic devices should be taken as evidence that conceptual metaphor permeates all types of language use. Genres of poetry and literature, which often have different goals and constraints than everyday conversation, simply permit these underlying metaphors to be evoked in more original and creative ways.

14 Metaphor in art

The same conceptual metaphors that are reflected in language are also apparent in non-linguistic contexts. Lakoff and Johnson note that metaphor exists in modalities of human expression besides language, for example in art: "(M)etaphor is not merely a matter of language. It is a matter of conceptual structure. And conceptual structure is not merely a matter of the intellect – it involves all the natural dimensions of our experience, including aspects of our sense experiences: color, shape, texture, sound, etc. ... Artworks provide new ways of structuring our experience in terms of these natural dimensions" thereby creating "new understandings," as new metaphors of any modality do (Lakoff and Johnson 1980:235).

Others have since examined visual metaphors. For example, Forceville (2002) explores the similarity between visual, or "pictorial" and linguistic metaphor. Forceville notes that most visual metaphor is limited by the same unidirectional patterns as linguistic metaphor, and that "prototypical pictorial metaphors are no more amenable to reversability of target and source than are prototypical verbal metaphors" (:7). Forceville presents some excellent examples of pictorial metaphor in film; for example, he cites "[t]he famous cut from the officer Kerensky to a peacock (in Eisenstein's *October*) which Whittock mentions as a cinematic metaphor presenting an 'overt' comparison (1990:48) ... Lang's cut in *Fury* from "housewives gossiping ... to shots of clucking hens" (Bordwell and Thompson, 1997:304, including photos of shots of the housewives and the hens)..."(:8). The juxtaposition of an image representing the target domain of a metaphor, followed by an image evoking the source domain, communicates the metaphor at least as well as any linguistic strategy. Of course, the conceptual metaphors in these images are

also found in language: a vain, pompous person may be called a "peacock," and gossipy women may be called "old hens". The evidence of these metaphors in both art and language suggests that they are conceptual structures that can surface in either art or language.

Some metaphors, such as GOOD IS LIGHT OF KNOWING IS SEEING, seem especially popular in art, presumably because the source domain is itself related to VISION OF LIGHT. A source domain such as LIGHT is easier to communicate using artwork than a source domain such as RESOURCE, FOOD, of UP. The effectiveness of depicting LIGHT in art probably contributes to the preponderance of metaphors such as GOOD IS LIGHT in artwork around the world. Figures in the religious artwork of many cultures, for example, are frequently shown bathed in light, radiating light, or haloed. The metaphor KNOWING IS SEEING is also common in art. One common visual manifestation of KNOWING IS SEEING is the cartoon convention of depicting a lightbulb over the head of a person with an idea. KNOWING IS SEEING is also apparent in the UC Berkeley seal, depicted below.

Figure (14.1) The UC Berkeley seal.



The rays of light issuing from the star represent the knowledge made available by education. The Berkeley motto, "Let there be Light," also evokes KNOWING IS SEEING and reinforces the image's message.

One unusual class of metaphor, called "image metaphor," is also commonly depicted in art. Image metaphor is based on visual mappings relating form, line, color, and other visual properties. For example, Forceville describes a commercial which visually relates a diving girl to a dolphin, using similarities in her position and movement, the texture of her suit, and the lighting, to an image of a dolphin (2002:10). Image metaphor may of course be expressed in language, as in "the girl is a dolphin," but this use does not seem more basic or more central than the visual expression.

Further evidence of the pervasiveness of conceptual metaphor is indicated by its use in spontaneous gesture, as explored in McNeill (1992) and Cienki (1998). Metaphoric gesture, like pictorial metaphor, is not dependent on verbal metaphor. Cienki (1998) observes that metaphoric gestures occur even in the absence of metaphoric language. For example, when a subject in one of Cienki's studies uses the expression "last semester," the student moves one hand to the left, to indicate that the time under discussion is in the past, via the conceptual metaphor TIME IS SPACE. Likewise, when another subject says "have trouble in the future," the subject moves both hands to the right, via the same metaphor. These gestures occur despite the lack of any language instantiating TIME IS SPACE.

Similarly, when discussing morality, a subject moves both hands upwards while saying "if you do the honest thing," but moves the hands downwards saying "if you do the dishonest thing" – the gestures reflecting the conceptual metaphor GOOD IS UP, though the subject's language is purely literal, and does not indicate the spatial source domain of MORE IS UP (1998:196-203). Note that these are the same conceptual metaphors which are instantiated in linguistic expressions such as "last semester is *behind* us now" (TIME IS

SPACE) and "morally *upright*" (GOOD IS UP). Metaphoric gesture also behaves like linguistic metaphor in its unidirectionality, as observed by McNeill (1992:14): a source is mapped to a target but not vice versa. This observation confirms that the same conceptual metaphors are at work in gesture and in language. However, these conceptual metaphors may surface in only gesture, or only in language, and still maintain a recognizable structure.

The evidence from metaphor in language, art, and gesture show that the same conceptual metaphors can underlie both linguistic and extralinguistic processes, but a conceptual metaphor need only be expressed in one of these modalities to be understood.

Despite recent research on how metaphor is communicated using art, there has been no attempt to compare individual artists' metaphoric language with the work that these artists produce. Theoretically, we could expect artists' metaphors for their art to affect their artwork. Different metaphors generate different inferences and emphases, and these inferences and emphases have an effect on the directions that we take in our creative activities. For example, in an experiment run by Gentner and Gentner (1983), one group of subjects was taught to reason about ELECTRICITY as a LIQUID, whereas another group was instructed to think about ELECTRICITY in terms of a CROWD OF PEOPLE. As a result of this training in the use of particular metaphors, subjects in the first group were better at puzzles about electricity which could be solved using inferences from LIQUIDS, but the second group was better at puzzles that used their knowledge about CROWDS OF PEOPLE. Our choice of conceptual metaphors, then, affects not only our metaphoric language, but also our approach to other activities, such as problem-solving. On this basis, I decided to

investigate whether the metaphors artists use to describe their work (and presumably, to conceptualize their work) have an effect on the type of artwork they produce.

To narrow the range of my study, I focused on variations of the metaphor ART IS LANGUAGE. I annotated every instance of this metaphor in a corpus comprised of artists' statements from a broad range of painters, and then compared the artists' linguistic use of this metaphor with the type of artwork the artists produced, in order to determine whether the variations in the artists' use of ART IS LANGUAGE correlated with differences in the artists' work. The rest of the chapter is devoted to this study.

14.1 The voices of image and form

Some artists "talk" to their paint. Abstract artist Masako Kamiya says, "I engage in a dialogue with paint. My statement is each dot I make with the brush, then I respond intuitively to each unexpected play of dots....This process is an interchange with the painting activity" (Zevitas 2003b:65). Other artists, such as painter Joseph Biel, describe their work as "talking" to an imagined audience: "The drawings function for me as a language.....It is my hope that they will communicate with a sense of potency to whatever audience receives them" (Zevitas 2003a:17).

Why do some artists metaphorically "converse" with their materials, while others metaphorically "address" an audience? Are these differences part of more general trends in how artists describe art as "language"? And does the use of different metaphors correspond with the production of particular types of artwork?

In my corpus of artists' statements, I found that all kinds of artists describe their work metaphorically via ART IS LANGUAGE, using terms such as *language*, *conversation*, and

narrative. However, different types of artists use these words with different meanings. There seem to be especially strong correlations between artists' use of certain variations on ART IS LANGUAGE and the artists' tendency to produce representational art (incorporating identifiable subject matter) versus non-representational art (involving only abstract shapes and patterns).

Representational artists talk about "languages" of images or subject matter, whereas non-representational artists tend to use "languages" of colors and forms. This distinction leads to differences in these artists' metaphoric usage of other words related to language, such as *vocabulary*, *words*, and *translation*. Additionally, representational artists try to faithfully represent a subject, which leads to concerns with artistic "truthfulness" that are not shared by non-representational artists.

Perhaps most strikingly, representational artists seem concerned with "speaking" to their viewers, whereas abstract artists' metaphors tend to ignore the viewers of their works. Non-representational artists prefer to "talk" with their own art materials, or even let the elements of their art "converse" amongst themselves.

This difference in "audience" aligns with a difference in the topics that artists "discuss" using their work. Representational artists "tell stories" that are implied by their subject matter, whereas non-representational artists are most interested in the "narrative" of their own process in making a painting. Representational artists, who focus on "describing" subject matter, tend to compare their work to genres of descriptive prose such as "journalism" and "biography". Non-representational artists, on the other hand, are more likely to consider their work as "poetry".

These differences suggest that artists believe in their metaphors. ART IS LANGUAGE is not just a handy way of talking about ART; it is a conceptual structure that affects the way artists think and paint. If representational artists use one set of variations on ART IS LANGUAGE, and abstract painters use another, then this indicates that the variations are a crucial part of the way artists plan, paint and conceptualize their works.

14.1.1 Methodology

The data in this chapter are derived from a corpus of 160 artists' statements from four sequential volumes of *New American Paintings* from 2002-2003. *New American Paintings* is a quarterly book-length volume that bills itself as a "Juried Exhibition-in-Print". Each volume represents forty painters, and includes three paintings and an artist's statement from every artist it represents. For the purposes of this study, the artists' work was sorted into three categories: representational, non-representational, or partly representational. I chose to study *New American Paintings* because (unlike most art magazines) this publication does not focus exclusively on either representational or non-representational work, but includes a balanced selection of both.

Of course, it can be a subjective issue whether a piece of art is representational. Numerous artists claim to depict figures, objects or landscapes, even when these subjects are abstracted to the point of being unrecognizable to the average viewer. Rather than force a standardized notion of "representation" onto artists' work, the current study analyzes artists' conceptualization of their artwork based on their *own* descriptions of its representational or non-representational nature.

Artwork was considered representational if it was described by the artist using terms such as "figurative," "representational" (Zevitas 2003b:45), "hyper-realist" (2003b:13), "photographic" (2003b:13), or "photojournalistic" (2002b:125). 68 Also included in this category was work from artists who made remarks such as: "I...record what I see as faithfully as I can" (2003b:49), "it is my intention to be as accurate as possible to the situation I am observing" (2002a:41), or "I...transform what I see into an image that is recognizable" (2003b:61); and artists who work "strictly from life" (2003a:129) or work "from direct observation" (2002a:125). Artists who discussed elements of their work other than recognizable depictions of objects, people, places, or symbols, were classified as either "non-representational" or "partly representational".

Purely non-representational artwork contained no recognizable imagery. Artists whose work was labeled "non-representational" generally referred to their work as "abstract" or "abstractions," and made remarks such as: "(my) process frees me from intending to construct a recognizable form" (2003b:65), "I believe that working abstractly best expresses my images and ideas" (2003a:37), "I am interested in abstraction in and of itself" (2003a:9) or "these paintings…resist settling on a precise referent" (2002a:101).

Artists were also deemed non-representational if no recognizable imagery was obvious in their work and they did not refer to any concrete subject matter in their statements or titles. These artists' statements consisted of comments such as "I am working with bold flat shapes in pure color" (2003a:9) or observations on the use of "circular brush stroke(s)" (2003a:69), "form in tandem with color" (2002b:37), or "patterns of geometric shapes" (2002a:133). These works were usually untitled, but were

68 Citations of the *New American Paintings* volumes will hereafter omit the editor's name and will include only the year and page number.

⁴⁵⁰

sometimes given names such as "#10" (2002a:133), "Counterparts" (2003a:9), or "Cluster Field 3" (2003a:69).

The majority of artists in the *New American Paintings* corpus combined representational and non-representational elements in their work. For example, one artist combined "the recognizable image of a house" with "areas of color that create a break in the picture plane" (2003a:25). Another artist used "flat space, flat color and an isolated image" (2003a:109), and another "adapt(ed) images from various sources and...abstract(ed) their form" (2003a:141). These artists' work was grouped into a third category: partly representational artwork.

Several artists whose work might appear purely non-representational – such as the artist who created a conglomeration of circles entitled "Leaning Dairy Pile" – made claims that their artwork "blurs the line between abstraction and representation" (2002a:137). Artists who mentioned specific subject matter in their statements, or who claimed to include representational imagery in their work, were also counted as combining representational and non-representational elements. Artists who described themselves as "abstract" but also "interested in figuration" (2002b:141); or who claimed to "locate abstraction" in representational subjects (2002b:57) were also classified as combining representational and non-representational elements.

Based on these criteria, the 160 artists in the corpus include fifty-six representational artists, forty-three non-representational artists, and sixty-one partly representational artists. Most of these artists' statements involve metaphoric language relevant to the analysis in this chapter (thirty-five representational, twenty-three non-representational,

and forty partly representational). ⁶⁹ In addition to these sorted corpus data from the four volumes of *New American Paintings*, this chapter also cites evidence and examples from artists' magazines, art history books, and online sources.

14.1.2 ART FOR ARTIST metonymy

ART IS LANGUAGE often interacts with the metonymy ART FOR ARTIST, in which an artwork stands for the artist who created it. This metonymy is evident in examples such as "I want my work to speak to the process of painting" (2002a:153) or "my drawings tell stories" (2003b:81), in which the artwork, not the artist, is the subject of "speak" and "tell". The artist is, of course, the literal source of the design elements that are conceptualized as "speech" or "stories". However, spatial and temporal distance separate the viewer from the artist, whereas the viewer directly experiences the artist's artwork. The artwork is therefore more salient than the artist in effecting an impact on the viewer. The function of metonymies such as ART FOR ARTIST is to permit more salient elements in a domain to stand for less salient elements (cf. Gibbs 1999), so the relative salience of the artwork in this scenario facilitates the ART FOR ARTIST metonymy.

The occurrence of ART FOR ARTIST metonymy was roughly equal across the different categories of artwork and its frequency did not seem to vary depending on the variant of ART IS LANGUAGE with which it occurred. Nevertheless, awareness of this metonymy is crucial to the analysis of ART IS LANGUAGE, given that ART FOR ARTIST must be disentangled from this metaphor in order to analyze it accurately.

_

⁶⁹ Fewer non-representational artists' statements included relevant data mainly because several of these statements were left blank, or consisted of quoted poetry, or listed cryptic phrases such as "I never had enough pennies for the gumball machine. I am a sucker for beautiful eyes. Flying saucers..." (42: 65). The artists in the other two categories used their artists' statements to discuss their artwork.

14.2 Representational and abstract "languages"

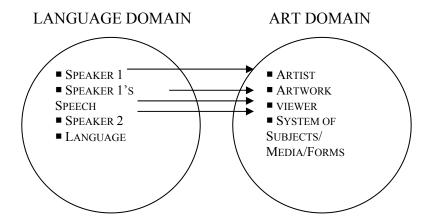
Both representational and abstract artists claim to use visual "languages". However, these "languages" can consist of very different things. In my corpus, the most noticeable difference appeared between the "language" of the abstract painters and the "languages" of the two classes of painters that used some representational elements.

Eight painters whose work involved representation used the term *language* metaphorically. These artists (three purely representational and five partly representational painters) described two types of visual "languages," one consisting of subject matter, and the other of artistic media. For example, urban representational artist Courtney Jordan refers to her subject matter as a "language" of "bridges, buildings and skyscrapers" (2003b:61), and partly representational artist Tommy Fitzpatrick, who depicts architectural forms, claims that "modern architecture is a visual language understood around the world" (2002b:57). The second type of "visual language" involved particular media or methods of art creation, such as the "language of drawing" (2003a:121) or a "painting language" (2003b:61).

The six purely abstract painters who used the term *language* metaphorically did not conceptualize either subject matter or media as languages, but rather referred to systems of shapes, colors, or brushstrokes, as "languages". For example, abstract painter Michael Braden's writes: "Over time, certain common notations have evolved, becoming...a conscious vocabulary that helps me negotiate the language of form" (2003a:33). For other painters, art creation involves "the language of mark-making" (2003b:101), "the imprecise language (of color)" (2002a:101) or an "artistic language with its own structure, colors and narrative" (2003a:9).

These variations can be captured in a diagram of ART IS LANGUAGE, as in Figure (14.2). The boldfaced items represent the possible units within the SYSTEM that is conceptualized as a LANGUAGE.

Figure (14.2) Describing art as *language* evokes ART IS LANGUAGE 70



It is logical that purely abstract painters, who never depict recognizable subject matter, would not conceptualize subject matter as "language". However, it is interesting that the partly representational artists seem to prefer the purely representational artists' metaphors over those of abstract artists. Apparently, artists who use both recognizable images and abstract forms are most likely to conceptualize their subject matter or media as "languages". This is not universally the case; for example, Paul Cezanne used representational imagery and yet spoke of "the language of forms and colors" (Blunden et al. 1970:188). In present-day artists' statements, at least, there seems to be a trend for partly representational artists to consider representation more than abstraction in their use of the term *language*.

⁷⁰ In this chapter, I will omit the frame structure within the relevant domains, in order to more concisely summarize systems of mappings that may involve structure from several frames within a domain.

454

Another puzzle is that abstract artists do not seem to conceptualize their media as languages. This could be ascribed to modern abstract painters' preference for multimedia work, as opposed to using different media in different works. Multimedia work obviates the sharp divide between media that makes it meaningful to conceptualize different media as mutually incomprehensible "languages".

For many non-representational painters, then, shape and color are more important than subject matter or specific media. Abstract artists focus on building unified, coherent systems of shapes or colors. These systems are their "languages".

Representational and partly representational painters, on the other hand, seem most interested in presenting intriguing subject matter, and in perfecting their use of various media. For these painters, "languages" consist of repertoires of subject matter or art media that the painters have mastered.

14.2.1 Painters' "vocabulary," "words" and "translation"

Representational and non-representational painters' conceptualizations of "language" produce different inferences. For representational painters who conceptualize different media as "languages," this leads to the inference that one medium may be "interpreted," or "translated" into another medium: for example, an on-site sketch may later be "translated" into a finished painting (Sanders 2002:14-15) or the human figure may be "translated" from reality onto the canvas (2002b:97).

When representational painters conceptualize subject matter as language, this does not usually lead to opportunities for "translation," possibly because most painters in *New*

American Paintings stick to one type of subject matter. No painter in my corpus claimed to "translate" from one range of subject matter to another.

Occasionally systems of forms can be "translated". Abstract artist Michelle Ross describes her process as "translating the history of abstraction into a personal idiom that includes design, gesture, geometry, (and) pattern" (2003a:133). However, this type of usage was rare. Just as representational painters tended to stick with one repertoire of subject matter, abstract artists preferred to keep to one range of forms and colors, rendering "translation" unnecessary.

Even though a sketch can be "translated" into a finished painting, the use of different media, such as charcoal sketching or oil painting, cannot be conceptualized as possessing other attributes of languages, such as "vocabulary" and "syntax". This is because the use of media, such as oil paints, is not comprised of any distinct units that could be conceptualized as "words" or "vocabulary," and the combination of which could be conceptualized as "syntax".

The abstract painters' systems of form and color, on the other hand, can be broken down into smaller elements such as brushstrokes, dots, and nuances of color. The abstract painters' "language of color and form" therefore has more internal structure than the representational artists' "languages". When an abstract artist has command of a range of shapes or colors, the artist typically is characterized as possessing a large "vocabulary" of colors and forms. For example, artist Donna Baspaly discusses techniques she uses to expand her "creative vocabulary" (Baspaly 2001:37-40), and Martina Nehrling claims that her "visual vocabulary develops as an index of nuances". This mapping implies that each shape or form is a word in a language. Speakers with large vocabularies have

enhanced linguistic resources, which maps to the enhanced repertoires of creative techniques available to a visual artist.

The corpus contained only one instance in which symbols were conceptualized as the "vocabulary" of a "language". Artist Owen Williams, whose work is partly representational, writes that his paintings involve "a personal vocabulary of symbols and images derived from nature, science, and art history" (2002b:161). In general, "languages" of form and color were far more likely to possess "vocabulary" than "languages" of symbols or media.

When colors or forms are conceptualized as "vocabulary," this provides the inference that the harmonious combination of similar forms or colors is "rhyming". For example, the repetition of similar colors can be called "visual rhyming" (2002a:101), and the repetition of "rhymed" shapes can be called "poetry" (2003b:37). The successful combination of shapes can also be conceptualized as "the syntax of visual language" or "the syntax of visual art" (2002a:165). Representational artists, whose "languages" generally lack "vocabulary," tend to miss out on the chance to exploit mappings from "rhyme" and "syntax".

14.2.2 Artistic "truth"

Representational and non-representational artists approach the issue of "truth" in different ways. In general, painters whose work is representational are more concerned with artistic "accuracy" or "honesty" than non-representational painters. Artist Chris Feiro, who works from life, claims that "it is (his) intention to be as accurate as possible to the situation (he is) observing" (2002a:41), and others claim to "document" (2003a:121) or

"describe" (2003b:29) the world; and one painter claims to "try to be specific with the landscape" (2003b:49). Nine representational artists in my corpus made claims of this kind. Three partly representational artists joined these nine in making claims about their "accuracy" or "honesty"; for example, Terri Roland describes her "use of humor (as) a pointed way of being truthful about our destructive and clumsy human nature" (2002b:141), and Judie Bamber wants to combine "the factuality of (a) photographic image with the artificiality of painting" (2003b:13).

Only three purely abstract painters made claims about accuracy, descriptive or explanatory power. Abstract artist Barry Kiperman aims to make his work "factual" (2003b:69), and James Siena wants to make paintings with the ability to "explain" his ideas (2003b:137). However, abstract artists tend to avoid terms such as *accurate*, *descriptive* or *specific*. These artists are not working from recognizable subject matter, and therefore have little that they need to "accurately describe" using their art.

14.2.3 "Narrative" in abstract and representational art

Art that is created with the intent of communicating a sequence of events is often conceptualized as "storytelling" or "narrative". In most cultures art has been used to document events or mythology, accompanying – or in the place of – spoken or written language. In the Western tradition artists may refer to paintings as "allegorical" or as exhibiting "narrative". "My drawings tell stories," says modern representational artist Mitchell Marco. "Each picture focuses on a character" (2003b:81).

In my corpus, the most common term describing art as language was *narrative*, which occurred twenty-two times; *stories* were mentioned ten times, and *allegory* three times.

The representational and non-representational painters used these terms with similar frequencies (for example, *narrative* was mentioned seven times in representational painters' statements, six times in non-representational artists' statements, and nine times in the statements of partly representational artists). However, the three classes of artists did not use these terms in the same way.

Representational painters used *narrative, story* and *allegory* to refer to sequences of events that their subject matter might conjure up. Still life artist Jill Grimes sets up for her paintings "using objects specifically arranged to support a narrative" (2003b:45), which allows the viewer to envision a scenario that led to the arrangement of objects depicted in the still life. Portrait artist Jenny Dubnau was "interested in a specific kind of narrative ambiguity of the sitter...under some kind of physical and emotional duress" (2003b:29); her subject's emotional, yet enigmatic, expressions could inspire a viewer to visualize several possible explanations for the subject's depicted state.

Partly representational artists tended to use *narrative*, *story* and *allegory* with the same meanings used by representational artists. These painters created "narratives made up of objects we think we know" (2003a:81) or "allegories of reality" (2002b:129).

Abstract painters, on the other hand, considered the visible evidence of their artistic process as "narratives" or "stories". Non-representational artist Augusto Di Stefano says: "By incorporating a performative aspect to the procedure (of painting), I am attempting to leave just enough room for something of a hermetic – if not abbreviated – narrative" (2002b:45). Di Stefano's heavy, layered brushstrokes made it evident which brushstrokes were completed first, so the viewer could mentally reconstruct the artist's painting process. This evidence of process constituted the artist's "narrative" to the viewer.

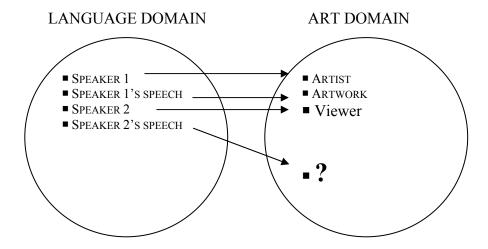
Abstract artist Lisa Liedgren likewise writes that she uses her "own creative process as subject matter" (2003a:113).

Three non-representational artists appeared to subscribe to the representational painters' definition of "narrative," as a sequence of events implied by the painting's subject matter. All three abstract painters, however, noted that they were not interested in this type of narrative, using decisive language such as "I am concerned neither with narrative nor image" (2003b:105).

14.3 Art as dialogue

In most communicative situations, at least two participants interact and respond to each other. When art is understood as language, the LANGUAGE domain typically provides a "Speaker 1," a "Speaker 2," and "Speaker 1's Speech," all of which are mapped to ART. However, Speaker 2's response in the input domain of communication is less easily mapped to any element in the ART domain. This makes it difficult to achieve a satisfactory mapping from the domain of speech, because conversational give-and-take is a crucial component of most spoken communication. The conundrum of "Speaker 2's Speech" is illustrated in Figure (14.3).

Figure (14.3) Describing art as language evokes ART IS LANGUAGE



Artists have found several different ways to map Speaker 2's Speech to the ART domain. Some artists map "Speaker 2's Speech" onto the audience's internal response to the artwork. This is a somewhat unsatisfactory mapping, because the artist cannot respond in turn to the "speech" except by anticipating it. One artist suggests that "lost and found" edges – boundaries which are soft or blurred – "allow the image and viewer to dialogue" more than crisp edges, because the viewer will have to search for the edges and will be more of a participant in understanding the painting (Newfield 2001:61-63). Many artistic techniques have evolved with the intent of maintaining a viewer's interest in the painting. However, an artist's anticipatory response to viewer's potential reactions still falls short of permitting a more complete conversational mapping. 71

"Speaker 2's Speech" was rarely mapped onto a viewer's reaction in my corpus. In the *New American Paintings* volumes, artists identified both speakers in an artistic "dialogue" or "conversation" thirty-five times. The viewer was mapped from a

⁷¹ Artists' endeavors may be described as an "answer" or a "response" to other artists' previously created works. For example, (Gardner 1993: 183) writes that "(Picasso's) *Les demoiselles d'Avignon* has been seen as an answer to Matisse's *Woman with a Hat* and *Le bonheur de vivre*". Unfortunately, this kind of

conversational addressee nine times, but in only one instance was the viewer described as the conversational participant who was speaking (when representational artist Sarah Nicole Tanner mentioned that she was seeking a "response" from the viewer [2002a:145]).

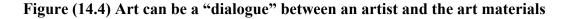
Some modern art deliberately seeks to expand the audience's role, to more perfectly fit the communicative model. Performance art exemplifies this attempt. The performance artist's ability to respond to the audience's reactions is usually integral to the art form. Other forms of art include video cameras or mirrors which reflect the audience and their reactions, or music which changes according to the audience's movements. Some art depends entirely on the viewers and their actions for its significance. For example, Marco Evaristti's exhibition of blenders containing live goldfish – which museum visitors could either blend or refrain from blending – relied on audience actions to make its statement about human nature (of the thousands of visitors, only a few blended fish each day). Likewise, the "artificial cloud" created by two New York architects, in which visitors' raincoats change color in response to the presence (and programmed information about the wearers' likes/dislikes) of other visitors, eschews the "passive" quality of traditional "paper art," according to the artists, and more completely represents a "conversation" than traditional painting (Deere 2001:109).

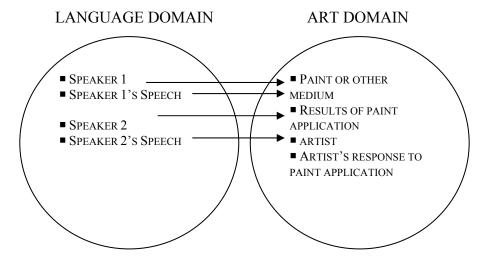
However, the painters represented in *New American Paintings* lack some of the communicative options that are open to performance artists. These painters have found various other solutions to the problem of "Speaker 2's Speech," explored in the following sections.

[&]quot;dialogue" was not represented in my corpus. (Thanks to Eve Sweetser for noting this type of "conversation".)

14.3.1 Eavesdropping on art

While some modern artists seek to expand the audience's role, other artists make use of language metaphors which marginalize the audience. Twenty-six of the thirty-five examples of "conversation," "dialogue" or "exchange" in the *New American Paintings* corpus did not map the viewer at all. How, then, can an artistic conversation occur? One way in which this can happen is if we conceptualize the *artwork*, not the viewer, as a Speaker in the "dialogue". This is shown in Figure (14.4).





Many abstract artists now speak of communicating with their paint or art materials, rather than with a human audience. When Masako Kamiya writes, "I engage in a dialogue with paint....This process is an interchange with the painting activity" (2003b:65), she is referring to a "conversation" in which the audience has no role. The only possible mapping for the audience is as an eavesdropper on the conversation between Kamiya and her paint.

Kamiya's metaphor can be more cognitively satisfying than the version involving communication between artist and viewer. A painting immediately shows the results of

the artist's activity, and the artist can proceed with the painting differently in response to these results. The viewer's reaction to the artwork, on the other hand, occurs at a different time and in a different place from the artist's creative process. The artist and viewer may be separated in space and time, and so the artist cannot easily make changes as a reaction to the viewer's reception of the painting.⁷²

However, the mappings in Figure (14.4) come with their own limitation. This variation on ART IS LANGUAGE can operate only in a situation where the artist cannot entirely predict how a painting will progress. As a result, the metaphor is used only by artists whose work involves random elements. The metaphor is not, therefore, favored by purely representational painters. In my corpus, only one representational artist referred to his process as a conversation between his artwork and himself, but abstract painters used this mapping seven times, and artists who combined representational and non-representational elements used the mapping three times. Abstract painters made comments such as: "I listen to my composition as it evolves" (2002a:101), or "When I paint, it is a dialogue between myself and that first mark on the canvas that establishes a simple point of departure" (2003a:33).

Purely representational painters did not generally use this sort of metaphoric language. The lone representational artist who used this version of ART IS LANGUAGE, Garrison Roots, referred to his work as a whole rather than to his materials: "My interest now is to develop a conversation between the work and myself" (2002b:145). Here, Roots seems to be mapping the realization of an idea on canvas as a conversational

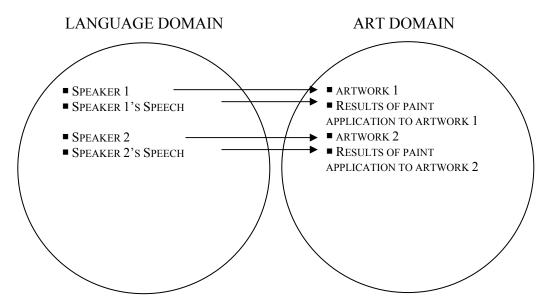
-

⁷² Artists painting on commission are an exception to this trend, as the commission process may involve repeated meetings between artist and customer. (Thanks to Janell Sorensen for this observation). The *New American Paintings* corpus does not include commissioned paintings, so these were not considered in the current study.

participant, and his reaction to this as his response. Roots presumably does not fully plan his paintings before beginning them, in order to have the flexibility to "respond" to his ideas as they materialize on canvas.

It is also possible to use a conversational metaphor which maps *neither* artist nor audience. One version of this metaphor maps conversational participants onto multiple artworks by the same artist, as in Figure (14.5).

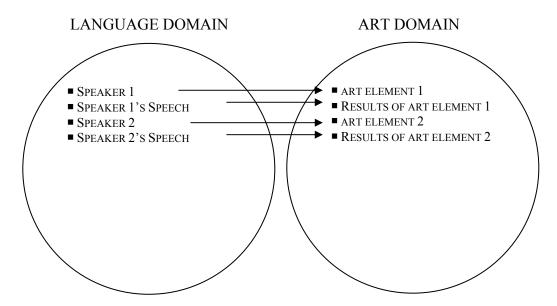
Figure (14.5) Art can be a "dialogue" between artworks



This version of ART IS LANGUAGE may be used by artists working several canvases simultaneously. "I like the way one picture starts a dialogue with the next," says artist Neo Rauch (Galloway 2001:110-111). This particular metaphor was, unfortunately, not found in my corpus. This may be because only three works from each painter were included, and the artists did not refer in their statements to works that were not included in the *New American Paintings* volumes.

However, a variation on the metaphor in Figure (14.5) was well-documented in the corpus. This version of ART IS LANGUAGE maps conversational participants onto multiple elements of a painting-in-progress, as shown below.

Figure (14.6) Art can be a "dialogue" between art elements



This system of mappings is similar to the one in Figure (14.5), in that elements of an artwork are conceptualized as "speaking". In the above version, however, the elements are imagined to speak to each other through unplanned interactions. As a result, this variant of ART IS LANGUAGE only applies to artwork in which the artist does not have complete control over the painting process. Unsurprisingly, like the structure in Figure (14.5), this metaphor is used mainly by abstract artists who depend on random interactions to produce their work. In the *New American Paintings* corpus, no purely representational painters used the system of mappings in Figure (14.6), but it was referenced five times by non-representational painters, and nine times by partly representational artists.

A typical example is provided by abstract artist Anne Neely's statement, in which she reports that her goal in art is to explore "how color, paint and form meet and respond to one another" (2003b:101). In abstract painter Tony Beauvy's paintings, "there are multiple dialogues between background and foreground, shape and color, and also with the edges of the paintings" (2003a:9).

In all of the versions of ART IS LANGUAGE discussed in this subsection, abstract artists were more concerned with exploring the use of their materials and formal elements than purely representational artists. As a result, abstract artists' materials and elements could "speak"; and they would converse either with the artist, or with one another.

14.4 Written versus spoken language

For artists who prefer to "communicate" with their audience rather than their materials, one way to avoid the problem of mapping "Speaker 2's Speech" is to conceptualize artwork as *written* language. Texts, in many contexts, do not permit an in-kind response from the readers. In this sense, written language is the perfect way to conceptualize art, as in Figure (14.7):

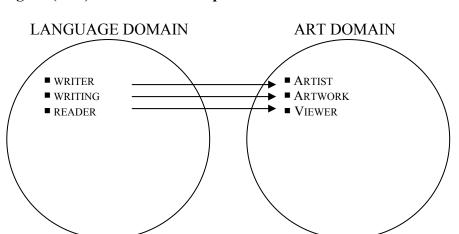


Figure (14.7) ART can be conceptualized as written LANGUAGE

More representational artists than non-representational artists choose to describe their work in terms of *written* communication, precisely because this choice helps them escape the dilemma of "Speaker 2's Speech". In the *New American Paintings* corpus, purely representational artists used ten references that necessarily involved written communication (as in "these paintings (are) a diary" [2002a:165]); non-representational artists used five, and partly representational artists used twenty-one. On the other hand, non-representational artists used sixteen examples that necessarily involved spoken communication (such as "I listen to my composition" [2002a:101]), whereas representational artists used only fourteen, and partly representational artists used twenty-five ⁷³

As we saw in the previous section, non-representational artists have the option of mapping art elements as Speaker 2, thus making it possible to map "Speaker 2's Speech" onto the effect of these materials or elements on the artist. Since abstract art can, in this way, be conceptualized as spoken language, it is not necessary for abstract artists to circumvent the problem of "Speaker 2's Speech" by referring to written language. This, I believe, explains why representational artists are more likely than abstract artists to describe their work in terms of written communication.

14.4.1 Genres of artistic "poetry" and "prose"

For some artists, different genres of writing are mapped to genres of art. For example, "still lifes...offer a degree of creative freedom unlike any other genre – a dichotomy which (still life artist Daniel) Greene likens to the difference between fiction and

-

⁷³ The remaining examples could be considered as either spoken or written communication, as in "a visual language" or a "vocabulary of symbols". Both spoken and written communication involve "language" and

nonfiction writing" (Sullivan 2001:30-35). Frank Webb, a judge in an art contest, uses a similar mapping when he says he wants "to see a painting that's more in the manner of the poetic than the journalistic" (Carpenter 2002a:8). Partly representational artist Patricia Hernandez classifies her work as "more fiction than biography" (2002b:77) and realist painter Sally Cleveland says her work is "journalistic in nature" (2003a:61). Artist Calvin Seibert calls his work "a diary, a visual text" (2003b:129). A surreal piece, such as Nic Hess's partly representational masking tape art, can even be imagined as a "fairy tale" (Spiegler 2002:96).

As might be expected, representational painters are more likely than non-representational painters to call their work "journalistic," a "record" of time and place, "biography" or "autobiography". These genres involve specific topics, which map to the subject matter of representational works. A biography, for example, describes the life of a person; so this genre maps well to portraiture, which depicts a person. An autobiography, which describes the writer, maps to a self-portrait of the artist. Artworks that lack specific subject matter cannot easily be understood as written genres with specific topics, and no non-representational painters in my corpus used the terms *journalistic*, *record*, *biography* or *autobiography*.

Abstract painters instead favored words such as *poetry*, *poetic*, and *lyrical* to describe their work. Artist Andrew Lang, who combines representational and abstract elements, says that creating his paintings is "like writing certain kinds of poems (which) are worked and reworked over a long period of time" (2002b:101). Poets are often more concerned with creating a certain emotional mood than with the precise description of a subject.

Both abstract and representational painters are intent on developing a particular

"vocabulary". 469

emotional effect in their works, so both non-representational and representational painters can conceptualize their work as poetry. Abstract artists used terms such as *poetry*, *poetic*, and *lyrical* three times, while each of the other classes of painters used these twice.

Along with mappings from particular genres of writing, conventions specific to written communication may also be mapped. A simplified drawing of a subject may be termed an "abbreviation"; a simplified style is "shorthand". An attention-getting point of interest, such as a butterfly hovering over a still life, may be a "punctuation mark" (Carpenter 2002b:30, Esterow 2001:34).

An actual or potential "reader" is an essential part of art, according to the metaphoric structure in Figure (14.7). A reader, as opposed to a conversational participant, does not usually have the opportunity of communicating with the writer whose work he or she reads. For this reason, written communication fits well with a metaphoric conceptualization of the art process. Art viewers, like readers, normally lack an opportunity to respond to the person whose creative works they enjoy. Written communication also offers a range of mappings that are not available when art is conceptualized as spoken communication, such as written genres, topics of writing, and writing conventions such as punctuation.

These benefits make the metaphor in Figure (14.7) appealing to artists of all types. Once again, we see that representation in art has an effect on metaphor: here, it permits genres of writing on a particular topic, such as biography and journalism, to map to artworks with a particular subject.

14.5 Direct "quotations" from artwork

Artwork is not only *described* in terms of language, it is *conceptualized* as language. This is apparent when the exact words "spoken" by an artwork are directly "quoted" by an artist, critic or viewer. As Esther Pascual (in press) observes, this type of direct speech demonstrates that a metaphor does not consist merely of special meanings of items such as *say* or *tell* that are stored in the lexicon. Direct speech demonstrates that speakers do not memorize the fact that *say* can mean "portray in artwork," because it would be impossible for speakers to memorize every possible quotation that artwork could "say". In order to "quote" from artwork's "speech," therefore, the artwork must be conceptualized as "speaking" at some level deeper than the lexicon.

Direct "quotes" from artwork are abundant on art websites. Most unambiguous usages involve the ART FOR ARTIST metonymy, because an artist *can* literally speak and be quoted (often rendering a passage ambiguous between literal and metaphorical "speech"), whereas an artwork cannot. This metonymy is especially clear in examples such as (1):

(1) Instead of offering a counter-example to our shallow mass culture, (a typical contemporary artist) caves into it and produces art that says, in effect, "See what you made me do?"

http://www.columbia.edu/cu/najp/publications/articles/plagens.pdf

Here, the question *See what you made me do?* is indirectly attributed to the artist, who wants the world to "see what it made him or her do". The ART FOR ARTIST metonymy then allows the "quotation" to be directly attributed to the artwork instead of the artist.

It is apparent that (1) involves a metaphor of the type described in this chapter, because neither the artist nor the artwork is literally speaking. The direct "quotation" of the artist/artwork cannot be the result of a lexicalized sense of *say*, since the exact phrasing of the "quotation" is included along with the verb *say*. It would likewise be unreasonable to hypothesize a special lexical sense of the entire sentence *See what you made me do?* – a special sense that is only used in describing the effects of artwork. Since the meaning of (1) cannot be attributed to anything in the lexicon, the use of this sentence in a direct "quotation" of an artist's work is evidence that a conceptual process (such as ART IS LANGUAGE) must be at work in the production and interpretation of examples such as (1).

Even more lengthy direct "quotations" can be attributed to art, as in example (2) below

(2) But I think my tendency, and most artists' tendency (is to) make sublime art – art that says, "I'm the sensitive person, I'm your guide and you could never have seen this without me, the sensitive artist showing it to you".

http://www.alamut.com/past/0506.html

The complex string of clauses "quoted" in (2) is even less likely than the example in (1) to have a special sense in the lexicon related to artistic expression. Example (2) also makes the ART FOR ARTIST metonymy especially evident, when the author of (2) refers to himself as "the sensitive artist showing (the art) to you". Only the ART FOR ARTIST metonymy makes it possible for the author's "quotation" to be attributed to his art, and yet for the author to refer to himself, within that "quotation," as "me, the sensitive artist".

Other metaphoric mappings can be evident in direct "quotations". For example, artistic style is conceptualized as speech style in (3)-(4), in which art "whispers" and "screams":

- (3) That painting whispers its insolent message: "This is the way I like it, if you don't, tough shit!"

 http://www.imagefactory.bz/exhibitions/exhbtnsjoanduran.htm
- (4) Don't create art that screams "here I am." http://www.sandiego.gov/citycouncil/cd1/neighborhoods/lajolla/pdf/project_minut es.pdf

These examples show that direct "quotations" not only map speech content to artistic content, as in (1)-(2), but can involve other mappings, such as from speech style to artistic style.

Direct "quotations" can also be used in compounds, as in (5).

(5) ... few patrons are interested in 'notice me' art... www.pwdeegan.org/?m=200510

There appears to be little difference in the use of direct "quotations" between abstract and representational work, and in fact, the *New American Paintings* volumes I studied did not contain any direct "speech" of this kind. However, the existence of examples such as (1)-(5) provides important evidence that the metaphoric mappings discussed in this chapter exist conceptually as well as linguistically, since the "quotations" are too complex and inventive to be ascribed to lexical senses of words and phrases. These "quotations" can therefore be taken as evidence that the disparity between abstract and representational artists' uses of ART IS LANGUAGE, as explored in this chapter, stems from differences in the conceptual structure of this metaphor in the minds of abstract and representational painters.

14.6 Trends in "speaking," painting and thinking

The way artists write about their work shows how they think about their work. For example, representational artists focus on their subject matter and their audience in their metaphoric language, which can be taken as evidence that these artists consider their subject matter and audience when they paint. Representational painters conceptualize systems of symbols or images as "languages," and faithfulness to subject matter as "truth". When these artists "tell stories," their narratives are about their subject matter. And when these artists describe their work in terms of written language, they refer to written genres with specific topics, such as biography or journalistic description, so that the subject matter of their artwork is understood as the topic of the writing. Representational artists are concerned with having a certain effect on their audience, and to this end they "speak to the viewer" or provide a "message" for the viewer to "read". Some representational artists invent new ways to include the audience in their "conversation," such as incorporating complexities in their art which the viewer explores slowly. In more recent years, artists have moved beyond this illusion of responsiveness and have developed works which literally react to the audience.

However, many non-representational artists have moved in the opposite direction. Abstract artists often fail to map the audience into their artistic process, focusing instead on "conversation" with (or amongst) their materials, colors and forms. The audience is mute witness to a conversation in which it plays no part. No doubt some audiences enjoy playing the "eavesdropper" on this artistic process. However, when artists decline to consider audience comprehension in their metaphors and artistic process, it decreases the likelihood that an audience will understand the art.

Abstract artists' focus on materials, colors and forms surfaces in other ways. These painters' "languages" are systems of colors and forms, not systems of images or subject matter. These artists are not concerned with "accuracy" or "description," and when they "tell stories," they "tell the story" of their painting process and their use of materials.

The *New American Paintings* corpus, with its balanced cross-section of representational and non-representational work, provides clear evidence of pervasive differences in representational and abstract painters' conceptualization and description of their work. The fact that artworks can be "directly quoted" attests that the structure of ART IS LANGUAGE is conceptual, and not merely linguistic. Abstract artists, then, really think about their work in a different way than representational artists.

The differences in conceptualization apparent in these artists' language and painting strongly argue that metaphor is active for these artists on a subconscious level – and that visual and linguistic metaphors, both conscious and unconscious, stem from the same underlying conceptual structures.

15 Conclusion

Over the past decades, research has shown that metaphor operates at a conceptual level deeper than language, gesture, or artwork. In this dissertation, we've seen that when conceptual metaphor *does* surface in language, it piggybacks on the patterns of meaning construction that are part of all language. Most fundamentally, metaphoric language appears to make use of the distinction between conceptually autonomous and conceptually dependent elements (cf. Langacker 1987), and the combination of these elements into more elaborate units of meaning and form. Part I of this dissertation paved the way for an explanation of metaphoric language in terms of conceptual autonomy and dependence, by introducing a new method of representing autonomy and dependence using semantic frames (cf. Fillmore 1982); and by outlining a new way of modeling the structure of metaphor using these same frames.

In Part II, we dove into the central argument of the dissertation, when we explored how conceptually autonomous slots in constructions tend to be filled with items that evoke the target domain of a metaphor, while the conceptually dependent slots are the ones reserved for source-domain items. Many exceptions to these trends follow rules of their own. For example, a construction's idiosyncratic semantics can intercede in the metaphoric meaning and uses of a phrase or clause (as in resultatives, idioms, and the other constructions explored in Part IV). Some apparent exceptions turn out to not be metaphor at all, such as the examples of metonymic inferencing explored in Part III.

Our reliance on these constructional patterns might seem constrictive. Metaphoric language that diverges from the trends outlined here requires effort, ingenuity – and resources such as context, gesture or the use of visual media. Even poets, whose job is the

creative use of language, find themselves bound to a certain degree by the conventions of metaphoric language, and cannot easily put a source-domain item in a conceptually autonomous constructional slot (Chapter 13).

However, the constructional conventions of metaphoric language give us enormous freedom within the boundaries they set. When we use the systems of conceptual autonomy and dependence that are already available in language, we can communicate metaphoric mappings with astonishing economy. A speaker only needs *two words* to make a hearer bring to mind all the rich complexity of a conceptual metaphor (using a predicating modifier construction, a domain construction, etc.). In fact, a speaker only needs two *morphemes*, which may be one "word" in a language such as Finnish (Chapter 8).

The efficiency granted by constructional conventions benefits poets as well as everyday speakers. In Chapter 13, we saw that a few carefully chosen words can express a special case of a metaphor, an unusual image metaphor, or a novel combination of metaphors. The established conventions of metaphoric language allow a reader to reconstruct unusual or novel metaphors, even when a poem offers only a few words to work with. The existence of conventional patterns in metaphoric language also allows poets to give their work an unusual subtlety, if they choose to circumvent the standard means of communicating metaphor and instead rely on devices such as parallelism, negation of the literal, or allegory (Section 13.2).

Clearly, the systematic use of particular constructions is an advantage for speakers communicating the structure of metaphors. It is my hope that the *recognition* of this systematicity will likewise prove valuable for academic researchers interested in

cognition, language, or literature. Recognition of the patterns in metaphoric language could benefit a range of fields, including Construction Grammar, which can refine its understanding of constructional meaning; natural language technologies (such as AI, search engines, and translation software) which can improve computer recognition and comprehension of metaphoric language; cognitive stylistics, in which the intent and comprehension of literary metaphor can be more precisely interpreted; and, of course, cognitive linguistics, which relies on metaphoric language as an important source of data on conceptual metaphor. Many of these fields have already benefited from the past decades' research on conceptual metaphor and/or constructional meaning. Understanding the *interaction* of conceptual metaphor and constructional meaning can only bring further rewards.

Bibliography

- Barcelona, Antonio 2002. "On the Ubiquity and Multiple-Level Operation of Metonymy". In: B. Lewandowska-Tomaszczyk, K. Turewicz, and Peter Lang, eds., *Cognitive Linguistics Today*. Frankfurt a. M., 207-224.
- Barcelona, Antonio 2003. "Clarifying and applying metaphor and metonymy". In: René Dirven and Ralf Pörings, eds., *Metaphor and Metonymy in Comparison and Contrast*. Berlin/New York: Mouton de Gruyter, 207-278.
- Barsalou, Lawrence W., Karen Olseth Solomon and Ling-Ling Wu 1999. "Perceptual Simulation in Conceptual Tasks". *Current Issues in Linguistic Theory* 152, 209-228.
- Bartsch, Renate 2003. "Generating polysemy: Metaphor and metonymy". In: René Dirven and Ralf Pörings, eds., *Metaphor and Metonymy in Comparison and Contrast*, Berlin/New York: Mouton de Gruyter, 48-74.
- Baspaly, Donna 2001. "A Voyage of Discovery". The Artist's Magazine, Aug., 37-40.
- Beitel, Dinara A., Raymond W. Gibbs Jr., and Paul Sanders 1997. "The Embodied Approach to the Polysemy of the Spatial Preposition *on*." In: Cuyckens, Hubert and Britta E. Zawada, eds., *Polysemy in Cognitive Linguistics*. Amsterdam, Philadelphia: John Benjamins, 241-260.
- Benczes, Réka 2006. *Creative Compounding in English*. Amsterdam/Philadelphia: John Benjamins.
- Bergen, Benjamin K. and Nancy Chang 2004. "Embodied Construction Grammar in Simulation-Based Language Understanding". In Jan-Ola Östman and Mirjam Fried (eds.), *Construction Grammar(s): Cognitive and Cross-Language Dimensions*. John Benjamins.
- Blank, Andreas 1999. "Co-presence and succession". In: Klaus-Uwe Panther/G. Radden, eds., *Metonymy in Language and Thought*, Amsterdam/Philadelphia, 169-191.
- Blunden, Maria and Godfrey Blunden 1970. *Impressionists and Impressionism*. New York: The World Publishing Co.
- Bowerman, Melissa 1996. "Learning how to structure space for language: A crosslinguistic perspective." Chapter 10 of *Language and Space*, Paul Bloom, Mary A. Peterson, Lynn Nadel, and Merril F. Garrett, eds. Cambridge MA: MIT Press, 383-436.
- Bordwell, David and Kristin Thompson, 1997. *Film art: An introduction* (5th edition). New York: McGraw-Hill.

- Boroditsky, L. 2000. "Metaphoric Structuring: Understanding time through spatial metaphors". *Cognition* 75(1), 1-28.
- Brisard, Frank, Gert van Rillaer and Dominiek Sandra 1997. "Processing Polysemous, Homonymous, and Vague Adjectives". In: Cuyckens, Hubert and Britta E. Zawada, eds., *Polysemy in Cognitive Linguistics*. Amsterdam, Philadelphia: John Benjamins, 261-284.
- Brooke-Rose, Christine 1958. A Grammar of Metaphor. London: Secker and Warburg Ltd
- Bybee, Joan and Joanne Scheibman 1999. "The effect of usage on degrees of constituency: the reduction of *don't* in English". *Linguistics* 37(4), 575-96.
- Carpenter, Sandra 2002a. "Dialogue". The Artist's Magazine, Dec., 8-11.
- Carpenter, Sandra 2002b. "2002 Art Competition: Still Life". *The Artist's Magazine*, Dec., 30-32.
- Chapman, Jim 2001. "Reach for the Sky". The Artist's Magazine, July, 44-49.
- Cienki, Alan 1998. "Metaphoric gestures and some of their relations to verbal metaphoric expressions". In: Jean-Pierre Koenig, ed., *Discourse and Cognition: Bridging the Gap.* Stanford, CA: CSLI, 189-204.
- Croft, William 1998. "Linguistic evidence and mental representations". *Cognitive Linguistics* (9)2, 151-173.
- Croft, William 2003. "The role of domains in the interpretation of metaphors and metonymies". In: René Dirven and Ralf Pörings, eds., *Metaphor and Metonymy in Comparison and Contrast*. Berlin/New York: Mouton de Gruyter, 161-206.
- Dancygier, Barbara and Eve Sweetser 2005. *Mental Spaces in Grammar: Conditional Constructions*. Cambridge: Cambridge University Press.
- Deere, Jessica 2001. "Climate Changers". ARTnews, Dec., 109.
- Ernst, Thomas 1984. *Towards an Integrated Theory of Adverb Position in English*. Bloomington, IN: Indiana University Linguistics Club.
- Ernst, Thomas 2001. *The Syntax of Adjuncts*. Cambridge, UK: Cambridge University Press.
- Esterow, Milton 2001. "ARTnews Retrospective". ARTnews, Dec., 34.

- Faltz, Leonard M. 1989. "A role for inference in meaning change". *Studies in Language* 13(2), 317 ff.
- Fass, Dan 1997. Processing Metonymy and Metaphor. Greenwich: Ablex Publishing Co.
- Fauconnier, Gilles and Mark Turner 1996. "Blending as a central process of grammar". In: Adele Goldberg, ed., *Conceptual Structure, Discourse and Language*. Stanford, CA: CSLI Publications, 113-130.
- Fauconnier, Gilles 1997. *Mappings in Thought and Language*. Cambridge: Cambridge University Press.
- Fillmore, Charles J. 1982. "Frame Semantics". In: The Linguistic Society of Korea, ed., *Linguistics in the Morning Calm*, Seoul: Hanshin Publishing Co., 111-137.
- Fillmore, Charles 1990. "Epistemic stance and grammatical form in English conditional sentences". CLS 26, 137-62.
- Fillmore, Charles, Paul Kay and Mary Catherine O'Connor 1988. "Regularity and Idiomaticity in Grammatical Constructions: The Case of *Let Alone*". *Language* 64, 501-538.
- Fillmore, Charles and Paul Kay 1999. "Grammatical constructions and linguistic generalizations: The *What's X Doing Y?* construction". *Language* 75, 1-33.
- Fong, Vivienne 1998. "Space and Time in the Semantics of the Finnish Case System". In Jean-Pierre Koenig, ed., *Discourse and Cognition*. Stanford: CSLI Publications, 17-27.
- Forceville, Charles 2002. "The identification of target and source in pictorial metaphors". *Journal of Pragmatics* 34(1), 1-14.
- Galloway, David 2001. "The New Look of Neo". ARTnews, Dec., 110-111.
- Gardner, Howard E. 1993. Creating Minds: An Anatomy of Creativity Seen Through the Lives of Freud, Einstein, Picasso, Stravinsky, Eliot, Graham, and Gandhi. New York: Basic Books.
- Geeraerts, Dick 1992. "Prototypicality effects in diachronic semantics: A round-up". In: Kellerman, W., Morrissey, M. D., eds., *Diachrony within Synchrony. Language History and Cognition*. Frankfurt am Main: Peter Lang, 229-250.
- Geeraerts, Dick 2003. "The interaction of metaphor and metonymy in composite expressions". In: René Dirven and Ralf Pörings, eds., *Metaphor and Metonymy in Comparison and Contrast*. Berlin/New York: Mouton de Gruyter, 435-468.

- Geis, Michael L. and Arnold M. Zwicky 1971. "On invited inferences". *Linguistic Inquiry* 2, 561-566.
- Gentner, Dedre and Donald Gentner 1983. "Flowing Waters and Teeming Crowds". In: D. Gentner and A. L. Stevens, eds., *Mental Models*. Hillsdale, NJ: Erlbaum Associates, 99-129.
- Gibbs, Raymond W. Jr. 1990. "Psycholinguistic studies on the conceptual basis of idiomaticity". *Cognitive Linguistics* 1(4), 417-451.
- Gibbs, Raymond W. Jr. 1994. *The Poetics of Mind: Figurative Thought, Language, and Understanding*. New York: Cambridge University Press.
- Gibbs, Raymond W. Jr. 1999. "Speaking and Thinking with Metonymy". In: Klaus-Uwe Panther/G. Radden, eds., *Metonymy in Language and Thought*. Amsterdam/Philadelphia, 61-76.
- Gibbs, Raymond W. Jr., Josephine M. Bogdanovich, Jeffrey R. Sykes, and Dale J. Barr 1997. "Metaphor in Idiom Comprehension". *Journal of Memory and Language* 37, 141-154.
- Gibbs, Raymond W. Jr. and Teenie Matlock. 1999. "Psycholinguistics and mental representations". *Cognitive Linguistics* 10(3), 263-269.
- Gibbs, Raymond W. Jr. and Teenie Matlock. 2001. "Psycholinguistic perspectives on polysemy". In: Cuyckens, Hubert & Britta Zawada, eds., *Polysemy in Cognitive Linguistics*. Amsterdam, Philadelphia: John Benjamins, 213-39.
- Gibbs, Raymond W. Jr. and Gerard Steen, eds., 1999. *Metaphor in Cognitive Linguistics*, Amsterdam: John Benjamins.
- Goldberg, Adele E. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: The University of Chicago Press.
- Goldberg, Adele E., Devin M. Casenhiser and Nitya Sethuraman 2005. "The role of prediction in construction learning". *Journal of Child Language* 32, 407-426.
- Goossens, Louis 2003a. "Metaphtonymy: The interaction of metaphor and metonymy in expressions for linguistic action". In: René Dirven and Ralf Pörings, eds., *Metaphor and Metonymy in Comparison and Contrast*. Berlin/New York: Mouton de Gruyter, 349-377.
- Goossens, Louis 2003b. "Patterns of meaning extension, "parallel chaining," subjectivication, and modal shifts". In: A. Barcelona, ed., *Metaphor and Metonymy at the Crossroads. A Cognitive Perspective*, Berlín, Mouton de Gruyter, 149-169.

- Grady, Joseph 1998. "The 'Conduit Metaphor' Revisited: A Reassessment of Metaphors for Communication". *Discourse and Cognition: Bridging the Gap.* Ed. JP Koenig.
- Grady, Joe and Christopher Johnson 1998. "Converging evidence for the notions of subscene and primary scene". Proceedings of the 23rd Annual Meeting of the Berkeley Linguistics Society, Berkeley, CA: BLS, 123-136.
- Grady, Joseph E., Todd Oakley and Seana Coulson 1999. "Blending and Metaphor". In: R. Gibbs, ed., *Metaphor in Cognitive Linguistics*. Amsterdam: John Benjamins, 101-124.
- Grice, Herbert Paul 1989. *Studies in the Way of Words*. Cambridge, MA: Harvard University Press.
- Haser, Verena 2003. "Metaphor in semantic change". In: Antonio Barcelona, ed., *Metaphor and Metonymy at the Crossroads*, Berlin/New York: Mouton de Gruyter, 171-194.
- Heine, Bernd and Tania Kuteva 2002. *World Lexicon of Grammaticalization*, Cambridge: Cambridge University Press.
- Higgins, R. F. 1979. The Pseudo-cleft Construction in English. New York: Garland.
- Israel, Michael 1996. "The *Way* Constructions Grow". In: Adele E. Goldberg, ed., *Conceptual Structure, Discourse and Language*. Stanford, CA: CLSI, 217-230.
- Jackendoff, Ray 2002. Foundations of Language. Oxford: Oxford University Press.
- Johnson, Christopher. 1997. "Learnability in the acquisition of multiple senses: SOURCE reconsidered". *Proceedings of the 22nd Annual Meeting of the Berkeley Linguistics Society*, Berkeley, CA: BLS, 469-480.
- Johnson, Christopher 1997. "Metaphor vs. conflation in the acquisition of polysemy: The case of *see*". In: M.K. Hiraga, C. Sinha and S. Wilcox, eds., *Cultural, Typological, and Psychological Issues in Cognitive Linguistics, Current Issues in Linguistic Theory 152*. Amsterdam, 155-169.
- Karlsson, Fred 1983. *Finnish: An Essential Grammar*. London and New York: Routledge.
- Katz, A., C. Cacciari, R. Gibbs and M. Turner, 1998. *Figurative Language and Thought*, New York: Oxford University Press.
- Kittay, Eva Feder 1987. *Metaphor: Its Cognitive Force and Linguistic Structure*. Oxford: Oxford University Press.

- Koch, Peter 1999. "Frame and contiguity: On the cognitive bases of metonymy and certain types of word formation". In: Klaus-Uwe Panther/G. Radden, eds., *Metonymy in Language and Thought*. Amsterdam/Philadelphia, 139-167.
- Lakoff, George 1980. "Getting the whole picture: The role of mental images in semantics and pragmatics". *Proceedings of the 6th Annual Meeting of the Berkeley Linguistics Society*, Berkeley, CA: BLS, 191-195.
- Lakoff, George 1987. Women, Fire and Dangerous Things. Chicago: University of Chicago Press.
- Lakoff, George and Mark Johnson 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lakoff, George and Mark Turner 1989. *More Than Cool Reason*. Chicago: The University of Chicago Press.
- Lakoff George 1997. "How Unconscious Metaphorical Thought Shapes Dreams". In: Dan Stein, ed., *Cognitive Science and Psychoanalysis*. New York: American Psychoanalytic Association.
- Lakoff, George and Mark Johnson 1999. *Philosophy in the Flesh*. New York: Basic Books.
- Lambrecht, Knud 1994. *Information Structure and Sentence Form.* Cambridge: Cambridge University Press.
- Landi, Ann 2002. "Stella!" ARTnews, March, 32.
- Langacker, Ronald W. 1987. Foundations of Cognitive Grammar, Vol. I. Stanford: Stanford University Press.
- Langacker, Ronald W. 1991. Foundations of Cognitive Grammar, Vol. II. Stanford: Stanford University Press.
- Langacker, Ronald W. 1995. "Raising and Transparency". Language 71(1), 1-62.
- Langacker, Ronald W. 1997. "Constituency, dependency, and conceptual grouping". *Cognitive Linguistics* 8(1), 1-32.
- Langacker, Ronald W. 2002. *Concept, Image and Symbol: The Cognitive Basis of Grammar*. New York: Mouton de Gruyter.
- Leech, Geoffrey N. 1983. *Principles of Pragmatics*. New York: Longman Group Limited.

- Leite, Naomi, ed. 1994. "Master Metonymy List," unpublished.
- Levi, Judith N. 1978. *The Syntax and Semantics of Complex Nominals*. New York: Academic Press.
- Lewandowska-Tomaszczyk, Barbara 1991. "Cognitive and Interactional Conditioning of Semantic Change". In: Kellerman, W., Morrissey, M. D., (eds), *Diachrony within Synchrony. Language History and Cognition*. Frankfurt am Main: Peter Lang, 229-250.
- Makkai, Adam, Maxine T. Boatner and John E. Gates 2004. *Dictionary of Commonly Used American Idioms*. Hauppauge, NY: Barron's Educational Series, Inc.
- Marantz, Alec 1984. On the Nature of Grammatical Relations. Cambridge, MA: MIT Press.
- Martin, James H. (to appear). "A corpus-based analysis of context effects on metaphor comprehension". In A. Stefanowitsch and S. T. Gries, eds., *Corpus-based approaches to metaphor*. Berlin and New York: Mouton de Gruyter.
- McCawley, James D. 1996. "Conversational Scorekeeping and the Interpretation of Conditional Sentences". In Shibatani, M. and S. A. Thompson (eds.), *Grammatical Constructions*, Oxford: Clarendon Press.
- McNeill, David 1992. *Hand in Mind: What gestures reveal about thought*. Chicago: University of Chicago Press.
- Mikkelsen, Line 2005. *Copular Clauses: Specification, predication, and equation.* Amsterdam/Philadelphia: John Benjamins Publishing Co.
- Nerlich, Brigitte and David D. Clarke 1992. "Outline of a model for semantic change". In: Kellerman, W., Morrissey, M. D., eds., *Diachrony within Synchrony. Language History and Cognition*. Frankfurt am Main: Peter Lang, 229-250.
- Nerlich, Brigitte and David D. Clarke 2001. "Serial metonymy: A study of reference-based polysemisation". *Journal of Historical Pragmatics* 2(2), 245–272.
- Newfield, Martha 2001. "Lightening a Mood". The Artist's Magazine, July, 61-63.
- Nunberg, Geoffrey 1979. "The non-uniqueness of semantic solutions: Polysemy". *Linguistics and Philosophy* 3, 143-184.
- Nunberg, Geoffrey, Ivan A. Sag and Thomas Wasow 1994. "Idioms". *Language* 70(3), 491-538.

- Panther, Klaus-Uwe and Linda Thornburg 1998. "A cognitive approach to inferencing in conversation". In *Journal of Pragmatics* 30(6), 755-769.
- Pascual, Esther 2002. *Imaginary Trialogues: Conceptual Blending and Fictive Interaction in Criminal Courts*. Utrecht: LOT.
- Pascual, Esther 2006. "Fictive Interaction within the sentence: A communicative type of fictivity in grammar". *Cognitive Linguistics* 17(2), 245-267.
- Pascual, Esther 2007. "Fictive interaction blends in everyday life and courtroom settings". In: A. Hougaard and T. Oakley, eds., *Mental Spaces in Discourse and Interaction*. Amsterdam: John Benjamins.
- Piaget, J. 1972. *The psychology of the child*. New York: Basic Books.
- Piaget, J. 1990. The child's conception of the world. New York: Littlefield Adams.
- Pickering, Martin J. and Steven Frisson 2001. "Processing Ambiguous Verbs: Evidence From Eye Movements". *Journal of Experimental Psychology: Learning, Memory and Cognition* 27(2), 556-573.
- Radden, Günter and Zoltan Kövecses 1999. "Towards a Theory of Metonymy". In: Klaus-Uwe Panther/G. Radden, eds., *Metonymy in Language and Thought*. Amsterdam/Philadelphia, 17-59.
- Reddy, Michael 1979. "The Conduit Metaphor," In A. Ortony, editor, *Metaphor and Thought*. Cambridge University Press.
- Rhodes, Richard 1977. "Semantics in Relational Grammar". *Proceedings of the Thirteenth Annual Meeting of the Chicago Linguistic Society*. Chicago Linguistic Society.
- Rhodes, Richard 2002. "Multiple Assertions, Grammatical Constructions, Lexical Pragmatics, and the *Eastern Ojibwe-Chippewa-Ottawa Dictionary*". In: William Frawley, Kenneth C. Hill, and Pamela Munro, eds., *Making Dictionaries: Preserving Indigenous Languages of the Americas*. Berkeley: University of California Press, 108-122.
- Rice, Sally, Dominiek Sandra and Mia Vanrespaille 1999. "Prepositional Semantics and the Fragile Link Between Space and Time". In: M.K. Hiraga / C. Sinha / S. Wilcox, eds., *Cultural, Typological, and Psychological Issues in Cognitive Linguistics, Current Issues in Linguistic Theory 152.* Amsterdam, 107-127.
- Riehemann, Susanne 2001. A constructional approach to idioms and word formation. Ph.D. thesis, Stanford.

- Riemer, Nick 2003. "When is a metonymy no longer a metonymy?" In: René Dirven and Ralf Pörings, eds., *Metaphor and Metonymy in Comparison and Contrast*. Berlin/New York: Mouton de Gruyter, 379-406.
- Roos, Eckhard 1992. "Diachrony in synchrony: A gestalt approach to idioms". In: Kellerman, W., Morrissey, M. D., eds., *Diachrony within Synchrony. Language History and Cognition*. Frankfurt am Main: Peter Lang, 547-554.
- Ruppenhofer, Josef, Michael Ellsworth, Miriam R. L. Petruck and Christopher R. Johnson 2005. "FrameNet: Theory and Practice". http://framenet.icsi.berkeley.edu/book/book.html#intro
- Sakahara, Shigeru 1996. "Roles and identificational copular sentences". In: Gilles Fauconnier and Eve Sweetser, eds. *Spaces, Worlds, and Grammar*. Chicago: The University of Chicago Press, 262-289.
- Sanders, Michael 2002. "How I Turn Sketches Into Pastel Paintings". *Artists & Illustrators*, Jan., 14-15.
- Sinclair, John, founding ed. in chief. 1995. *Dictionary of Idioms*. London: William Collins Sons & Co. Ltd.
- Sinclair, John, ed. in chief. 1989. *Dictionary of Phrasal Verbs*. London: William Collins Sons & Co. Ltd.
- Spiegler, Marc 2002. "Tape It to the Limit". ARTnews, March, 96.
- Stefanowitsch, Anatol 2005. "The function of metaphor: Developing a corpus-based perspective". *International Journal of Corpus Linguistics* 10(2), 161-198.
- Stern, Gustaf 1968 [1931]. *Meaning and Change of Meaning*. Bloomington: Indiana University Press. (orig. publ. Göteborg, Elanders boktryckeri aktiebolag, 1931.)
- Strohner, Hans and Gijsbert Stoet 1999. "Cognitive Compositionality: An Activation and Evaluation Hypothesis". In: M.K. Hiraga / C. Sinha / S. Wilcox, eds., *Cultural, Typological, and Psychological Issues in Cognitive Linguistics, Current Issues in Linguistic Theory 152*, Amsterdam, 195-208.
- Sullivan, Jenny 2001. "Say Something Special". The Artist's Magazine, July, 30-35.
- Sullivan, Karen 2006. "How Does Art 'Speak' and What Does It 'Say': Conceptual Metaphor Theory as a Tool for Understanding the Artistic Process". In *Thought Tools for a New Generation: Essays on Thought, Ideas, and the Power of Expression,* Eugene, OR: Robert D. Clark Honors College, 81-89.

- Sullivan, Karen 2007. "Lexical Filledness and Metaphor in Idioms". In *Collocations and Idioms 1: Papers from the First Nordic Conference on Syntactic Freezes*, Marja Nenonen, Sinikka Niemi and Jussi Niemi, eds., Joensuu, Finland: Joensuu University Press, 330-341.
- Sullivan, Karen *in press*. "Frame-Based Constraints on Lexical Choice in Metaphor". In *Proceedings of the 32nd Annual Meeting of the Berkeley Linguistics Society*, Berkeley, CA: BLS.
- Sullivan, Karen *in press*. "Metaphoric Extension and Invited Inferencing in Semantic Change". *Cultura, Lenguaje y Representación / Culture, Language and Representation*, Ignasi Navarro i Ferrando (ed.), Castellón, Spain: Universitat Jaume I Press.
- Sullivan, Karen *in press*. "Genre-Specific Metonymy in Norse Skaldic Poetry". *Language and Literature* 17(1), 21-36.
- Sullivan, Karen *submitted manuscript*. "The Languages of Art: How Representational and Abstract Painters Conceptualize Their Artwork in Terms of Language".
- Sullivan, Karen *submitted manuscript*. "Grammatical Constructions in Metaphoric Language".
- Sweetser, Eve 1990. From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure. Cambridge, UK: University of Cambridge Press.
- Sweetser, Eve 1997. "Compositionality and blending: semantic composition in a cognitively realistic framework". In: *Fifth International Cognitive Linguistics Conference*. Amsterdam, 129-162.
- Talmy, Len 2000. *Toward a Cognitive Semantics: Concept Structuring Systems*. Cambridge, MA: MIT press.
- Taylor, John R. 2003. "Category extension by metonymy and metaphor". In: René Dirven and Ralf Pörings, eds., *Metaphor and Metonymy in Comparison and Contrast*. Berlin/New York: Mouton de Gruyter, 323-347.
- Traugott, Elizabeth Cross and Richard B. Dasher 2002. *Regularity in Semantic Change*. Cambridge, UK: University of Cambridge Press.
- Turner, Mark 1987. *Death is the Mother of Beauty: Mind, Metaphor, Criticism*. Chicago: University of Chicago Press.
- Turner, Mark 1991. Reading Minds: The Study of English in the Age of Cognitive Science. Princeton, New Jersey: Princeton University Press.

- Turner, Mark 2002 "Toward an Integrated Cognitive Poetics: The Cognitive Study of Art, Language and Literature," *Poetics Today* 23(1), 9-20.
- Turner, Mark and Gilles Fauconnier 1995. "Conceptual integration and formal expression". *Metaphor and Symbolic Activity*, 10(3), 183-203.
- Turner, Mark and Gilles Fauconnier 2003. "Metaphor, metonymy, and binding". In: René Dirven and Ralf Pörings, eds., *Metaphor and Metonymy in Comparison and Contrast*. Berlin/New York: Mouton de Gruyter, 469-487.
- Ullmann, Stephen 1962. *Semantics: An Introduction to the Science of Meaning*. New York: Harper and Row Publishers, Inc.
- Ullmann, Stephen 1963 [1951]. *The Principles of Semantics*. Oxford: Compton Printing Ltd.
- Warren, Beatrice 2003. "An alternative account of the interpretation of referential metonymy and metaphor". In: René Dirven and Ralf Pörings, eds., *Metaphor and Metonymy in Comparison and Contrast*. Berlin/New York: Mouton de Gruyter, 113-132.
- Whittock, Trevor, 1990. Metaphor and film. Cambridge: Cambridge University Press.
- Wilkins, David P. 1996. "Natural Tendencies of Semantic Change and the Search for Cognates". In: Mark Durie and Malcolm Ross, eds., *The Comparative Method Reviewed: Regularity and Irregularity in Language Change*. New York/Oxford: Oxford University Press.
- Williams, John N. 1992. "Processing polysemous words in context: Evidence for interrelated meanings". *Journal of Psycholinguistic Research* 21, 193-218.

Zevitas, Steven T., ed. 2002a New American Paintings Vol. 41, Sept.

Zevitas, Steven T., ed. 2002b New American Paintings Vol. 42, Nov.

Zevitas, Steven T., ed. 2003a New American Paintings Vol. 43, Jan.

Zevitas, Steven T., ed. 2003b New American Paintings Vol. 44, March