Summer 2020

Easy in Any Language: Syntax, Semantics, and Pragmatics of Activity-Oriented Adjectives in Six Languages

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DOI: <https://doi.org/10.31979/etd.edgb-m36t>
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EASY IN ANY LANGUAGE:
SYNTAX, SEMANTICS, AND PRAGMATICS OF ACTIVITY-ORIENTED
ADJECTIVES IN SIX LANGUAGES

A Thesis Presented to the
Faculty of the Department of Linguistics and Language Development
San José State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
David Koffman

May 2020

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David Koffman

The Designated Thesis Committee Approves the Thesis Titled

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David Koffman

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May 2020

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ABSTRACT

EASY IN ANY LANGUAGE: SYNTAX, SEMANTICS, AND PRAGMATICS OF ACTIVITY-ORIENTED ADJECTIVES IN SIX LANGUAGES

Words that denote the degree of effort required for some activity, called *easy* adjectives here, have distinctive behavior. This behavior is explored in six languages to determine how the semantics of these words is reflected in the expressions to which they can apply, the constructions in which they appear, and their use in discourse. For four Indo-European languages, English, Spanish, German, and Russian, the analysis is based on random samples from linguistic corpora. For two non-Indo-European languages, Japanese and Swahili, the analysis is based on consultant elicitations and published examples. The analysis confirms that *easy* adjectives have distinctive behavior compared to prototypical adjectives that describe properties of things. In every language studied, *easy* adjectives (such as English *easy*, *difficult*, and *hard*) apply exclusively to: finite and non-finite clauses; Noun Phrases (NPs) that denote activities, including de-verbal nominalizations; NPs that act as metonymies for activities due to frame-semantic associations; NPs that appear in constructions along with an explicitly stated activity; and pro-forms with non-specific antecedents. Details are given of the specific constructions employed in these patterns, showing how a variety of syntactic means are employed in different languages to achieve the same functions. Corpus data for the four Indo-European languages are used to show how the behavior of evaluation adjectives (those that describe the value, cost, or benefit of an activity) differs from that of *easy* adjectives despite some similarities that have been the focus of prior literature.

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List of Abbreviations

Adj	Adjective
COCA	Corpus of Contemporary American English
NP	Noun Phrase
PRO	Pronoun
RNC	Russian National Corpus
SOV	Subject Object Verb (constituent order)
SVO	Subject Verb Object (constituent order)
TAM	Tense Aspect Mood
V	Verb

The following abbreviations are used in the glosses for non-English examples.

1, 2, 3	First, second, third person	PASS	Passive
ACC	Accusative	PFV	Perfective
ADNOM	Adnominal	PL	Plural
ADV	Adverbial	PREP	Prepositional
CL2	Noun Class 2 (similar for Class 1 – 9)	PRES	Present
COMP	Comparative	PST	Past
CONJ	Conjunctive	PTCP	Participle
COP	Copula	Q	Question
DAT	Dative	REFL	Reflexive
F	Feminine	S	Singular
FUT	Future	SBJV	Subjunctive
IMP	Impersonal	TOP	Topic
INF	Infinitive		
INS	Instrumental		
IPFV	Imperfective		
LIST	List		
LOC	Locative		
M	Masculine		
N	Neuter		
NEG	Negative		
NOM	Nominative		
NONPAST	Non-past		

1. Introduction

This study compares the behavior of prototypical adjectives that describe properties of physical entities to the behavior of certain non-typical adjectives that describe events or the relationship of agents to events. It will be shown that these non-typical adjectives have distinctive behavior as regards the syntactic structures in which they appear, the words to which they can be applied, and how these interact in discourse. The concepts of frame semantics will be used to show how this distinctive behavior is strongly influenced by the semantic character of these adjectives. At least one characteristic of non-typical adjectives will be shown to be grounded in discourse considerations. Further, elements of this behavior apply across a wide range of languages.

The analysis is based, as much as possible, on found language as contained in linguistic corpora. Using corpus evidence opens the research to the possibility of finding examples that contradict or at least challenge the hypotheses proposed. This contrasts with analysis based on constructed examples. Such examples may be constructed for the sake of proving a hypothesis (or disproving another author's hypothesis); the possibility of finding counter-evidence depends entirely on the author's willingness or imagination in looking for challenging (yet, ideally, natural) cases.

The particular non-typical adjectives in question have been called the *easy* class of adjectives (Nanni 1978, 1980) and includes words such as *easy*, *hard*, *difficult*, *tough*, *simple*, and *impossible* that denote the degree of effort required for some activity. For economy of expression they will be called “*easy* adjectives” here.

Multiple aspects of the research represent advances over prior work. Prior work about *easy* adjectives (Nanni 1978, 1980; Postal 1971; Lasnik and Fieno 1974; Zwart 2012) focuses on the syntax of specific constructions in English as viewed in a generative framework or else shows that similar constructions in other languages differ from English (Matthews and Comrie 1990, Reider 1993). New elements of this thesis, absent from the prior work, include: a focus on the connections between the semantics and syntax of *easy* adjectives; a basis in corpus analysis; consideration of the entire range of constructions in which *easy* adjectives are found; estimation of how common or rare various constructions are, not just their existence or grammaticality; and a focus on commonalities among multiple languages using concepts from frame semantics and pragmatics.

1.1. What is an Adjective?

It is a matter of some controversy whether every language has a distinct class of words that can be called adjectives as distinct from nouns and verbs, or even whether “adjective” is a useful concept at all. For example, Payne (1997) states, “Adjectives are problematic in almost every language” and “there is no semantically definable class of concepts that universally falls into a category that we would want to call adjectives.” Dixon and Aikhenvald (2004) present contributions from participants in a conference examining expressions for adjectival concepts in 13 diverse languages, including some, like Wolof and Korean, commonly said to lack a distinct class of adjectives.

In a summary chapter, based on all the evidence, Dixon suggests that the term “adjective” can be used for a word class that:

- is grammatically distinct from the noun class and the verb class;¹
- includes words from some or all of four prototypical adjective types denoting properties of objects according to dimension, age, value, and color;
- (a) functions either as an intransitive predicate or as a copula complement, and/or
(b) modifies a noun in a Noun Phrase (NP).

Note that condition (a) in the last bullet allows for not just predicate adjectives as understood in (for example) Indo-European languages, but also for words that function as head of an intransitive predicate. These words might be glossed as ‘be red’ or similar and are commonly described as stative verbs. Condition (b) of the last bullet allows for words that function adnominally; these can have morphological characteristics similar to nouns. Reviewing the evidence from all of the languages, Dixon concludes that these two word types can be called “verb-like adjectives” and “noun-like adjectives respectively,” because, even though “it can sometimes be a tricky matter finding criteria to distinguish ‘verb-like’ adjectives from verbs and ‘noun-like’ adjectives from nouns,” nevertheless “in every language which is studied in detail, such criteria can be found.”

In any event, all of the languages studied in detail in this research have large, undisputed adjective classes. For simplicity, the words in question will be called adjectives.

1.2. Typical Adjectives

Adjectives that fit Dixon’s (1977, 2004) semantic definition of “adjective” might be called “typical adjectives.” Dixon’s purely semantic definition is:

¹ “Grammatically distinct” refers not just to morphological differences but to syntactic ones as well.

Semantically, an adjective describes some important but non-criterial property of an object. That is, an adjectival description will serve to distinguish between two members of the same species, that are referred to by a single common noun.

The word “object” in this definition appears to imply a physical object and this would generally apply for most of those concepts that fit Dixon’s list of four core semantic types “typically found in languages with large and small adjective classes.” The four are:

- DIMENSION—big, small, long, tall, short, wide, deep, etc.
- AGE—new, young, old, etc.
- VALUE—good, bad, lovely, atrocious, proper/real, etc.
- COLOR—black, white, red, etc.

All except VALUE do typically apply to physical objects, but could also apply to abstractions by means of metaphor, e.g. a “long time” or a “big difference.” VALUE adjectives stand out as different from the rest. As Dixon points out, they do not always describe any property on their own, only in combination with some purpose or culture-specific norm.

In formal terms, using Van Valin’s “logical structure” notation (Van Valin 2005), prototypical adjectives are simple state predicates with a single argument, such as **red’**(house) or, in a somewhat more elaborate form suggested by Van Valin, **be’**(house, **red’**), where **be’** is not the English copula *be*, but a notational convention for an attributive predication.

1.3. *Easy* Adjectives

Even further than VALUE adjectivals from the prototypical cases are words that Dixon (2004) assigns to a DIFFICULTY class and that are called *easy* adjectives here,

defined as “words that denote the degree of effort required for some activity.” Saying that *easy* adjectives apply to an activity suggests an obvious semantic overlap with adverbs. In fact, there is not much difference in meaning between *This product is easy to find* and *This product can be easily found*. Note English has no adverbial way to express the opposite of easiness. That is, English allows *This product is hard to find*, but not **This product can be hardly found* (at least not with the intended meaning) despite the adverbial character of the property being expressed. In German, predicate adjectives are indistinguishable in form from adverbs and the same is true in many situations in Russian. This overlap will be explored in the corpus analysis. All of this suggests that *easy* adjectives constitute an edge case that probes the boundaries of the concept of adjective.

More formally, using Van Valin’s logical structure notation, *easy* adjectives have the following semantic structure when used as a predicate:

easy’(pred’[x, y, z])

- **pred’** is (tentatively) any predicate.
- x, y, and z are the semantic arguments of **pred’**, which will vary depending on the argument structure of the predicate. Specifically:
 - x is an Actor (the most Agent-like participant in a clause).
 - y is an Undergoer (the most Patient-like participant in a clause) in the case of a transitive predicate.
 - z is any third argument, typically a goal or beneficiary, that is an inherent component of the semantics of the predicate.

In attributive (adnominal) use, as in *easy book*, following the convention given earlier for *red*, the semantic structure would be'(book, **easy**'). This notation obscures important issues involved in the use of *easy* adjectives that will be explored at length.

Van Valin's notation is intended as a purely semantic description, independent of the morpho-syntactic structures of any particular language. If that is possible, then the structure given for *easy* adjectives would (presumably) apply to any expression that conveys the concept of easiness, even if a language completely lacks any single lexeme meaning 'easy' and, instead, uses a longer expression like 'requires little effort'.

Any of the semantic arguments may be unexpressed or unspecified in a specific utterance. Examples, with **predicates in bold** and arguments underlined:

- Three arguments: It's **hard** for me **to buy** her anything she doesn't already have. (Actor, Beneficiary, Undergoer)
- Two arguments: It is **easy** for Mary **to learn** languages. (Actor, Theme)
A good man is **hard to find**. (Undergoer, unspecified Actor)²
- One argument: It is **easy** to **sleep** here. (unspecified Actor)

All of these examples involve adjectives as copular complements ("predicate adjectives"), with the **pred'** modified by the adjective realized as a *to*-infinitive. Other verbal and de-verbal forms are also possible, as in *Learning languages is easy for Mary*. Other syntactic templates may also be available, as in English "tough movement," which is discussed below.

² In English, an explicit Actor is only possible with a *for*-infinitive. If there is an unspecified argument it is always the Actor.

If the claimed semantic description is correct and language-neutral, and not just a reflection of English-speaking bias, then *any adjective in any language that describes an easy concept should be expressed using syntactic means that allow for the adjective to apply to an activity predicate with multiple arguments*. It is not claimed that semantics determines syntax, but that it does strongly influence the syntactic (and morphological and lexical) means that are used. The particular syntactic means employed will vary among languages. One outcome of the project will be a catalog of the morpho-syntactic and lexical means that are observed with *easy* adjectives.

1.4. Easy Adjectives and “Tough Movement”

The *easy* adjectives share some characteristics with a larger group of adjectives with which they have sometimes been lumped. In the generative linguistic literature, *easy* adjectives are known for their participation in the so-called “tough movement” construction (Postal 1971), so named because of a presumed relationship between examples (1.1) and (1.2), in which (1.1) is taken to be more fundamental, and (1.2) is assumed to be the result of moving the grammatical object *John*.

(1.1) It is easy to please John.

(1.2) John is easy to please.

Other authors have given different syntactic explanations for the same construction, including “object deletion” (Lasnik and Fiengo 1974) and a “complex adjective” (Nanni 1980; Zwart 2012).

As will be seen, *easy* adjectives appear in constructions that are at least superficially similar to tough movement in languages other than English. But the name “tough

movement” presumes a theoretical framework that is not relevant here. Moreover, as will also be seen, superficially similar constructions in other languages are quite different from the English construction. But the concept of a *complex adjective* (e.g. *easy to please*), independently of any theoretical analysis, turns out to describe the facts of multiple languages with some accuracy and will be used from here on.

Various authors have attempted semantic characterizations of adjectives that participate in the complex adjective construction. Nanni (1978) identifies these adjectives as those that “describe the relationship between an individual and an activity or event and ... describe the cost, value or benefit [of the activity or event] to the individual.” Huddleston and Pullum (2002) describe the English construction as a “hollow *to*-infinitival” (where hollowness refers to the missing grammatical object) and identify the associated adjectives as those that “have to do mainly with the ease or difficulty of the situation described in the infinitival clause or with one’s emotional attitude to it.” Lists of adjectives that appear with “hollow *to*-infinitivals”, i.e. in complex adjective constructions, in addition to *easy* adjectives, include, among others:

<i>amusing</i>	<i>convenient</i>	<i>harmful</i>	<i>intolerable</i>	<i>safe</i>
<i>annoying</i>	<i>dangerous</i>	<i>horrible</i>	<i>loathsome</i>	<i>stupid</i>
<i>bad</i>	<i>entertaining</i>	<i>illegal</i>	<i>marvelous</i>	<i>unpleasant</i>
<i>beneficial</i>	<i>evil</i>	<i>instructive</i>	<i>nice</i>	<i>useful</i>
<i>boring</i>	<i>fun</i>	<i>interesting</i>	<i>pleasant</i>	<i>useless</i>

Chapter 5 will look at some examples of these adjectives and show that their participation in complex adjective constructions is much more limited than for *easy* adjectives, and that this fact may be grounded in discourse considerations.

1.5. Outline of the Thesis

Chapter 2 outlines the basic hypotheses about how the semantics of *easy* adjectives are reflected in the words they apply to and in the syntactic structures they appear in. Then these claims are supported and illustrated using corpus examples for English. This corpus analysis provides the framework that is used for analysis of *easy* adjectives in other languages in the following chapters.

Chapter 3 extends the analysis to three additional Indo-European languages for which linguistic corpora were readily available.

Chapter 4 synthesizes the data from Chapters 2 and 3, showing to what extent the patterns observed for *easy* adjectives are similar and different in the four languages in the corpus analysis.

Chapter 5 considers complex adjective constructions in detail. Data is presented supporting the claim that, although some non-*easy* adjectives also participate in complex adjective constructions, they do so to much more limited degree than *easy* adjectives, and this tendency is related to discourse considerations.

Chapter 6 examines limited evidence from two non-Indo-European languages, Swahili and Japanese, using data from consultant elicitations and published literature.

Chapter 7 briefly summarizes the principal findings and limitations of the research, and identifies unresolved questions for future investigation.

2. *Easy* Adjectives and their Use in English

This chapter develops a framework for describing the variety of expressions to which *easy* adjectives can apply in English, called the *targets* of *easy* adjectives. This framework is then used for a corpus analysis. The same framework, with minor modifications, is used in the following chapters to analyze *easy* adjectives in other languages.

2.1. Expected Behavior of *Easy* Adjectives

Easy adjectives, such as *easy*, *hard*, *difficult*, *tough*, *simple*, and *impossible* denote the degree of effort or difficulty required for some activity. Therefore, *easy* adjectives naturally apply to activities, typically expressed using verbs and clauses. This makes *easy* adjectives semantically in some ways more like adverbs and completely different from prototypical adjectives that denote properties of things. From these facts, it follows that any language with *easy* adjectives will have means to apply them to activities.

Three mechanisms that directly represent activities in English are:

- Non-finite verb clauses (*it wasn't easy to find her a present, finding work is hard*)
- Nominalizations (*an easy decision*)
- NPs that denote an activity (*easy work*)

The term *activity* in the last bullet refers to any activity, event, process, state, etc. of the sort typically denoted by verbs. Similarly, the label *Activity NP* will be used, simply for the sake of brevity, to refer to an NP that denotes an activity, process, etc.

Languages other than English have other structures available in addition to the bulleted ones listed above. For example, Spanish uses complement clauses with a

subjunctive finite verb where English might use a *for*-infinitive to change subjects as in *It was hard for her to stop* (see Chapter 3).³ Modern Greek, which lacks non-finite verbs entirely, takes this tendency even further (Joseph, 2009).

Two more mechanisms for allowing activities to be targets of *easy* adjectives are conveniently described using the concept of “semantic frame” as developed in Fillmore (1982) and Fillmore and Baker (2009). Fillmore defines a “frame” in this usage as:

...any system of concepts related in such a way that to understand any one of them you have to understand the whole structure in which it fits; when one of the things in such a structure is introduced into a text, or into a conversation, all of the others are automatically made available.

Fillmore and Baker define a semantic frame more formally as “the cognitive structures that shape speakers’ understanding of linguistic expressions.” Fillmore and Baker explain semantic frames as an instance of the more general notion of cognitive frames, which are “any of the many organized packages of knowledge, beliefs, and patterns of practice that shape and allow humans to make sense of their experiences.” In the case of language, words and other linguistic structures are fully understandable and usable only in the context of the vast body of experience and knowledge that speakers of a language share. The experience and knowledge relevant to understanding a particular utterance can be called its semantic frame, or just its frame.

The notion of frames helps in understanding the application of *easy* adjectives to words (nouns or NPs) that, on the surface, do not denote activities. Two cases are referred to here as *implicit frames* and *explicit frames*.

³ In English too, *for* with an infinitive is often analyzed as a complementizer. See Radford (1997:54)

Implicit frames apply to uses such as *an easy book* or *a hard question*. For literate speakers of languages in which books are written, books are understood as things that are read. It is certainly possible to do other things with a book—one can write a book, discuss a book, or prop up furniture with one. But the most immediate association with books in the experience of literate speakers of English will be with reading them. This association is likely to be reinforced by the context in which the statement occurs, say looking for an appropriate book to buy for a young reader. In this context, an *easy book* is a book that is easy to read. In other words, saying that a book is easy can be understood as shorthand for saying that reading the book is easy. Similarly, in the context of discussing a test in a school setting, saying that a question is hard is shorthand for saying that answering the question correctly is hard.

We can say that, in these usages, *book* acts as a metonymy for reading the book, and *question* acts as a metonymy for answering the question. These metonymies depend on the fact that *book* and *question* naturally evoke *activity frames* of reading and test taking respectively. In all of the examples examined, the activity evoked is one that has the thing being described as easy (e.g. *book* or *question*) as its Undergoer (typically a Patient, Theme, or Stimulus), never its Actor. For example, while a *difficult book* is one that is hard to read, a *difficult author* is not someone who has difficulty writing. Hence the activity frame can always be given using a past participle: a book is read, a question is answered.

Explicit frames are similar in concept to implicit frames, except that the speaker explicitly provides the activity context to which the *easy* adjective is understood to apply.

As will be seen, the most common structure used for this purpose in English is the complex adjective construction. For example, in (1.2) earlier (*John is easy to please*), there is nothing about *John* that naturally evokes the activity of pleasing, but the construction provides it explicitly. English also allows constructions of the form *He's a hard man to like*, which also supplies an explicit activity frame where none is already implicit. These constructions allow an *easy* adjective to apply to a word that has no obvious activity frame or to apply to an activity frame other than the most obvious one.

To summarize, it appears that *easy* adjectives in English can be applied to the following expression types, listed here in order from most verbal, with the least dependence on context, to least verbal with complete dependence on context:

- Non-finite verb clauses
- Nominalizations
- Activity NPs
- NPs that come with implicit activity frames, and so are naturally understood as metonymies for those activities
- NPs for which an explicit activity frame is provided by the speaker

In practice, the distinction between a nominalization and an Activity NP is not clear cut, so these will be lumped together.

If the framework presented here is correct, then other applications of *easy* adjectives will be rare, or involve different meanings. The rest of this chapter provides corpus evidence to back up these claims for English. Similar data for Spanish, German, and Russian are provided in Chapter 3.

2.2. Prototypical Adjectives

As a baseline against which to compare the behavior of *easy* adjectives, consider first two examples of prototypical adjectives: *small* (from Dixon’s PHYSICAL PROPERTY class) and *red* (from Dixon’s COLOR class). Samples of 100 random occurrences of each word from the Corpus of Contemporary American English (COCA) (Davies 2009) were classified according to the syntactic forms in which they occur and the type of word modified by the adjective (called here its *target*). As shown in Table 1, these words most commonly appear adnominally as part of an NP; other constructions, including copular predicates account for just about 10% of occurrences.

Table 1. Syntax of Prototypical Adjectives

Construction	Adjective	
	Red	Small
Adnominal	89	92
Copular Predicate	6	4
Object Complement ^a	-	1
Name ^b	3	-
Anaphora ^c	2	2
Intransitive predicate ^d	-	1
Total	100	100

Number of occurrences in a sample of 100 uses of each adjective

^a E.g. *They could make it smaller.*

^b E.g. *The Red and Black* (book title)

^c E.g. *He had expected a mounted army, small perhaps, but very like the French troops coming up behind him.*

^d *He’d started small.*

Red almost exclusively applies to physical entities, including man-made objects, food, natural phenomena, and body parts (Table 2). Figurative uses and names involve extended uses of words for physical objects, as in the name *Red Cross* and *red Sharpie*,

where the brand name for a kind of pen stands in for the color of ink in it. *Small* applies to a wider range of targets, many of them physical entities but also a significant number of abstractions (as in *small number*, and *small changes*) and figurative uses, as in *small voice* (presumably not small in size, but low in volume) and *small plate* (not necessarily the actual plate but the food portion on it). These words function as expected for prototypical adjectives.

Table 2. Targets of Prototypical Adjectives

Target Type	<i>Red</i>		<i>Small</i>	
	Count	Examples	Count	Examples
Object	20	<i>flag, bricks, carpet, Jaguar (car)</i>	25	<i>door, plates, notepad</i>
Institution	-	-	21	<i>business, army, farm</i>
Name-part	19	<i>Red Cross, Red Sox</i>	-	-
Food	15	<i>pepper, grapes, cabbage, wine</i>	-	-
Nature	14	<i>light, planet, rose</i>	15	<i>boy, fish, waves</i>
Body-part	12	<i>eyes, gills, hair, beard</i>	3	<i>eyes, teeth</i>
Figurative	5	<i>zone, Sharpie</i>	15	<i>voice, plate (of food)</i>
Clothing	6	<i>cap, skirt, suspenders</i>	-	-
Material	5	<i>leather, silk</i>	-	-
None	3	-	-	-
Abstract	1	<i>shades</i>	20	<i>number, changes, fortune</i>

2.3. Targets of *Easy* Adjectives in English

Table 3 shows the target types of various forms of *easy* found in 223 random examples from COCA.⁴ Tables 4 and 5 show similar data for *difficult* and *hard*. The target types are listed from the most verbal, requiring no context at all to be called easy or

⁴ Originally 200 random cases of *easy*, *hard*, and *difficult* were analyzed. But initial exclusion of some forms required the sample to be expanded, adding other cases in proportion to their presence in the corpus.

difficult to the least verbal and most concrete, requiring an explicit activity-related context to be called easy or difficult.

The results include examples with comparative, superlative, and negative forms (e.g. *easy*, *easier*, *easiest*, and *not easy*). There are no obvious differences in the target types or syntactic structures used with these variations. The number of cases is reduced from the original sample in each table because cases involving other meanings than those referring to degree of difficulty are not shown. For example, in the case of *easy*, examples not shown include *easy chair*, *easy smile*, *take it easy*, and *peaceful easy feeling*.⁵ In the case of *hard*, the majority of the 200 examples from COCA involved meanings other than ‘not easy’—not just ‘hard to the touch’ but figurative uses like *hard drugs*, *hard currency*, and *hard drinking*, as well as adverbial uses like *work hard*.

⁵ *Easy smile* might be understood as an Activity NP, where the noun *smile* denotes the process of smiling. But an easy smile is not just one that requires little effort make, but one that somebody makes frequently in what seems a completely unforced and natural manner.

Table 3. Targets of Easy in English

Target Type	Count	Pct.	Examples
Finite verb	3	2%	<i>go easy, come easy</i>
For infinitive	3	2%	<i>for you to talk with your parents</i>
Infinitive Clause	35	19%	<i>to shave on board a ship, to persuade him</i>
Gerund Clause	18	10%	<i>finding a deal, inventing a new material,</i>
Non-specific	30	16%	<i>it, this, things^a</i>
Activity NP	35	19%	<i>access, decision, reach, a win (victory)</i>
Implicit Frame	25	14%	<i>a way out, prey, targets, excuses</i>
Explicit Frame	35	19%	<i>an office (to clean), a tooth (to pull)</i>
Total	184	100%	(Usable relevant cases, of 223 cases analyzed) (116,961 total cases in the Corpus)

Table 4. Targets of Difficult in English

Target Type	Count	Pct.	Examples
For infinitive	17	9%	<i>for you to accumulate wealth</i>
Infinitive Clause	38	19%	<i>to convince an administrator</i>
Gerund phrase	16	8%	<i>breathing, watching the film,</i>
Non-specific	21	11%	<i>it, this, things^a</i>
Activity NP	25	13%	<i>process, readjustment, change</i>
Implicit Frame	43	22%	<i>puzzles, an issue, a question</i>
Explicit Frame	38	19%	<i>validity (to assess), documentation (to follow)</i>
Total	198	100%	(Usable relevant cases, of 200 cases analyzed) (87,675 total cases in the Corpus)

Table 5. Targets of Hard in English

Target Type	Count	Pct.	Examples
For infinitive	11	11%	<i>for politicians to reach consensus</i>
Infinitive Clause	32	32%	<i>to try to find something, to make snowballs</i>
Gerund Clause	3	3%	<i>falling asleep, concentrating on the game</i>
Non-specific	12	12%	<i>it, this, things^a</i>
Activity NP	6	6%	<i>a decision, a part of my life, choices</i>
Implicit Frame	11	11%	<i>lessons, times, questions</i>
Explicit Frame	24	24%	<i>plywood (to come by), aircraft (to shoot down)</i>
Total	99	100%	(Usable relevant cases, of 200 cases analyzed) (196,266 total cases in the Corpus)

^a The immediate target is a word like *it*, *this*, or *things*, but that word does not refer to any specific, identifiable sentence element in prior discourse.

The sample sizes are too small for most of the differences in relative frequency of occurrence for the three adjectives to be statistically significant. The most notable difference among the adjectives is that *hard* occurs less commonly with Activity NPs and more frequently with infinitive clauses than *easy* or *difficult*.⁶ Conceivably, this pattern could be traced to the fact that English has an adverbial form of *easy* (i.e. *easily*), and the adverbial phrase *with difficulty*, but no comparable form for *hard*. Issues related to NP targets (implicit frames, explicit frames, and Activity NPs) of *easy* adjectives are examined in more detail below.

The targets of *easy*, *difficult*, and *hard* are obviously different in kind than targets of prototypical *red* and *small*. While the targets of *red* and *small* are predominantly physical things and metaphorical extensions of things, the targets of *easy*, *difficult*, and *hard* include many non-finite clauses (*to*-infinitives and gerunds) and words that denote activities. Even the tendency of *easy* adjectives to refer to non-specific targets⁷ is a pattern not seen with the prototypical adjectives *red* and *small*. The targets that do refer to physical objects typically include an explicit frame, most commonly in the form of a *to*-infinitive, or else an implicit activity frame that is supplied by the context. These patterns are discussed in detail below.

An important distinction is that between non-specific targets and pronoun targets with clear antecedents. In some cases, the immediate target is a pronoun with a clear

⁶ $t = 2.51$ ($p < 0.02$) for infinitives with *hard* vs. *easy*. $t = 2.95$ ($p < 0.01$) for Activity NPs with *hard* vs. *easy*. $t = 2.51$ ($p < 0.02$) for infinitives with *hard* vs. *difficult*. t -tests here and in all later tables are for differences in proportions between independent samples using a 2-tailed test.

⁷ Pronouns or placeholders like *things* that do not refer to any specific, identifiable prior sentence element.

antecedent, and in these cases the antecedent is given along with the pronoun as the target. These cases generally involve explicit frames with complex adjectives, as in (2.1) (where the *easy* adjective is in bold and target is underlined). Far more common are pronouns with no clear antecedents, usually something generally indicated in the prior discourse, as in (2.2).

(2.1) We are planning to send our boys to a private school. They are pretty **hard** to control.

(2.2) St. Louis doesn't have to wait another 100 years to make the changes that its leaders know instinctively have to be made for the region to grow and prosper and unite. It can build a better future right now, by using the serious momentum to eliminate the municipal court cabal as the impetus to consider bigger change. **It** won't be easy, but these days, nothing is easy in St. Louis.

In (2.1) *they* clearly refers to *our boys*, but in (2.2) *it* refers to a general notion of improving conditions in St. Louis. In other cases, what is easy or hard may be fairly clear in semantic terms, but syntactically ambiguous. In all these situations the *easy* adjective does not apply to any specific sentence element. This is a different case than dummy *it* with an extraposed infinitive, where *it* either refers to nothing at all, or perhaps to the infinitive clause. Cases like (2.2) are given their own target category, non-specific, in Tables 3, 4 and 5 since there is no basis for assigning them to any other category.

2.4. Clausal Targets of Easy Adjectives

There are a few points to make about clausal targets before considering the more interesting case of NP targets. In English clausal targets are limited to non-finite clauses, i.e. *to*-infinitives (with and without a *for*-phrase) and gerunds. The most common case is an extraposed *to*-infinitive clause:

(2.3) It's not **easy** to shave on-board a ship.

- (2.4) Divides within each party also make it **hard** for politicians to reach another bipartisan consensus.

Sentences like (2.3) and (2.4) are called *extraposed* on the theory that the canonical syntax would be for the *to*-infinitive to precede the main verb as subject.⁸ In fact, sentences with pre-verbal *to*-infinitives are uncommon in contemporary English—no examples occur in the data. Instead, the typical pattern for a non-finite subject uses a gerund clause, as in (2.5) and (2.6). Much less common are extraposed gerund clauses, as in (2.7).

- (2.5) Determining the cause of this crash will be more **difficult** than most.

- (2.6) Wearing high heels while chasing down bad guys isn't **easy**.

- (2.7) It's not **easy** making it as a roadside attraction 20 miles off the interstate.

Easy adjectives with extraposed *to*-infinitives are similar in appearance to complex adjectives used with explicit-frame targets, but the two situations are distinguished by the fact that the extraposed infinitive clause has no missing grammatical object, while a complex adjective with an explicit-frame target always has a missing object that corresponds to the explicit-frame target.

2.5. NP Targets of *Easy* Adjectives

NP targets, as opposed to clausal ones, are the Activity NPs (including nominalizations), those based on implicit frames, and those based on explicit frames.

2.5.1 Activity NPs. Target words classified as Activity NPs (including nominalizations) are shown in Table 6. Some of these could possibly have been classified as implicit-

⁸ More precisely, (2.4) shows *it*-extraposition embedded within an object complement construction. But this has no bearing on the fact that *hard* applies to the extraposed non-finite clause *for politicians to reach...consensus*.

frame targets. For example, words like *job*, *work*, *choice*, and *decision* could be said to evoke the frames of doing a job, doing work, and making a choice or decision. But these are generic frames that add nothing to the senses of working, choosing, or deciding, which are the activities already inherent in the words alone. Understanding *an easy job*, *easy work*, or *hard choices/decisions* requires nothing more than the meaning of the words themselves.

One group of words that is missing from Table 6 is words derived from stative verbs, like *appearance*, *need*, and *smell*. Searching COCA shows, for example, that *easy/hard/difficult* do not occur at all before *appearance*, *need*, or *smell*. But since many stative verbs also have non-stative uses, apparent exceptions do occur. *See* is commonly stative, as shown by the ungrammaticality of **I am seeing a bird in our yard*, but in a context involving ability to see, the derivative noun *sight* can be called easy, as in (2.8) and (2.9).

(2.8) It [a bird] landed on a tree, still within **easy sight**.

(2.9) By mid-June [comet] Hale-Bopp was an **easy sight** in binoculars at magnitude 6½.

Table 6. Activity NP Targets of Easy Adjectives

Easy	Difficult	Hard
a decision to do something	adjustment of something	a living
a job	analysis	choices
a life	chase terrain	decision
a walk	choice (2)	part of her journey
access to something (3)	determination of	
an answer to something	something	
assembly	dialogues	
availability of something	engagement with tradition	
commands	enterprise	
communication	job	
crossing	lives	
decision (2)	privatization	
fit	process	
fix	progress	
its administration	putting (golf)	
job	readjustment	
maintenance of something	regime change	
move (action)	task (3)	
reach (2)	tasks	
repudiation	the task	
solutions	this museum project	
steps (in a process)	this step of the process	
task	this task	
the career part (of her life)	time (an experience) (4)	
the sport		
their walk		
transport		
travel		
win		
work		
your job		

Some Activity NPs appear to occur preferentially with certain *easy* adjectives.

Solution is used mainly with *easy*, much less than with *difficult* (about half as often in COCA), and hardly ever with *hard*. It appears that the degree of difficulty involved in

solving something is most commonly expressed using *easy solution* in various positive and negative expressions, as in (2.10) (positive) and (2.11) and (2.12) (negative).

(2.10) The Fresh Wave Pets line provides an **easy solution** to eliminate unwanted odors from your pet and your home.

(2.11) No **easy solution** to these contradictions can be expected.

(2.12) I'm not hopeful that we can have an **easy solution** to this.

Difficult solution is much less common and mostly limited to comparing the difficulty of multiple solutions, as in (2.13). After all, a solution can only be so difficult before it's hardly a solution at all.

(2.13) Typically for Mao, he chose an equally unexpected and almost equally **difficult solution**.

By comparison the closely related word *problem* (invoking the implicit frame of solving when used with an *easy* adjective) is used much more commonly with *hard* or *difficult* than *easy* (595 tokens in COCA for *hard* or *difficult* vs. 50 for *easy*), and most uses with *easy* are negative, as in *not an easy problem*.

2.5.2 Syntax of Activity NP Targets. Syntactically, Activity NPs lend themselves naturally to adnominal use of *easy* adjectives, as in all the examples in this section so far. This is the pattern seen in 46 out of 66 cases (70%) in the data, as in (2.14) and (2.15).

(2.14) Bears enjoy **easy travel**, just like us.

(2.15) Quick and **easy communication** in a foreign language is essential for relief workers.

2.5.3 Implicit-Frame Targets. Implicit-frame targets of *easy* adjectives found in the data are listed in Table 7. These are labelled “implicit frame” because they are used with no explicit frame and do not denote an activity. If the framework established at the

beginning of this chapter is correct, then the speaker or writer in each case presumably assumed that listeners and readers would understand in what activity context each of these would be understood as easy, difficult, or hard.

Activity frames for some targets are clear from general knowledge or definition. An attempt is made in Table 7 to divide target words into those that are clear from general knowledge and those that require context. Examples of associated activity frames for selected general-knowledge targets are given in the bottom of Table 7. Examples (2.16) and (2.17) illustrate this concept. In these examples we understand that puzzles are things to solve and songs are things to sing without needing to know anything about the context in which these statements were made.

(2.16) ...years spent studying the world's most **difficult** engineering puzzles.

(2.17) It's a really **difficult** song, particularly for a baritone.

Other target words (shown in the middle section of Table 7) have less obvious interpretations. Either the activity frame is ambiguous or is entirely dependent on context. Two examples of implicit frames from context, (2.18) and (2.19), show that nearly anything could acquire an implicit activity frame in the right context.

(2.18) Make **easy** shrimp bites. (Title of a recipe)

(2.19) Germany was **difficult**. (In a story about challenges faced by Chilean refugees in Germany)

Table 7. Implicit-frame Targets of Easy Adjectives

Frame Type	Easy	Difficult	Hard
General knowledge	alternatives excuses laughs pain prey route routes target words (in a test) targets (for drones) targets for archers tip (how to do something) way way out	age boss Christmas conditions (2) days economic conditions issue(s) (4) leadership roles neighbors puzzles question(s) (6) situation(s) (3) song targets the economy the match (chess) the range (of a song) this year time=a period of time(3)	a quadratic equation day lessons obstacles questions time (period) times
Specific context	a dinner (recipe) a hole (in golf) a symbol (for political opponents) beef stew (recipe title) shrimp bites (recipe title) touches (decorating) videos (how-to article title)	(criminal) cases (2) comedy (to perform) Germany (to live in as a refugee) ground (to pitch a tent on) lies (locations in golf)	funding (to obtain)
Activity frames of selected general knowledge targets	excuses – made prey – caught route – traveled way out – taken	boss – worked for issues – resolved puzzles – solved song – sung targets – hit	questions–answered

Outside of that context, however, referring to these things (e.g. shrimp bites or Germany)

as easy or difficult seems unlikely. These can still be called implicit-frame targets

because the context is not explicitly given. In (2.20) the context is supplied merely by the location of the title in a collection of recipes. In (2.21) the context is the entire story in which the sentence occurs.⁹

Some target words need very minimal context to clarify the intended meaning of a word. For example, saying *comedy is hard* is understandable when spoken by an actor, and *a difficult lie* is understandable when spoken by a golfer, meaning a place where the ball has landed and from which is it difficult to hit it well.

Ambiguous frames occur in (2.20) and (2.21) with *difficult cases*:

(2.20) It was as colleagues, as professionals, that they had truly bonded. They had solved **difficult cases**. (in a detective novel)

(2.21) Critics feared the law could have a "chilling effect," making prosecutors shy away from worthwhile but **difficult cases**.

In (2.22), for a detective a case is something to be solved,¹⁰ while in (2.23) for a prosecutor it is something to be successfully prosecuted. In (2.22) the concern is to determine "who did it", while in (2.23) it is proving "X did it."

Some implicit-frame target words occur preferentially with one of the *easy* adjectives. *Prey* is found almost exclusively with *easy*: *easy* is the most common adjective pre-collocation with *prey* in COCA, with 200 tokens vs. four for *difficult* and none for *hard*. *Target*, which like *prey* has associations with hunting, is similar—377 tokens of *easy*

⁹ In this spirit, even the purest general-knowledge implicit frame could be said to derive from the context supplied by the entirety of the continuing discourse among members of a speech community. This point of view would suggest that there is a gradient rather than a clear dividing line between general-knowledge implicit frames and context-specific implicit frames.

¹⁰It might be said that the verb *solved* in (2.22) makes this an explicit frame. But similar sentences suggest otherwise. For example, *wrote* in *he wrote some difficult books* does not force interpretation of *difficult books* as difficult to write instead of difficult to read.

target vs. 37 for *difficult target*. Most instances of *hard target* refer to targets that are hard to damage because of size or armor, not targets that are hard to hit.¹¹ A word that occurs only with *difficult* (four times) is *issue*. That *issue* was not found with *easy* could be a statistical fluke, but results presented in the next section suggest a different explanation.

One thing that is hard to determine from small-sample corpus evidence is what collocations are *not* possible or likely. Since *easy* adjectives specify the degree of effort associated with an activity, it would be expected that the target words of *easy* adjectives would generally evoke activities that require some degree of effort. To clarify, an example of something that is generally construed as not requiring effort is watching a movie. In some ways, watching a movie is similar to reading a book, but *easy movie* does not occur in COCA except in *not an easy movie to make*, and *difficult movie* is used to mean one that arouses discomfort in viewers. Consistent with this idea, few if any of implicit-frame targets evoke an activity that would be considered effortless.

2.5.4 Syntax of Implicit Frames. Since implicit frames depend on conventional associations, it is not surprising to see that the most common syntax is adnominal as in most of the examples given above, e.g. *difficult engineering puzzles*, *difficult song*, *easy shrimp bites* and *easy exercise*. This adnominal pattern applies to 62 out of 74 cases (84%) in the data. By comparison copular constructions and others are relatively infrequent.

¹¹ I.e. the opposite of *soft target*, defined as “A person or thing that is relatively unprotected or vulnerable, especially to military or terrorist attack.” (from Oxford Dictionaries at www.lexico.com)

2.5.5 Explicit-Frame Targets. Based on the framework laid out earlier, we expect explicit frame targets to include: 1) words that have no obvious (implicit) activity frame, and 2) words used with an activity frame other than the most obvious one. Examples of the first kind include (2.22) and (2.23):

(2.22) The engines and 6.5kW Kohler gas generator were **easy** to check.

(2.23) The vehicle really was not **difficult** to push.

Example (2.24) illustrates the use of explicit frames when a word is used with an activity frame other than the most obvious one.

(2.24) ...he uses his skill as a communicator to go around the country and just push that one **easy** to understand issue.

As shown in the previous section, *issue* with *difficult* requires no explicit frame. The phrase *difficult issue* is understandable as an issue that is difficult to resolve, issues being, among other things, things that need resolution. But *issue* in (2.24) is a target of *easy*, not *difficult* and has the meaning of an election talking point with an explicit frame of explaining.

Table 8 provides a sample of explicit-frame targets along with the explicit frames for each. The full list of explicit frame targets in the data is given in Table 9. The diversity of words on this list suggests that any word that can be the object of a verb can be the target of an *easy* adjective with an explicit frame. Very few of the words in Table 9 appear to have obvious implicit-frame interpretations based on general knowledge or linguistic usage alone. The few that do, like *issue* in (2.26), are used with other senses.

Table 8. Explicit-frame Targets of Easy Adjectives

Easy	Difficult	Hard
a galaxy – to see	gutters – to repair	a yarn – to fathom
a service – to use	love – to express	aircraft – to shoot down
a tooth – to pull	merger – to put together	Cesium-137 – to acquire
dietary habits – change	professions – to explain	plywood – to come by
disease – to prevent	soft-linked items – to	slip-ons – to find
errors – to fix	design	subsequent invoicing
exercises – to master	subjects – to render (in a	the damage – to undo
nuts – to swallow	painting)	the honor – to describe
offices - clean	documentation – to follow	small cars – to give away
the genesis of something –	liquor traffic – to suppress	
to uncover	validity – to assess	

Table 9. Explicit-frame Targets of Easy Adjectives

Easy	Difficult	Hard
a bottom (of the stock market)	a (difficult) time doing something (4)	a (hard) time doing something (4)
a galaxy	enclaves of authority	a word
a service	gutters	a yarn
a tooth	I	aircraft
characteristics and transitions	Latin American stuff	Cesium-137
dietary habits	love	ingredient
disease	merger	it (an aircraft)
enemies	motivation content	letters
errors	part (of planning a trip)	me
everything they were looking for	perceptions and attitudes	part (of giving a speech)
exercises	professions	plywood
food	soft-linked items	slip-ons
issue	something	subsequent invoicing
it (a medical device)	something (a permit)	that (a description of someone's lack of remorse)
liquid securities	subjects (2)	that (how a park will look)
no system	that (drawbacks)	the damage
nuts	the cases (legal)	the honor
offices	the criticism (2)	the stock market
part (of an experience)	the diplomatic express	they (our boys)
pressure-treated wood	the documentation	they (small cars)
she	the liquor traffic	thing (to undo)
that one (an agenda item)	the program	
the ability (to do something)	the vehicle	
the bad ones (traders)	these sites	
the best actress nominee	they (doors with polycarbonate glass)	
the engines and 6.5kw Kohler gas generator	they (kinds of chauvinism)	
the genesis of something	they (materials)	
the sweepstakes	this (the monetary value of something)	
they (heads on boats)	trips	
they (people)	two journalism reviews	
they (plants)	up-and-comers	
thing	validity	
way (route)	way (to intercept something)	

The case of *exercises* further illustrates use of explicit frames to invoke an activity frame other than the obvious one. Example (2.25) shows *exercise* with an explicit frame, *easy to master*. But a search of COCA finds numerous instances of *easy exercise* with no explicit frame, as in (2.26). Here (and in the other cases in COCA) an exercise appears to be understood as something that is “done” (i.e. performed or carried out). For many exercises, mastering is not an issue, hence a meaning of easy mastery as in (2.25) needs an explicit expression, while a meaning of easy performance as in (2.26) does not.

(2.25) The exercises were gentle and **easy** to master.

(2.26) The pelvic tilt is a relatively **easy** exercise that takes the stress off the back.

At least one word in Table 8, *merger*, appears to be an Activity NP that should not require an explicit frame. The context of the sentence in (2.27) makes it clear that a corporate merger is at issue. The phrase *difficult merger to put together* suggests that a corporate merger is a complex legal and institutional process, not just a simple coming together.

(2.27) Chase and Lowrie say they think BP and Amoco enjoy similar corporate cultures. “This is not going to be a **difficult** merger to put together in cultural terms,” Chase says.

One thing that cannot be seen merely from inspection of Tables 8 and 9 is whether some of the words listed might have implicit frames from context, as with the examples of *easy shrimp bites* and *Germany was difficult*. However, further examination of the data does not find any such cases.

To summarize, *easy* adjectives with explicit frames generally apply to targets without obvious implicit activity frames, whether based on conventional usage or context, except

to indicate the easiness of some activity other than the one most closely associated with the target. For similar reasons, few if any of the target words used with explicit frames denote activities on their own.

2.5.6 Syntax of Explicit-Frame Targets. By far the most common syntactic means for creating explicit frames with *easy* adjectives is the complex adjective construction, illustrated earlier in (2.22) (*The engines were easy to check*) and (2.23) (*The vehicle was not difficult to push*). Sixty-nine of the 97 cases of explicit-frame targets in the data use this construction. In a few cases a complex adjective construction is embedded within an object complement construction, as in (2.28) below. Other means include the so-called mixed relative (Jones 1991) construction, most commonly with quasi-grammatical placeholder words like *thing* and *way*, as in (2.29), but also with more concrete words as in (2.30).

(2.28) The just-in-time revolution has made such trips **difficult to find**. (About hopping cargo ships for pleasure travel.)

(2.29) There are lots of **easy** ways **to enjoy** these delicious flowers of May.

(2.30) Giving students responsibility is perhaps the **hardest** ingredient **for teachers to make part** of the learning environment.

Pre-nominal phrases, like *easy to understand issue* in (2.24), occur only three times in the data. Lastly, in the common idiom *have a hard time Ving*, as in (2.31), *time* has been classified as an explicit-frame target for lack of a better option.

(2.31) Many military leaders worry that such robots will have a **hard** time **distinguishing** combatants from innocent civilians.

2.6. Summary of Target Types and Syntax in English

The most typical syntax found with each target type is shown in Table 10. This table summarizes the remarks about syntax made in the discussion above.

Table 10. Typical Syntax for each Target Type

Target Type	Typical Syntax of <i>Easy</i> Adjectives (with examples)
Infinitive Clause	It extraposition <i>It's not easy to shave on-board a ship.</i>
Gerund Clause	Copular Predicate <i>Wearing high heels isn't easy.</i>
Non-specific	Copular Predicate <i>It won't be easy.</i>
Activity NP	Adnominal <i>an easy choice</i>
Implicit Frame	Adnominal <i>difficult puzzles, a difficult song</i>
Explicit Frame	Complex adjective, mixed relative <i>The vehicle was not easy to push</i> <i>easy ways to enjoy these flowers</i>

Complete statistics about target type and syntax are given in Table 11 with the most typical combinations (per Table 10) in bold. Overall NP targets comprise 50% of the cases, while clausal targets account for 37%. The balance are non-specific targets and finite verbs.

Table 11. Distribution of Target Types and Syntax

Target Type	Syntax								Grand Total	Percent
	Adverbial	It Extra- position	Copular predicate	Object comple- ment	Mixed relative	Pre- nominal phrase	Adnominal	Complex Adjective		
Finite verb	3								3	1%
<i>For</i> infinitive clause		21		10					31	6%
Infinitive Clause		99	1	4	1				105	22%
Gerund Clause		4	28	5					37	8%
Non-specific			43	8	6		2	4	63	13%
Activity NP			14	6			46		66	14%
Implicit Frame			13	1			65		79	16%
Explicit Frame				4	11	3	11	68	97	20%
Grand Total	3	124	99	38	18	3	124	72	481	

Table 11 includes two syntax types only briefly mentioned until here. One is syntax type Adverbial, which applies to non-standard use of *easy* as an adverb with a finite verb, as in (2.32).

(2.32) The more you help me right now, the easier the whole thing will go.

Similar adverbial use of *hard* is also possible, although the actual cases of adverbial *hard* in the data all involved the meaning ‘strenuously’ as in *working hard*. The other syntax type in Table 11 that has received only brief mention is the object complement construction, which always involves one of the other constructions embedded within it. Examples were given earlier of an embedded complex adjective with an explicit-frame target (2.28) (*made such trips difficult to find*) and embedded *it*-extraposition of an infinitive clause target (2.4) (*make it hard for politicians to reach consensus*).

The target and syntax types shown here account for all of the uses of *easy* adjectives found in the data, other than cases in which the adjective means something other than the effort required to do something. *Hard* in particular has numerous other uses, but *easy* also has idiomatic uses, as in *take it easy*, *rest easy*, and *easy chair*. With these exceptions, the observed uses fit well the expected patterns laid out at the beginning of this chapter.

3. *Easy* Adjectives in Spanish, German, and Russian

Corpus data were analyzed from three Indo-European languages including a Romance language (Spanish), a Germanic language (German) and a Slavic language (Russian). For each language, the presentation will include:

- Data source
- Key grammatical facts
- Targets and syntax of *easy* adjectives. As for English, the analysis proceeds from the most verbal targets (clauses and non-finite verbs) through those with conventionally associated activities, to those with no verbal associations at all.

3.1. Spanish

3.1.1 Data Source. Data for Spanish are taken from the Genre/Historical section of the Corpus del Español (Davies 2009a). This corpus, according to its website, contains 100 million words (tokens) of data from the 1200s to 1900s. For the 1900s, it is equally divided between spoken, fiction, newspaper, and academic texts. Only data for the 1900s were used. The same interface provides access to a much larger corpus of about two billion words, but it is entirely composed of data from web pages.

3.1.2 Spanish Grammar.¹² Unmarked constituent order in Spanish is Subject-Verb-Object (SVO). There is no case marking except for pronouns. Verbs are marked for number, person, tense, and aspect. Despite the lack of case marking, constituent order is somewhat more flexible than in English. Nouns are marked for gender, which is either masculine or feminine. Key facts about adjectives in Spanish include:

- With few exceptions, adjectives are marked for number and, for adjectives ending a vowel, for gender as well. Adjectives agree in number, and when possible in

¹² Facts about Spanish grammar are from Butt and Benjamin (2013).

gender, with the noun they modify. The adjectives analyzed, *fácil* ‘easy’ and *difícil* ‘hard, difficult’, are marked only for number, having the forms *fácil/fáciles* and *difícil/difíciles*.

- When used adnominally, adjectives may precede or follow the noun they modify. Generally, restrictive uses are post-nominal while non-restrictive uses are pre-nominal, but there are many variations to this pattern.
- Comparative and superlative are expressed periphrastically, e.g. *más fácil* ‘easier’ (lit. ‘more easy’) and *lo más fácil*, ‘easiest’ (lit. ‘the more easy’).
- There are distinct adverbial forms *fácilmente* ‘easily’ and *difícilmente* ‘with difficulty’. As in English the adjective form *fácil* ‘easy’ is occasionally used adverbially.

3.1.3 Targets of Easy Adjectives in Spanish. As in English, targets of *easy* adjectives in Spanish, including words, phrases, and whole clauses that denote activities either directly or indirectly. All of the principal target types found in English also occur in Spanish, but Spanish has one more type not found in English, finite complement clauses. These typically perform a similar function as *for*-infinitives in English, allowing for a different subject than the main clause. Spanish has only one non-finite verb form, an infinitive; infinitive clauses can occur in canonical subject position, in a prepositional phrase (both similar to English gerunds), and extraposed, following a copula. Table 12 gives relative frequencies from the data, listed from the most verbal targets, requiring no context at all to be called easy or difficult to the least verbal and most concrete, requiring an explicit activity-related context to be called easy or difficult.¹³ Examples of specific targets and the associated syntax will be given in the following sections.

¹³ The count of tokens for *fácil* ‘easy’ is over 200 because the initial sample left out plural forms and these were added later, in proportion to their occurrence in the total corpus. Cases were eliminated if they consisted of fragments for which there is no target at all, or appeared to contain questionable data, either garbled in transcription or, in some cases, uttered by non-native speakers.

Table 12. Targets of Easy Adjectives in Spanish

Target Type	<i>Fácil</i> ‘Easy’	<i>Difícil</i> ‘Difficult’	Total	Weighted Percent ^a
Finite Verb	4%	0%	2%	2%
Finite Complement Clause	4%	4%	4%	4%
Infinitive	30%	35%	33%	33%
Non-specific	19%	20%	20%	20%
Activity NP	21%	10%	16%	14%
Implicit Frame	9%	20%	14%	16%
Explicit Frame	13%	11%	12%	12%
Total	100%	100%	100%	100%
Usable Relevant Cases	208	193	401	
Cases analyzed	218	199	417	
Total Cases in the Corpus	2,039	3,331	5,370	

Percentages are of usable relevant cases for each adjective.

Boxes mark cases that are significantly higher than the other column with 95% confidence. For use with finite verb targets, $t=2.9$ ($p=.004$), for use with Activity NP targets, $t=3.0$ ($p=.003$), for use with Implicit Frame targets, $t=3.0$ ($p=.002$).

^aWeighted according to total cases in the corpus. These percentages are provided for comparison to other languages in Chapter 4.

3.1.4 Non-specific Targets in Spanish. As in English, instances of *easy* adjectives with syntactically non-specific targets are common. These refer to some idea in the prior discourse that may be more or less clear, but not to any specific antecedent that can be assigned to a target type or syntax. They may have no subject (or more properly a zero-subject), as in (3.1) or generic subjects like *eso* ‘that’, *esto* ‘this’, or *cosas* ‘things’, as in

(3.2). In (3.1) what is easy might have been getting married or deciding to get married. In

(3.2) it is clear that what is difficult is getting the support of Congress, but no specific

phrase or clause of the first sentence can be the antecedent of *eso* ‘that’.

(3.1) Y decid-ió cas-ar-se y le era **fácil**.
and decided-3S marry-INF-REFL and 3S.DAT was.3S easy
‘And she decided to get married. And it was easy for her.’

(3.2) Usted necesit-ará el apoyo del Congreso. Y eso parece **difícil** porque....
You need-2S.FUT the support of Congress And that seems difficult because
‘You will need the support of Congress. And that seems difficult because...’

3.1.5 Clausal Targets in Spanish. Clausal targets (infinitive clauses and finite complement clauses) account for 37% of the cases analyzed. Most commonly, the infinitive clause is extraposed, following a copula, as in (3.3), but it can also be in subject position, as in (3.4).

(3.3) No fue **fácil** acord-ar los detalles
no be.PRET.3S easy remember-INF the details
‘It wasn’t easy to remember the details.’

(3.4) Enseñ-ar física en este momento es mucho más **fácil**
teach-INF physics in this moment be.PRES.3S much more easy
‘Teaching physics right now is much easier.’

Note that there is no explicit subject in the extraposed version and the copula always has the third person singular form. This can be understood as the zero third-person singular, similar to dummy *it* in English, being marked on the verb, as is common in Spanish, or, more simply, as a case of inverted constituent order, as is also common in Spanish, with the copula agreeing with an infinitive subject.

The second kind of clausal target is a complement clause with a subjunctive finite verb, often with an explicit subject, as in (3.5).

- (3.5) es **difícil** que los ion-es estén unid-os estrechamente
 is difficult that the.M.PL ions(M)-PL be.PRES.SBJV.3PL bound-M.PL tightly
 ‘It is difficult for the ions to be tightly bound.’

3.1.6 Activity NP Targets in Spanish. Since Activity NPs directly denote activities, they require no context of any kind to be described by an *easy* adjective. As in English, with Activity NPs, *easy* adjectives are most commonly used adnominally as in (3.6) and (3.7), but also frequently as copular complements, as in (3.8). A full list of Activity NP targets is given in Table 13. Many words have equivalents on both the English and Spanish lists, including words meaning ‘task’, ‘life’, ‘access’, ‘answer’, ‘solution’, and ‘choice.’

- (3.6) Su vida era una búsqueda de soluciones rápidas y **fáciles**
 his life be.IPFV.3S a search of solution.PL rapid.PL and easy.PL
 ‘His life was a search for rapid and easy solutions.’
- (3.7) Eso que estás dici-endo es una **fácil explicación**.
 that which be.PRES.2S say-PROG be.PRES.3S an easy explanation
 ‘What you’re saying is an easy explanation.’
- (3.8) Su imitación a mí me resulta muy **fácil**.
 its imitation to me for.me becomes very easy
 ‘Its imitation, for me, is very easy.’ (Imitating a voice, once heard.)

Table 13. Activity NP Targets in Spanish

<i>Fácil</i> ‘Easy’	<i>Difícil</i> ‘Difficult’
<i>acceso</i> ‘access’	<i>acceso</i> ‘access’
<i>apertura</i> ‘opening’	<i>adaptación</i> ‘adaptation’
<i>búsqueda</i> ‘search’	<i>caracterización</i> ‘characterization’
<i>captura</i> ‘capture’	<i>competencia</i> ‘competition’
<i>competencia</i> ‘competition’	<i>elección</i> ‘choice’
<i>el dominio romano</i> ‘Roman occupation’	<i>encargo</i> ‘task’
<i>el espionaje</i> ‘espionage’	<i>la aprobación</i> ‘the approval’
<i>empresa</i> ‘undertaking’	<i>la comunicación</i> ‘communication’
<i>enriquecimiento</i> ‘enrichment’	<i>la despedida</i> the farewell’
<i>homologaciones</i> ‘confirmations’	<i>la implementación y la organización</i>
<i>la vida</i> ‘life’	‘implementation and organization’
<i>lectura</i> ‘reading (of a book)’	<i>la observación</i> ‘observation’
<i>manejo</i> ‘handling’ (2)	<i>la vida</i> ‘life’
<i>obtención</i> ‘procurement’	<i>meditación</i> ‘meditation’
<i>paso</i> ‘passage’	<i>misión</i> ‘mission’
<i>pesquisa</i> ‘investigation’	<i>obras</i> ‘works (building projects)’
<i>planteamiento</i> ‘presentation’	<i>tarea</i> ‘task’
<i>realización</i> ‘attainment’	<i>un parto</i> ‘a birth’
<i>recurso</i> ‘recourse’	<i>un paso</i> ‘a step’
<i>respuesta</i> ‘answer’	<i>un trabajo</i> ‘a job’
<i>respuestas</i> ‘responses’	
<i>solución</i> ‘solution’ (2)	
<i>soluciones</i> ‘solutions’ (3)	
<i>su imitación</i> ‘its imitation’	
<i>tarea</i> ‘task’	
<i>transporte</i> ‘transport’ (2)	
<i>un acceso</i> ‘an access’	
<i>un truco</i> ‘a trick’	
<i>una comparación</i> ‘comparison’	
<i>una conquista</i> ‘a conquest’	
<i>una explicación</i> ‘an explanation’ (3)	
<i>una lectura</i> ‘a reading or interpretation’	
<i>una tarea</i> ‘a task’ (2)	
<i>una vida</i> ‘a life’ (3)	

3.1.7 Implicit-Frame Targets in Spanish. Where a thing has an associated activity that is clear from general knowledge or the general topic of the discourse (the implicit frame), that thing can be called easy without explicitly stating the activity. In (3.9), a rival or opponent is an entity to be beaten in a competition of some sort (in this case a soccer match). In (3.10), the speaker is a musician talking about learning to play various instruments. In (3.11), the usage makes it clear that *cruce de caminos* ‘crossroads’ is a metaphor for a decision point, so what is difficult is making a decision.

(3.9) Argentina ser-á un rival **difícil**.
 Argentina be.FUT.3S a rival difficult
 ‘Argentina will be a difficult opponent.’

(3.10) Yo cre-o que no hay instrumento **fácil**, realmente.
 I believe-PRES.1S that no exist instrument easy really
 ‘I don’t think there is any easy instrument, really.’

(3.11) La situación de la ópera se encuentr-a en un **difícil** cruce de caminos.
 The situation of the opera REFL find-PRES.3S in a difficult crossing of roads
 ‘The situation of the opera is at a difficult crossroads.’

As in English, with implicit-frame targets, *easy* adjectives are most commonly used adnominally, although they are also used as copular complements. A full list of implicit-frame targets is given in Table 14. Overlaps between the English and Spanish lists of implicit-frame targets include words meaning ‘question’, ‘route’, ‘issue’, ‘conditions’, ‘situation’, and various periods of time.

Table 14. Implicit-Frame Targets in Spanish

<i>Fácil</i> ‘Easy’	<i>Difícil</i> ‘Difficult’
<i>que (un reto)</i> ‘which (a challenge)’	<i>asunto</i> ‘(unresolved) issue’
<i>pregunta</i> ‘question’	<i>caso</i> ‘case, situation’ (2)
<i>el camino</i> ‘road’	<i>circunstancias</i> ‘circumstances’ (2)
<i>asunto</i> ‘issue’	<i>condiciones</i> ‘conditions’
<i>un modo de vida</i> ‘a way of life’	<i>contexto</i> ‘context’
<i>presa(s)</i> ‘prey’ (5)	<i>contexto presupuestario</i> ‘budgetary context’
<i>plata</i> ‘money’	<i>cruce de caminos</i> ‘crossroads (decision point)’
<i>palabras</i> ‘words’	<i>enfermedades</i> ‘illnesses’
<i>materias</i> ‘subjects (of study)’	<i>equilibrio</i> ‘equilibrium’
<i>instrumento</i> ‘(musical) instrument’	<i>gramática y un vocabulario</i> ‘grammar and vocabulary’
<i>esperanzas</i> ‘hopes’	<i>incipios</i> ‘beginnings’
<i>camino</i> ‘road’	<i>la relación permanente</i> ‘a (romantic) relationship’
<i>recurso</i> ‘means’	<i>Los años</i> ‘years’
<i>pasto</i> ‘fodder’	<i>materiales</i> ‘materials (topics of study)’
<i>fortunas</i> ‘fortunes’	<i>momentos</i> ‘moments’
	<i>obstáculos</i> ‘obstacles’
	<i>oficio</i> ‘occupation’ (of painter)
	<i>papel</i> ‘role’
	<i>parcela</i> ‘field (of endeavor)’
	<i>preguntas</i> ‘questions’
	<i>un rival</i> ‘a rival’
	<i>situación</i> ‘situation’ (8)
	<i>técnica</i> ‘expertise’
	<i>tema</i> ‘topic’
	<i>un año</i> ‘a year’
	<i>un asunto</i> ‘issue, matter’
	<i>un partido</i> ‘match (soccer game)’

3.1.8 Explicit-Frame Targets in Spanish. All of the examples of explicit-frame targets in the data employ complex adjectives of the pattern *fácil/difícil de V-inf*, as in *fácil de controlar* ‘easy to control’ or *difícil de comprender* ‘difficult to understand’. The preposition *de* is always present in this construction. It is the ordinary preposition *de*,

usually translated as ‘of’, used in many other contexts. Hence the infinitive in this construction works similarly to an English *-ing* form as in *easy of understanding*.

The complex adjective can be a post-copular predicate, as in (3.12), or a post-nominal modifier as in (3.13). In (3.12) note that the plural markings of *imágenes* ‘images’, *eran* ‘were’, and *fáciles* ‘easy’ make it unambiguous that *imágenes* is the grammatical subject and that *fáciles* is an adjective modifying it.

- (3.12) Las imágenes de los pulmones era-n **fácil-es** de interpretar
the.PL image-PL of the lungs be.IPFV-3PL easy-PL of interpret-INF
‘The images of the lungs were easy to interpret.’

- (3.13) deb-en tom-ar hierro **fácil** de asimilar
should-PRES.3PL take-INF iron easy of assimilate-INF
‘They should take iron that is easy to assimilate.’

A full list of explicit-frame targets is given in Table 15, in which pronoun references with clear antecedents are given with the antecedent. The explicit-frame targets are all things that are not readily described as easy or hard, except when explicitly associated with an activity—the explicit frame. In (3.14) *manera* ‘way’ could be called easy on its own (as in *do it the easy way*), but only if some activity to be done was already under discussion. Since virtually anything can be called easy or hard with respect to some activity, it is to be expected, and is the case, that there is virtually no overlap between the English and Spanish lists.

- (3.14) ...es una manera **fácil** de evad-ir-se de los problemas.
be.PRES.3S a way easy of escape-INF-REFL from the problems
‘It is an easy way to evade problems.’

Table 15. Explicit-Frame Targets of Easy Adjectives in Spanish

<i>Fácil</i> ‘Easy’	<i>Difícil</i> ‘Difficult’
<i>Basic</i> ‘Basic (programming language_’	<i>el catalán</i> ‘Spanish’
<i>circulo</i> ‘circle (of people)’	<i>el mal</i> ‘evil’
<i>cosas (exquisiteces)</i> ‘things (delicacies)’	<i>el peso de la culpa</i> ‘the weight of the blame’
<i>eso</i> ‘that (how something is being fixed)’	<i>epoca</i> ‘time period’
<i>hierbas y especias</i> ‘herbs and spices’	<i>esta gente</i> ‘these people’
<i>hierro</i> ‘iron’	<i>experimentos</i> ‘experiments’
<i>hilos</i> ‘threads’	<i>historia de la economia</i> ‘history of s.t.’
<i>imágenes</i> ‘images’	<i>hombre</i> ‘a man’
<i>la (la forma poetica)</i> ‘the poetic form (of language)’	<i>la música española</i> ‘Spanish music’
<i>lo (aire)</i> ‘it (air)’	<i>la pasión y el carácter experimental</i> ‘passion and experimental character’
<i>manera</i> ‘way’ (2)	<i>las cosas</i> ‘things’
<i>material</i> ‘material’	<i>los más simples</i> ‘the simplest ones (seismograms)’
<i>obra</i> ‘work (of art)’	<i>obra</i> ‘(musical) body of work’
<i>pelota</i> ‘ball’	<i>teatro nuevo</i> ‘a new theater’
<i>pórtico</i> ‘portico’	<i>un acción</i> ‘a stock (corporate share)’
<i>programas</i> ‘programs’	<i>una esencia</i> ‘an essence’
<i>propiedad</i> ‘(physical) property’	<i>zero (la música de guestern)</i> ‘the music of westerns’
<i>que (un aullido)</i> ‘which (a howl)’	<i>zero (un mineral de hierro)</i> an iron mineral’
<i>que (una pregunta)</i> ‘which (a question)’	<i>zero (un mundo)</i> ‘a world’
<i>secretos</i> ‘secrets’	<i>zero (un veneno de las abejas)</i> ‘bee venom’
<i>sujeto</i> ‘(experimental) subject’	<i>zero (una vida sin música)</i> ‘a life without music’
<i>uno (un peso)</i> ‘one (a weight)’	<i>zero</i> ‘he’
<i>zero (el condón)</i> ‘the condom’	
<i>zero (estudios)</i> ‘studies (articles)’	
<i>zero (una almohada)</i> ‘a pillow’	

3.2. German

3.2.1 Data Source. Data for German come from the “core corpus” of the *Digitales*

Wörterbuch der deutschen Sprache (Digital Dictionary of the German Language—

DWDS) at www.dwds.de produced by the Berlin-Brandenburg Academy of Sciences

(Geyken 2006). The core corpus contains about 120 million tokens from about 80,000 twentieth-century documents. The corpus attempts to be balanced by text-type and time period. According to the project website, the text make-up is approximately:

Literary texts	28%
Newspapers	27%
Scientific texts	23%
General non-fiction	21%

Spoken material is available only in a separate, specialized corpus (which was not used because the available material was not balanced by time period). Each adjective was analyzed using 200 random hits from non-scientific sources from 1960 and later.

3.2.2 German Grammar.¹⁴ Unmarked constituent order is SVO, but there is considerable flexibility, made possible in part by case marking. Case marking of pronouns is lexical, i.e. according to a paradigm for each pronoun, while case marking of NPs appears most prominently on determiners; for example, nominative *er* ‘he’ and *der Mann* ‘the man’ and accusative *ihn* ‘him’ and *den Mann* ‘the man’. The invariable rule of constituent order is that the finite verb is always second. There are three genders, masculine, feminine, and neuter. The famous tendency to place verbs at the end of clauses applies only to subordinate clauses and to participial and infinitive complements of modals and auxiliary verbs. In these cases, the modal or auxiliary functions as the main, tensed verb in the usual second-constituent position.

¹⁴ Facts about German grammar are from Lederer (1969).

Adjectives in German can be used adnominally (attributively) or as a predicate complement of a copula or intransitive verb. When used adnominally, adjectives are marked for number, gender, and case and agree with the noun modified. When used as predicates, adjectives are unmarked and are indistinguishable from adverbs. Many, possibly most, adjectives can be used adverbially, modifying finite verbs and other adjectives. Lederer (1969) illustrates this with the example:

<i>Das Mädchen ist schön.</i>	<i>Das Mädchen singt schön.</i>
‘The girl is beautiful.’	‘The girl sings beautifully.’

Lederer notes that many authorities deny that there is any distinction between predicate adjectives and adverbs.

3.2.3 Targets of Easy Adjectives in German. The behavior of three adjectives was explored: *leicht* ‘easy’, *schwer* ‘hard’, and *schwierig* ‘difficult’. *Leicht* and *schwer* are a semantic pair having the literal meanings ‘light’ and ‘heavy’. In addition to ‘easy’, other figurative uses of *leicht* include ‘slight’, ‘mild’, and ‘not serious’, while other figurative uses of *schwer* include ‘severe’, ‘intense’, and ‘serious’. Given the semantic range of *leicht/schwer*, many of the 200 random cases found in the corpus were not relevant to this analysis. In the sense of ‘easy’ and ‘hard’ both are used in a wide range of syntactic environments, including adverbially, as seen in Table 16. *Schwierig* means only ‘difficult’ and is used mostly to describe NPs. (The glosses ‘hard’ for *schwer* and ‘difficult’ for *schwierig* are intended only to reflect the fact that *schwierig* has a restricted semantic range compared to *schwer*, much as *difficult* has a restricted semantic range compared to *hard*.)

There are some striking differences in the usage patterns for the three words that were analyzed. The boxed figures in Table 16 are significantly different (in percentage terms, with 95% confidence) from those in the other columns.

Table 16. Targets of Easy Adjectives in German

Target Type	<i>Leicht</i> 'Easy'	<i>Schwer</i> 'Hard'	<i>Schwierig</i> 'Difficult'	Total	Weighted Percent ^a
Finite Verb*	49%	6%	0%	15%	24%
Finite Complement Clause			0%	1%	0%
Infinitive Clause	10%	32%	11%	15%	19%
Participle*	1%	0%	0%	0%	0%
Adjective*	5%	9%	1%	4%	6%
Non-specific	13%	5%	3%	6%	8%
Activity NP	6%	22%	29%	21%	16%
Nominal Infinitive	0%	3%	2%	1%	1%
Implicit Frame	5%	14%	50%	30%	16%
Explicit Frame	12%	8%	5%	7%	9%
Total	100%	100%	100%	100%	100%
Total Usable Relevant Cases	110	77	200	387	
Cases analyzed	200	200	202	604	
Total Cases in the Corpus	26,455	34,168	5,854	66,477	

Percentages are of usable relevant cases for each adjective.

Boxes mark cases that are significantly different from the other columns, combining all adverbial uses together, with 95% confidence.¹⁵

*Adverbial use ^aWeighted according to total cases in the corpus.

¹⁵ For adverbial use of *leicht* vs. *schwer* $t=6.2$ ($p<.001$), *leicht* vs. *schwierig* $t=10.9$ ($p<.001$). For use with non-specific targets, *leicht* vs. *schwierig* $t=3.3$ ($p=.001$). For use with Activity NP targets, *leicht* vs. *schwer* $t=3.2$ ($p=.002$), *leicht* vs. *schwierig* $t=4.6$ ($p<.001$). For use with infinitive clause targets, *schwer* vs. *leicht* $t=3.8$ ($p<.001$), *schwer* vs. *schwierig* $t=4.3$ ($p<.001$). For use with implicit-frame targets, *leicht* vs. *schwierig* $t=8.0$ ($p<.001$), *schwer* vs. *schwierig* $t=5.4$ ($p<.001$).

Notably, adverbial use is much more common with *leicht* ‘easy’ than the other words; implicit-frame targets are much more common for *schwierig* ‘difficult’; and infinitive clause targets occur more often with *schwer* ‘hard’.

3.2.4 Adverbial Use of Easy Adjectives in German. As seen in Table 16, adverbial use is the most common use of *leicht* ‘easy’, but not of *schwer* ‘hard’ or *schwierig* ‘difficult’. Adverbial uses include use with verbs, adjectives, and participle targets, as in (3.15) – (3.17). In addition, as will be discussed, explicit-frame targets in German may involve adverbial use.

- (3.15) Das Schiff habe sich **leicht** und bequem steuer-n lass-en
 the ship have-PRES.SBJV.3S REFL **easy** and comfortably steer-INF let-INF
 ‘The ship [it was said] could be easily and comfortably steered.’
 (Lit. ‘The ship let itself easily and comfortably steer.’)
 (Verb target)

- (3.16) Die Aussöhnung zwischen den beiden Koreas scheint nur sehr **schwer**
 the reconciliation between the both Koreas seems only very difficult
erreichbar zu sein.
 reachable to be-INF
 ‘Reconciliation between the two Koreas seems very difficult to achieve.’
 (Lit. ‘Reconciliation between the two Koreas seems only with difficulty
 achievable.’)
 (Adjective target)

- (3.17) Das ist allerdings **leichter** gesagt als getan.
 that is though easier say.PST.PTCP than do.PST.PTCP
 ‘That that is easier said than done.’¹⁶
 (Past participle target)

¹⁶ In English, a prescriptive grammar purist might correct this to *more easily said than done*, but in German the adjectival and adverbial forms are identical.

3.2.5 Non-specific Targets in German. As in every language explored so far, *easy* adjectives commonly refer to non-specific targets as in (3.18), which follows a discussion about how earlier generations have rendered literary judgments about famous authors.

- (3.18) Um die Nachwelt steht es noch **schwierig-er**.
 for the posterity stands it even difficult-COMP
 ‘For posterity, it is even more difficult.’

3.2.6 Clausal Targets in German. Nearly all of the examples of clausal targets employ extraposition of infinitive clauses, using a form (the *zu*-infinitive) that closely parallels the English *to*-infinitive with a dummy *it*. In (3.19) note that German syntax places the *zu*-infinitive at the end of its clause, following the direct object.

- (3.19) Es ist einfach, Ratschläge zu erteil-en, aber **schwer**, sie zu befolg-en.
 it is simple advice(PL) to give-INF but hard them to follow-INF
 ‘It is easy to give advice but hard to follow it.’

It is possible but uncommon for the infinitive clause to appear in canonical subject position. (3.20) is one of the handful of cases in the data.

- (3.20) Eine Disco im Griff zu halt-en, ist für den Inhaber sehr **schwer**
 a disco in.the grasp to hold-INF is for the owner very hard
 ‘Keeping a disco under control is hard for the owner.’

It is also possible for a bare infinitive (without *zu*) to function quasi-nominally, with an article, but also with verbal complements (similar to an English *gerund*). (3.21) shows an example with an ad-hoc compound ‘breakfast-making’.

- (3.21) Wenigstens war dann das Frühstück-mach-en nicht so **schwer**.
 at.least was then the breakfast-make-INF not so hard
 ‘At least making breakfast wasn’t so hard then.’

The solitary case of a finite complement clause target involves an expanded meaning of ‘difficult’. In (3.22) *schwierig* ‘difficult’ means ‘creating difficulties’ rather than ‘requiring effort’.

- (3.22) Besonders **schwierig** für den Slalom-läufer ist, dass er nicht auf dem Rennkurs trainieren darf.
 Especially difficult for the slalom-runner is that he not on the race-course train-INF may
 ‘Especially difficult for the slalom skier is that he is not allowed to train on the racecourse.’

3.2.7 Activity NP Targets in German. The list of Activity NP targets (Table 17) is dominated by targets of *schwierig* ‘difficult’ partly because, unlike *leicht* ‘easy’ and *schwer* ‘hard’, it is mostly used adnominally, and also because its meanings are mostly limited to ‘difficult’.¹⁷ Activity NP targets appear mostly in adnominal and copular constructions, as in (3.23) and (3.24) respectively.

- (3.23) Wie bereiten Sie sich auf eine **schwierige** Verhandlung vor?
 how prepare you REFL for a difficult negotiation PRF
 ‘How do you prepare yourself for a difficult negotiation?’
- (3.24) ...als ob das Leben nicht **schwer** genug wäre.
 as if the life not hard enough is.PST.SBJV
 ‘...as if life weren’t hard enough.’

Activity NPs refer to activities with no help from conventional or explicit frames, and the target words in Table 17 require no implicit or explicit frame to be described as easy or

¹⁷ This does not necessarily mean that *leicht* and *schwer* are not commonly used with Activity NP (and implicit-frame) targets. The token counts for *leicht*, *schwer*, and *schwierig*, given at the bottom of Table 16, show that *leicht* and *schwer* are far more common overall than *schwierig*. As a result, the number of total occurrences of *leicht* and *schwer* with Activity NPs is probably higher than for *schwierig*. However, confirming this would require an efficient way of filtering out tokens with meanings other than ‘easy’ and ‘hard’. No such method is available.

hard. Many of the entries in Table 17 are already familiar from the appearance of their equivalents in earlier tables of English and Spanish Activity NP targets.

Table 17. Activity NP Targets in German

Leicht 'Easy'	Schwierig 'Difficult'	
<i>Abschied</i> 'parting'	<i>Abflug</i> 'takeoff'	<i>Lösung</i> 'solution'
<i>Arbeit</i> 'work'	<i>Ablösungsprozess</i>	<i>Objekt</i> 'project'
<i>Ende</i> 'end (death)'	'separation process'	<i>Preisfestsetzung</i>
<i>Entschluss</i> 'decision'	<i>Arbeit</i> 'task, work' (3)	'determining a price'
<i>Leben</i> 'life'	<i>Aufgabe</i> 'task' (7)	<i>Prozess</i> 'process' (3)
<i>Orientierung</i>	<i>AufGrund-Setzen</i> 'setting on	<i>Regelung</i> 'resolution
'orientation'	land'	(resolving)'
<i>Teil der Aufgabe</i> 'part	<i>Aufträge</i> 'orders or	<i>Übergangsphase</i>
of the task'	decisions'	'transitional phase'
<i>Unternehmen</i>	<i>Aussprache</i> 'pronunciation'	<i>Unternehmen</i> 'enterprise'
'undertaking'	<i>Beantwortung</i> 'response'	<i>Verfolgung</i> 'pursuit'
	<i>Behandlung</i> 'treatment'	<i>Verhandlung(en)</i>
	<i>Bekehrung</i> 'conversion'	'negotiation(s)' (3)
	<i>Bemühungen</i> 'efforts'	<i>Verkehr</i> 'transport'
	<i>Diagnosen</i> 'diagnoses'	<i>Versorgungslage</i> 'supply
	<i>Dialog</i> 'dialog'	situation'
	<i>die Eine</i> 'one--a relationship'	<i>Vertragsverhandlungen</i>
	<i>die Erzielung</i> 'achievement'	'contract negotiation'
	<i>Die Überzeugung anderer</i>	<i>Wahlen</i> 'elections'
	'convincing others'	<i>Wissenschaft</i> 'science'
	<i>dieser</i> 'this - a dialog'	<i>Würdigung</i> 'appraisal'
	<i>Diskussion(en)</i>	<i>Zigarettenmarketing</i>
	'discussion(s)' (2)	'cigarette marketing'
	<i>Einspeisung</i> 'feeding'	
	<i>Entscheidungen</i> 'decisions'	
	(5)	
	<i>Form der Kooperation</i> 'form	
	of cooperation'	
	<i>Formulierung</i> 'formulation'	
	<i>Invasion</i> 'invasion'	
	<i>Leben</i> 'life'	

3.2.8 Implicit-Frame Targets in German. Most of the target words listed in Table 18 are easily associated with some relevant activity, even without any context at all.

Table 18. Implicit Frame Targets in German

Leicht ‘Easy’	Schwierig ‘Difficult’	
<i>Mitleid</i> ‘pity’	<i>Bedingungen</i> ‘(financial) terms’	<i>Partitur</i> ‘musical score’
<i>Opfer</i> ‘victim’	<i>Bedingungen</i> ‘conditions’	<i>Passagen</i> ‘passages (of music)’
<i>die Sache</i> ‘the situation’	<i>Bezirk</i> ‘neighborhood’	<i>Phase</i> ‘phase’ (2)
<i>eine Zeit</i> ‘a time’	<i>die Zeit</i> ‘time’	<i>Problem</i> ‘problem’ (4)
<i>Ziele</i> ‘goals’	<i>Disziplin</i> ‘disciplines (areas of sports specialization)’	<i>Probleme</i> ‘problems’ (9)
	<i>Ende</i> ‘end’	<i>Punkte</i> ‘points (of negotiation)’
Schwer ‘Hard’	<i>Fälle</i> ‘cases’	<i>Sachen</i> ‘issues, matters’ (3)
<i>der Abschied</i> ‘the farewell’	<i>Felder</i> ‘fields (topics of negotiation)’	<i>Schulverhältnisse</i> ‘school conditions’
<i>die Lage</i> ‘the situation’	<i>Frage</i> ‘question (issue)’ (3)	<i>Situation</i> ‘situation’ (9)
<i>Lehren</i> ‘lessons’	<i>Fragen</i> ‘issues’ (3)	<i>Strategie</i> ‘strategy’
<i>Präsidentschaftsperiode</i>	<i>Fragen</i> ‘questions’ (3)	<i>Thema</i> ‘topic’ (2)
‘Presidential term of office’	<i>Gedicht</i> ‘poem’	<i>Tino</i> ‘Tino (name of a child)’
<i>Stunden</i> ‘hours’	<i>Gegenstand</i> ‘subject’	<i>Übergangsperiode</i>
<i>Vergangenheit</i> ‘a past’	<i>Gelände</i> ‘terrain’	‘transitional period’
<i>Zeiten</i> ‘times’	<i>Geschäft</i> ‘business (matter)’	<i>Übergangsphase</i> ‘transition phase’
<i>die Zeit</i> ‘the time (of some wars)’	<i>Gewürzen</i> ‘spices’	<i>Umstände</i> ‘circumstances’ (2)
<i>die Zeiten</i> ‘the times’	<i>Grenzfragen</i> ‘border issues’	<i>Verfahren</i> ‘legal cases’
	<i>Hürden</i> ‘hurdles’	<i>Verkehrssituation</i> ‘traffic condition’
	<i>Jahr</i> ‘year’	<i>Voraussetzungen</i>
	<i>Kinder</i> ‘children’	‘requirements’
	<i>Kombinationen</i> ‘combinations (of jumps)’	<i>Wartezeit</i> ‘wait time’
	<i>Kreditstanding</i> ‘credit standing’	<i>Weg</i> ‘path’ (2)
	<i>Lage</i> ‘situation’ (13)	<i>Wirtschaftslage</i> ‘economic situation’ (3)
	<i>Lernmaterial</i> ‘learning material’	<i>Zeit</i> ‘time’ (2)
	<i>Manager</i> ‘managers’	<i>Zeiten</i> ‘times’ (2)
	<i>Märkte</i> ‘markets’	<i>Zukunft</i> ‘the future’
	<i>Mission</i> ‘mission’	

For example, the very frequent cases of *Situation* and its near-synonyms such as *Lage* ‘position or situation’ refer to things to be endured or resolved, in in (3.25):

- (3.25) Es bringt die Hochschulen in eine äußerst **schwierige Lage**.
It brings the colleges in a extremely difficult situation
‘It puts the colleges in an extremely difficult situation.’

Resolving or solving is also the frame for similarly frequent cases of *Frage(n)* ‘question(s) or issue(s)’, *Problem(e)* ‘problem(s)’, and *Sache(n)* ‘matter(s) or issue(s)’, as in (3.26):

- (3.26) Es braucht Zeit, bei so ein-em **schwierig-en Problem** das Wesentliche
It needs time by such a-DAT difficult-DAT problem the essential
der Lösung herauszuarbeiten.
of.the solution work.out-INF
‘It takes time, with such a difficult problem, to work out the essentials of a solution.’

Enduring or successfully getting through is the frame for various expressions denoting periods of time, including *(die/eine) Zeit(e)* ‘the/a time(s)’, *Period(e)* ‘period(s)’, and *Phase(n)* ‘phase(s)’. Looking at a less obvious case, calling *Kinder* ‘children’ or *Tino* (a child’s name) *schwierig* means the child is difficult to handle. In fact this usage is specifically listed in the authoritative Duden online dictionary (www.duden.de), which gives as one of two main meanings of *schwierig*, “hard to handle, to satisfy.” As expected, implicit-frame targets in German are similar to those seen earlier for English and Spanish.

3.1.5 Explicit-Frame Targets in German. Explicit-frame targets appear in a complex-adjective construction that is superficially similar to the ones in English and Spanish, but is arguably quite different in structure. In (3.27) and (3.28) the phrases *leicht zu finden* ‘easy to find’ and *schwieriger zu nähen* ‘harder to sew’ appear similar to their English

counterparts. Also, in (3.28) the target *ein Riss* ‘a cut’ is clearly marked nominative, even though semantically it is a Patient of the verb.¹⁸

(3.27) *Meine Nase? Die ist doch leicht zu finden!*
my nose it is but easy to find-INF
‘My nose? But it’s easy to find!’

(3.28) *Das Hauptargument der Mediziner ist, dass ein Riss sehr viel
the main.argument of.the physicians is that a.NOM tear very much
schwieriger zu näh-en ist als ein glatter Schnitt.
harder to sew.up-INF is than a.NOM smooth cut
‘The main argument of the physicians is that a tear is much harder to sew up
than a smooth cut.*

But the infinitive in these examples is an instance of what is sometimes called the “modal infinitive” in German grammar, with a passive interpretation (Durrell 2017). Lederer (1969) gives the following pair as an illustration (glosses added):

(3.29) *Seine Aussprache war leicht zu versteh-en.*
his pronunciation was easy to understand-INF
‘His pronunciation was easy to understand.’/ ‘His pronunciation could be easily understood.’

(3.30) *Dieses Kapitel ist bis morgen zu les-en.*
this chapter is by tomorrow to read-INF
‘This chapter must be read by tomorrow.’

In the first example, (3.29), *leicht* ‘easy’ appears in the same context as in (3.27) and (3.28), but in the second example of Lederer’s pair, (3.30), the same slot is occupied by the adverbial phrase *bis morgen* ‘by tomorrow’. This suggests that the second gloss in (3.29), with *easily understood*, is closer to the sense of the German. Comrie and

¹⁸ For *Riss* ‘cut’, which is masculine, accusative would be *einen Riss*. In the other examples, with feminine and neuter targets, nominative and accusative marking cannot be distinguished, as they are identical.

Matthews (1990) reach the same conclusion and underline the passive/modal nature of this construction with the example in (3.31):

- (3.31) Dies-er Mann ist zu furchten.
this-NOM man is to fear-INF
'This man is to be feared.'/ 'This man should/must be feared'

Regardless of the details of the German syntax, it is clear that, as in other languages, the construction in question allows an *easy* adjective (even if used adverbially in German) to describe a target that has no obvious associated activity by explicitly supplying an activity, as is the case for all the targets in Table 19. The German data do include two target words that might have been called easy or hard on their own—*Last* 'burden' and *Buch* 'book'. Two more apparently similar cases (*Verlust* 'loss' and *Warenumschlag* 'goods transfer') turn out to involve explicit frames other than the activities that the words themselves describe. Aside from these exceptions, the explicit-frame targets on their own have no relation to potential easiness, so it is not surprising that there is no overlap with the lists of English and Spanish explicit-frame targets.

Once adverbial uses come into consideration, cases like (3.16) could also be said to have explicit-frame targets. (3.16) was categorized as adverbial because the German is of the form 'Reconciliation between the two Koreas seems achievable with great difficulty'. But functionally, 'achievable with great difficulty' could be regarded as an explicit frame for the target 'reconciliation' as suggested by the free-form gloss 'Reconciliation between the two Koreas seems very difficult to achieve'.

Table 19. Explicit Frame Targets in German

<i>Leicht</i> ‘Easy’	<i>Schwer</i> ‘Hard’	<i>Schwierig</i> ‘Difficult’
<i>Café</i> ‘café’	<i>der Last</i> ‘the burden’	<i>Betonierbereiche</i>
<i>die</i> ‘it (my nose)’	<i>Illusionen</i> ‘illusions’	‘concreting areas’
<i>Geschicklichkeitsübung</i>	<i>Persianer und Indianer</i>	<i>Briefwechsel</i> ‘exchange of
‘skill exercise’	‘Persians and Indians’	letters’
<i>Klemmleuchte</i> ‘clamp	<i>Schutzrechte</i> ‘intellectual	<i>Buch</i> ‘book’
lights’	property rights’	<i>ein Riss</i> ‘a tear’
<i>Kompetenze</i> ‘abilities’	<i>Spannungsverhältnis</i>	<i>eine Reihe von öffentlichen</i>
<i>Meteoriten</i> ‘meteorites’	‘tension’	<i>Erklärungen</i> ‘a series of
<i>Reizobjekte</i> ‘stimulus	<i>wieviel Wahres</i> ‘how much	public statements’
objects’	truth’	<i>Flächen</i> ‘areas (of land)’
<i>Rinnen und Roste</i> ‘gutters		<i>Moskau</i> ‘Moscow’
and grates’		<i>Ort</i> ‘place’
<i>Truppenkonzentration</i>		<i>Sachverhalt</i> ‘facts’
‘troop concentration’		
<i>Verlust</i> ‘loss’ (to get over)		
<i>Vorsätze</i> ‘intentions’		
<i>Warenumschlag</i> ‘goods		
transfer’ (to regulate)		
<i>Windsurfer</i> ‘windsurfer’		

German seems to avoid using *easy* adjectives with definite pronouns referring to an NP target. In the tables of Activity NP, implicit-frame, and explicit-frame targets, there are only three such cases. For example, the only instance in the German data of a sentence of the general form *PRO is easy to V* is (3.23) (*My nose? It’s easy to see*).

3.3. Russian

3.3.1 Data Source. Russian data come from the Russian National Corpus (RNC) (Apresjan et al. 2006). According to its website (<http://www.ruscorpora.ru/old/en/>), the RNC “main corpus” contains about 209 million tokens from written texts, of which about

44% are from fiction and 56% non-fiction, principally journalism and technical/scientific sources.

3.3.2 Russian Grammar.¹⁹ Notable features of Russian, which it shares with other Slavic languages, are prominent case marking, relatively free word order, and a consistent aspect distinction between perfective and imperfective verbs. Unmarked constituent order is SVO, but variation is common; the general pattern is to place “new information” at the end of a clause. There are three genders, masculine, feminine, and neuter, and six cases. There are no articles and the present-tense copula is unexpressed (zero). A few facts about Russian adjectives (Corbett 2004, Wade 1992) will help clarify the patterns seen with *easy* adjectives:

- Adjectives occur as predicate complements, usually with a copula, and as modifiers in noun phrases.
- Adjectives have a “long form” and “short form.”
- The long form can be used attributively (adnominally, as a modifier in a noun phrase) or a predicate. It has a regular paradigm which allows agreement with the noun that is modified in gender (including the sub-gender of animacy), number, and case.
- The short form is used only as a predicate and has four forms, three used with singular nouns according to gender, and one used with plural nouns. The short form also has an invariable comparative form. The full short form paradigm for *legkij* ‘easy’ is:²⁰

MSg	<i>legok</i>	PL	<i>legki</i>
FSg	<i>legka</i>	Comp.	<i>legče.</i>
NSg	<i>legko</i>		

¹⁹ Facts about Russian grammar are from Wade (1992).

²⁰ Russian is transliterated, not rendered phonetically. Most letters can be considered to have approximately their Latin values, including *j* representing [j]; however, *š* is [ʃ], *č* is [tʃ], *ž* is [ʒ] and *y* is [ɨ]. The genitive and masculine accusative ending [ovo]/[evo] is spelled *ogo/ego* for historical reasons. Palatalization on word-final consonants is written *C’*.

- Neuter and comparative short form adjectives are usually identical in form to the related adverbs. Using the example of *legkij* ‘easy’, the neuter short form *legko* and the comparative *legče* may mean ‘easy’ or ‘easier’ respectively as regards a neuter noun, or ‘easily’ or ‘more easily’ applying to a verb in a verb phrase, an adjective, or a participle.

3.3.3 Easy Adjectives in Russian. The adjectives investigated are *legkij* ‘light, easy’, *tjaželij* ‘heavy, hard’, and *trudnij* ‘difficult, laborious’. As suggested by the glosses, *legkij* and *tjaželij* are a semantic pair having the literal meanings ‘light’ and ‘heavy’. They have numerous figurative meanings in addition to ‘easy’ or ‘hard’. For example, *legkij* can mean ‘slight’, ‘mild’, ‘gentle’, and ‘lung’. Given this semantic range, many of the 200 random cases of each found in the corpus were not relevant to this analysis. *Trudnij* is the adjective form of the noun *trud* ‘labor’. It is often translated with terms other than ‘difficult’, including ‘laborious’, ‘tough’, ‘arduous’, and ‘troublesome’, but these can all be understood as extended meanings of ‘difficult’ in specific circumstances.

As in all the languages examined, the Russian *easy* adjectives appear in a wide range of syntactic environments, as seen in Table 20. Adverbial use is common, similar to German. There are clear differences among the three adjectives. Statistically significant entries are outlined with boxes. *Legkij* ‘easy’ is more often used adverbially than the others., *Tjaželij* ‘hard’ is used more often with Activity NP and implicit frame targets than the others. *Trudnij* ‘difficult’ is used more with infinitive clause targets than the others.²¹ The apparent underrepresentation of explicit-frame uses of *tjaželij* ‘hard’ is not statistically significant.

²¹ For adverbial use of *legkij* vs. *tjaželij* $t=5.0$ ($p<.001$), *legkij* vs. *trudnij* $t=7.4$ ($p<.001$). For use with implicit-frame targets, *tjaželij* vs. *legkij* $t=4.4$ ($p<.001$), *tjaželij* vs. *trudnij* $t=-3.0$ ($p=.003$). For use with infinitive clause targets, *trudnij* vs. *tjaželij* $t=3.4$ ($p=.001$), *trudnij* vs. *legkij* $t=4.0$ ($p<.001$).

Table 20. Targets of Easy Adjectives in Russian

Target Type	<i>Legkij</i> 'Easy'	<i>Tyželij</i> 'Hard'	<i>Trudnij</i> 'Difficult'	Total	Weighted Percent ^a
Finite Verb*	22%	2%	3%	8%	10%
Finite Complement Clause		1	2%	1%	1%
Participle*	5%	0%	2%	2%	3%
Reflexive Passive*	10%	0%	0%	3%	4%
Infinitive Clause	26%	26%	52%	41%	34%
Activity NP	11%	21%	10%	12%	14%
Non-specific	9%	12%	8%	9%	10%
Implicit Frame	7%	34%	16%	17%	18%
Explicit Frame	10%	3%	9%	8%	8%
Total	100%	100%	100%	100%	100%
Total Usable Relevant Cases	91	58	194		
Cases Analyzed	200	200	204	604	
Total cases in the corpus	6,346	7,593	2,164		

Percentages are of usable relevant cases for each adjective.

Boxes mark cases that are significantly different from the other columns, combining all adverbial uses together, with 95% confidence.

*Adverbial use. ^aWeighted according to total cases in the corpus.

3.3.4 Adverbial Use of Easy Adjectives in Russian. Since the adverbial forms of adjectives are indistinguishable from short-form neuter or comparative forms, labelling specific uses as adverbial is based on syntax, specifically uses in which the target is a finite verb or participle. In (3.32) the phrase *legko i bystro* 'easily and quickly' must be adverbial since, if it were interpreted as neuter short-form adjectives, the words would agree only with *bolšinstvo* 'majority', while the position of the phrase immediately before

the finite verb, is typical of adverbial placement. In (3.33), the situation is similar, and the placement of *legko* immediately before the participle is typically adverbial; note that *ostroumny* ‘witty’ agrees with *stat’i* ‘articles’ but *legko* does not.

(3.32) *politsi-ya legk-o i bystr-o zaderživa-et bol’šinstv-o iz nix.*
 police(F)-NOM easy-ADV and quick-ADV detain-3S majority(N)-ACC of them
 ‘the police easily and quickly detain most of them.’

(3.33) *stat’-i M.M. ostroumn-y, legk-o čita-em-ye*
 article-NOM.PL M.M. witty-PL easy-ADV read-PASS.PTCP-NOM.PL
 ‘M.M.’s articles are clever and easily read.’

3.3.5 Non-specific Targets in Russian. Non-specific targets can be the neuter demonstrative *eto* ‘this’, referring to something in the preceding discourse, as in (3.34), or can make use of an impersonal construction in which there is no explicit subject and often no verb, as in (3.35). In both cases, the adjective has the neuter singular short form.

(3.34) *no et-o tak že trudn-o kak ne slopa-t’ tret’e piroznoe*
 but this-N.S.NOM as just hard-N.S as not eat.PFV-INF third cake
večer-om v krovat-i
 evening-INS in bed-LOC
 ‘But this is just as hard as not eating the third cake in the evening in bed.’

(3.35) *u vas očen’ tjažel-o s geografiej*
 for you very hard-N.S with geography
 ‘It’s very hard for you, due to the geography.’ (a military situation)

3.3.6 Clausal Targets in Russian. Sentences with clausal targets typically have an infinitive clause, a copula (which is zero in the present tense), and an *easy* adjective in any order. Clausal targets occur with all of the *easy* adjectives but most commonly with *trudnij* ‘difficult’. The adjective always has the neuter or comparative short form.²² In

²² Corbett (2004) notes that there has been a tradition in Russian linguistics to regard predicate adjectives that apply to “non-canonical subjects,” including infinitive phrases and indefinite pronouns like ‘all’ or ‘nothing’, as adverbs and/or belonging to separate category called the Category of State. This practice is not applied here, following Corbett, who rejects it as an unnecessary complication.

(3.36) the infinitive clause *eto delat'* 'this to do' precedes *trudnee* 'harder', while in

(3.37) the infinitive clause *popytat'cja vistroit' noyj institut* 'to try to build a new institute' follows *legče* 'easier'. In both cases the adjective has the invariant comparative form.

(3.36) v kuvšin-e naprimer ili kovš-e eto delat' **trudnee**
in jug-LOC for.example or ladle-LOC this-N.S.ACC do-INF hard.COMP
'In a jug, for example, or ladle, this is harder to do.'

(3.37) emy bud-et **legče** so storony popyta-t'-cja vistroi-t'
3S.DAT be.FUT-3S easier from distances try-INF-REFL build-INF
nov-yj institut-ø
new-ACC institute-ACC
'It will be easier for him, from a distance, to try to build a new institute.'

3.3.7 Activity NP Targets in Russian. The list of Russian Activity NP targets (Table 21)

include numerous words for 'work' or 'task', as in the other languages reviewed, and other words that clearly denote activities. Just over half of the Activity NP targets (22 out of 41) occur with adnominal *easy* adjectives, as in (3.38), and the balance with the *easy* adjective as a predicate, either with a copula or some other intransitive verb, as in (3.39). In (3.39) the instrumental case marking of *legkimi* 'easy (INS)' is typical of intransitive predicates in Russian.

(3.38) im predstoit **trudn-yj** vybor-ø sredi novyx modelej
to.them lie.ahead difficult-S.M.NOM choice.M-S.NOM among new models
'They face a difficult choice among the new models.'

(3.39) zadanija okazyvajutcja dlja nego sliškom **legk-imi**
tasks turn.out for him too easy-PL.INS
'The tasks turn out to be too easy for him.'

Table 21. Activity NP Targets in Russian

<i>Legkij</i> ‘Easy’	<i>Trudnij</i> ‘Difficult’
<i>dostupnost</i> ‘availability’	<i>delo</i> ‘task’
<i>proekt</i> ‘project’	<i>vybor</i> ‘choice’ (2)
<i>rabota</i> ‘work’ (2)	<i>dyxanija</i> ‘breathing’
<i>služba</i> ‘service’	<i>pereprava</i> ‘crossing’
<i>trud</i> ‘work’	<i>podvig</i> ‘feat’
<i>zadača</i> ‘the task’	<i>pod’jom</i> ‘the climb’
<i>zadanija</i> ‘tasks’	<i>poxod</i> ‘the trek’
<i>zanjatie</i> ‘work’	<i>pretvorenija v žizn</i> ‘implementation’
<i>žizn</i> ‘(her) life’	<i>proiznošenija</i> ‘pronunciation’
	<i>proxoždenija</i> ‘passage’
	<i>razgovor</i> ‘conversation’
	<i>učeba</i> ‘studies’
	<i>zadača/i</i> ‘task(s)’ (4)
	<i>žizn</i> ‘life’
<i>Tjaželij</i> ‘Hard’	
<i>‘pereživanii</i> ‘experiences’	
<i>protsess</i> ‘process’	
<i>rabota</i> ‘work’ (4)	
<i>trud</i> ‘work’ (3)	
<i>tur</i> ‘tour’	
<i>zadači</i> ‘tasks’	
<i>žizn</i> ‘life’	

3.3.8 Implicit-Frame Targets in Russian. The Russian implicit-frame targets (Table 22) include many familiar entries from other languages, including *situatsija* and *položenie* ‘situation’, *problem* ‘problem’, *put* ‘path’, *vopros* ‘question’ and multiple expressions indicating periods or time or phases of some process. As before, these are understandable as things to be resolved, travelled, answered, and gotten through. The vast majority of implicit-frame targets (45 out of 58) occur with adnominal *easy* adjectives, as in (3.40) and (3.41).

- (3.40) v dann-oj **tjažel-oj** situatsi-i futbolisty
in given-F.S.LOC hard-F.S.LOC situation(F)-S.LOC footballers
pošli navstrečy kluby
went to.meet club-DAT
‘In this difficult situation, the players went to meet at the club.’

- (3.41) vy mne zadali **trudnyj** vopros-ø no ja
 you to.me posed difficult-M.S.ACC question.M-S.ACC but I
postara-jus' na nego otvet-it'
 will.try-1S on it answer-INF
 'You asked me a difficult question, but I will try to answer it.'

In (3.41), note that the second clause ('I will try to answer it') would make no sense if the word *vopros* 'question' did not already evoke the frame of posing and answering.

Table 22. Implicit Frame Targets in Russian

<i>Legkij</i> 'Easy'	<i>Trudnij</i> 'Difficult'
<i>retsept</i> 'recipe (for healing)'	<i>anglijskij jazyk</i> 'English'
<i>dobyča</i> 'prey/booty'	<i>den'</i> 'day'
<i>polufinal</i> 'the semi-finals'	<i>dstantsija</i> 'course (for a race)'
<i>Ablex</i> 'Abflex'	<i>futy</i> 'feet (measure)'
<i>trebovanija</i> 'requirements'	<i>isključenija</i> 'exceptions'
<i>ryvok</i> 'spurt (of effort in a race)'	<i>iskusstvo</i> 'art (craft)'
	<i>kampanija</i> '(military) campaign'
	<i>mal'čiki i devočki</i> 'boys and girls'
	<i>maršrut</i> 'route'
	<i>mig</i> 'moment'
	<i>naša vremena</i> 'our time'
	<i>obstanovka</i> 'situation/condition'
	<i>perelomy</i> 'changes'
	<i>period</i> 'financial period'
	<i>podrostok</i> 'teenager'
	<i>položenija</i> 'position'
	<i>poxod</i> 'hike'
	<i>problema/y</i> 'problem(s)'
	<i>programma</i> 'program'
	<i>put'</i> 'path' (2)
	<i>roman</i> 'romance'
	<i>situatsija</i> 'situation' (3)
	<i>slovo</i> 'word'
	<i>uslovija</i> 'conditions'
	<i>vopros</i> 'question'
	<i>vremena</i> 'times'
	<i>zadači</i> '(financial) problems'

More than in German, there are some targets that are only understandable as ‘easy’ or ‘hard’ in a specific setting supplied by the larger context. Some examples, all used with no explicit activity frame:

Aflex – an exercise machine used by an author as part of a fitness regime. (‘Abflex was very simple, convenient and easy.’)

futy ‘feet’ – the final distance to be covered to a goal in an arduous physical trial (‘These feet were the hardest.’)

isključenija ‘exceptions’ – specific cases for which an action just described is too hard (‘All Arabs would be deported to neighboring countries, other than very difficult and special exceptions.’)

3.3.9 Explicit-Frame Targets in Russian. The targets classified here as explicit-frame targets are those that appear before an *easy* adjective and an infinitive and are syntactic complements of the infinitive, typically marked accusative. This gives a similar appearance as explicit-frame constructions in the other languages reviewed so far, as suggested by the glosses in (3.42) and (3.43). Similar sentences with nominative-marked targets of *easy* adjectives do not occur.

(3.42) menja **trudn-o** ljubi-t’ ja zna-ju
 1S.ACC hard-N.S love-INF 1S.NOM know-PRES.1S
 ‘I am hard to love, I know.’

(3.43) no mo-ego perv-ogo muž-a byl-o ne takto **legk-o**
 but my-ACC first-ACC husband-ACC was-N.S not so easy-N
 v et-om ubedi-t’
 of this.PREP convince-INF
 ‘But my first husband was not so easy to convince of this.’

In (3.42) *menja*, glossed as 1S.ACC but rendered freely as ‘I’, is clearly marked accusative and is the object of the infinitive *ljubit’* ‘to love’. A literal, word-for-word rendering of the sentence in English would be ‘Me (is) hard to love, I know.’ The sentence can be parsed two ways. 1) The infinitive phrase *ljubit’ menja* ‘to love me’ (with *menja* pre-

posed in the utterance) can be considered the grammatical subject, which is modified by neuter-marked *legko* ‘easy’. This would correspond to an English gloss of ‘Loving me is hard’. 2) Alternatively, the sentence can be considered an impersonal construction, with no grammatical subject, which might be glossed as ‘It is hard to love me’. On purely syntactic grounds, there is no way to say whether this is truly a case of an explicit-frame target or merely a rearrangement of a sentence with more canonical constituent order.

Similar logic applies to (3.43); since this sentence is in the past tense, there is a non-zero copula *bylo* ‘was’, which is marked singular neuter,²³ agreeing either with the infinitive phrase *ubedit’ moego pervogo muža* ‘to convince my first husband’ or with an unexpressed zero-subject. In this example, inspection of the larger context (not shown) reveals a discourse motivation for the initial placement of *moego pervogo muža* ‘my first husband’, which is that the speaker is contrasting her first husband to her second (who was more agreeable). As further evidence that explicit frames with complex adjectives in Russian are no different than clausal targets (aside from word order) , consider (3.44).

(3.44) *zapugann-oj tolp-oj legče upravlja-t’*
 intimidated-INS crowd-INS easier manage-INF
 ‘An intimidated crowd is easier to manage.’

In this sentence, *upravljat’* ‘to manage’ requires a complement marked instrumental and this marking is maintained regardless of where the complement is placed. Chapter 5 will return to this issue, focusing on discourse considerations.

²³ Russian verbs are not marked for person in the past tense.

Regardless of the syntactic details, the list of explicit-frame targets in Table 23 is similar to the lists for other languages, in that few or none either denote activities or come with conventional activity frames.

Table 23. Explicit Frame Targets in Russian

<i>Legkij</i> ‘Easy’	<i>Tjaželij</i> ‘Hard’	<i>Trudnij</i> ‘Difficult’
<i>arija</i> ‘aria’	<i>eto</i> ‘this (non-specific)’	<i>eto</i> ‘this (non-specific)’
<i>tolpoj</i> ‘crowd’	zero ‘(a lake)’	<i>menja</i> ‘me’
<i>muža</i> ‘husband’		<i>rol’</i> ‘role (of s.o. in an event)’
<i>ego</i> ‘it (coffee)’		<i>rynok</i> ‘the market (for Russian software)’
<i>ix</i> ‘they (animals)’		<i>sravnenie</i> ‘comparison’
<i>slovo</i> ‘word’		<i>vlijanija</i> ‘effect (of natural selection)’
<i>allel’</i> ‘allele’		<i>znachenija</i> ‘their significance’
<i>nas</i> ‘We’		
<i>russkix</i> ‘the Russians’		

Note: the forms given are all marked accusative, except *tolpoj* ‘crowd’ which is marked instrumental, as explained regarding (3.44).

4. Comparison of Languages

This chapter will review the extent to which the analysis of four languages shows similarities and confirms the hypothesis outlined at the beginning of Chapter 2, and will identify differences in the frequency of target types among the four languages, and what, if any, features of these languages these differences correlate with.

4.1. Similar Target Types and Confirmation of the Basic Hypothesis

As stated in Chapter 2, from the semantic character of *easy* adjectives, it follows that any language with *easy* adjectives will have means to apply them to activities, with considerable semantic overlap with adverbs. Mechanisms in English that accomplish this run from, at one extreme, structures that apply *easy* adjectives to clauses that express activities, to, at the other extreme, structures that apply *easy* adjectives to expressions that have no verbal/activity sense on their own at all, and need to be explicitly placed in an activity frame by the speaker. The full spectrum of targets seen in English is:

- Non-finite verb clauses
- Nominalizations
- NPs that denote an activity
- NPs that come with implicit activity frames, and so are naturally understood as metonymies for those activities
- NPs for which an explicit activity frame is provided by the speaker

As seen in the review of Spanish, German, and Russian, all of these mechanisms are found in the use of *easy* adjectives in all of these languages. None of these target types are commonly found with prototypical adjectives like *red* and *small* or their equivalents in other languages. Each of the targets types is discussed below, including similarities

and differences in the relevant syntax among the languages. The target types are grouped for discussion into three macro-categories: clausal and non-specific targets, i.e. non-NP targets; Activity NP and implicit-frame targets, i.e. NP targets that do not require an explicit frame; and explicit- frame targets.

4.1.1 Clausal and Non-specific Targets. In all of the languages reviewed, in half or more of the sample cases examined, the *easy* adjective applies either to a clause or to something non-specific in the prior discourse, neither of which is true for more typical adjectives. In all of the languages, an *easy* adjective can apply to a non-finite verb clause. In Spanish, German, and Russian *easy* adjectives can also apply to some finite verb clauses. In the case of Spanish, the finite verb clause is introduced by a complementizer, allowing the clause to occupy a syntactic slot typical of an NP or non-finite verb clause. In German and Russian the distinction between adjectives and adverbs is less clear than in English and Spanish, so examples of *easy* adjectives in the corpora include many cases that apply directly to finite verbs (as well as to adjectives, and participles). Similar cases occur in non-standard usage in English and Spanish in situations where standard English and Spanish employ derived adverbial forms.

In all of the languages, unmarked constituent order is SVO, so it is possible to speak of extraposed non-finite clauses, and these are common as targets of *easy* adjectives in all of the languages. All the languages also allow non-finite clauses in canonical subject position, but English is alone in having a distinct form, the gerundive *-ing* form, as the usual mechanism for this.

4.1.2 Activity NP and Implicit-Frame Targets. The lists of Activity NP and implicit-frame targets are strikingly similar for the four languages. Common Activity NP targets include words meaning ‘choice’ or ‘decision’, ‘task’ or ‘work’, ‘life’, ‘access’, ‘solution’, and ‘process’. Common implicit-frame targets include words meaning ‘question’, ‘issue’, ‘path’ or ‘route’, ‘problem’, and periods of time. With small sample sizes, it is to be expected that some words will show up in the samples for one language but not the others, as is the case.

For each language, the lists of implicit-frame targets include words whose activity frame comes not from general or purely linguistic knowledge, but from a more specific context such as the identity of the speaker, or the location or situation in which the utterance occurs. The fact that English, Spanish, and German seem to make somewhat more use of these context-dependent targets than Russian is not conclusive given the small sample sizes analyzed. The German and Russian lists have very few pronoun targets compared to English and Spanish. These were shown with the antecedent, where one was clear, i.e. when the target was not non-specific. The relative scarcity of pronoun targets in German and Russian could be due to the fact that these corpora have no spoken language data.

In all the languages, Activity NP and implicit-frame targets are most commonly used adnominally, but also occur as copular complements with some frequency.

4.1.3 Explicit-Frame Targets. There is very little overlap in the list of explicit-frame targets among the four languages. This is as would be expected, since these depend on

the explicit frame supplied by the speaker in each case in order to be capable being called easy or hard.

All of the languages have constructions of similar surface appearance that allow a speaker to comment about a topic, expressing that it is easy or difficult in connection with some activity. Further, the target of the *easy* adjective is always the Undergoer of the activity. However, there is little commonality in the syntactic details of how this is accomplished:

- In English, a semantic Patient or Theme that might otherwise be the direct object of the verb in a non-finite clause instead appears as the grammatical subject of the main (“matrix”) clause, hence the use of terms like “movement” and “raising” to describe this construction.
- Spanish is similar, except that the non-finite verb appears in a prepositional phrase, similar to an English gerundive, e.g. *easy of doing* rather than *easy to do*.
- German allows sequences of the type *topic + easy adjective + zu infinitive*, with the topic (target) marked nominative, but the *zu*-infinitive is most likely understood as passive, and the slot occupied by the *easy* adjective can also be occupied by an unambiguously adverbial expression.
- In Russian sequences of the type *topic + easy adjective + infinitive*, the topic always has the same case marking that it would have following the infinitive, usually accusative, but sometimes instrumental or dative for verbs that require an instrumental- or dative-marked complement. In other words, this sequence is nothing more than an unremarkable instance of the flexibility of constituent order that is typical of Russian.

But despite all these differences, all of the constructions function similarly in discourse.

4.2. Frequency of Target Types among the Languages

Each language has its syntactic individuality, especially as just discussed with explicit-frame targets, but a comparison of the target categories is possible and shows broad agreement in the frequency of target types, with a few exceptions. Table 23 shows

estimates of the relative frequency of each target type in each corpus for all the *easy* adjectives that were analyzed combined. (No attempt is made to adjust for differences in the make-up of the four corpora. Further, whether any of these corpora is truly representative of a language as a whole is, of course, unanswerable and possibly meaningless.)

Table 23. Distribution of Target Types

Target Type	Estimated Percent for All <i>Easy</i> Adjectives in each Corpus ^a			
	English	Spanish	German	Russian
Finite Verb	1%	2%	24% ($\pm 5\%$)	14% ($\pm 5\%$)
Adjective / Participial	-	-	6%	3%
Clausal	38%	37%	19% ($\pm 5\%$)	34%
Non-specific	13%	20% ($\pm 4\%$)	8%	10%
Activity NP	13%	14%	18%	14%
Implicit Frame	15%	16%	16%	18%
Explicit Frame	21% ($\pm 4\%$)	12%	9%	8%
Total ^b	100%	100%	100%	100%

^aValues in parentheses are 95% confidence intervals. Percentages for all the *easy* adjectives analyzed in each language have been combined, with adjustment for the fact that, although approximately 200 cases of each adjective were analyzed, the total number of cases of each adjective within each corpus varies. For example, in Spanish *fácil* ‘easy’ is almost twice as common in the corpus as *difícil* ‘difficult’. The weighted percentages for Spanish, German, and Russian are the same ones given earlier in Table 12, 16, and 20.

As seen in Table 23, there are differences in the use of finite-verb, adjective / participial, and clausal targets. The “Clausal” category of target types allows comparison across languages despite differences in the kinds of clausal targets among the languages.

Clausal targets include both non-finite clauses and finite complement clauses that function as grammatical subject or object of the main verb. The boxed percentages in Table 23 are those that appear significantly different for one language compared to others.²⁴ Three differences deserve note:

1. German (and to a lesser extent Russian) appear to make the most use of finite verb targets, but this may be traceable to the simple fact that adverbs are indistinguishable from predicate adjectives in German and Russian. As a result, the data include many cases that would be omitted in the samples from the English and Spanish corpora, since the morphologically distinct adverbial forms were not included. What is less obvious is why this tendency should apparently come at the expense of clausal targets (mainly infinitive clauses), which occur much less frequently in German than in the other languages.
2. Spanish is particularly friendly to non-specific targets, which could be related to Spanish being the only consistently PRO-drop language analyzed. Russian can omit subject pronouns too, but only in some cases, whereas omission of subject pronouns is the default, unmarked pattern in Spanish.
3. English makes far more use of explicit frames than the other languages.

As noted, the data for German and Russian include clearly adverbial uses, since they are indistinguishable from adjectives and cannot be identified without examining each individual case, but the data for English and Spanish do not. In an attempt to make the English and Spanish data more comparable to German and Russian, Table 24 includes adverbial forms from the corpora.

²⁴ More precisely, what is estimated is differences among corpora, not differences among languages.

Table 24. Distribution of Target Types including Adverbial Uses

Target Type	Estimated Percent for All <i>Easy</i> Adjectives in each Corpus			
	English	Spanish	German	Russian
Adverbial	14% ^a	12% ^a	30% ($\pm 6\%$)	17%
Complement Clause	32%	33%	19% ($\pm 5\%$)	34%
Non-specific	11%	18% ($\pm 4\%$)	8%	10%
Activity NP	11%	12%	18%	14%
Implicit Frame	13%	14%	16%	18%
Explicit Frame	18% ($\pm 4\%$)	10% ($\pm 3\%$)	9%	8%
Total ^b	100%	100%	100%	100%

Values in parentheses are 95% confidence intervals.

^aExact, based on total counts for each corpus.

^bIndividual percents may not add to 100% due to rounding.

The adverbs included in Table 24 for the first time here are English *easily*, Spanish *fácilmente* ‘easily’, and Spanish *difícilmente* ‘with difficulty’. Since it is not practical to distinguish, for example, whether an instance of *easily* in COCA applies to a finite verb, an adjective, or participle, Table 24 shows all adverbial uses combined (but not including the complex adjectives used with German explicit frames, which are still assumed to function as predications involving an explicit frame, regardless of whether they might be more properly labelled as *complex adverbs*).

Reviewing the three differences noted before (page 73), the first one, more use with finite verb targets in German and Russian, is subsumed in the catchall adverbial category. After accounting for English and Spanish adverbial forms, German stands out as different from all the other languages even. No simple explanation presents itself, but the fact that the same idea is expressed using an adverb instead of adjective more frequently in one

language is generally consistent with the overall adverbial nature of the concept of easiness.

In the case of English, it might be supposed that the relative infrequency of adverbial forms could be related to the lack of adverbial forms of *easy* adjectives in English, i.e., the fact that there is no adverbial antonym of *easily*. But it turns out that all four languages restrict adverbial use mainly to ease instead of difficulty. As seen earlier in Table 15, very few adverbial uses of German *schwer* ‘hard’ and *schwierig* ‘difficult’ were found in the corpus. Similarly, few adverbial uses of Russian *tyazheliy* ‘hard’ and *trudniy* ‘difficult’ were found in the corpus, as seen in Table 19. In Spanish, *difícilmente* ‘with difficulty’ is much less frequent than *fácilmente* ‘easily’, both in absolute terms and in comparison to adjectival use, as shown in Table 25.

Table 25. Adjectival and Adverbial Forms in Spanish

Form	Fácil/mente	Difícil/mente
Adjective	2,039	3,331
Adverb	512	186
Adverb Percent	20%	5%

Total cases in the Corpus del Español

Continuing with the topic of frequent use of adverbial forms in German, it appears that German has a variety of expressions that conveniently make use of adverbs. For example, adverbial expressions equivalent to *X lets itself easily do* or *X is easily doable* are used in many cases where an English speaker might use a complex adjective

equivalent of the form *X is easy to do*. Examples were given earlier as (3.15) (*The ship let itself easily steer*) (and (3.16) (*Reconciliation between the two Koreas is with difficulty achievable*)).

Another example, (4.1), illustrates an impersonal adverbial expression where an English speaker might use an extraposed infinitive.

- (4.1) Im Kollektiv trink-t es sich besonders leicht.
in.the group drink-3S it REFL especially easy
'It's especially easy to drink in a group.'
(Lit.: 'In the group, it drinks itself especially easily.')

Cases like (4.1) might also help explain the relative infrequency of clausal targets in German, which is clear both with and without including adverbs in the tabulations.

The second difference noted on Page 73, more use of non-specific targets in Spanish, remains after inclusion of adverbial forms.

The third difference noted on Page 73 was more use of explicit frames in English, which still also applies after inclusion of adverbial forms. In discussing the frequency of adverbial expressions, it was noted that German uses adverbial expressions with finite verbs and adjectives where English speakers might use a complex adjective to create an explicit frame. A review of the German corpus data found a total of 18 such cases. If these cases were categorized as explicit frames instead of "adverbial" in Table 24, the percentage of uses labelled as adverbial would fall from 30% to 22% and the percentage of explicit frame uses would rise from 9% to 18%. This would make German appear more similar to English in its use of explicit frames. But no similar explanation for infrequent use of explicit frames seems to be available for Spanish or Russian. Instead, what seems to be needed is an explanation for the popularity of explicit-frame

constructions in English, which stands out as the exception in Tables 23 and 24. (One feature of English that turns out *not* to provide an explanation is the ease of adding a subject to a complex adjective using a *for*-phrase (as in *that's easy for you to say*), since inspection of the data shows that these phrases are relatively uncommon, occurring only twice in the samples analyzed.)

5. Explicit Frames with *Easy* and Evaluation Adjectives

Easy adjectives are not the only ones that apply to activities, at least some of the time. All of the adjectives listed earlier in Section 1.4 can also apply to activities and “describe the relationship between an individual and an activity or event and ... describe the cost, value or benefit [of the activity or event] to the individual” (Nanni 1978). More briefly, they will be called *evaluation adjectives* here. In English, these evaluation adjectives appear with “hollow *to*-infinitivals” (Huddleston and Pullum 2002), referred to here as *complex adjectives* when used as part of an explicit frame. As with *easy* adjectives, in clauses of the form *NP is adj + to-infinitive*, NP is always the semantic Undergoer of the verb. The evaluation adjectives are also used with the same kinds of clausal, non-specific, Activity NP, and implicit-frame targets seen with *easy* adjectives. This chapter will explore the behavior of these evaluation (non-*easy* but still activity-oriented) adjectives, focusing in particular on 1) differences that have been noted between their behavior in English and other languages, 2) differences in their behavior compared to *easy* adjectives even in English, and 3) how these differences relate to discourse considerations.

5.1. Similarity of *Easy* and Evaluation Adjectives.

The examples from COCA in (5.1) – (5.12), using two of the evaluation adjectives from Section 1.4, *dangerous* and *interesting*, show they can apply to all of the same target types as *easy* adjectives in English.

Clausal – Gerundive Targets:

(5.1) Skiing the backcountry is **dangerous**.

(5.2) Living here is **interesting** and soothing.

Clausal – Extraposed Infinitive Targets:

(5.3) It's **dangerous** to be a celebrity sometimes.

(5.4) It's going to be really **interesting** to see what the jury decides.

Non-specific Targets:

(5.5) "I did not see an increase in marijuana use on the mountain," says Vail's chief of police, Dwight Henninger, who has spent every Saturday up on Vail Mountain for the last 12 years. "There are a lot of folks who thought it might be more **dangerous** on the hill."

(5.6) This year's format resembles what we saw in volleyball—eight subdistrict champions and the next eight highest teams in wild-card points qualifying for the district finals. It's a change, but at least two Class B coaches seem to be rolling with the punches. "I think it'll really be **interesting**," Gretna coach Jerome Skrdla said.

Activity NP Targets:

(5.7) He made this **dangerous** journey because his hometown in Honduras has been overrun by criminal gangs.

(5.8) Well, that's an **interesting** observation.

Implicit-Frame Targets:

(5.9) Nearly 80% of us think the world is a more **dangerous** place than it used to be. (Frame: to live in)

(5.10) One of the most **interesting** puzzles in Habermas's work is the sense in which he thinks there is a common project toward which a modern society must be working. (Frame: to attempt to understand)

Explicit-Frame Targets:

(5.11) A hillside garden can actually be easier to tend than a hillside planted with a lawn that would be difficult and **dangerous** to mow.

(5.12) The differences in each culture were **interesting** to hear about.

For most of these target types, similar cases are easily found in the corpora for Spanish, German, and Russian. For example, infinitive targets are seen in the following:

Spanish:

- (5.13) También es **interesante** ver la inteligente utilización de su gran erudición.
also is interesting see-INF the intelligent use of his great erudition
'It is also interesting to see the intelligent use of his great erudition.'
- (5.14) Me parece que... es **peligroso** seguir en este sistema de enseñanza.
me.DAT seems that is dangerous continue-INF in this system of teaching
'It seems to me it is dangerous to continue with this system of instruction.'

German:

- (5.15) Es ist ja oft **gefährlich**, die Wahrheit zu sag-en.
it is indeed often dangerous the truth to say-INF
'It is often dangerous to speak the truth.'
- (5.16) Es ist **interessant** zu seh-en, wie zaghaft die beiden jetzt red-en.
it is interesting to see-INF how timid the both now talk-3PL
'It is interesting to see how timidly the two of them are speaking now.'

Russian:

- (5.17) dvig-at' cja dn-em **opasno**
move-INF day-INS dangerous
'It (was) dangerous to move during the day.'
- (5.18) liš' togda ljudj-am **interesno** nas čit-at' i otklik-at' cja
only then people-DAT interesting us read-INF and respond-INF
'Only then is it interesting to people to read and respond to us.'

5.2. Limited Dependence of Evaluation Adjectives on Activity Frames

There are limits to the activity-oriented nature of these evaluation adjectives. It is useful to examine the general distribution of targets. Using *dangerous* as an example, a review of 200 random uses from COCA finds that 117 cases (58.5%) have implicit-frame targets, many of which might even be called "inherent," that is, not dependent on any activity frame at all (see Table 26.)

Table 26. Target Types of Dangerous

Target Type	Frequency	Percent
Clausal	21	10.5%
Non-specific	22	11.0%
Activity NP	37	18.5%
Implicit-Frame or Inherent	117	58.5%
Song Name	2	1.0%
Explicit Frame	1	0.5%
	200	100%

Based on 200 random hits from COCA

Especially common targets that might be considered dangerous in their own right include various terms for people (*criminals, people, husband, redheads, man, dictators, strangers*, and named individuals) and terms for animals (*animals, skunks, dogs, sharks*, etc.). In theory no word usage can be truly frame-independent. Even calling an object *red* depends on knowledge of human perceptual categories (i.e. seeing). Similarly calling a skunk *dangerous* assumes a human point of view, since the intent is not to label skunks as inherently dangerous to other skunks or to the natural world in general. Calling a person *dangerous* might be said to depend on a frame of encountering, living with, or similar. But these are hardly *activity* frames in the same sense that a frame of solving is needed to understand the meaning of *easy puzzle*.

Other common implicit-frame targets of *dangerous* include substances (*chemicals, greenhouse gases, uranium*, etc.) and some of the same words as found as implicit-frame targets of *easy* adjectives, such as *situation, times*, and *period* (of time).

In any event, more than half of the targets of *dangerous* are NPs, not clausal, do not denote an activity, and are easily understood as dangerous without any explicit mention of an activity. By comparison, the same can be said of fewer than 18% of *easy*-adjective targets in any of the languages reviewed, as seen in Table 23.

5.3. Explicit-Frame Targets of Evaluation Adjectives.

5.3.1 Claimed Differences Among Languages. Explicit-frame targets appear to be an especially notable exception to the general pattern of similarity between *easy* and evaluation adjectives and similarity among languages. English clearly does allow for explicit frames with adjectives like *dangerous* and *interesting*, as illustrated earlier in (5.11) and (5.12). But the review of 200 random uses of *dangerous* found only one explicit-frame target, suggesting that this construction is much less common than it is for *easy* adjectives. A more thorough review of the frequency of explicit frames is provided below.

In the literature on tough movement and in various language references, it has been claimed that English is unusual in allowing constructions like (5.11) and (5.12) with evaluation adjectives. Comrie and Matthews (1990), discussing German “analogs of tough movement” give *langweilig* ‘boring’ and *gefährlich* ‘dangerous’ as examples of adjectives that can apply to extraposed infinitives but cannot undergo tough movement, giving the following examples (glosses added):

- (5.19) Es ist gefährlich, so was zu unternehmen.
 it is dangerous such.a.thing to undertake
 ‘It is dangerous to undertake such a thing.’

- (5.20) *So was ist gefährlich zu unternehmen.
 such.a.thing is dangerous to undertake
 ‘Such a thing is dangerous to undertake.’

In a German reference grammar, Durrell (2017) gives (grammatical) examples that have the form of (5.19) but with *easy* adjectives (including *leicht* ‘easy’), and states, “this construction is common in English , but it is possible with very few adjectives in German.” Durrell names *einfach* ‘simple’, *schwer* ‘hard’, *schwierig* ‘difficult’, and also *interessant* ‘interesting’. *Interessant* is notable as the only (non-*easy*) evaluation adjective in the list, a fact for which no explanation is given. Durrell also points out that the German construction is only possible with verbs that license an accusative-marked complement.

In Spanish, Sauer (1972) claims that tough movement is possible only with adjectives of difficulty (i.e., the ones called *easy* adjectives here), and gives unacceptable examples with *divertido* ‘fun’, *bueno* ‘good’, and *probable* ‘likely’. As in German, Sauer notes that adjectives like *interesante* ‘interesting’ can be used in “tough constructions.” Zierer (1974) adds *peligroso* ‘dangerous’ to the list of Spanish evaluation adjectives that do not allow tough movement. Reider (1993) tests these claims by asking a sample of 16 native speakers of Spanish to judge the acceptability of 54 sentences of two types using *easy* and evaluation adjectives:

- Type (a): with extraposed infinitives (*Es interesante ver esa película* , ‘It is interesting to see this movie’).
- Type (b): with complex adjectives / tough movement (*Esa película es interesante de ver*, ‘This movie is interesting to see’).

He finds that almost all speakers accept both sentence types for *fácil* and *difícil*. None found Type (b) acceptable for *divertido* ‘fun’, but about half found Type (b) acceptable for *interesante* and four out of 16 found Type (b) acceptable for *importante* ‘important’, another evaluation (non-*easy* but activity-oriented) adjective.

The literature about Russian does not appear to include any analyses of what adjectives can be used in explicit frames. Given the flexibility of constituent order in Russian, it might be that any adjective that allows an infinitive complement can also be used as part of an explicit frame. This could be the case if the restricted nature of explicit frames in German and Spanish is structural in origin. Another possibility is that the functional / discourse related nature of explicit frames is involved. In that case, Russian might have similar restrictions. But then the wider use of explicit frames in English (if it exists) would need an explanation.

5.3.2 The Discourse Basis of Explicit Frames. The observations that have been made so far about explicit-frame targets of *easy* adjectives suggest a discourse analysis that may yield further insight and may also help to understand similar patterns with non-*easy* adjectives.

A typical expression involving an *easy* adjective and an explicit-frame target, in all of the languages reviewed, has the general form:

NP target + copula + easy adjective + infinitive clause
“complex adjective”

The place of the copula may be taken by an intransitive verb that licenses an adjective complement, such *seem*, *appear*, or *become*. The place of the NP target may be taken by a pronoun or a relativizer that refers to an NP antecedent.

An NP that does not denote an activity, is not a nominalization, and has no implicit activity frame based on general or purely linguistic knowledge, or based on the context of utterance, cannot naturally be called easy or difficult, in the sense of requiring little or a great deal of effort. However, it can be called easy or difficult if it is explicitly linked to some activity that affects whatever is denoted by the NP, as in *easy to see*, or *hard to understand*.

In other words, utterances of the type *NP is easy...*, where NP does not denote an activity, require a complement that provides the activity involving NP which is said to be easy. Hence a listener hearing something like *my bed is easy...* expects to hear something more, since *my bed* does not belong to the class of things that can be easy on their own. Possible completions might include *...to make*, *to clean under*, or *to disassemble* (for easy moving, say). The syntactic details vary from language to language, as reviewed in Section 4.1.3, but in general if a sentence introduces a non-activity topic that is described as easy, then a complement describing an associated activity is expected.

This analysis implies that, in all languages with *easy* adjectives, we expect sentences like *NP is easy to V* to be much more common for non-activity NPs than activity NPs (nominalizations and words with implicit activity frames). For example, sentences like *The bed is easy to make* will be much more common than sentences like *The decision was easy to make* or *The book is easy to read*. The only exception anticipated would be where

there is a contrast like *The book was hard to write but easy to read*. This is exactly the pattern that was seen in the review of explicit-frame targets in English, Spanish, German, and Russian.

5.3.3 Implications for Evaluation Adjectives. Generalizing beyond *easy* adjectives, it can be hypothesized that explicit frames with complex adjectives reflect a strategy for describing some activity-oriented property of some topic, typically a topic that itself is not an activity or closely associated with an activity. However, as seen in Table 26 in Section 5.2, at least some evaluation adjectives (like *dangerous*) are used primarily to describe things that are indeed closely associated with activities or that require no activity frame at all. Similarly, a review of frequent noun collocates of *interesting* finds numerous words like *people*, *story*, *place*, *idea*, and *subject* that require no explicit frame. It should be expected then that explicit frames will be relatively infrequent with these adjectives.

To test this idea, it was necessary to narrow the corpus search, and in some cases to use larger corpora. In anticipation of relative rarity, web-based corpora were used in two cases:

- For Spanish, since the Genre-Historical corpus which was used earlier, has only 20 million words from the 1900s, the much larger (5.1 billion-word) web-based Now Corpus of Spanish was used.
- For German, since near-zero cases of explicit frames with *gefährlich* ‘dangerous’ were expected, the 3.1 billion-token Webkorpus 2016c was used.

Both of these corpora are searchable using the same web interfaces cited earlier (<https://www.corpusdelespanol.org/> and <https://www.dwds.de/>) as the corpora used to investigate *easy* adjectives.

The analysis results are given in Table 27. To avoid having to inspect thousands of cases for relatively uncommon uses, sub-corpora of cases following patterns typical of explicit frames in each language were created. The size of each of these sub-corpora is given in Table 27 under the heading “Total with Pattern.” The patterns used were tailored to the syntax observed with *easy* adjectives in each language:

English: *Adj to V-inf* and *Adj N to V-inf*

Spanish: *Adj de V-inf*

German: *Adj <3 tokens before zu V-inf*

Russian: *Adj V-inf ≤2 tokens after N-ACC*

In most cases, the sub-corpora still contained too many cases to inspect all of them, so random samples were taken for analysis, as shown under heading “Sample from Pattern.” The count of explicit frame uses in each sample was then used to estimate the total in the entire corpus.

Table 27. Analysis of Explicit Frames with Evaluation Adjectives

Language	English		Spanish	German	Russian
Adjective	<i>Dangerous</i>		<i>Peligroso</i>	<i>Gefährlich</i>	<i>Opasno</i>
Total in corpus	38,610		345,680	149,773	28,280
Total with Pattern	1,067 ^a	500 ^b	440	1,310	979
Sample from Pattern	200	100	100	500	100
Explicit Frame in Sample	15	45	26	6	8
Estimated Explicit Frame Cases	80	225	114	16	78
Percent of Total Adjective Uses	0.21%	0.58%	0.03%	0.01%	0.28%
95% Confidence Interval	±0.10%	±0.13%	±0.01%	±0.008%	±0.18%
	0.70% ±0.11% ^c				
Adjective	<i>Interesting</i>		<i>Interesante</i>	<i>Interessant</i>	<i>Interesno</i>
Total in Corpus	60,784		435,908	5,681	60,726
Total with Pattern	4,420 ^a	869 ^b	1,449	185	4,540
Sample from Pattern	100	100	100	185	152
Explicit Frame in Sample	12	57	57	13	6
Estimated Explicit Frame Cases	530	495	826	13	179
Percent of Total Adjective Uses	0.87%	0.81%	0.19%	0.23%	0.30%
95% Confidence Interval	±0.46%	±0.14%	±0.03%	±0.12%	±0.23%
	1.69% ±0.46% ^c				

^a Pattern a: *NP is interesting to do* ^b Pattern b: *an interesting NP to do* ^c Combined

The analysis shows that:

- As with *easy* adjectives, explicit frames with complex adjectives are much more common in English than in the other languages.
- As expected, in all of the languages, explicit frames with *interesting* or *dangerous* are far less common than with *easy* adjectives (as a percentage of all uses of the same adjectives). The procedures used in this analysis could have missed some cases, but even with a generous allowance for missed cases, the estimated incidences of explicit frames are a small fraction of those seen for *easy* adjectives in Table 23.
- In Spanish and German, as claimed in the literature, explicit frames with *interesting* are much more common than with *dangerous*. In the case of Spanish, explicit frames with *peligroso* do occur (contrary to claims of one author). In the case of German, so few cases with *gefährlich* were found in a corpus of the 3.1 billion-tokens that a claim of ungrammaticality is not unreasonable.

The results are consistent with the pattern noted earlier that many more things can be called dangerous or interesting without any explicit activity context than can be called easy or difficult on their own. Inspection of the explicit frame cases with *dangerous* and *interesting* shows that even within these, the activity frame is often of a very different character than seen with *easy* adjectives.

5.3.4 Explicit Frames with Dangerous. Table 28 shows the 15 cases of explicit frames found in a sample of 200 hits from COCA with the pattern *NP... dangerous to V-inf*. Some fit the pattern seen with *easy* adjectives, i.e., the target needs the activity frame to be called *dangerous*. Examples include *a lawn* (to mow), *rooms* (to mess with in a renovation), and *a document* (to touch, i.e. due to its fragility). In the case of *firedamp*, the full predicate is *not dangerous to breathe*. These cases fully deserve the name *explicit frame*.

Table 28. Explicit-Frame Targets with Dangerous

Target	Activity Frame
a lawn	to mow
a man	to know
firedamp	to breathe
it (non-specific)	to do (2 cases)
its national airline	to fly
messages	to give
pan	to use
rooms	to mess with (in a renovation)
she	to be around
the genes that cause cancer	to work with
the stuff (gunpowder)	to fabricate
the thing (a document)	to touch
the water	to drink
What (an auto lift)	to work with

In 200 random hits from COCA with the pattern *NP... dangerous to V-inf*

In other cases, however, the frame merely adds specificity or certainty, for example saying that a national airline is dangerous already evokes a frame of flying, and saying the water is dangerous (in an article about economic conditions in India) already evokes a frame of drinking. So, calling the airline dangerous to fly and the water dangerous to drink, merely confirms what a listener likely assumes.

In the 45 cases with the pattern *dangerous NP to V-inf* (summarized in Table 29), this tendency is even more pronounced. This pattern seems different than the more straightforward *NP is dangerous to V-inf*, but can also function as an explicit frame. For example, in (5.21) *place* refers back to *the kitchen table*, which has no obvious activity frame likely to be dangerous. The statement functions similarly to *the kitchen table was dangerous to change him on*, but is much more idiomatic.

- (5.21) They made me diaper David while they videotaped me. They made me put him on the kitchen table. That was **a very dangerous place to change him**, but they insisted.

Table 29. Explicit-Frame Targets with dangerous NP to V-inf

Target	Activity Frame
accusations	to make
area	to let self-interest operate in
chemical	to have on site
direction	to follow
game	to play
man	to have in charge
person	to disappoint
place	to be (13 cases)
place	to change him
place	to do business
place	to land
place	to live
place	to sit
place	to visit
places	to live
road	to take
situation	to get into
thing	to do (7 cases)
thing	to do to Ephron
thing	to play with
thing	to suggest
thing	to want to be
thing	to wish for
time	to ride
word	to use

In 100 random hits from COCA with the pattern *dangerous NP to V-inf*

As with *place* in (5.21) most of targets in Table 29 refer back to something more specific. *Area* refers back to a particular area, *place* refers to a particular place, etc. Many of these examples, like (5.21), fit the pattern of explicit frames very well, but others do not. For example, some the places referred to in *a dangerous place to...* include a mine, the wreckage of a bombed building, a maximum-security prison, and Afghanistan, any of which might be called dangerous on its own. *Thing* often refers back to a specific thing, but not always. In many cases it refers back to a whole clause as in (5.22), in which the

second sentence could be shortened to *That would be very dangerous* with no change in meaning.

- (5.22) I don't want to speculate about who was behind it until I know. That would be **a very dangerous thing to do.**

Explicit frames with Spanish *peligroso* ‘dangerous’ are much rarer than for English *dangerous*. In other respects, the situation is similar to that with English. Table 30 lists the 26 explicit-frame targets and their respective activity frames found in a sample of 100 hits with the pattern *peligroso de V-inf*. Targets that clearly depend on the activity frame to be understood as dangerous include *stories*, *appraisals*, *documents of the 1890s*, and an *artifact*. But some, like *professions*, *animals*, a *border*, and a *river* might easily be called dangerous on their own. The frame clarifies in what way the target is dangerous. For example, an animal is not dangerous in general, just to hunt or keep as a pet. The border in the example is actually a street that divides the territories of rival gangs—increased gang conflict has made it dangerous to cross.

Table 30. Explicit-Frame Targets of Spanish *Peligroso* ‘Dangerous’

Target	Activity Frame
amounts (of mineral water)	to drink
animals	to hunt
animals	to keep at home
appraisals	to make
an artifact	to handle
a border	to cross
border	to cross
(criminal) charges	to exercise (prosecute)
documents of the 1890s	to handle
an intersection	to cross
a location	to navigate
a partial eclipse of the sun	to view directly
professions	to exercise
a river	to cross
the scheme	to use repeatedly
a section (of the Great Wall of China)	to traverse
some stories	to hear
time travel (in a video game)	to use
the trail	to walk on

In Russian, where an explicit-frame target is an unexceptional case of a verbal complement being pre-posed for expressive purposes, explicit-frame targets of *опасно* ‘dangerous’ are much more common than for Spanish *peligroso*, similar to English *dangerous* with the pattern *NP is dangerous to V-inf*. The Russian explicit-frame targets are the most consistent among the four languages in conforming to the pattern seen with *easy* adjectives. Whereas the activity frames with targets of Spanish *peligroso* are often predictable or unsurprising, that is not generally true of most of the Russian targets seen in Table 31. These words all retain the marking required as complements of the infinitive activity frame, and all of them are words that might naturally be used in these frames.

Table 31. Explicit-Frame Targets of Russian *Opasno* ‘dangerous’

Target	Activity Frame
which task	to not carry out
it (a school)	to make a zone of competition
toe caps	to use in military shoes
the streets of St. Petersburg	to walk on
women	to anger
the role of seeking consent in society	to underestimate
a person	to refuse
dollars	to keep

5.3.5 Explicit Frames with Interesting. Just about anything can be called interesting, so it is to be expected that explicit activity frames will infrequently be absolutely essential, but will instead add clarity or specificity, or nothing at all, since speakers are not always concise in expressing themselves. Given this background, it is somewhat surprising that explicit frames with *interesting* are much more common than with *dangerous* in all of the languages except Russian. In particular, the analysis confirms that explicit frames do occur with German *interessant*, possibly alone among the evaluation adjectives in German.

In the 12 explicit frames found in a sample of 100 cases from COCA with the pattern *NP... interesting to V-inf* (Table 32), the activity frames are similar to implicit frames, but with a difference. For example, if *she is interesting to talk to*, then we could probably also just say *she is interesting*. But that does not necessarily entail that talking to her is interesting. Perhaps she is an inarticulate athlete who is interesting to watch, or whose career is interesting to follow. Saying *she is interesting to talk to* explains precisely in what way she is interesting. Far more often, however, speakers find it unnecessary to elaborate on how something is interesting, as seen in the small sample of examples from

COCA in (5.23). These can be understood as evoking implicit frames, denoting an activity on their own, or (in the case of *an interesting thing*) introducing a topic that is about to be explained.

(5.23) That's a very interesting question.

I have had an interesting life.

I had a feeling that the day was going to be more interesting than usual.

We've had some interesting dinner table and breakfast table conversations over the years.

Morley mentioned an interesting thing, during the break.

Table 32. Explicit Frame Targets of Interesting

Target	Activity Frame
differences	to hear about
he	to talk to
it (an affidavit)	to study
it (non-specific)	to do
it (non-specific)	to contemplate
she	to talk to
that (non-specific)	to watch
the results	to look at
them	to follow
this fight	to watch
twenty opposites	to think about
which (that something is happening)	to think about
Pattern: <i>NP... dangerous to V-inf</i>	

There were 57 cases of explicit frames from COCA with the pattern *interesting NP to V-inf*, including many similar to those in Table 32, i.e. things that can be called interesting on their own, but with clarification, as well as some other patterns. For example, the phrase *interesting times* can occur without elaboration, but in saying these

are *interesting times to be a Christian* or *interesting times to be men*, the infinitive adds meaning that is in no way implicit in *interesting times* by itself. Similarly, in (5.23), describing areas around a house as *interesting places to grow ornamentals*, although *interesting places* is an acceptable, and very common, phrase on its own, adding ...*to grow ornamentals* creates a meaning that could not otherwise have been inferred.

- (5.24) My small, south-facing front yard and northerly backyard are interesting places to grow ornamentals.

Note that *places* is just a placeholder referring back to *My small, south-facing front yard and northerly backyard*, but it cannot be omitted, as seen in the ungrammatical (5.25).

- (5.25) *My small, south-facing front yard and northerly backyard are interesting to grow ornamentals (in).

A quarter of all the hits in COCA with the pattern *interesting NP to V-inf* use semantically empty *thing(s)* or *way(s)*. In these expressions, *thing(s)* and *way(s)* appear to serve a variety of functions, often similar to indefinite pronouns like *something* or *some way*, as in (5.26).

- (5.26) We had a French poodle named Ratatouille, which was certainly **an interesting thing to try to explain** to my friends in second grade.

To summarize, while explicit frames with complex adjectives based on *interesting* may be syntactically the same as with *easy* adjectives, they often function quite differently.

Spanish *interesante* and Russian *interesno* appear to function similarly to English *interesting*, except that neither language has a construction similar to the English *interesting NP to V-inf*.

In German, the case of *interessant* is noteworthy because this seems to be the only non-*easy* adjective for which a complex adjective (in this case *interessant zu V-inf*) is

widely acceptable or used. Examining the data shows that the complex adjectives based on *interessant* typically add little to the sense of the adjective on its own. By far, the most common collocation is *interessant zu lesen* ‘interesting to read’, as in (5.27), precisely the kind of usage that was not seen in explicit frames with *easy* adjectives.

- (5.27) Dein Artikel war sehr interessant zu lesen.
your.NOM article was very interesting to read-INF
‘Your article was very interesting to read.’

Other common collocations are *interesting to visit*, *interesting to hear*, and *interesting to observe*. In general, the infinitive adds little information that is not implied by calling the target interesting, as in (5.28).

- (5.28) Die Region in dies-em Nationalpark ist interessant zu besichtigen.
the.NOM region in this-DAT national.park is interesting to visit-INF
‘The region in this national park is interesting to visit.’

This use of *interessant zu V-inf* appears to be a turn of phrase that has become popular for reasons apparently unrelated to any fundamental issue of semantics or discourse function, possibly based on borrowing from another language.

5.3.6 Summary. Explicit frames with evaluation adjectives are far less common than with *easy* adjectives. Evaluation adjectives often describe activities, including those expressed in clauses or implicit in NPs. But there are also some NP targets that appear to depend little on any stated or implicit activity, at least in the case of the two example evaluation adjectives, *dangerous* and *interesting*. There are relatively few cases in which adding an explicit activity-frame is needed to apply the label *dangerous* or *interesting*.

Another way of saying this is that while *easy* adjectives are inherently activity oriented, evaluation adjectives are not, although they do allow for application to

activities. All of the languages have means for forming complexes that combine *easy* adjectives with activities. Except in German, the same means is available with evaluation adjectives, but is used much less. Differences in syntax might be partially responsible for this, but the ease with which evaluation adjectives apply to targets on their own appears to play an important role.

At least in the case of German, this capability to form complexes that combine *easy* adjectives with activities stems from the inherent overlap in adjectival and adverbial function of easy adjectives, which in this case may more properly be labeled “adjectivals.” That the same capability is generally lacking with evaluation adjectives is consistent with these having much less functional overlap with adverbs.

6. Non-Indo-European Languages

Two non-Indo-European languages provide some perspective on the analysis so far. While the languages reviewed so far show considerable diversity in syntax, they are all in the same language family, are all spoken in Western Europe, and share a long cultural history that could influence modes of expression. By comparison, the languages reviewed in this chapter, Japanese and Swahili, are spoken in areas geographically remote from Europe, are historically unrelated to any European language, and have been subject to intensive cultural exchange with European languages only in recent history. Nevertheless, it will be shown that *easy* adjectives in Japanese and Swahili are used in ways very similar to those seen so far, applying to activities in the form of clauses, NPs that denote activities, NPs with implicit activity frames, and NPs with explicitly stated activity frames.

6.1. Japanese

Japanese is the principal language of Japan, spoken by some 120 million people. Other than closely related dialects spoken in Japan, Japanese has no confirmed relationship to any other language, although some writers have theorized a relationship to Korean (Shibatani 2009).

6.1.1 Grammatical Background. Japanese has a number of characteristics which make its use of *easy* adjectives of interest. In contrast to the Indo-European languages reviewed in earlier chapters, typical constituent order is Subject-Object-Verb (SOV). (See Sato (2014) and Backhouse (2004) for essential Japanese grammatical concepts.) Adpositions follow their NP complements. Case is marked by particles following the NP. NPs may be

topicalized using the particle *wa*, which replaces the nominative and accusative case particles, but can follow dative case particles.

There are multiple adjective types. The two principal categories are called “*i* adjectives” (based on their inflectional pattern) and “*na* adjectives” (based on the *na* particle that follows the adjective in attributive use). In the following discussion, following Backhouse (2004), they are called *inflected adjectives* and *uninflected adjectives*. Both groups are very large and include both lexically simple and complex items.

Inflected adjectives resemble verbs morphologically, with inflectional categories similar to those of verbs, and to some extent syntactically. For this reason, they are sometimes called “adjectival verbs” (Sato 2014). Backhouse gives the comparison of the affirmative, plain (non-formal) inflectional paradigms of the inflected adjective *nagai* ‘long’ and the verb *okiru* ‘get up’ shown in Table 33. The two paradigms are similar but differ in important points, especially in the non-past and conjunctive forms. Imperative and hortative forms are absent for both inflected adjectives and non-volitional verbs. Like verbs, inflected adjectives function as predicates without a copula, as in (6.1), although a copula can be added for politeness.

- (6.1) Usagi no mini wa naga-i (Backhouse 2014)
rabbit ADNOM ear TOP long-NONPAST
‘Rabbit ears are long.’

Table 33. Affirmative Paradigms of Nagai ‘long’ and Okiru ‘get up’

Form	<i>nagai</i> ‘long’	<i>okiru</i> ‘get up’
Non-past	<i>naga-i</i>	<i>oki-ru</i>
Conjunctive	<i>naga-ku</i>	<i>oki</i>
Past	<i>naga-katta</i>	<i>oki-ta</i>
Provisional	<i>naga-kereba</i>	<i>oki-reba</i>
<i>te</i> -conjunctive	<i>naga-kute</i>	<i>oki-te</i>
Conditional	<i>naga-kattara</i>	<i>oki-tara</i>
Representative	<i>naga-kattari</i>	<i>oki-tari</i>
Imperative	—	<i>oki-ro</i>
Hortative	—	<i>oki-yoo</i>

(Backhouse 2014)

Like verbs, the non-past and past forms of inflected adjectives can modify a noun in an NP, with no additional syntax, as in (6.2):

- (6.2) *naga-i* *ressya* (Backhouse 2014)
 long-NONPAST train
 ‘long train’

Uninflected adjectives require support of a copula to function as predicates, as in (6.3). The copula has the same form as used with nouns. As noun-modifiers in NPs, uninflected adjectives are followed by adnominal markers *na* or *no*, depending on the adjective. This is similar to the case for nouns, as in *Usagi no mini* ‘rabbit ears’ in (6.1), except that the *na* variant is unique to uninflected adjectives, as in (6.4). Because of their

syntactic similarity to nouns, uninflected adjectives are sometimes called “adjectival nouns” (Sato 2014). However, unlike nouns, they cannot head an NP, and are not followed by case markers.

(6.3) Sisetu wa rippa da²⁵ (Backhouse 2014)
 facilities TOP impressive COP
 ‘The facilities are impressive.’

(6.4) hizyoo ni rippa na tatemono (Backhouse 2014)
 very impressive ADNOM building
 ‘a very impressive building’

The inflected adjectives include most of those in Dixon’s core types of DIMENSION, AGE, and COLOR (e.g. *ookii* ‘big’ / *hiroi* ‘small’; *hurui* ‘old’ / *atarasii* ‘new’; and *stroi* ‘white’ / *kuroi* ‘black’) but some are uninflected (e.g. *midori* ‘green’). Foreign borrowings, including those of Chinese origin, are generally uninflected. Many concepts are represented by both inflected and uninflected adjectives. This holds in particular for *easy* adjectives.

6.1.2 Easy Adjectives in Japanese. There are two semantic pairs that describe easiness:

kantan (*na*) ‘easy’ *muzukashii* ‘difficult’

yasui ‘easy’ *nikui* ‘difficult’

Of these, *kantan* ‘easy’ is uninflected, used with *na* adnominally, while the others are all inflected. *Yasui* and *nikui* combine with verbs to form complex adjectives, similar to those seen in Indo-European languages, while *kantan* and *muzukashii* do not. In terms of the analysis framework used in previous chapters, complex adjectives with *yasui* and

²⁵ *Da* is the plain, non-past, affirmative form of the copula. In later examples, the polite form *desu* is used.

nikui are used with explicit-frame targets, while *kantan* and *muzukashii* are used adnominally and as predicates with clausal, Activity NP, and implicit-frame targets. The following examples are from Sato (2014) unless otherwise noted.

Clausal Target. In (6.5), the complementizer (or nominalizer) *no* allows the verb phrase *reporto o kaku* ‘write a report’ to be the topic of the sentence and the target of the adjective *muzukashi* ‘hard’. This topic-clause is compared to the verb phrase *shiken o ukeru* ‘take an exam’, for which the negation *hodo* takes the place of a nominalizer. *Kaku* ‘write’ and *ukeru* ‘take’ are the plain non-past forms of these verbs.

- (6.5) *Repōto o kaku no wa shiken o ukeru hodo muzukashi-ku arimasen.*
 report ACC write COMP TOP exam ACC take NEG hard-CONJ COP.NEG
 ‘Writing a report is not as hard as taking an exam.’

Activity NP Target. In (6.6) *sosa* ‘operation’ denotes the activity of operating ‘this machine’ (*koko kikai*). It can be the target of the uninflected adjective *kantan* ‘easy’ with no further elaboration.

- (6.6) *Kono kikai wa sosa ga kantan desu.*
 this machine TOP operation NOM easy COP
 ‘This machine is easy to operate.’
 (Lit. ‘As for this machine, the operation is easy.’)

Implicit-Frame Targets. In (6.7) and (6.8), a book (*hon*) is described as easy with no need for further elaboration. In (6.7) *kantan* ‘easy’ is a predicate (with the copula *desu*) referring to *kono hon* ‘this book’, while in (6.8) *kantan* modifies *hon* attributively in an NP, with the particle *na*. Note, in (6.7) *kono* ‘this’ is a demonstrative adjective, modifying *hon* book, while in (6.8) *kore* ‘this’ is a pronoun, marked with *wa* as the topic of the sentence. The NP *kantan na hon* ‘easy book’ in (6.8) by itself does not require a copula.

(6.7) Kono hon wa **kantan** desu
 this book TOP easy COP
 ‘This book is easy.’

(6.8) Kore wa **kantan** na hon desu (Kataoka 2019)
 this TOP easy ADNOM book COP
 ‘This is an easy book.’

Hon ‘book’ is an example of target whose activity frame is implicit in the sense that any literate speaker can be assumed to associate it with the activity of reading.

In (6.9) *mondai* ‘question(s)’ (on a test) are described as easy and hard. That a question is something to be answered follows from the definition of the word, and a language with a word for questions presumably has means to call questions easy or hard. Conceivably, *mondai* in this sense depends on the cultural phenomenon of test-taking, but even without this context the concept of a question in general presumes the expectation of an answer.

(6.9) Tesuto ni wa **kantan** na mondai ga mittsu soshite **muzukashii** mondai
 test DAT TOP easy ADNOM question NOM three and hard question
 ga hitotsu arimasu.
 NOM one exist
 ‘There are three easy questions and one hard question on the test.’

A more context-dependent example is shown in (6.10), which (like all the preceding examples) is taken from a textbook to help English-speakers learn Japanese. Within this context, where a frame of learning as an adult is pervasive, no further explanation is needed to call these Japanese writing systems difficult in varying degrees.

(6.10) kanji to katakana to, dochira ga **muzukashii** desu ka
 kanji LIST katakana LIST which NOM hard COP Q
 ‘Which is more difficult, kanji or katakana?’

Explicit-Frame Targets. As in other languages, a construction is available that allows speakers to mention a topic and then comment that some activity involving that topic is easy or hard. Examples (6.11), (6.12), and (6.13) illustrate various points regarding explicit-frames in Japanese. In (6.11) the combining adjective *yasui* ‘hard’ attaches to *tsukai* ‘use’ to form a complex adjective, *tsukai-yasui* ‘hard to use’. (*Tsukai* ‘use’ is the so-called stem form of the verb, which is the plain, affirmative, non-past form.) Without the explicit frame provided by *tsukai*, calling a dictionary hard (or difficult) seems unlikely. Note that, in (a), *kono jisho* ‘this dictionary’ is marked as a topic, but has no case marking. An explicit nominative case marking (*ga*) is possible but would emphasize ‘this dictionary’ (Kataoka 2019) unless combined with an Agent topic as in (b).

- (6.11) a) Kono jisho wa totemo **tsukai-yasui** (desu)²⁶.
 this dictionary TOP very use-easy COP
 ‘This dictionary is very easy to use.’

- b) *Watshi wa kono jisho ga tsukai-yasui*. (Inoue 2004)
 1S TOP this dictionary NOM use-easy
 ‘For me this dictionary is easy to use.’

- (6.12) Kono baggu wa karu-kute **mochi-yasui** (desu).
 this bag TOP light-CONJ hold-easy COP
 ‘This bag is light and easy to hold.’

- (6.13) Kimono wa **ki-nikui** desu soshite **aruki-nikui** desu (Kataoka 2019)
 kimono TOP wear-hard COP and/but walk.in-hard COP
 ‘A kimono is hard to wear and hard to walk in.’

In (6.12) *kono baggu* ‘this bag’ is described as *mochi-yasui* ‘easy to hold’. Certainly holding is a common thing to do with a bag, but one of many equally likely activities. In English, *easy bag* would have no obvious meaning and apparently Japanese is similar.

²⁶ The copula is optional with inflected adjectives like *yasui* ‘easy’ and *nikui* ‘hard’.

Note that this example concatenates *mochi-yasui* ‘easy to hold’ with another inflected adjective *karui* ‘light’, which in this case is marked with the conjunctive affix *-kute*.

As a final example of explicit frames in Japanese, (6.13) shows two different activities being described as hard in connection with a kimono. Even if ‘hard kimono’ had some natural interpretation in Japanese, a statement about two different activities would require an explicit frame as in (6.13).

Explicit frames in Japanese appear to provide yet another example of a construction that allows a topic to be described as easy or hard with respect to an explicitly stated activity, just as in English, Spanish, German, and Russian, but one that is syntactically different from any of the constructions seen so far since Japanese is the only head-last language examined. Comparing the explicit-frame examples in (6.11) – (6.13) to the earlier (6.5) (‘Writing a report is not as hard as taking an exam’), the order of constituents is similar. In both cases, given Japanese predicate-final order, the sequence is *Undergoer* + *Activity* + *Hard/Easy*. But the syntax in the two cases is very different. In (6.5) *muzikashii* ‘hard’ (with a copula) refers to two clauses, each with a complementizer, of the form *Repōto o kaku* (‘write a report’), with the Undergoer (*Repōto*) marked accusative. In the explicit-frame examples, no complementizer is needed—the Undergoer is marked nominative or as topic (understood as the subject), and the *activity+hard/easy* sequence is a complex adjective using the specialized combining adjectives *yasui* ‘easy’ and *nikui* ‘hard’.

An English analog to these two constructions would be ‘report-writing is hard’ (or ‘writing reports is hard’) vs. ‘reports are hard to write’. In discourse terms, the topic is ‘report-writing’ in one and just ‘reports’ in the other.

6.2. Swahili

Swahili is a Bantu language of eastern Africa. It is spoken by some 150 million people, although the number of native speakers, for whom it is a first language, is much smaller (Ethnologue 2018). Data about use of adjectives in Swahili come from elicitations from a native-speaker consultant obtained in connection with a field methods class at San José State University in the Spring of 2019. The consultant was a female student at SJSU in her twenties, born and raised in Dar-es-Salaam, Tanzania.

6.2.1 Grammatical Background.²⁷ Swahili is a strongly prefixing, agglutinative language. Constituent order is typically SVO. As in other Bantu languages, a complex noun-class system has a pervasive influence on both nominal and verbal morphology. Depending on the authority, there are as many as 19 noun classes. However, some of these are limited in use or based on a tradition of emphasizing similarity of the entire Bantu language group. Also, the singular and plural of a given noun are considered to belong to different classes. For practical purposes, each noun falls into one of six class-pairs, an even-numbered singular class and an odd-numbered plural class. To a great degree, the initial syllable of a noun shows its class membership. For example, Class 1/2, consisting of nouns denoting humans, has consistent marking of *m-* singular and *wa-* plural, as in the following examples:

²⁷ See Ashton (1947) and Palomé (1967) for summaries of Swahili grammar.

<u>Class 1</u>	<u>Class 2</u>
<i>m-tu</i> ‘person’	<i>wa-tu</i> ‘people’
<i>m-ke</i> ‘wife’	<i>wa-ke</i> ‘wives’
<i>m-zazi</i> ‘person’	<i>wa-zazi</i> ‘people’

Some other classes show much less consistency, both in terms of semantic character of the membership and the prefix marking. There are also phonological processes that affect the prefixes.

Verbs are marked with prefixes indicating tense/aspect/mood (TAM) and class membership of subject and object. Pronominal subjects and objects are also indicated by prefixes. The order of prefixes is: Subj–TAM–Obj–Verb Stem. The object prefix is often omitted. There is an infinitive form of verbs that has the form *ku*–Obj–Verb Stem. (The prefix *ku-* is considered to mark infinitives as noun-class 15.) In a relative clause, the verb is marked with a relative prefix according to the class of its referent. Derivational suffixes create middle voice verbs, applicatives, and causatives.

Adjectives follow the noun they modify in an NP. They can also be used predicatively with the invariable present-tense copula *ni* or, in other tenses, the verb *kuwa* ‘to be’. Adjectives of Bantu origin are marked to show concord with the noun they modify and are called *variable adjectives*. The prefixes are generally the same or similar to the corresponding noun-class prefixes, but some vary, and, as with nouns, phonological process can modify the form of the prefix. Also, adjectives that modify animate nouns commonly take Class 1/2 concord. There is a limited number of variable adjectives. Palomé (1967) lists 39 common variable adjectives. There are also numerous

invariable adjectives, mostly of Arabic origin, and some recent ones from European languages. Many concepts expressed using adjectives in English are expressed using nouns. For example, ‘yellow flower’ is expressed using a construction similar to ‘flower of yellow-color’.

6.2.2 Easy Adjectives in Swahili. Adjectives used to express difficulty include *rahisi* ‘easy, inexpensive, convenient’, *-epesi* ‘light, easy’, and *-gumu* ‘difficult, tough, firm’. As suggested by the leading hyphens, *-epesi* and *-gumu* are variable, while *rahisi* is invariable. The available examples show that *easy* adjectives, as in other languages, apply to activities in the form of clauses, NPs that denote activities, NPs with implicit activity frames, and NPs with explicitly stated activity frames.

Clausal Targets. The verb prefix *ku-* creates an infinitive, used as a complement for many verbs and as a verbal noun that can also head a clause. Examples (6.14) and (6.15) show infinitives used as complements following an impersonal verb (with subject prefix glossed as IMP), similar to extraposed usage in English.²⁸ Note the use of the verb form *yaliyoiva*, literally ‘that had ripened’ where English uses an adjective *ripe*.²⁹

- (6.14) i-li-kuwa **n-gumu** ku-pata ma-embe ya-liyoiva leo
 IMP-PST-be IMP-hard INF-find CL6-mango CL6-that.were.ripe today³⁰
 ‘It was hard to find ripe mangoes today.’ (In the market.)

²⁸ The infinitive phrase is the semantic target of *-gumu* ‘hard’ but cannot be its syntactic target. The infinitive is considered Class 15 with its own class concord *-ku* (Ashton 1947: 123). Instead we see the impersonal prefix (both on the copula and *-gumu*) in the slot normally occupied by the noun-class concord prefix. It is homophonic with the Class 9 prefix, but cannot be understood that way since there is no Class 9 argument in the sentence.

²⁹ A detailed gloss would be *ya-li-yo-iva*, CL6-PST-CL6.REL-ripen.

³⁰ A class prefix before the TAM marker is always a subject marker. If there is an object marker, it always follows the TAM marker.

- (6.15) i-li-kuwa **rahisi** ku-ji-funza ki-ingereza
 IMP-PAST-be easy INF-REFL-learn CL7-english
 ‘It was easy to learn English.’

In (6.16) the infinitive clause is at the beginning of the sentence, apparently as a topic that is described as easy, but otherwise the construction is similar.

- (6.16) ku-ji-funza ki-ingereza i-li-kuwa **rahisi**
 INF-REFL-learn CL7-english IMP-PAST-be easy
 ‘Learning English was easy.’ (‘As for learning English, it was easy.’)

Activity NP Targets. The examples from the field methods class contain no Activity NP targets. A Swahili-English Dictionary (Rechenbach 1967), in the definition of *rahisi*, gives the example *kazi rahisi* ‘easy work’.³¹

Implicit-Frame Targets. Examples (6.17) and (6.18) are a pair that together form a response to an elicitation about a test. Note the use of the infinitive of *kuwa* ‘be’ + *na* ‘with’ as an existential. As in the other languages reviewed, a question is understood as something to be answered (the implicit frame), so an ‘easy/hard question’ is one such that answering it is easy/hard.

- (6.17) ku-li-kuwa³² na ma-swali ma-nne ma-**rahisi**³³
 ADV-PAST-be with CL6-question CL6-four CL6-easy
 ‘There were four easy questions...’

- (6.18) na swali ø-moja **ø-gumu**
 and CL5.question CL5-one CL5-hard
 ‘...and one hard one.’

³¹ On-line Swahili-English dictionaries and various websites include examples of *easy* adjectives with words meaning ‘task’, ‘work’, and ‘victory’. However, it was not possible to verify that these examples represent native-speaker Swahili. Some appear to be created by foreigners learning Swahili and some may be automated translations from other languages.

³² *ku-* is an adverbial marker (not the infinitive marker) that in combination with *kuwa* ‘to be’ creates and existential (Ashton 1947: 213).

³³ The consultant used *rahisi* ‘easy’ with a class marking, and persisted after questioning, even though references all agree that it is invariable. Also note that the numbers 1 through 5, and also 8 (which are the ones of Bantu origin) are treated as variable adjectives.

(6.19) shows *rahisi* referring to questions in a copular construction:

- (6.19) ma-swali ma-nne ya-li-kuwa ma-**rahisi**
CL6-questions CL6-four CL6-PST-be CL6-easy
'Four questions were easy.'

Rechenbach's (1967) Swahili-English dictionary includes the example *lugha rahisi* 'easy language' with the explanation that this means a language that is easy to learn. It is doubtful whether languages in general are understood as things to be learned, but in the context of a bilingual dictionary they may be.

Explicit-Frame Targets. Swahili, like every other language examined, has a construction that allows introduction of an NP topic followed by a comment about some activity that is easy or hard in connection with that topic. This construction is illustrated in (6.20) concerning a question and (6.21) concerning a house.

- (6.20) swali ø-moja li-li-kuwa ø-**gumu** ku-li-elewa
CL5.question CL5-one CL5-PAST-be CL5-hard INF-CL5-understand
'One question was hard to understand.'

- (6.21) ny-umba y-angu ni **rahisi** ku-i-pata³⁴
CL9-house CL9-my COP easy INF-CL9-find
'My house is easy to find.'

A question (as seen before) can be easy based on the implicit frame of answering. But here the issue is understanding, which needs to be stated explicitly. A house is not something that can be called easy or hard, except in connection with some explicitly stated activity.

The syntax of these examples raises some issues. In (6.20), Class 5 *swali* 'question' is the basis of subject marking in *lilikuwa* 'it was'; the basis of class concord for *moja* 'one'

³⁴ *Rahisi* 'easy' which was marked for class-concord earlier shows no such marking here, but phonological changes often result in ø-marking for Class 9.

and *gumu* ‘hard’; and the basis of object marking in *kulielewa* ‘to understand it’. (Recall, the prefix before the tense marker is the subject, while the prefix after the tense marker is the object.) In (6.21), Class 9 *nyumba* ‘house’ functions similarly. When there is a lexical object, the object prefix is normally omitted on the verb, as in (6.14) earlier (‘It was hard to find mangoes’). In (6.20) and (6.21), if the object marker on the infinitives is interpreted as class concord, then the grammatical status of *swali* ‘question’ in (6.20) and *nyumba* ‘house’ in (6.21) would be ambiguous between subject and object.

There appear to be some limits in the use of this construction in Swahili since sentences similar to (6.20) and (6.21) in connection with finding ripe mangoes (in the market) and learning English were deemed unacceptable. In the case of learning English, it may be relevant that *kujifunza* ‘to learn’ in (6.15) is reflexive. In the case of finding mangoes, it may be relevant that the verb *kupata* ‘to find’ in (6.16) has other uses, including ‘achieve’ and ‘attain’. Establishing any limits on this construction is a topic for additional investigation, beyond the scope of this thesis.

6.3. Summary

To summarize, all the same activity-related target types are used with *easy* adjectives in Japanese and Swahili with much the same functions as in the Indo-European languages reviewed before, but with distinctive syntax, especially in the case of explicit frames. Whether other (non-activity) uses are possible is difficult to say without a corpus analysis, but no other uses appear in the sources consulted for this thesis. This analysis lends support to the idea that the hypothesized pattern of behavior of *easy* adjectives applies crosslinguistically and is not limited to a particular language type or family. One

limitation of the data is that, while Japanese and Swahili are historically culturally distant from Western Europe, many of the specific examples that were available do reflect recent cultural borrowing, in particular phrases about reports, school tests and similar.

7. Conclusions

The review of *easy* adjectives in six languages shows that their semantic character strongly influences the heads that they can modify and the syntax of expressions in which they appear. While the syntactic details are different in every language, there are general patterns that are consistent across all the languages reviewed. Broadly, the possible targets can be divided into three types: NP targets, clausal targets, and non-specific targets. Evaluation adjectives behave similarly, but with some important differences that appear related to discourse patterns. Each of these cases is discussed below.

7.1. NP Targets of *Easy* Adjectives

There are three types of NP targets: Activity NPs, implicit-frame targets, and explicit-frame targets. In every language the NP targets of *easy* adjectives are different than targets of typical adjectives. While typical adjectives describe physical things and metaphoric extensions of things, *easy* adjectives describe activities. The specific NP targets that are most commonly used with *easy* adjectives may well be culture dependent, but there is no evidence of any culture dependence in the three categories of NP targets. In other words, speakers of one language might talk more about the ease or difficulty of learning to dance, while the speakers of another language talk more about breeding horses, but both use the same three categories of words.

7.1.1 Simple NP Targets: Activity NPs and Implicit-Frame Targets. In every language there are two types of targets that require no further elaboration to be called easy or difficult. These are:

1. Activity NPs: the NP denotes an activity, either lexically (e.g. *process*), or as a nominalization of a verb (e.g. *adjustment*), including (in English) the very common cases of zero-derivations where noun and verb forms are identical (e.g. *change*, *work*, *dance*, etc.).
2. Implicit frames: the NP is closely associated with some activity (an implicit activity frame), and so is naturally understood as a metonymy for that activity. The association may depend only of the meaning of word or general knowledge (e.g. a book is read and a puzzle is solved) or may depend on a specific context, like the profession of the speaker, the topic of a story or narrative, or the category of a text (e.g. a recipe). These examples are all in English, but examples in all six languages were given in preceding chapters.

The syntax of *easy* adjectives with Activity NP targets and implicit-frame targets is broadly similar in all of the languages reviewed. In all the languages, Activity NP and implicit-frame targets are most commonly used adnominally, but also occur as copular complements with some frequency. Object complements (e.g. *make something easy*) occur in all the Indo-European languages that were analyzed, though the random corpus samples happened to include examples only in English and Spanish.

7.1.2 Explicit-Frame NP Targets. Every language has constructions that allow an NP to be introduced as a topic and then called easy or difficult in combination with an explicitly-stated activity (an explicit activity frame), most commonly using a complex adjective. In all the languages for which corpus data was examined, it was found that explicit frames apply almost exclusively to NP targets that could not be called easy or hard without being explicitly linked to some activity, or to NP targets that the speaker wishes to connect with some activity other than the one typically associated with it.

These targets constitute an overlap with clausal targets since the explicit frame is usually

clausal in form. In all languages the explicit-frame target is the semantic Undergoer of the activity that constitutes the activity frame.

The corpus analysis found more use of explicit frames in American English than in Spanish, German, or Russian, but all of the languages use explicit frames to introduce a target and then comment on the ease or difficulty of some activity involving that target.

All of the languages have a construction used for explicit frame targets similar to *topic NP + copula + complex adjective*, where the complex adjective combines the *easy* adjective and some verb form. Beyond that, details vary:

- In English and Spanish, the topic NP is marked nominative and the verb is an infinitive, i.e. a non-finite verb form that can function as a nominal and also head a clause. In English, the infinitive is a *to*-infinitive, while Spanish has no similar form. Spanish has only one non-finite verb form, an infinitive formed by adding *-ar*, *-er*, or *-ir* to the verb stem, and it appears with the preposition *de* ‘of’ in complex adjectives.
- In Swahili, the activity-frame verb is an infinitive, marked by the prefix *ku-*, but the syntactic status of the topic NP is ambiguous, since the noun class of the topic determines both the subject marker of the copula and the object marker of the infinitive.
- In German, the topic NP is marked nominative; the infinitive verb, which has a form analogous to English *to*-infinitives, is understood as a passive form; and the *easy* adjective occupies a slot otherwise typical of adverbial expressions.
- In Russian, the topic NP is marked accusative, instrumental, or dative, according to the requirements of the verb, and is clearly a pre-posed complement of the infinitive verb (e.g. a “direct object” or “indirect object”).
- In Japanese, the topic NP is explicitly marked as a topic with the *wa* topic marker, and can optionally be marked nominative with the *ga* subject marker. The complex adjective has the form: *plain non-past verb + easy/hard*. Compared to the other languages, this form is distinctive for not involving a non-finite verb form and for placing the *easy* adjective after the verb. Given Japanese predicate-final constituent order, this pattern is consistent with a predication of easiness about the topic NP and activity.

7.2. Clausal Targets of Easy Adjectives

In every language *easy* adjectives, unlike typical adjectives, can apply to entire clauses. As with NP targets, there is broad syntactic similarity, in that mechanisms exist to allow an *easy* adjective to modify an entire clause, but the details vary. The languages reviewed have many mechanisms for this purpose, but the most common follow some patterns.

- In the two Germanic languages, English and German, *easy* adjectives typically target an extraposed non-finite verb clause using a specialized non-finite verb form, the *to*-infinitive in English and the analogous *zu*-infinitive in German. In these languages, every finite verb, including copulas, requires a subject. In the case of impersonal expressions, as with extraposed infinitives, a dummy pronoun is used, *it* in English, *es* in German, resulting in sentences of the form *it/es* + *copula* + *easy/hard* + *to/zu-infinitive clause*. German, in which adverbs are indistinguishable from predicate adjectives, makes much more use of adverbial expressions of easiness than the other languages. This is true even after making allowance for explicitly adverbial forms (e.g. *easily*) in other languages.
- Spanish and Russian both allow impersonal expressions with no subject. Hence sentences of the form *copula* + *easy/hard* + *infinitive clause* are common. In both languages the copula is marked in a way that is consistent with an impersonal zero subject (corresponding to dummy *it* in English) or with the infinitive clause acting as subject.
- In Swahili, the finite verb in an impersonal expression carries a specialized impersonal subject prefix, but has no lexical or explicit pronominal subject. However, this pattern does not apply to the present-tense copula, which has the invariable form *ni*. With these differences, Swahili allows sentences similar to those in Spanish and Russian.
- Japanese appears to have no non-finite verb form, but does allow for an *easy* adjective to apply to a finite verb clause followed by a complementizer. Spanish too commonly allows *easy* adjectives to apply to complementized finite verb clauses. The Spanish use appears to be limited to subjunctive-marked verbs, while the similar-appearing Japanese structure appears to have no similar marking or semantics.

7.3. Non-specific Targets of Easy Adjectives

Easy adjectives, unlike typical adjectives, often apply to non-specific targets. These targets may be a general topic in prior discourse or some activity that is more or less clear but syntactically ambiguous. This pattern was seen in all the (Indo-European) languages that were analyzed using corpus data.

7.4. Evaluation Adjectives

Evaluation adjectives, like *easy* adjectives often apply to activities and also to non-specific targets, but also apply to specific, physical entities. They are used with all the target types identified for *easy* adjectives. However, based on a limited investigation of two evaluation adjectives, *dangerous* and *important* (and equivalents in other languages), they are most commonly used with NP targets that require no explicit activity frame. In many cases, as with *easy* adjectives, the activity frame is implicit in the meaning or common use of the word, but in others (as in *dangerous criminal* or *interesting person*) no activity frame, explicit or implicit, appears to be needed. Evaluation adjectives are used in explicit frame constructions, at least in some languages, but these constructions are much less common than with *easy* adjectives and, for some adjectives in some languages, either absent or marginally acceptable.

The relative rarity of explicit frames with evaluation adjectives may be related to the fact that many fewer potential targets of evaluation adjectives need any activity frame at all. With *easy* adjectives, the number of things that require an explicit frame for the adjective to apply appears to be quite large, while for evaluation adjectives it is much smaller. That is, there are many more things that can be called dangerous or important on their own

than can be called easy or hard on their own. In these cases, adding an explicit frame is done for purposes of elaboration rather than out of necessity. This is uncommon but does occur with *easy* adjectives, and the observed frequency of such explicit frames is of the same order of magnitude as the frequency of explicit frames with evaluation adjectives.

7.5. Further Research

There are two likely areas for further investigation:

1. More extensive analysis of *easy* adjectives in languages with constituent order other than SVO. This could include corpus analysis of Japanese and Swahili (both SOV), a VSO language for which a corpus may be available, such as Irish, Welsh, or Scottish Gaelic, and a language with no case marking at all like Mandarin Chinese.
2. Analysis of additional evaluation adjectives. The differences seen between *dangerous* and *interesting* leave open the possibility that many of these adjectives have their own distinctive characteristics.

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