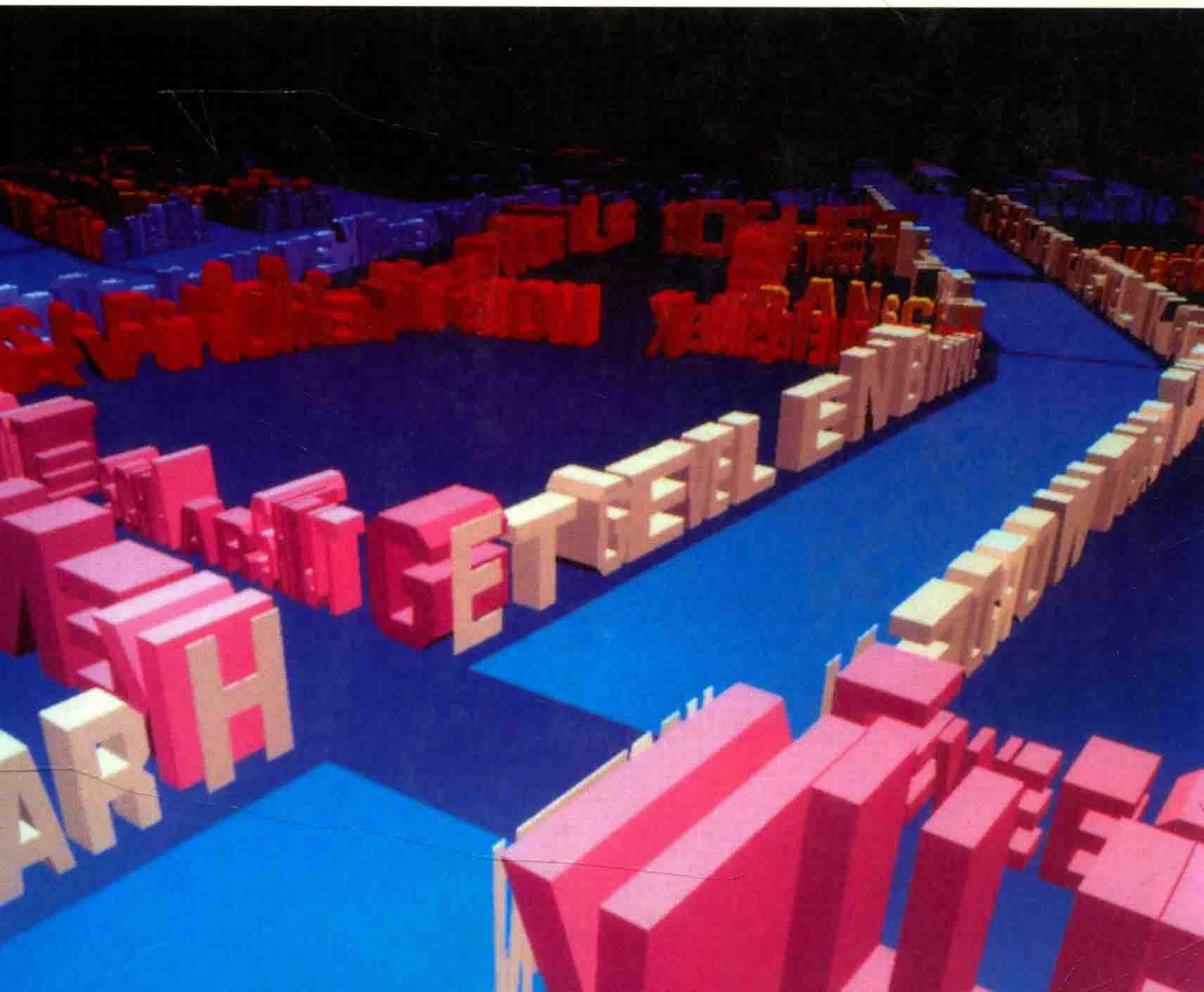


David G. Lockwood

Syntactic Analysis and Description

A CONSTRUCTIONAL APPROACH



Syntactic Analysis and Description

A constructional approach

DAVID G. LOCKWOOD

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Dedicated to the memory of

Kenneth Lee Pike

Pioneer in Function-based Syntactic Description

June 9, 1912–December 31, 2000

Preface

As its title implies, this book focuses on how to analyse and describe the phenomena of syntax. It concentrates on ways to go from data to description rather than on questions of how syntax is learned or acquired, on its organization more than its explanation. It uses an eclectic model which has been drawn primarily from three frameworks: (1) the stratificational model of Sydney M. Lamb; (2) the tagmemic model originated by the late Kenneth L. Pike, and refined by others such as Robert E. Longacre; and (3) the systemic model of M. A. K. Halliday. It is centered around the notion of the syntactic construction, a notion found in most models of syntax, and it characterizes a construction in a fashion that focuses attention on the distinction between a functional position and the class of manifestations associated with that position. This notion is particularly associated with the tagmemic model, but it is also important in the systemic and stratificational views.

While English is usually used (when possible) to begin the discussion of a topic, the book uses a broad geographical, genetic, and typological range of languages to illustrate its points. Most of the data sets presented in the various chapters have been assembled with the aid of published textbooks, reference grammars, and articles. When data items are represented in italic letters, orthography (or a conventional Roman transliteration) is being used. Other examples are in classical phonemic transcription. Where feasible, there has been an attempt to check the data sets presented with native speakers and specialized linguists, but this was not always possible, and it was considered better to illustrate points more broadly rather than confine the data to languages that could be more thoroughly checked. The reader is therefore cautioned against using these data sets to support special theoretical points without checking them personally with speakers or experienced linguists. This seems to be good advice in any case.

Each of the 15 chapters of the book concludes with a set of exercises intended to give the student practice in applying the concepts and notations in the chapter. These include not only the traditional data sets found in linguistics texts, requiring one to proceed from data to description, but also some interpretation problems, designed to give practice in going from a formalized description to a partly analysed representation of the data. An excellent source of additional material of the traditional type is Merrifield et al. (eds) (1987), which includes problems in both morphology and syntax from a wide range of languages.

The book is designed to present both the basics of syntax and some more special topics such as the treatment of clitics (Chapter 8), negation (Chapter 9), and alternative forms of clausal organization (Chapter 10). It presents only the fundamentals of these topics, because syntax is far too complex a subject to be totally covered in a single work of this length.

Thanks are due especially to two colleagues who read and offered their comments on earlier drafts of significant parts of the book: Mayrene Bentley, formerly of Michigan State, who read original versions of Chapters 1–4, and William J. Sullivan of the University of Florida, who read and commented on earlier versions of all 15 chapters. Thanks are also due to the following experts on some of the languages used in illustrations and exercises:

Amharic	Dr. Grover M. Hudson (Michigan State University)
Chinese	Dr. Yen-Hwei Lin (Michigan State University)
German	Dr. Victoria and Mr. Thoralf Hoelzer-Maddox (East Lansing, Michigan)

Hebrew	Ms. Ellen Rothfeld (Michigan State University)
Hindi	Dr. Helen E. Ullrich (New Orleans, Louisiana)
Hungarian	Dr. Miklós Kontra (Hungarian Academy of Sciences)
Japanese	Dr. Mutsuko Endo Hudson (Michigan State University)
Kannada	Dr. Helen E. Ullrich (New Orleans, Louisiana)
Swahili	Dr. Carol Myers-Scotton (University of South Carolina) [Table 7.4]
Welsh	Dr. Toby D. Griffen (Southern Illinois University, Edwardsville)

It is also fitting to remember several linguists now deceased who contributed in various ways to the book. The book as a whole is dedicated to the memory of Kenneth L. Pike, who taught the first course treating syntax in depth that the author took. His emphasis on the distinction between function and class and his interest in a wide range of languages are especially reflected in the book.

Others worthy of special mention include Dr. Seok Choong Song, a native of Korea who grew up bilingual in Korean and Japanese, who helped to refine some Korean and Japanese data sets incorporated in the book. Dr. Michael Eric Bennett was a promising young linguist who received his doctorate at Michigan State in 1986 and contributed the Malagasy data for Chapters 1 and 8. While his premature death at the age of 34 was much to be lamented, he left a collection of language grammars and textbooks which has proven to be a valuable resource for data for this work. The author's independent study of Central Yup'ik Eskimo, finally, was aided and encouraged by Dr. John H. Koo, who had taught at the University of Alaska, Fairbanks, and pursued fieldwork on the language. His sudden death in 1997 cut short a collaboration on a projected handbook of the fascinating morphology of this language, but data from the materials he had provided have nevertheless enriched this book significantly.

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Constructions, functions, and classes

What is syntax?

(According to its Greek etymology, the term “syntax” means “the study of arrangements”, and to linguists, this means specifically the study of arrangements in language.) Such arrangements need to be studied because they are not automatically predictable: the order of linguistic elements that may seem “natural” to the speakers of one language may not correspond at all to what seems natural to the speakers of another language. This point can easily be demonstrated by comparing the expression *the red book* in English with its equivalent in some other language, for example Italian. The Italian words equivalent to English *the*, *red*, and *book* are *il*, *rosso*, and *libro*, respectively, but they are not properly combined in the English order to give **il rosso libro*. Rather, the word meaning RED is put after the word for BOOK to give *il libro rosso*. This example illustrates a minor difference in the patterns of arrangement characteristic of English and Italian, and therefore of the syntax of these languages.

If one looks at the totality of language, it turns out that there are several different kinds of arrangement patterns that need to be studied. In phonology, for example, each language has characteristic arrangements of its basic units, its phonemes. The study of these arrangements is a syntax of the phonology, often called **PHONOTACTICS**.

For many linguists, there is also another area of language called the **SEMOLOGY**, the study of linguistic meanings. This is involved with studying and describing the meaning elements of a language. To those who have seriously examined this area, it appears that each language also has its own syntax of meaningful units (**SEMEMES**), which may be called a **SEMOTACTICS**.

The kind of syntax with which the term is most often associated, however, is neither phonological nor semological. First and foremost, modern usage reserves the term **SYNTAX** for the study and description of how words combine to form particular kinds of language structures. The structures most commonly studied here are known as **PHRASES**, **CLAUSES**, and **SENTENCES**. We can illustrate all three of these terms in connection with the following example:

My Aunt Susan is quite ill, and I want to visit her in the hospital.

As a whole, this example is one sentence, and within it are two clauses:

- (1) *My Aunt Susan is quite ill* and
- (2) *I want to visit her in the hospital.*

These clauses can be termed **INDEPENDENT CLAUSES** because either one could constitute a sentence by itself. Then, by traditional reckoning, the first clause contains two phrases – one is the **NOUN PHRASE** *My Aunt Susan*, and the other is the **ADJECTIVE PHRASE** *quite ill* – and the second clause contains the **INFINITIVE PHRASE** *to visit her* and the **PREPOSITIONAL PHRASE** *in the hospital*. Within the latter phrase, finally, there is another noun phrase, *the hospital*. (Some linguists may view one or more of these matters a bit differently, of course, but one need not be overly concerned with such differences at this point.)

In this work, then, syntax will be understood as involving the study and description of the

arrangements of words into phrases, clauses, and sentences in various languages. The study will point out how languages are similar in their syntactic arrangements as well as how they are different. While the major focus will be on the description of the phenomena rather than their explanations, occasional attention will be given to a discussion of possible explanations for syntactic phenomena.

One way of contrasting this kind of syntax with the “syntactic” aspects of phonology and semology is to call it **GRAMMATICAL SYNTAX**. While such a usage is quite reasonable, it should be pointed out that linguists sometimes use a broader definition of “grammar”. According to that broader definition, a “grammar” is a description or characterization of the whole of linguistic knowledge lying behind the language behavior of a speaker, including phonology and semology as well as the structure of words, phrases, clauses, and sentences. According to the narrower view used here, **GRAMMAR** is one of the three basic subdivisions of linguistic description, along with phonology and semology. In this sense, grammar includes morphology – the internal structure of grammatical words – as well as syntax. In outline form, this view is represented in Figure 1.1.

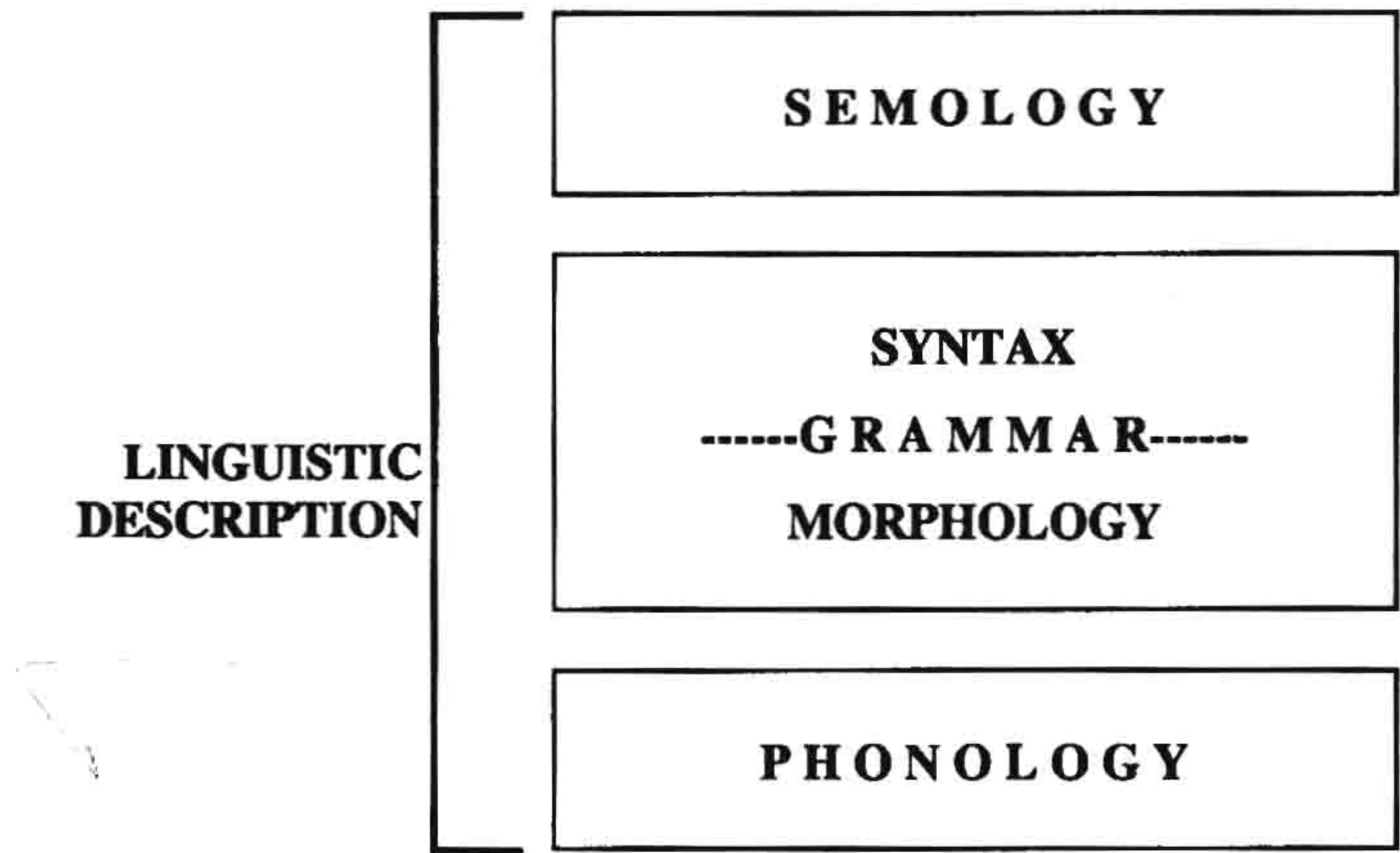


Figure 1.1 Divisions of linguistic structure and description

It should be noted that some languages may not have any morphology, while every language has syntax. Vietnamese and Classical Chinese are often cited as languages without morphology. Among the languages that do have both morphology and syntax – the vast majority – the relative role of each of these subdivisions in the grammar may be proportionately greater or lesser. In English, the role of morphology is, for example, relatively limited. In a language like Eskimo, on the other hand, morphology may do a much larger percentage of the total work of grammar than it does in English or most European languages. This is easily demonstrable when one considers an example from one form of Eskimo, namely Central Alaskan Yup’ik, beside its English translation:

Yup’ik	/nánvaxpáxtiŋnáqŋáicuŋnáxcuq/
English	<i>He probably won’t try to go to the big lake.</i>

While the English sentence contains at least ten words (and eleven if we treat *won’t* as just a reduced form of *will not*), the Eskimo expression really counts as a single word, which is simultaneously a clause and also a sentence. While there are other cases where the number of words in a Yup’ik sentence would be greater, the grammar of this language allows – and indeed requires in many cases – the use of a single word of considerable morphological complexity where English would use many more words, each of them generally less complex, to express the same ideas. For this reason, the burden of morphology in the total grammar of

Yup'ik is much greater, and that of syntax is correspondingly less, in comparison to the relative burdens found in English.

In a language like Vietnamese, on the other hand, the entire burden of the grammar would belong to the syntax, in view of the absence of morphologically complex words.

The construction: an essential element in syntax

According to the approach followed in this book, the most basic concept in syntax is that of the construction. A CONSTRUCTION may be defined as a general pattern of combination found in syntax. Evidence for two important constructions in English is shown in Tables 1.1 and 1.3. The evidence is partial, and each construction may in fact be expanded beyond what is shown here, but this material will suffice as a basis for a preliminary discussion.

Table 1.1 Evidence for the noun phrase construction in English

1. <i>the book</i>	7. <i>a light box</i>
2. <i>the big book</i>	8. <i>that little box</i>
3. <i>this heavy book</i>	9. <i>a box</i>
4. <i>this box</i>	10. <i>a heavy box</i>
5. <i>that big box</i>	11. <i>the light book</i>
6. <i>that little book</i>	12. <i>this big book</i>

Considering first the material in Table 1.1, we note that each of the examples begins with one of the four English words *a*, *that*, *the*, *this* and ends with a word of the set *book*, *box*. In between these two parts, the pattern shows that there may be no word at all, or one of the words *big*, *heavy*, *light*, *little*. It is often useful to chart such evidence, as demonstrated in Table 1.2.

Table 1.2 A charting of the English noun-phrase data

POSITION 1 Obligatory	POSITION 2 Optional	POSITION 3 Obligatory
<i>a</i> <i>that</i> <i>the</i> <i>this</i>	<i>big</i> <i>heavy</i> <i>light</i> <i>little</i>	<i>book</i> <i>box</i>

Table 1.3 Evidence for the intransitive clause construction in English

1. <i>John works.</i>	6. <i>Mary sits here.</i>
2. <i>Mary sits.</i>	7. <i>John works below.</i>
3. <i>Mary works here.</i>	8. <i>Leslie works.</i>
4. <i>John sits there.</i>	9. <i>John works inside.</i>
5. <i>Leslie sits below.</i>	10. <i>Mary works there.</i>

Considering next the data in Table 1.3, we see that the first word there is one of the set *John*, *Leslie*, *Mary*, while the second is one of *sits*, *works*. While examples 1, 2, and 8 end with this second word, the others give evidence for a third word, one of the set *below*, *here*, *inside*, *there*. This material can be charted as in Table 1.4. These examples suggest that we can represent the pattern of a construction with an arrangement of positions one after the other, with some positions obligatory and others optional.

Table 1.4 A charting of the English intransitive clause data

POSITION 1 Obligatory	POSITION 2 Optional	POSITION 3 Obligatory
<i>John</i> <i>Leslie</i> <i>Mary</i>	<i>sits</i> <i>works</i>	<i>below</i> <i>here</i> <i>inside</i> <i>there</i>

Functions within constructions

In the charts shown in Tables 1.2 and 1.4, the parts of each construction have simply been labeled as “positions”, numbered from the beginning to the end. It will be better, however, if we can replace these simple position-numbers with linguistically based labels. One way to go about such labeling might be to adopt labels based on the class of words that can occur in each position, reflecting the fact that each of the positions identified so far seems to be manifested by words of a particular sort. So for the parts of the noun phrase, we might use the terms “determining adjective”, “descriptive adjective”, and “noun” for positions 1 through 3 in Table 1.2. We might similarly adopt the terms “proper noun”, “intransitive verb”, and “locative adverb” for the corresponding positions of Table 1.4. Some approaches to the matter have proceeded in precisely this way, treating each construction as a sequence of obligatory or optional class-labels. An alternative tradition suggests, however, that it may be more appropriate to label each position according to its **FUNCTION** – what it does – rather than according to the class of its manifestations. Each function would, in turn, be related to a **MANIFESTATION CLASS**. According to this tradition, the noun phrase positions would be functionally labeled as **DETERMINER**, **MODIFIER**, and **HEAD**, and those of the intransitive clauses would be **SUBJECT**, **PREDICATOR**, and **LOCATIONAL**. (These specific terms will be further exemplified and discussed in later chapters. The reader should not be preoccupied by the lack of precise definitions for them at this point.) The boxed representations of Figure 1.2 present a more formal representation of the two constructions and their constituent functions. In these representations, the labels for optional functions are placed in square brackets, while those for obligatory ones are unbracketed.

In comparing the approach relating constructions to classes directly with the alternative which brings in function as well, we need to see whether the second alternative is worth the extra complication it seems to involve. The argument that the extra complexity is needed centers on the fact that functions form a part of the meaning of each position that carries a functional label, and that this aspect of the meaning is not going to be adequately treated when

(a)

Noun Phrase		
Determiner	[Modifier]	Head

(b)

Intransitive Clause		
Subject	Predicator	[Locational]

Figure 1.2 Boxed representations of two English constructions

the positions are labeled with class-labels alone. Such a fact can be most easily demonstrated by considering data where the same class is associated with distinct functions, as in the further English data of Table 1.5. Here the same set of nouns can occur in two distinct functions: that of **SUBJECT** (before the verb), and that of **OBJECT** (after the verb). If we just referred to the class without the function in treating such examples, these differences would be missed. The construction here with its functions is shown in Figure 1.3, based on the same foundations as the representations of Figure 1.2.

Table 1.5 Evidence for the transitive clause construction in English

1. <i>Leslie sees John.</i>
2. <i>John knows Leslie.</i>
3. <i>Mary sees Leslie.</i>
4. <i>Leslie knows Mary.</i>
5. <i>Mary knows John.</i>
6. <i>John sees Leslie.</i>

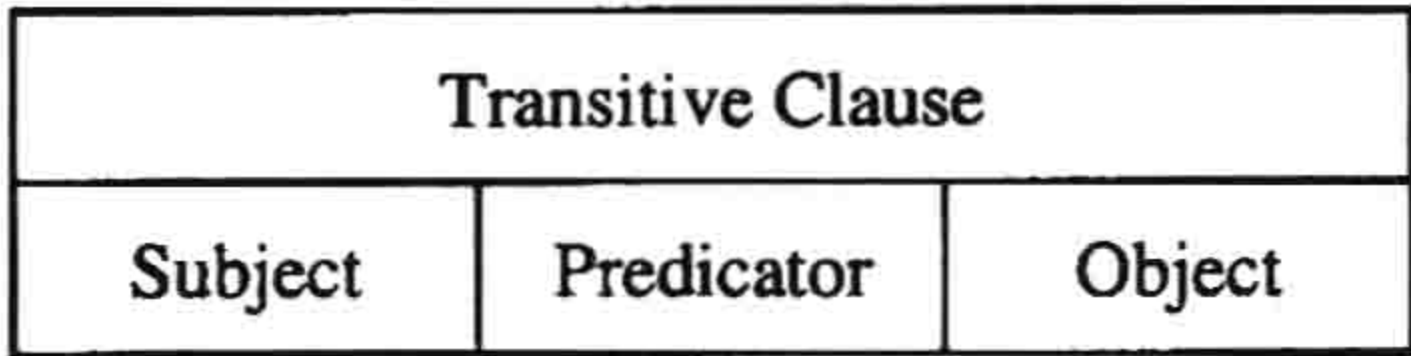


Figure 1.3 Boxed representation of the English transitive clause construction

The manifestation of functions

We have concluded that each construction is characterized by a sequence of optional or obligatory functions. To complete the description, each such function needs to be further related to a class of linguistic units which can serve to manifest it, a manifestation class. In principle, the manifestation class for a given function may consist of single words, other constructions, or a combination of the two. In the simple examples presented so far, words are the only members, though we will soon see evidence for more complex examples.

Figures 1.4 and 1.5 present the complex boxed solutions for the data from Tables 1.1 and 1.5, respectively. Each example includes a **CONSTRUCTION BOX** presented previously, and each function in one of these is connected by lines to **VOCABULARY BOXES** listing the words involved.

According to the convention followed here, each vocabulary box is headed by a class-label in the plural. The words in each vocabulary box can conveniently be given in alphabetical order. As is illustrated in Figure 1.5, the same class may manifest more than one function, and in that case it is not necessary to repeat the box that represents that class. The dual (or sometimes multiple) function of a given vocabulary class is indicated in the boxed solution by the fact that different lines connect the vocabulary box to its various functions.

Application to basic clausal data

In order to see how this system can be applied to data from languages other than English, let us consider some evidence for the structure of transitive clauses in three different languages: Turkish (Table 1.6), Thai (Table 1.7), and Welsh (Table 1.8). In examining such data sets from unfamiliar languages, one obviously needs a translation (or **GLOSS**) for each example if one is to be able to proceed in its analysis. (For the previous English data, glosses were omitted as unnecessary, though they could, of course, have been provided in materials written for speakers of some other language.) The glosses, however, apply to each example as a whole and

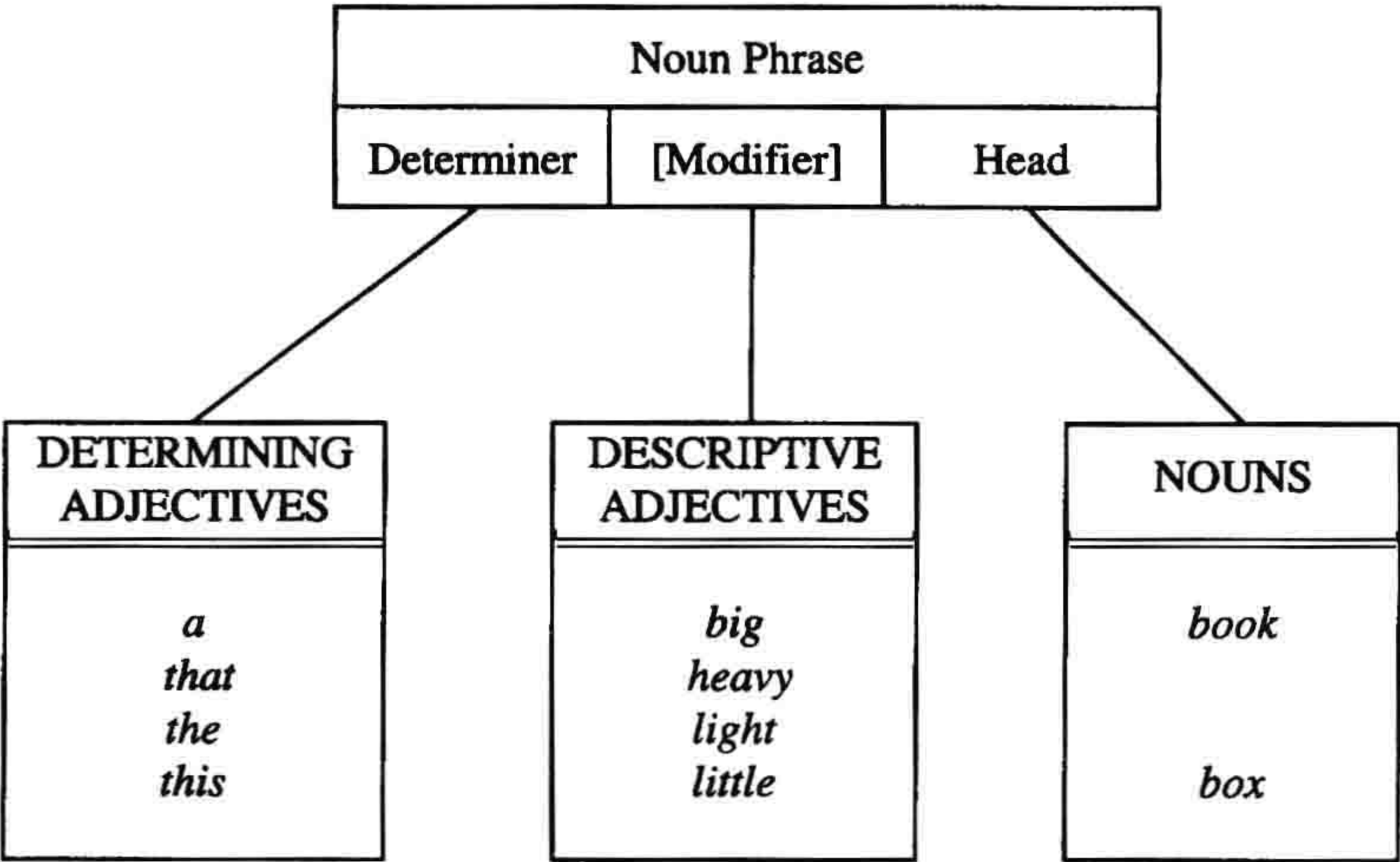


Figure 1.4 Boxed solution to the English data of Table 1.1

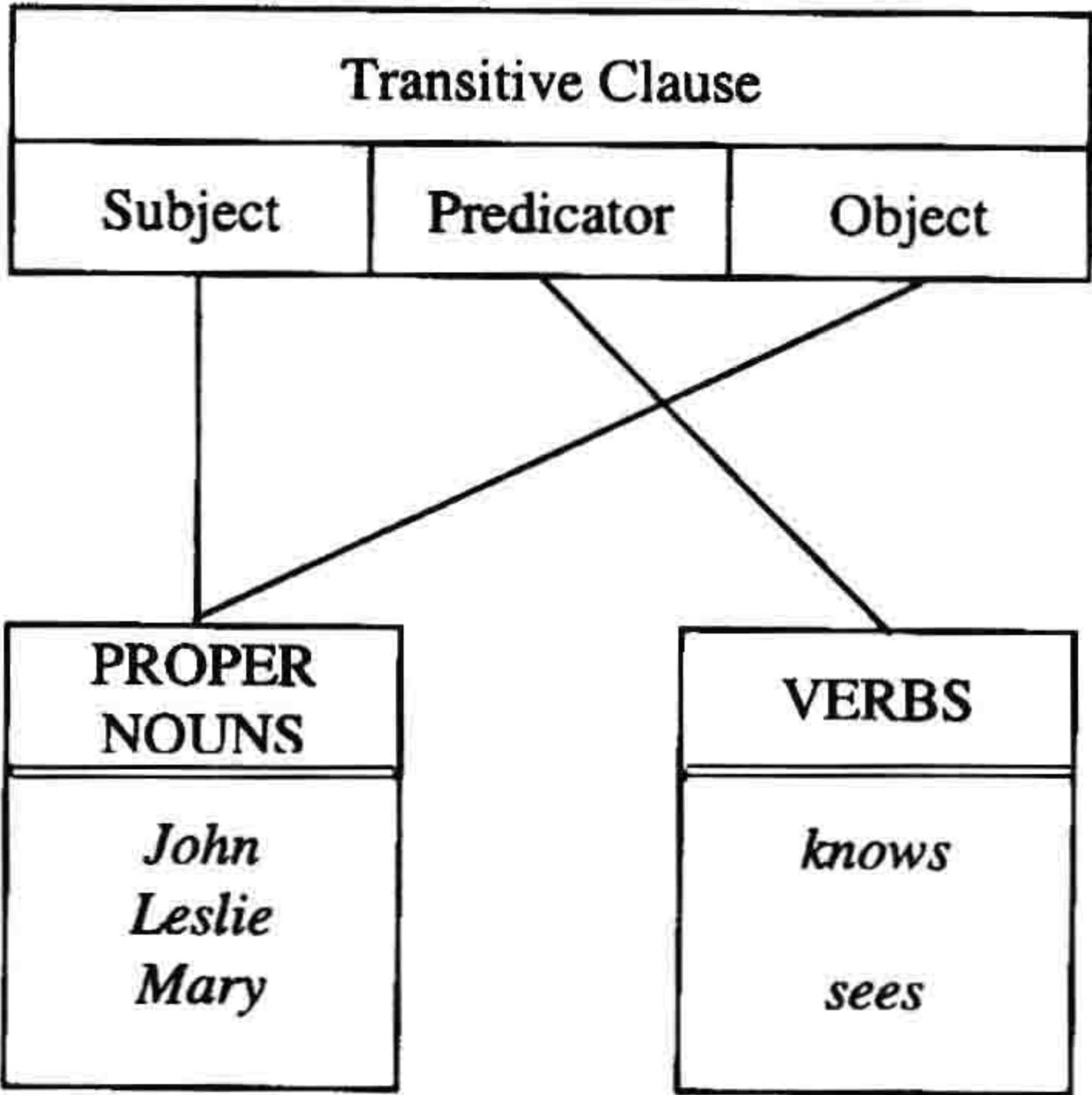


Figure 1.5 Boxed solution to the English data of Table 1.5

Table 1.6 Evidence for the transitive clause construction in Turkish

1. çiftçi köpek gördü	THE FARMER SAW A DOG.
2. köpek çiftçi gördü	THE DOG SAW A FARMER.
3. köpek adam gördü	THE DOG SAW A MAN.
4. komşu kedi gördü	THE NEIGHBOR SAW A CAT.
5. çiftçi kedi buldu	THE FARMER FOUND A CAT.
6. arkadaş köpek istedi	THE FRIEND WANTED A DOG.
7. kedi komşu duydu	THE CAT HEARD A NEIGHBOR.
8. adam arkadaş sevdi	THE MAN LIKED A FRIEND.
9. asker köpek buldu	THE SOLDIER FOUND A DOG.
10. komşu asker duydu	THE NEIGHBOR HEARD A SOLDIER.

Table 1.7 Evidence for the transitive clause construction in Thai

1.	k ^h rūr dūr p ^h û'jǐŋ	THE TEACHER LOOKS AT THE WOMAN.
2.	k ^h rūr dūr dèk	THE TEACHER LOOKS AT THE CHILD.
3.	dèk dūr k ^h rūr	THE CHILD LOOKS AT THE TEACHER.
4.	dèk dūr p ^h û'jǐŋ	THE CHILD LOOKS AT THE WOMAN.
5.	p ^h û'jǐŋ rú'càk dèk	THE WOMAN KNOWS THE CHILD.
6.	dèk rú'càk k ^h rūr	THE CHILD KNOWS THE TEACHER.
7.	p ^h û'jǐŋ rú'càk k ^h rūr	THE WOMAN KNOWS THE TEACHER.
8.	k ^h rūr rú'càk dèk	THE TEACHER KNOWS THE CHILD.

Table 1.8 Evidence for the transitive clause construction in Welsh

1.	gwe'l sayr aθro	A CARPENTER SEES A TEACHER.
2.	edwīn sayr aθro	A CARPENTER KNOWS A TEACHER.
3.	edwīn sayr šopur	A CARPENTER KNOWS A SHOPKEEPER.
4.	gwe'l aθro sayr	THE TEACHER SEES A CARPENTER.
5.	gwe'l nayn aderīn	A GRANDMOTHER SEES A BIRD.
6.	gwe'l aderīn nayn	A BIRD SEES A GRANDMOTHER.
7.	edwīn šopur says	A SHOPKEEPER KNOWS AN ENGLISHMAN.
8.	edwīn aθro albanur	A TEACHER KNOWS A SCOTSMAN.
9.	gwe'l says frind	AN ENGLISHMAN SEES A FRIEND.
10.	edwīn frind šopur	A FRIEND KNOWS A SHOPKEEPER.

do not indicate the meaning of each individual word directly. This has to be deduced by the analyst using a process of comparison between partly similar examples.

Consider first the Turkish data. It seems clear that no single example, taken separately, will permit analysis. Comparison of examples that do not share any words – such as any two of examples 1, 7, and 8 – is also futile. But if we compare items 1 and 2, we see that they share all three words, but the first two words are in a different order in each example. This difference of order corresponds, we can also see, to a difference in the roles of Subject and Object in the two examples. This allows us to guess that /gördü/ is the verb meaning SAW, but it does not tell us whether the two other words are in the order *OBJECT* + *SUBJECT* or the reverse. Comparing items 2 and 3, however, we see that both have *the dog* as Subject and the word /köpek/ in first position. This sets up the hypothesis that the order in transitive clauses in this language is *SUBJECT* + *OBJECT* + *PREDICATOR*, and when we check through the remaining examples, we find this hypothesis confirmed. The analysis of this material is presented in boxed form in Figure 1.6.

When we consider the other two data sets and carry out a similar analysis, we find that Thai is like English in having a *SUBJECT* + *PREDICATOR* + *OBJECT* order, while Welsh has the order *PREDICATOR* + *SUBJECT* + *OBJECT*. Boxed solutions to these data sets are presented in Figure 1.7 (for Thai) and Figure 1.8 (for Welsh).

In all these data sets, it will be noted, the English glosses include definite and/or indefinite articles which do not correspond to any words in the other language. This situation is quite common, although there are, of course, many other languages that have articles at least roughly similar in usage to the English *the* and *a(n)*. Examples without articles are being used in this preliminary discussion to limit our consideration to just the essentials of clause structure.

Orders of functions in transitive clauses

In examining data from the transitive clause in English and three other languages, we have seen some of the evidence for an important aspect of the syntactic typology of languages. This

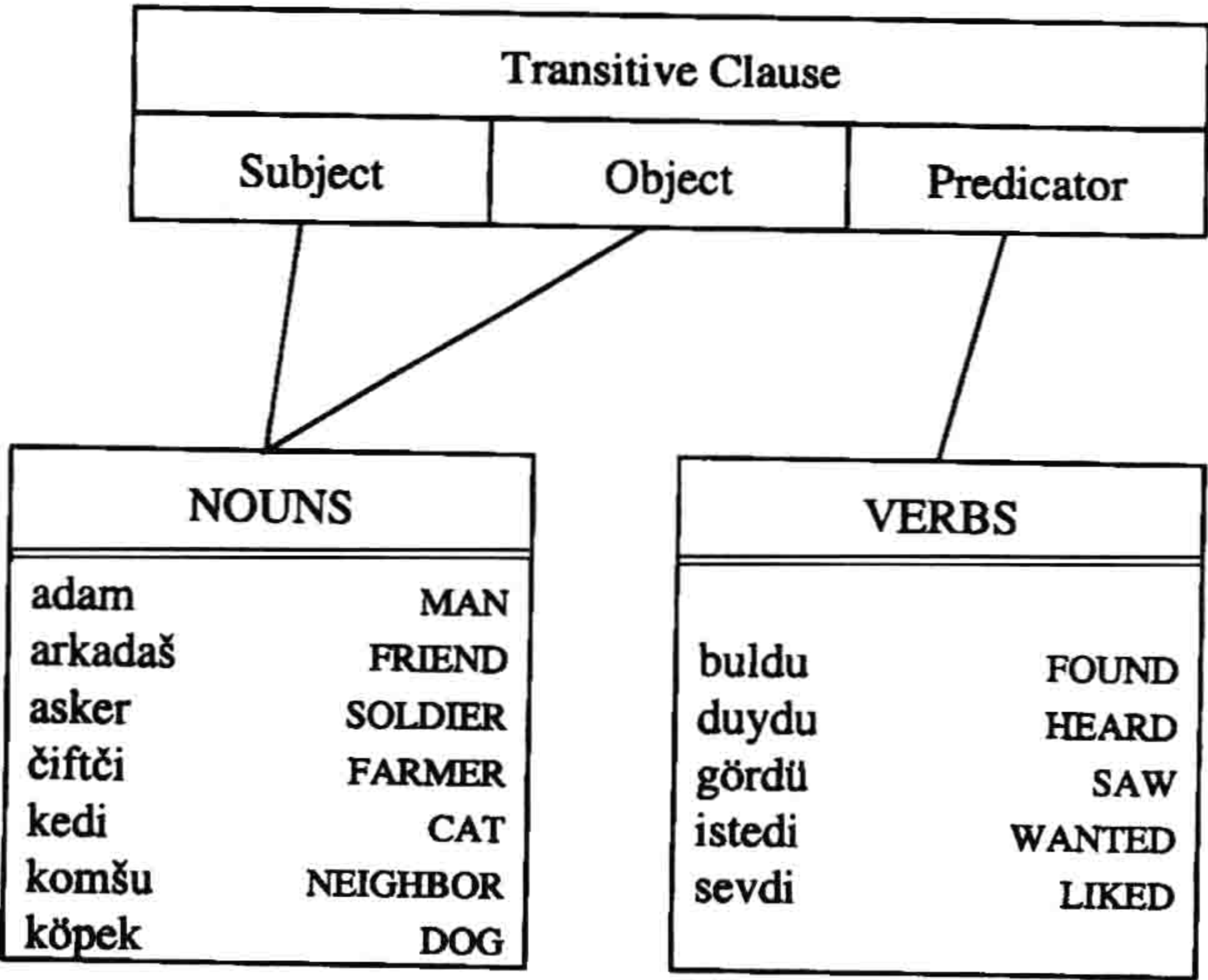


Figure 1.6 Boxed solution to the Turkish clause data of Table 1.6

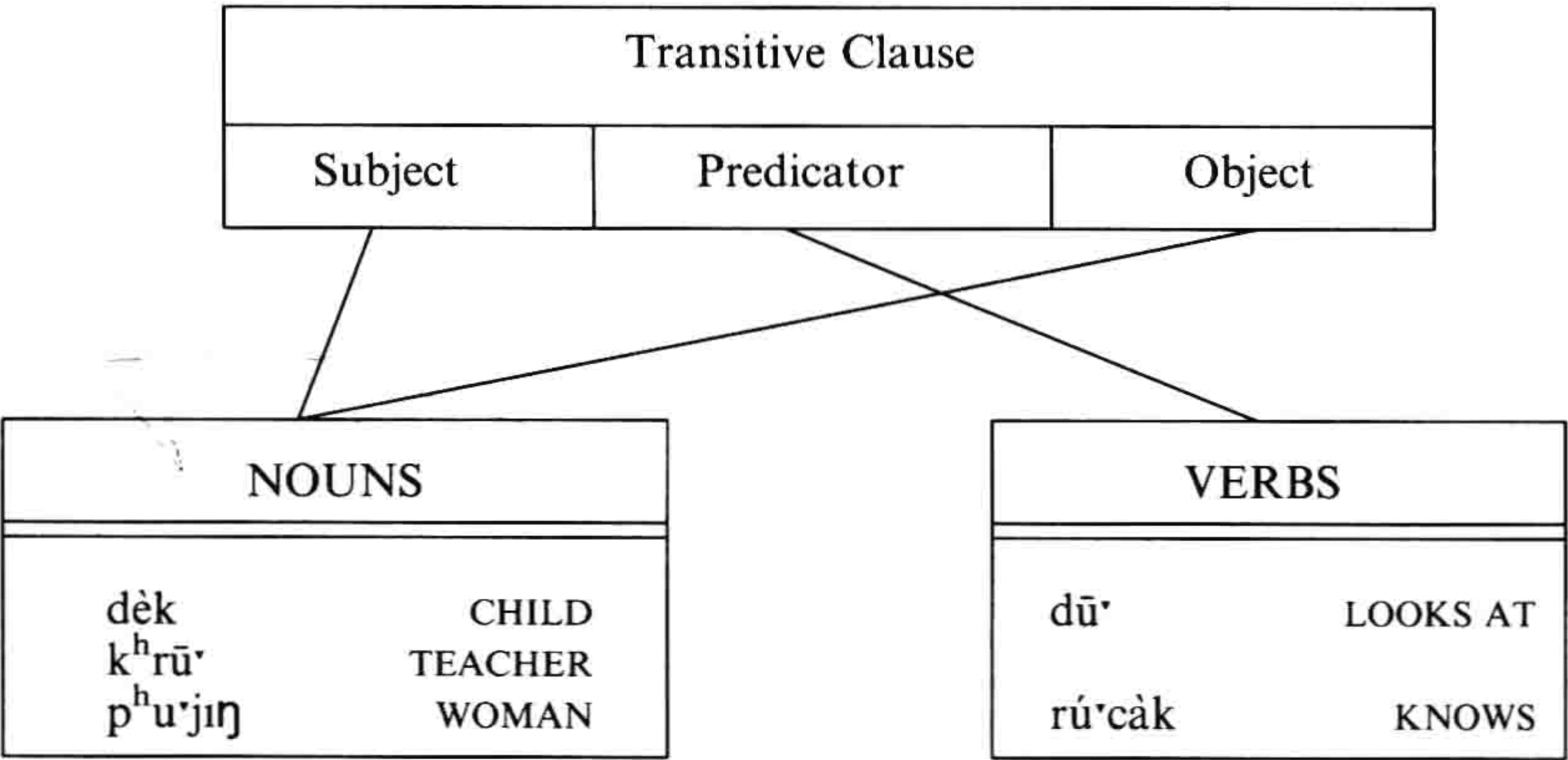


Figure 1.7 Boxed solution to the Thai clause data of Table 1.7

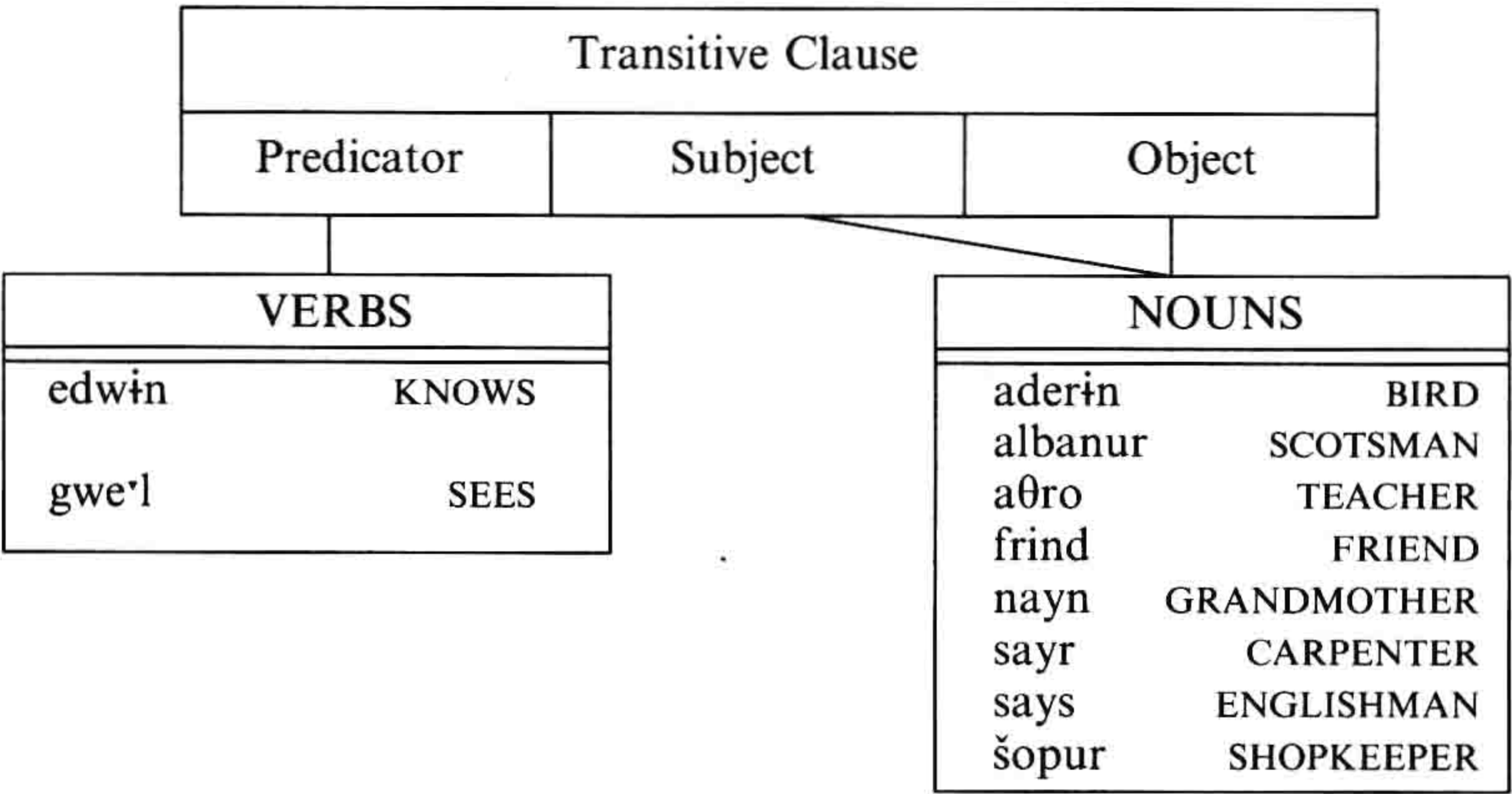


Figure 1.8 Boxed solution to the Welsh clause data of Table 1.8