

8 Grammatical relations

Grammatical relations (GRs) are structurally defined relations between words in phrases and clauses. Common terms used to refer to particular grammatical relations are **SUBJECT**, **DIRECT OBJECT**, **INDIRECT OBJECT**, **ERGATIVE**, **ABSOLUTIVE**, **GENITIVE**, and **OBLIQUE**. Sometimes the oblique relation (discussed below) is considered to be the *absence* of a grammatical relation. Like other structural notions, GRs are *defined* independently of function (such as semantics or topicality), though they clearly have communicative functions. Even as the structure of any tool is logically distinct from (though intimately connected to) its function, so GRs are logically distinct from the functions that they perform. Nevertheless, it is important to recognize that GRs play a significant role in expressing meaningful distinctions, such as who is acting upon whom, what is topical, and so on.

A second important fact about GRs is that they are essentially *relational* concepts. In other words, they don't exist unless there are two elements that are related. A nominal element by itself does not "have" a grammatical relation. It is only when it occurs in a structure with a verb that we can say that it is a "subject" or an "object," etc. In fact, it may be better to always say "subject of" or "object of" since these terms make it clear that there must be another element in the construction. The grammatical properties that identify GRs are determined by syntactic constructions, and not simply by semantic properties of individual nouns or verbs.

Here is an analogy from real life. A concept like "boy" is not inherently relational, because it depends solely on the characteristics of the individual. The concept of "brother," on the other hand, is relational, because someone can't be simply a *brother* without reference to someone else. Getting back to grammar, a category like plurality is non-relational, because it usually depends on the semantic characteristics of the individual referent of a noun. This semantic characteristic is reflected structurally in many languages by some kind of "plural marking." Subject, on the other hand, is a category that depends on the structure of the whole clause. A nominal element can only be the "subject of" some other grammatical element.

Sometimes the term **ARGUMENT** is used to refer to any nominal that has a grammatical relation to a verb, or to another noun. This sense of the term "argument" is borrowed from mathematics where an argument is an independent variable in a function; in other words, a thing that has a property, or has a relation

to some other thing. A nominal that doesn't have a grammatical relation to some other word is called either a "non-argument," or an oblique.

GRs can be reflected structurally by any number of features. The three main structural features that often reflect grammatical relations in a clause are the following:

- Case marking on nouns
- **PARTICIPANT REFERENCE** marking on verbs (agreement, concord)
- Constituent order

In the following pages, we will see examples of how different languages use these structural features (and a few others) to organize systems of grammatical relations, and will present some methods for analyzing them.

Grammatical relations within noun phrases

The simplest illustration of a grammatical relation is the genitive relation that may hold between nouns in a noun phrase. In an English Determined Noun Phrase (DP) like:

- (1) Caitlin's quilt

the word *Caitlin's* refers to a person the speaker is portraying as someone who, in some broad sense, is closely associated with the quilt. Although we intuitively think of genitive arguments (*Caitlin* in this example) as expressing "possession," in fact the actual relation between the message-world person referred to by the name *Caitlin* and the message-world item referred to by the word *quilt* is in fact quite open ended. The quilt may be the one that Caitlin made, e.g., in the context of a contest in which homemade quilts are being judged, even though she already sold it to someone else. Or it may be the quilt that Caitlin happens to be using right now, though she is not its legal owner. It may be the quilt that Caitlin just bought, or the one she likes best. There are many examples of genitive-plus-noun constructions in which the genitive noun cannot reasonably be considered the "owner" of the other noun. For example:

- (2) a. Hiro's mathematics professor
 b. Milicent's favorite political party
 c. the car's color
 d. Madaline's home town
 e. the book's main point

Even though the semantic relations between the genitive and the head noun are very different in all of these examples, the morphosyntactic (grammatical) features that express the relation in English are the same. Namely, the "possessor" comes before the head noun and is marked by the suffix spelled 's. These *grammatical* features constitute evidence that the two nouns have a *grammatical* relation to one another. This relation constrains, to a certain extent, the range of semantic relations

likely to be inferred, but the grammatical properties themselves (linear order and case marking) are logically independent of the semantic relations. For this reason, we use the neutral, grammatical term “genitive” to refer to the grammatical relation between *Caitlin* and *quilt* in example 1 rather than a semantically loaded term such as “possessor.”

Like all grammatical relations, a genitive relation can be expressed in many different ways in different languages. In some languages, the relation is marked on the head noun, rather than the genitive noun. These are sometimes called **HEAD-MARKING** languages (Nichols 1986). For example, in Panare, a suffix goes on a noun when the noun refers to something that is possessed by something else. We will use the abbreviation **HGEN**, for “head of a noun phrase that contains a genitive noun,” for this suffix:

- (3) a. *matá* ‘shoulder’
 b. *matá-n* ‘someone’s shoulder’
 shoulder-HGEN
 c. *Tomán máta-n* ‘Tom’s shoulder’
 Tom shoulder-HGEN
 d. *a-matá-n* ‘your shoulder’
 2-shoulder-HGEN

In Panare, the possessor may be understood from the context (3b), expressed by a full noun (3c), or expressed simply by a prefix on the head. In all of these examples, the genitive relation is marked on the head noun, ‘shoulder,’ rather than on the genitive noun itself.

Occasionally we will use the cover term **G** to refer to a noun in a genitive relation, regardless of how it is expressed grammatically. This is illustrated for Panare and English in example 4:

- (4) **G** **HEAD**
 a. *Toman* *máta-n* ‘Tom’s shoulder’
 Tom *shoulder-HGEN*
 G **HEAD**
 b. *Caitlin-’s* *quilt*
 Caitlin-GEN

There are many other ways that languages express a genitive relation between nouns. We will see examples of some of these in the exercises at the end of this chapter. Now we turn to grammatical relations that hold within clauses.

Grammatical relations in clauses

The simplest illustration of a grammatical relation in a clause is probably the subject relation that may hold between a noun and a verb (more accurately,

a noun phrase and a verb phrase). For example, in all of the following English clauses, the pronoun *I* is the subject:

- (5) a. I exercise every evening.
 b. I can see the Statue of Liberty already!
 c. I carry nothing.
 d. I hate pills.
 e. I was smeared by the *New York Times*.

The semantic role of the referent of the pronoun *I* and the rest of the clause in each of these examples is quite different. In 5a, *I* refers to an AGENT – someone who controls the action described by the verb and does it on purpose (see chapter 4 for discussion of semantic roles). In 5b, *I* refers to an EXPERIENCER – someone who receives a sensory impression but does not control the event, or perform it on purpose. In 5c, *I* refers to someone who does not do anything with respect to the following verb. In 5d, *I* refers to someone who has an emotional response that is most likely not purposeful, or controlled. Finally, in 5e, *I* refers to something like a PATIENT.

In spite of these very different semantic roles, in each case the grammatical relation of *I* to the rest of the clause is the same. How do we know this? We look at the grammatical properties that commonly distinguish grammatical relations (sometimes we will call these “structural features”). These are repeated here for convenience:

- case marking on nouns or pronouns
- participant reference marking on verbs (agreement, concord)
- constituent order

In English, the subject relation is expressed partially by the case of personal pronouns. Other noun phrases are not morphologically marked for the subject relation in English. The pronoun *I* in English specifically refers to first-person singular *subjects* only. If a first-person singular participant is not a subject, another form of the pronoun is used, either *me* or *my*:

- (6) a. Mr. Frodo’s not going anywhere without *me*.
 b. American girls would seriously dig *me* . . .
 c. . . . with *my* cute British accent.
 d. Do you mean you wish to surrender to *me*?

These forms are ungrammatical in the subject position:

- (7) a. **Me* exercise every evening.
 b. **Me* can see the Statue of Liberty already!
 c. **My* carry nothing.
 d. **My* hate pills.
 e. **Me* was smeared by the *New York Times*.

Correspondingly, *I* is ungrammatical in other grammatical positions:

- (8) a. *Mr. Frodo's not going anywhere without *I*.
 b. *American girls would seriously dig *I* . . .
 c. * . . . with *I* cute British accent.
 d. *Do you mean you wish to surrender to *I*?

This is one grammatical property of subjects in English: pronouns appear in the subject case (*I*, *we*, *they*, etc.) when they function as subject.

What about participant reference marking on verbs (agreement)? English does have a system of verb agreement, though it is rather impoverished compared to agreement systems of many other languages, even within the Indo-European family. In the present tense of English major class verbs, there is a suffix spelled *-s* (without the apostrophe) that appears when the subject is third-person singular:

- (9) He hates pills.

When the subject is a different person, or a different number, this *-s* goes away (at least in standard Englishes):

- (10) a. They hate pills. *They hates pills.
 b. We hate pills. *We hates pills.
 c. You hate pills. *You hates pills.

The *-s* does not change when other nouns or pronouns in a clause change:

- (11) a. She digs me. c. She digs him.
 b. She digs us. d. She digs them.

Therefore, this *-s* is an expression of verb agreement with the subject, and is another grammatical property of the relational notion of *subject* in English.

Finally, what about constituent order? In English, constituent order does help us distinguish the subject from other nouns in a clause, but we need to be careful how we state the generalization. We may be tempted to say something like “the subject is the first NP in the clause.” This usually is true, but not always. Consider the following:

- (12) a. The King's stinking son fired me.
 b. Fezzik, are there rocks ahead?
 c. On the horizon appeared a ship.
 d. “A giant!” yelled Frodo.
 e. What house do you live in?

The first noun phrase in each of these examples is *the king*, *Fezzik*, *the horizon*, *a giant*, and *what house*. None of these have the other grammatical properties of subjects, and none of them would be considered the subject according to any respectable linguistic theory. Therefore, we need to qualify our statement concerning the position of subjects in English somehow.

How about “the subject is the nominal element that appears right before the main verb or auxiliary”? We can see from the examples in 12 that this

generalization isn't always true either. In 12b *Fezzik* appears right before the main verb, *are*. In 12c, d, and e the noun phrase that comes right before the verb or auxiliary is also not a subject.

In spite of these problems in determining the position of the subject in the clause, we still have this common-sense idea that the “subject comes first.” Why is that? The reason is that it very frequently *does* come early in the clause, normally right before the verb or auxiliary. This is a well-oiled habit pattern of English. This pattern can be varied for special purposes, such as questions (12b and e), **PRESENTATIVES** (12c), and **QUOTATIVES** (12d). These are all **PRAGMATICALLY MARKED** constructions, in the sense that they are used in special contexts, e.g., when information is being requested, when new participants are being introduced into the discourse, etc. Clauses in which the subject comes right before the verb or auxiliary are pragmatically neutral (see chapter 7). So, to describe the position of the subject in English, we need to clarify that we are only talking about pragmatically neutral clauses:

- (13) The subject is the noun phrase or pronoun that immediately precedes the verb or auxiliary in pragmatically neutral clauses.

While you may be able to think of apparent counterexamples to this statement, it is a reasonably good generalization regarding subject position in English.

We've seen that grammatical relations, like subject, are identified by grammatical properties (like case, agreement, and linear order), rather than semantic roles (AGENT, EXPERIENCER, etc.). This fact can be illustrated even with the same verb. Consider the following English examples:

- (14) a. I opened the door with the key. SUBJECT = AGENT
 b. The key opened the door. SUBJECT = INSTRUMENT
 c. The door opened. SUBJECT = PATIENT

In these clauses the formal category of subject (as identified by preverbal position, pronominal form, and potentially verb agreement in English) expresses three distinct semantic roles, AGENT, INSTRUMENT, and PATIENT. Furthermore, *the key* does not have a direct grammatical relation in 14a (it is an oblique) but in 14b it is the subject, even though it fills the same semantic role in both clauses. Similarly, *the door* is the direct object in 14a and 14b, but subject in 14c, even though it is the semantic PATIENT in all three clauses. The determination of which participant becomes subject, then, is a matter of **PERSPECTIVIZATION** (Fillmore 1976). That is, clauses 14a, b, and c could all be descriptions of the same message-world situation, but from different perspectives.

While all languages use a small number of grammatical relations to express a large number of semantic roles, some languages seem to be more sensitive to semantic roles than others. For example, in Guaymí (a Chibchan language of Costa Rica and Panama), there is a grammatical case for AGENTs, and other semantic roles that are very “AGENT-like.” This case is marked by a zero suffix, as illustrated by the word *Toma* in example 15:

- (15) Toma- \emptyset Dori dëma-e. 'Tom greets Doris.'
Tom Doris greet-PR

EXPERIENCERS, on the other hand, appear in the dative case:

- (16) Davi-e Dori gar-e 'David knows Doris.'
David-DAT Doris know-PR
- (17) Toma-e Dori tîr-i. 'Tom remembers Doris.'
Tom-DAT Doris remember-PR
- (18) Ti-e ru hatu-aba. 'I saw the airplane.'
1SG-DAT airplane see-PAST
- (19) Ti-e timëna nib-i. 'I feel thirst.' ('I'm thirsty.')
1SG-DAT thirst feel-PR

Certain other Guaymí verbs that describe involuntary actions place one of their core arguments in a LOCATIVE case:

- (20) a. José-**biti** Maria köinigwi-ani-nggö. 'José forgot Maria.'
José-LOC Maria forget-PAST 1-ASP
- b. Köinigwit-ani-nggö ti-**biti**. 'I forgot it.' (lit: 'It was
forgot-PAST 1-ASP I-LOC forgotten upon me.')
- (21) Davi-**bötö** Dori hurö rib-aba. 'David was afraid of Doris.'
David-LOC Doris fear feel-PAST 2
- (22) Ti-**bötö** kö nib-i tibo. 'I'm cold.'
I-LOC place feel-PR cold

So we see that grammatical relations are one major way that languages express semantic roles, even though it is not possible to identify grammatical relations purely on the basis of semantic roles. It would be a mistake, for example, to define the notion of subject as "the noun that refers to the AGENT" for any language. As we have seen, many subjects are not AGENTS, and AGENTS can be expressed in other ways than via the subject relation. In fact, if subject could be defined as the AGENT or vice versa, there would be no need for both terms.

Systems for organizing grammatical relations

In order to insightfully discuss systems of grammatical relations within a clause, it is convenient to identify three basic "semantico-syntactic roles" termed S, A, and O (Dixon 1972, 1979, 1994). Similar terms are used by Comrie (1978) and Silverstein (1976). These terms assume two prototypical clause types:

- (23) a. S V
Single argument: 'Bob left.'
- b. A V O
Multi-argument: 'Bob greeted Aileron.'

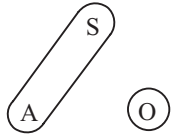
The S is defined as the only nominal argument of a single-argument clause. This is quite different from the S used by Greenberg in his characterization of constituent order typology, as discussed in chapter 7, or the S used in earlier versions of Generative Grammar to refer to the highest node in constituent structure. While the term S often reminds us of the grammatical relation subject, S as used in this chapter refers informally to the “Single” argument of a single-argument clause. Sometimes this type of clause is referred to as an **INTRANSITIVE** clause.

The A is defined as the most AGENT-like argument of a multi-argument clause. Sometimes this type of clause is referred to as a **TRANSITIVE** clause. If there is no argument that is a very good AGENT, the A is the argument that is treated morphosyntactically in the same manner as prototypical AGENTS are treated. Usually there will be one argument in every verbal clause that exhibits this property, though there may not be. More complex systems are described below.

O is the most PATIENT-like argument of a multi-argument clause (see chapter 4). While the term O often reminds us of the grammatical relation ‘object,’ O refers informally to the “Other” argument of a multi-argument clause. Again, if none of the arguments is very much like a PATIENT, then the argument that is treated like a prototypical PATIENT is considered to be the O.

In this schema, the grammatical relation of **SUBJECT** can be defined universally (i.e., for all languages, rather than for one particular language) as S together with A, while **DIRECT OBJECT**, or simply “object,” can be defined as O alone. Some languages pay more grammatical attention to these notions than do others. In the following extended discussion, we will discuss the various morphosyntactic systems for expressing S, A, and O.

Languages may treat S and A the same morphosyntactically, and O differently. The following English examples illustrate this system with pronominal case forms – one form, *he*, is used for third-person singular masculine pronouns in both the S and the A roles. A different form, *him*, is used for third-person masculine singular pronouns in the O role:

- (24) a. He left.
 b. He greets him.
- 
- nominative | accusative
 (Subject) (Object)

The extended circle around S and A in this diagram indicates that S and A are treated by the grammar of English as “the same,” as demonstrated by the subject properties discussed above (use of the subject case form, *he*, in 24, immediately before the verb). The distinct circle around O indicates that O is treated differently, insofar as a different pronominal form, *him*, is used to refer to it. *Him*

also appears in a different position in the clause, namely after the verb. This system is often referred to as a **NOMINATIVE/ACCUSATIVE** system. The morphosyntactic grouping of S and A together can be called the **NOMINATIVE** case, while the distinct morphosyntactic treatment of the O role is the **ACCUSATIVE** case.

The Quechuan languages (a group of languages spoken throughout the Andes mountains in South America) employ the same arrangement. However, in addition to pronominal forms and constituent order, the Quechua languages express this system in morphological case marking on free noun phrases. In the following examples from Huallaga Quechua (Weber 1989) the same case marker, \emptyset (zero), occurs on noun phrases in both the S (example 25a) and A (25b) roles. A distinct case marker, *-ta*, occurs on noun phrases in the O role (25b) (all Quechua examples courtesy of David Weber, p.c.):

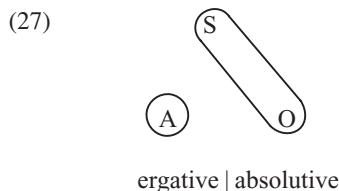
- (25) a. S
 Juan- \emptyset aywan. ‘Juan goes.’
 -NOM goes
- b. A O
 Juan- \emptyset Pedro-ta maqan. ‘Juan hits Pedro.’
 -NOM -ACC hits

Nominative/accusative systems usually seem very reasonable to speakers of Indo-European languages since most of these languages exhibit this kind of system.¹

The following examples from Yup’ik (Alaska) illustrate another system for grouping S, A, and O:

- (26) a. S
 Doris-aq ayallruuq. ‘Doris traveled.’
 -ABS traveled
- b. A O
 Tom-am Doris-aq cingallrua. ‘Tom greeted Doris.’
 -ERG -ABS greeted

In these examples the case marker *-aq* occurs on the S argument of an intransitive clause (26a) and the O argument of a transitive clause (26b). The case marker *-am* marks only the A of a transitive clause. If any morphological case marks A alone, it can be called the **ERGATIVE** case. Similarly, any morphological case that marks both S and O can be termed the **ABSOLUTIVE** case:



This arrangement, known as an **ERGATIVE/ABSOLUTIVE** system, is sporadic in European and African languages. However, it is common in other areas of the world. Ergativity occurs as a basic system for organizing grammatical relations in many languages of Australia, Central Asia, and the Americas. It occurs as a partial case marking system in South Asia and in many other languages of the Americas. Many Austronesian languages have also been claimed to exhibit this system.

In addition to morphological case marking on pronouns or full noun phrases, languages may manifest ergative/absolute or nominative/accusative systems in person marking on verbs, and/or constituent order.

We have seen above that Quechua manifests a nominative/accusative system in case marking of noun phrases. Quechua also manifests a nominative/accusative system for organizing grammatical relations in person marking on verbs. Consider the following examples:

- (28) a. S
 Aywa-n. 'He goes.'
 go-3SG
- b. S
 Aywa-a. 'I go.'
 go-1SG
- c. O A
 maqa-ma-n. 'He hit me.'
 hit-1SG-3SG

In example 28a the third-person singular S of an intransitive verb is referred to by the suffix *-n*. In 28b the first-person S argument is expressed by the suffix *-a* (actually length on the final vowel of the root). Example 28c shows that the suffix *-n* is also used for third-person A arguments of transitive verbs. Hence, A and S are treated morphologically alike by the person-marking system of Quechua. The fact that, in 28c, the first-person suffix for O arguments is *-ma* rather than *-a* illustrates that O and S are treated as different. Again, this way of treating S and A alike and O differently constitutes a nominative/accusative system.

As might be expected, languages can also manifest an ergative/absolute GR system in person marking on verbs. Yup'ik will again serve as our example of such a system:

- (29) a. S
 Ayallruu-nga. 'I traveled.'
 traveled-1SG
- b. S
 Ayallruu-q. 'He traveled.'
 traveled-3SG
- c. A O
 Cingallru-a-nga. 'He greeted me.'
 greeted-3SG-1SG

In example 29a the suffix *-nga* indicates a first-person singular S argument of an intransitive verb. In 29b the suffix *-q* marks the third-person S. In 29c the suffix *-nga* marks the first-person O argument of a transitive clause. Since this is the same marker that is used for first-person S arguments, this suffix groups S and O together morphologically into an absolutive category. The third-person singular A argument of a transitive clause is expressed by a suffix *-a*. Since this suffix is different from the third-person S suffix, it can be said to identify ergative arguments. Again, this treatment of S together with O as distinct from A constitutes an ergative/absolutive system.

Since constituent order is universally one major means of expressing grammatical relations, one might ask whether ergative/absolutive and/or nominative/accusative systems can be manifested in constituent order. Of course, the answer is “yes.” English, consistent with its strong nominative/accusative orientation, treats S and A alike in that the S of intransitive verbs and the A of transitive verbs most neutrally occur in preverbal position. The O of transitive verbs, on the other hand, is treated differently in that it occurs in post-verbal position.

In some verb-medial languages the verb and the O argument form a “tight” constituent in transitive clauses, and the verb and the S argument form an analogous constituent in intransitive clauses. In Kuikúro, a Cariban language of Brazil, SV (intransitive) and OV (transitive) are very rigid structures. The most neutral position for the A argument is following the OV complex (example 30b) (examples from Franchetto, 1990):

- (30) a. S V
karaihá kacun-tárâ ‘The non-Indian is working.’
non-Indian work-CONT
- b. O V A
kuk-aki-sâ ta-lâígo léha karaihá-héke
INC-word-POS hear-FUT ASP non:Indian-ERG
‘The non-Indian will hear our words.’

In 30a the S argument of an intransitive verb occurs in preverbal position. In 30b the O argument of a transitive verb occurs in preverbal position, and the A argument occurs in post-verbal position. Since both S and O occur in the same position, we can say that this language manifests an ergative/absolutive system in constituent order.

One language, Sanuma (a variety of Yanomamí spoken in Brazil and Venezuela), is a verb-final language that is reported to exhibit constituent order ergativity. In this language, SV and OV form tight constituents. In transitive clauses A precedes O and V, but if there is any other constituent, call it X, it must occur after A. Thus the orders are AXOV and XSV (Borgman 1990, as reported in Dixon 1994:52). Since A is treated distinctly by being separable from the OV complex, this pattern can be considered to be a kind of constituent order ergativity.

In summary, any system that treats S and A alike as opposed to O is a nominative-accusative system for organizing grammatical relations. Any system that treats S and O alike as opposed to A is an ergative/absolutive system. The following section will provide some suggestions for how to approach the analysis of grammatical relations.

Analyzing grammatical relations systems

In this section we will walk through a couple of basic problems in analyzing systems of grammatical relations. First we will look at some data from classical Latin. Then we will look at a slightly more complex problem from Managalasi, a language spoken in Papua New Guinea. Here are the Latin data:

(31) a.	puella columbam liberat	'The girl is freeing the dove.'
b.	puellae columbam liberant	'The girls are freeing the dove.'
c.	puella arat	'The girl is plowing.'
d.	puellae arant	'The girls are plowing.'
e.	puella columbas liberat	'The girl is freeing the doves.'
f.	columba volat	'The dove is flying.'
g.	columbae volant	'The doves are flying.'
h.	columba puellam amat	'The dove loves the girl.'
i.	columbae puellam amant	'The doves love the girl.'
j.	columba puellas amat	'The dove loves the girls.'

Since grammatical relations are most directly reflected in (1) case marking on NPs, (2) verb agreement, and (3) constituent order, we want to look at all three of these domains to see if we have any evidence for grammatical relations. One way to approach this task is to make a three-column chart and list the ways in which S, A, and O are expressed in each column:

	S	A	O
case marking			
verb agreement			
constituent order			

You will want to leave lots of room under each heading, since you don't know ahead of time how many different forms you will have to insert in each column.

Now we just list the forms that express the S, A, and O roles. As we do our standard comparison of form and meaning, we notice very quickly that this appears to be a language in which clauses are structured in AOV order. In fact, constituent order in Latin is highly pragmatically based. Nevertheless, even if it were consistently AOV, we would not be able to rely on constituent order to express a system for organizing grammatical relations. Why is that? Well, if

the orders of elements in transitive and intransitive clauses are AOV and SV, which argument of the transitive clause is treated like the S of the intransitive clause? You could say that the A is treated like the S because both occur at the beginning of their respective clauses. On the other hand, you could also say that the O is treated like the S because they both occur immediately before the verb! This shows that in this type of language, constituent order just doesn't work as a way of determining the system for organizing grammatical relations.² Since constituent order cannot be relied upon for expression of grammatical relations in Latin, we can eliminate that row in our chart.

We see in example 31a that the form meaning 'girl' must be *puella*. Since this word is functioning in the A role, we put this form in the column under A:

	S	A	O
case marking		puella 'girl'	
verb agreement			

The next noun in sentence 31a is *columbam*, which must mean 'dove.' When we look at the free translation, it appears that 'dove' is functioning in the O role. In 31b, *puellae* must mean 'girls,' which is functioning in the A role, and again we have *columbam* functioning in the O role. Examples 31c and 31d are single-argument clauses, therefore they have S arguments, but no A or O arguments. The S argument of 31c is *puellae* and the S argument of 31d is *puella*. In this way we work through all the data and fill in the top row of the chart:

	S	A	O
case marking	puella 'girl' puellae 'girls' columba 'dove' columbae 'doves'	puella 'girl' puellae 'girls' columba 'dove' columbae 'doves'	puellam 'girl' puellas 'girls' columbam 'dove' columbas 'doves'
verb agreement			

We notice that the forms are the same under S and A, and different under O. Therefore this must be a nominative/accusative case-marking system. The best analysis of the case endings, given these data, is the following:

- (32) Nominative singular: -∅ (zero, i.e., no marker)
 Nominative plural: -e
 Accusative singular: -m
 Accusative plural: -s

Now let us look at the verbs. In examples 31a and 31b the verb ending changes from *-t* to *-nt*. The only meaning difference between the two clauses is plurality of the A argument. Therefore it looks like *-t* is used when the A is singular and *-nt* is used when the A is plural:

	S	A	O
case marking	puella 'girl' puellae 'girls' columba 'dove' columbae 'doves'	puella 'girl' puellae 'girls' columba 'dove' columbae 'doves'	puellam 'girl' puellas 'girls' columbam 'dove' columbas 'doves'
verb agreement		-t SG -nt PL	

Just looking at 31a and 31b we cannot tell whether the verb changes with the plurality of the O, since the O is singular in both examples. However, 31a and 31e are identical except for the plurality of the O. And, voilà, the verb does not change. Therefore it appears from these data that the O is not marked on the verb at all. When we look at all the examples (crucially 31c and 31d), we can fill in the rest of the chart as follows:

	S	A	O
case marking	puella 'girl' puellae 'girls' columba 'dove' columbae 'doves'	puella 'girl' puellae 'girls' columba 'dove' columbae 'doves'	puellam 'girl' puellas 'girls' columbam 'dove' columbas 'doves'
verb agreement	-t SG -nt PL	-t SG -nt PL	-0 SG -0 PL

Again we see that S and A are treated alike, and O differently. Therefore this language exhibits a nominative/accusative system in verb agreement as well as case marking on nouns.

Split systems

We have seen that grammatical relations can be organized according to a nominative/accusative or an ergative/absolute system. We have also seen that there are three structural features that most directly identify GRs: case marking, participant reference marking on verbs (verb agreement), and constituent order. In this section, we will look at some examples of languages which illustrate both nominative/accusative and ergative/absolute systems, depending on the context. Such languages are sometimes said to exhibit a “split” system for organizing grammatical relations. In most such splits, the appearance of one system or the other is related either to the semantics/pragmatics of intransitive clauses (**SPLIT INTRANSITIVITY**), or to the semantics/pragmatics of transitive clauses (**SPLIT ERGATIVITY**). Further information on split intransitivity can be found in Merlan (1985) and Mithun (1991). Further information on split ergativity can be found in Silverstein (1976), DeLancey (1982) and the references on ergativity cited above.

Split intransitivity

Some languages express S arguments of intransitive verbs in two or more morphologically distinct ways. Such languages are sometimes said to exhibit **SPLIT INTRANSITIVITY**. The most common split intransitive systems express some S arguments in the same way as A arguments and others in the same way as O arguments. Other terms that have been used for such systems include **STATIVE/ACTIVE**, **ACTIVE**, **SPLIT-S**, and **FLUID-S** systems, among others. Split intransitivity is most commonly exhibited in verb agreement, though we will illustrate a marginal case of split intransitivity in case marking below (Guaymí). Examples 33a, b, and c illustrate basic transitive clauses in Lakhota (examples quoted in Mithun 1991, or provided by Walter and Delores Taken Alive of Little Eagle, South Dakota):

- (33) a. a-ma-ya-phe 'you hit me'
DIR-1SG-2SG-hit
- b. wa-ø-ktékte 'I kill him'
1SG-3SG-kill
- c. ø-ma-ktékte 'he kills me'
3SG-1SG-kill

Examples 33a and c illustrate that the prefix *ma-* refers to the first-person singular O argument of a transitive clause. Example 33b illustrates that the prefix *wa-* refers to the first-person A argument of a transitive clause. Some intransitive verbs, such as those meaning 'fall,' 'die,' and 'shiver,' take the O prefix *ma-* to refer to first-person S arguments:

- (34) a. ma-híxpaye 'I fall'
1SG-fall
- b. ma-t'e' 'I die'
1SG-die
- c. ma-č'áča 'I shiver'
1SG-shiver

Other verbs, e.g., those meaning 'play,' 'swim,' and 'sing,' take the A prefix, *wa-*, for first-person S arguments:

- (35) a. wa-škate 'I play'
1SG-play
- b. wa-núwe 'I swim'
1SG-swim
- c. wa-lowâ 'I sing'
1SG-sing

Therefore, we can say that there are two kinds of S arguments in Lakhota: S_a arguments are those S arguments that are treated grammatically like transitive A arguments (examples 35a, b, and c), while S_o arguments are those S arguments

that are treated like O arguments. This kind of system may be diagrammed as follows:

- (36)
-
- intransitive non-volitional, or stative, clauses
- transitive clauses
- intransitive volitional, or active, clauses

Usually there is a fairly obvious semantic basis for the distinction between the two types of S arguments, though the basis is apparently not the same for every language (Mithun 1991). For example, in modern colloquial Guaraní (Paraguay) intransitive verbs that describe events that involve change fall into the S_a class, while those that describe states fall into the S_o class. A few languages have been shown to exhibit split intransitivity based on discourse pragmatics. For example, in Yagua, certain verbs of motion (specifically **TRANSLATIONAL MOTION** verbs; see chapter 4) can take S_a or S_o subjects, depending on the discourse context:

- (37) a. Muuy sii-myaa-si-ñíí 'There he rushed out.'
 there run-COMPL-out-3:O
- b. Sa-sii-myaa-síy 'He rushed out.'
 3:A-run-COMPL-out

In example 37a the S is expressed by an enclitic *-ñíí*. This is the form that is used for O arguments of transitive verbs. In 37b the S is expressed by a prefix *sa-*. This is the form used for A arguments of transitive verbs. It is clear that this distinction is not based on semantics since the S arguments of both clauses are understood to be equally as agentive, volitional, etc. An empirical study of narrative text shows that S_o subjects occur at scene changes and episodic climax (37a), whereas S_a subjects occur elsewhere (37b) (T. Payne 1992). Similar observations have been made for Pajonal Campa (Heitzman 1982), and Asheninca Campa (J. Payne and D. Payne 1991). Both of these languages are spoken in the same geographic region as Yagua, but they are not genetically related to Yagua.

Split ergativity

If a language exhibits a nominative/accusative system in one part of the grammar, and an ergative/absolutive system in another part, that language can be said to exhibit split ergativity. Among such languages, there are two main factors that may condition the split: one is the semantic and/or pragmatic character of the arguments, and the other is tense/aspect. We will briefly describe these two types of split ergativity in the following sections.

The first type of split-ergative system is one in which some kinds of nominal arguments participate in a nominative/accusative system, whereas others participate in an ergative/absolutive system. To illustrate this kind of system, we will

take an extended look at another language, Managalasi, spoken in Papua New Guinea:

- (38) a. a va'-ena 'You will go.'
 2SG go-FUT.2SG
- b. na va'-ejo 'I will go.'
 1SG go-FUT.1SG
- c. nara a an-a'-ejo 'I will hit you.'
 1SG 2SG hit-2SG-FUT.1SG
- d. ara na an-i'-ena 'You will hit me.'
 2SG 1SG hit-1SG-FUT.2SG

Again, we notice that this is a verb-final language, therefore we will be concerned only with nominal case marking and verb agreement. Examples 38a and 38b are intransitive (single-argument) clauses, therefore they have S arguments only. The S arguments in both examples are pronouns, which we can place in the chart as follows:

	S	A	O
pronouns	a 2SG na 1SG		
verb agreement			

In example 38c the 1SG pronoun is *nara*. Since, according to the free translation, the 1SG argument (*I*) is the most AGENT-like, we will put *nara* in the A column. The other argument in this clause is 2SG, *a*, therefore we will put *a* in the O column. In 38d the 2SG argument, *ara*, is the most AGENT-like, so we will put *ara* in the A column. The other argument in 38d is *na*, therefore we will put *na* in the O column, thus completing the first row of the chart:

	S	A	O
pronouns	a 2SG na 1SG	ara 2SG nara 1SG	a 2SG na 1SG
verb agreement			

Since the forms in the S and O columns are the same, and the forms in the A column are different, this represents an ergative/absolutive case-marking system. The case endings may be analyzed as follows:

- (39) Ergative case marker: -ra
 Absolutive case marker: -∅ (zero)

Now let us look at verb agreement. It is evident from the glosses in 38 that in this language, verb agreement is combined with future tense. Since the tense is the same in all the examples, we need not be concerned specifically with tense – all the variation in the suffixes must be due to variation in the person of the arguments.

Since the suffixes are different in 38a and 38b, we know that the verb must agree with the S. In 38c the verb agrees with the 1SG A argument, and in 38d the verb agrees with the 2SG A argument. We also notice that the suffix *-a* refers to a 2SG O argument, while *-i* refers to a 1SG O argument. Therefore we can complete the second row of the chart as follows:

	S	A	O
pronouns	a 2SG na 1SG	ara 2SG nara 1SG	a 2SG na 1SG
verb agreement	-ena 2SG -ejo 1SG	-ena 2SG -ejo 1SG	-a' 2SG -i' 1SG

In the second row we notice that the S and A columns are identical, while the O column is the odd one out. Therefore, in terms of verb agreement, this language illustrates a nominative/accusative system. Our conclusion is that this language has a split-ergative system in which pronouns exhibit an ergative/absolutive system and verb agreement exhibits a nominative/accusative system.

The second type of split ergativity is one based on tense and/or aspect. In all such languages, the ergative/absolutive system occurs in the past tense or perfective aspect, while the nominative/accusative system occurs in the non-past tense(s) or imperfective aspect (DeLancey 1982). The following example is from Georgian, the national language of the Republic of Georgia (Comrie 1989):

- (40) a. Student-*i* midis. 'The student goes.'
 -NOM goes
 b. Student-*i* ceril-s cers. 'The student writes the letter.'
 -NOM letter-ACC writes
 c. Student-*i* mivida. 'The student went.'
 -ABS went
 d. Student-*ma* ceril-*i* dacera. 'The student wrote the letter.'
 -ERG letter-ABS wrote

In these examples, the case marker *-i* marks S and A nominals in the "present" tense (examples 40a and b). Therefore, it is appropriate to refer to this case marker as marking nominative case. The same case marker, however, marks S and O nominals in the "past tense" (examples 40c and d).³ In these clauses, then, it is appropriate to describe *-i* as an absolutive case marker. The following table summarizes the Georgian system:

Georgian	S	A	O
case marking: present tense	-i	-i	-s
case marking: past tense	-i	-ma	-i

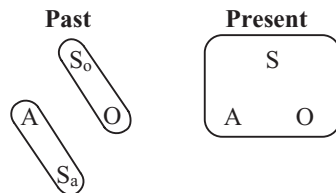
This table illustrates clearly that S and A are treated alike and O differently in the present tense, thus manifesting a nominative/accusative system. At the same time, S and O are treated alike and A differently in the past tense, thus manifesting an ergative/absolutive system. This is a classic split-ergative system based on tense/aspect.

Before leaving the topic of split systems for organizing grammatical relations, we will present one interesting example of a combination split-intransitive/split-ergative case-marking system. This is from Guaymí of Panama and Costa Rica. Guaymí has a straightforward split-intransitive case-marking system in past tenses. This is illustrated in 41a, b, and c. The ergative case marker *-gwe* can only occur on the A arguments of transitive verbs or S arguments of agentive intransitive verbs in one of the past tenses. The marker *-gwe* may not occur on the S argument of 41b because the verb *ɲat-*, ‘die,’ is non-volitional; it is something that happens to the dog, rather than something the dog does on purpose. These examples show that a split-intransitive system for organizing grammatical relations can be manifested in nominal case marking as well as in verb agreement:

- (41) a. Dori-gwe blit-ani. ‘Doris spoke.’
 Doris-ERG speak-PAST I
- b. Nu ɲat-ani. ‘The dog died.’
 dog die-PAST I
- c. Toma-gwe Dori dëma-ini. ‘Tom greeted Doris.’
 Tom-ERG Doris greet-PAST I
- d. Dori blit-e. ‘Doris speaks.’
 Doris speak-PR
- e. Toma Dori dëma-e. ‘Tom greets Doris.’
 Tom Doris greet-PR
- f. Nu ɲat-e. ‘The dog dies.’
 dog die-PR

However, *-gwe* never occurs, regardless of the semantics or transitivity of the verb in the present, or any tense other than past (41d, e, and f). One could say that Guaymí has two quite distinct case-marking systems, a split-intransitive system in the past tense and a neutral system in the present:

- (42) Split system for organizing grammatical relations in Guaymí:



The exercises at the end of this chapter will give you practice in recognizing the different ways in which languages organize their grammatical relations.

Conceptual outline of chapter 8

- I. Languages typically treat each nominal element in a clause in one of about three or four morphosyntactic ways. These morphosyntactic means of treating nominal elements are called grammatical relations. Terms used for various grammatical relations that have been proposed include genitive, subject, (direct) object, indirect object, oblique, ergative, and absolutive. The structural features that most directly express grammatical relations are:
 - case marking on nouns
 - participant reference marking on verbs (agreement, concord)
 - constituent order (usually not helpful in verb-final or verb-initial languages)
- II. There are different possible “systems” for organizing grammatical relations. The systems discussed in this chapter are:
 - nominative/accusative systems
 - ergative/absolutive systems
 - split-intransitive systems
 - split-ergative systems
- III. There are two basic types of split-ergative systems in the world’s languages, though combinations may occur:
 - split-ergative systems based on the ways arguments are expressed (verb agreement vs. pronouns vs. full NPs)
 - split-ergative systems based on tense and/or aspect
- IV. A method for analyzing the system for organizing grammatical relations of any language is presented.

Exercise 8.1: Iraqi Arabic

Adapted from Cowan and Rakušan (1998:100)

- | | |
|------------------------------|-------------------------------|
| 1. ilwalad yifuuf ilbeet. | ‘The boy sees the house.’ |
| 2. ilwalad yihibb ilbinit. | ‘The boy loves the girl.’ |
| 3. ilwalad yiktib ilmaktuub. | ‘The boy writes the letter.’ |
| 4. ilbinit tifuuf ilwalad. | ‘The girl sees the boy.’ |
| 5. ilbinit tiktib iddaris. | ‘The girl writes the lesson.’ |
| 6. ilwalad yigi. | ‘The boy is coming.’ |

- A. How would you say: ‘The girl loves the boy’ in Iraqi Arabic?
- B. Describe the system for organizing grammatical relations in Iraqi Arabic. What kind of system is manifested here? Be sure to consider all structural features that express grammatical relations.

Exercise 8.2: Gujarati*Tom Payne*

- | | |
|--|------------------------------|
| 1. Ramesh pen khāridto hāto. | ‘Ramesh was buying the pen.’ |
| (male name) pen (fem) | |
| 2. Rameshe pen khāridyi. | ‘Ramesh bought the pen.’ |
| 3. Ramesh awyo. | ‘Ramesh came.’ |
| 4. Sudha awyi. | ‘Sudha came.’ |
| (fem. name) | |
| 5. Sudha awti hāti. | ‘Sudha was coming.’ |
| 6. Ramesh awto hāto. | ‘Ramesh was coming.’ |
| 7. Sudhae pen khāridyi. | ‘Sudha bought the pen.’ |

- A. What structural features distinguish grammatical relations in Gujarati?
- B. What system or systems for organizing grammatical relations does it use? Give evidence for your claims.

Exercise 8.3: Avar*Yakov Testelefs*

- | | |
|------------------------|-----------------------------|
| 1. Vas vigiana. | ‘The boy got up.’ |
| 2. Vas vegana. | ‘The boy lay down.’ |
| 3. Yas yigiana. | ‘The girl got up.’ |
| 4. Yas yegana. | ‘The girl lay down.’ |
| 5. Vasas yas yettsana. | ‘The boy praised the girl.’ |
| 6. _____ | ‘The girl praised the boy.’ |

- A. What language family does Avar belong to?
- B. What is the probable translation of number 6 in Avar?
- C. What structural features reflect grammatical relations in Avar?
- D. Describe the system for organizing grammatical relations in Avar. Give all of the evidence.

Exercise 8.4: Endo*Tom Payne*

- | | |
|-----------------------------|----------------------------|
| 1. Kícho Pěělyòn | ‘Elephant came.’ |
| 2. Kícho Kíplěkwà | ‘Hare came.’ |
| 3. Kílěchí Kíplěkwà Pěělyón | ‘Hare told Elephant . . .’ |
| 4. Kílěchí Pěělyón Kíplěkwà | ‘Hare told Elephant . . .’ |
| 5. Kílěchí Kíplěkwà Pěělyòn | ‘Elephant told Hare . . .’ |

- | | |
|-----------------------------|----------------------------|
| 6. Kílèchí Pëëlyòn Kìplèkwà | ‘Elephant told Hare . . .’ |
| 7. Kípka pííç | ‘People came.’ |
| 8. Kíro pííç | ‘People saw (him/her/it).’ |
| 9. Kíro pîîç | ‘He/she saw people.’ |
| 10. Kíro Kìplèkwà | — — — |
| 11. Kíro Kíplèkwà | — — — |

- A. Where is Endo spoken? What language family does it belong to?
 B. What structural features distinguish grammatical relations for full noun phrases in Endo?
 C. What system for organizing grammatical relations is employed?
 D. Translate numbers 10 and 11.

Exercise 8.5: Swahili, Safi dialect, part I

David Perlmutter, Mary Rhodes, and Paul Thomas

- | | |
|----------------------------|-------------------------------|
| 1. Mtoto alipoteka. | ‘The child got lost.’ |
| 2. Kitabu kilipoteka. | ‘The book got lost.’ |
| 3. Watoto walipoteka. | ‘The children got lost.’ |
| 4. Vitabu vilipoteka. | ‘The books got lost.’ |
| 5. Mtoto aliona kisu. | ‘The child saw a knife.’ |
| 6. Mtoto anaona kisu. | ‘The child sees a knife.’ |
| 7. Mtoto aliona vitabu. | ‘The child saw books.’ |
| 8. Watoto walileta vitabu. | ‘The children brought books.’ |
| 9. Wewe ulileta kitabu. | ‘ You brought a book.’ |
| 10. Mimi ninataka vitabu. | ‘ I want books.’ |
| 11. Sisi tulipoteka. | ‘ We got lost.’ |
| 12. Nilipoteka. | ‘I got lost.’ |
| 13. Aliona visu. | ‘He saw knives.’ |

The use of verb prefixes other than the ones given would be ungrammatical, for example:

14. a. *Mtoto kilipoteka. (‘The child got lost.’)
 b. *Mtoto walipoteka.
 etc.

The use of no prefix at all would also be ungrammatical.

Give a position-class diagram of the verb based on these data. In the diagram, list and gloss all morphemes.

Exercise 8.6: Swahili, Safi dialect, part 2

David Perlmutter, Mary Rhodes, and Paul Thomas

(This is a continuation of the previous exercise. In answering the questions below, be sure to keep the data in exercise 8.5 in mind.)

15. Mtoto alimwona mganga.	'The child saw the doctor.'
16. Mtoto aliwaona wanyama.	'The child saw the animals.'
17. Watoto wanakitaka kitabu.	'The children want the book.'
18. Mtoto anavitaka vitabu.	'The child wants the books.'
19. Mimi niliwaona wao.	' I saw them.'
20. Yeye aliniona mimi.	' He saw me.'
21. Mgeni alivileta visu.	'The visitor brought the knives.'
22. Watoto wanakipenda kitabu.	'The children like the book.'
23. Watoto waliwupenda wewe.	'The children liked you.'
24. Watoto waliwapenda waganga.	
25. Mganga anamleta mtoto.	
26. _____	'The visitors brought the knives.'
27. _____	' I like the child.'
28. _____	'The visitors like the children.'
29. _____	'I like books.'
30. _____	'They see knives.'

- A. Fill in the English for examples 24 and 25 and the Swahili for 26–30.
- B. Revise the chart that you made for exercise 8.5 to incorporate these data.
- C. State any morphophonemic rules that apply.
- D. What system is used for organizing grammatical relations in these data?

Exercise 8.7: Guugu Yimidhirr

John Haviland

1. Ngayu nhangu nhaadhi.	'I saw him/her.'
2. Gudaangun yarrga nhaadhi.	'The dog saw the boy.'
3. Nyulu nganhi nhaadhi.	'He/she saw me.'
4. Yarrgangun gudaan nhaadhi.	'The boy saw the dog.'
5. Ngayu dhadaa.	'I am going to go.'
6. Gudaan dhadaa.	'The dog is going to go.'
7. Nyulu dhadaa.	'He/she is going to go.'
8. Yarrga dhadaa.	'The boy is going to go.'
9. Ngayu yarrga gunday.	'I hit the boy.'
10. Yarrgangun nganhi gunday.	'The boy hit me.'

- A. Where is Guugu Yimidhirr spoken? What language family does it belong to? How many speakers are there?
- B. List and give a meaning for each morpheme in the above data.
- C. In what respects are grammatical relations in Guugu Yimidhirr organized on an ergative/absolute basis, and in what respects are they organized on a nominative/accusative basis? Is this consistent or inconsistent with universal expectations?

Exercise 8.8: Russian

Sam Hanchett and Deborah Fink

- | | |
|-------------------------|---|
| 1. d'evačka ísit sabáku | 'The girl is looking for the dog.' |
| 2. sabáku ísit d'evačka | 'The girl is looking for the dog.' |
| 3. sabáka ísit b'élku | 'The dog is looking for the squirrel.' |
| 4. ísit sabáka b'élku | 'The dog is looking for the squirrel.' |
| 5. ísit b'élku d'evačka | 'The girl is looking for the squirrel.' |
| 6. p'ísit d'evačka | 'The girl is writing.' |
| 7. sabáka lájit | 'The dog is barking.' |
| 8. ísit sabáka d'evačku | |

- A. What structural features distinguish grammatical relations in Russian?
 B. What system for organizing grammatical relations does Russian employ? Give evidence for your claims.
 C. Translate example 8.

Exercise 8.9: Ho

John and Sally Mathai

There are two ways of saying each of the following sentences in Ho. Other possibilities are ungrammatical.

- | | | | |
|-------------------------|-------------|---|-------------------|
| 1. I am going. | senoʔanaŋ | / | aŋ senoʔana |
| 2. You are going. | senoʔanam | / | am senoʔana |
| 3. He/she is going. | senoʔanae | / | aʔe senoʔana |
| 4. I am beating you. | ʔammeʔanaŋ | / | ameŋ ʔammeʔana |
| 5. I am beating him. | ʔami: ʔeneŋ | / | aʔeŋ ʔami: ʔene |
| 6. You are beating me. | ʔamiŋʔenem | / | aŋem ʔamiŋʔene |
| 7. You are beating him. | ʔami: ʔenem | / | aʔem ʔami: ʔene |
| 8. He is beating me. | ʔamiŋʔene | / | aŋeʔe ʔamiŋʔene |
| 9. He is beating you. | ʔammeʔanae | / | ameʔe ʔammeʔana |
| 10. He is beating him. | ʔami: ʔene | / | aʔeʔe ʔami: ʔene |
| 11. I went. | senoʔjanaŋ | / | aŋ senoʔjana |
| 12. You went. | senoʔjanam | / | am senoʔjana |
| 13. He/she went. | senoʔjanae | / | aʔe senoʔjana |
| 14. I beat you. | ʔamkedmijaŋ | / | ameŋ ʔamkedmija |
| 15. I beat him. | ʔamkijeŋ | / | aʔeŋ ʔamkije |
| 16. You beat me. | ʔamkiđijem | / | aŋem ʔamkiđijene |
| 17. You beat him. | ʔamkijem | / | aʔem ʔamkije |
| 18. He beat me. | ʔamkiđijene | / | aŋeʔe ʔamkiđijene |
| 19. He beat you. | ʔamkedmijae | / | ameʔe ʔamkedmij |
| 20. He beat him. | ʔamkije | / | aʔeʔe ʔamkije |

- A. Where is Ho spoken? What language family does it belong to?
 B. List and gloss all the morphemes illustrated in these data.
 C. Using concise English prose, describe the system that Ho uses for expressing S, A, and O arguments.

Exercise 8.10: Kurmanji Kurdish

Nick Bailey

The Kurdish people number at least 25 million. Kurdish is an important member of the Iranian branch of the Indo-European language family. The variety known as Kurmanji Kurdish is spoken by about 15 million people living in Turkey, Iran, Iraq, Syria, and the former USSR. This variety is normally written in Cyrillic script (as is Russian) but is presented here in a modified Latin script:

1. ez diçim	'I am going.'
2. tu diçî	'You (sg.) are going.'
3. ew diçe	'He/she/it is going.'
4. ew diçin	'They are going.'
5. gulistan diçe	'Gulistan is going.'
6. ez çûm	'I went.'
7. tu çûyî	'You (sg.) went.'
8. ew çû	'He/she/it went.'
9. ew çûn	'They went.'
10. gulistan çû	'Gulistan went.'
11. ez gulistanê dikişînim	'I am pulling Gulistan.'
12. tu gulistanê dikişînî	'You (sg.) are pulling Gulistan.'
13. ew gulistanê dikişîne	'He/she/it is pulling Gulistan.'
14. ew gulistanê dikişînin	'They are pulling Gulistan.'
15. gulistan min dikişîne	'Gulistan is pulling me.'
16. gulistan te dikişîne	'Gulistan is pulling you (sg.).'
17. gulistan wî dikişîne	'Gulistan is pulling him.'
18. gulistan wê dikişîne	'Gulistan is pulling her.'
19. gulistan wan dikişîne	'Gulistan is pulling them.'
20. min gulistan kişand	'I pulled Gulistan.'
21. te gulistan kişand	'You (sg.) pulled Gulistan.'
22. wî gulistan kişand	'He pulled Gulistan.'
23. wê gulistan kişand	'She pulled Gulistan.'
24. wan gulistan kişand	'They pulled Gulistan.'
25. min ew kişand	'I pulled him/her/it.'
26. min ew kişandin	'I pulled them.'
27. min tu kişandî	'I pulled you (sg.).'
28. te ez kişandim	'You (sg.) pulled me.'
29. te ew kişandin	'You pulled them.'
30. gulistanê ez kişandim	'Gulistan pulled me.'

- A. What structural features distinguish grammatical relations in Kurdish?

- B. What kind of system does Kurmanji Kurdish use to organize grammatical relations? Please provide charts of all the relevant forms (a separate sheet of paper will be necessary for this part of the exercise).

Exercise 8.11: Samoan II

Olga Uryupina, adapted by Tom Payne

Samoan is spoken by 38,700 people in American Samoa and 153,000 in Western Samoa, an independent country. About 162,000 additional Samoan speakers live in New Zealand, Hawaii, Fiji and on the West Coast of mainland USA. Samoan is a Polynesian language

- | | |
|---------------------------------|------------------------------------|
| 1. 'Ua lafi le pua'a. | 'The pig hid.' |
| 2. 'Ua tutuli e tagata maile. | 'The people chased away the dogs.' |
| 3. 'Ua pupu'e e le pusi 'isumu. | 'The cat caught the mice.' |
| 4. 'Ua pu'e e le tama le pusi. | 'The boy caught the cat.' |
| 5. 'Ua fefefe teine. | 'The girls got scared.' |
| 6. 'Ua fasi e tama le 'isumu. | 'The boys killed the mouse.' |

- A. Translate from Samoan into English:

7. 'Ua fefe le pusi.
8. 'Ua tuli e 'isumu le pusi.

- B. Translate from English into Samoan:

9. 'The boys hid.'
10. 'The mice caught the dog.'
11. 'The girl killed the pigs.'

- C. What system or systems does Samoan employ for organizing grammatical relations? Give your evidence.

Notes

1. The terms nominative and accusative are from the traditional grammars of classical languages. To a large extent their use in those grammars corresponds to the definitions given here. However, the terms in the classical languages refer strictly to morphological cases. The markers that signal those cases are often used in many other ways in addition to marking A, S, and O arguments. For example, the accusative case in Latin marks objects of certain prepositions. Here we are using the terms nominative and accusative to describe expressions of grammatical relations, no matter how those roles are instantiated in the morphosyntax. So we may, for example, refer to a particular noun phrase as a nominative noun phrase if it is an S or an A argument, whether or not it is marked by a distinct nominative case marker.
2. Note that this is not the same thing as saying that constituent order does not distinguish grammatical relations. In an AOV language, the relative position of A and O clearly may

help identify which is which. However, a *system* of organizing grammatical relations must involve intransitive clauses as well, and, as mentioned in the text, there is no consistent way of grouping A with S or O with S in terms of constituent order in an AOV/SV language.

3. "Past tense" is actually a simplification of the meaning of this conceptual category in Georgian, but for our purposes it will suffice.