7

Processes that change grammatical relations

Chapter 6 examined the two major systems used in languages to distinguish grammatical relations, the nominative/accusative system and the ergative/absolutive system. It also examined the ways in which the grammatical relations may be represented cross-linguistically: constituent order, case-marking and verb agreement. This chapter shows that grammatical relations between a verb and its arguments are not static: most languages have ways of changing the valency of a verb via processes of promotion and demotion of NPs. Section 7.1 examines the best-known of these valency-changing processes – the passive construction. Section 7.2 looks at a counterpart found in ergative systems, which is known as the antipassive. Sections 7.3 and 7.4 introduce another two valency-changing processes, the applicative and the causative constructions.

7.1 PASSIVES AND IMPERSONALS

7.1.1 The passive construction and transitive verbs

Consider the pairs of sentences in (1) through (3):

(1) a. Kim took some great photos with that old camera.
b. Some great photos were taken (by Kim) with that old camera.

(2) a. We stole that Ming vase yesterday.
b. That Ming vase was stolen (by us) yesterday.

(3) a. Three cups of tea have revived the nurse.
b. The nurse has been revived (by three cups of tea).

In each example, the (a) sentences are said to be ACTIVE and the (b) sentences PASSIVE.

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Before reading further, examine each pair of sentences in (1) to (3), and list as many syntactic and morphosyntactic differences as you can between the active sentences and the passive sentences. Use the correct grammatical terminology to the best of your ability.

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The active (a) sentences all have a transitive verb – a verb that has a subject and a direct object. By contrast, the passive (b) sentences all have only a subject, and no object: they have become intransitive. The NP that was the original subject in the active sentences (*Kim*, *we*, *three cups of tea*) has been DEMOTED in the passive: it is no longer a subject, but instead appears inside a PP headed with *by*. This means that it's no longer a core NP. In fact, the original subject of the active sentence doesn't necessarily appear in the passive sentence at all: we can also say simply *Some great photos were taken with that old camera*, *That Ming vase was stolen yesterday* and *The nurse has been revived*. The NP that was the original object in the active (a) sentences has been PROMOTED in each (b) sentence, becoming the subject of the passive sentence. Finally, the verbs in the passive sentences differ in form from the verbs in the active sentences. The passives all contain the PAST PARTICIPLE form of the verb: *taken*, *stolen*, *revived*; and they all contain a form of *be* as an auxiliary (in bold): ***were*** *taken*, ***was*** *stolen*, *has* ***been*** *revived*.

The passive in English can therefore be recognized by the following signs:

- Subject of the active sentence > demoted to a *by*-phrase or deleted; removed from the core.
- Object of the active sentence > promoted to subject of the passive.
- Passive contains auxiliary *be* + past participle of the main verb.

How do we know for sure that the NPs *some great photos*, *that Ming vase* and *the nurse* really are the subjects of the passive sentences? After all, each of these NPs has the semantic role of THEME (or PATIENT) – what has been taken, what has been stolen, the person being revived – and this is the role more usually associated with objects. We can tell that these NPs in the (b) sentences nonetheless are subjects because they trigger SUBJECT/VERB AGREEMENT, which, as we saw in Section 2.3.2, is one of the diagnostic properties for subjects in English. In (1b), the subject *some great photos* is plural, so we get ***were*** *taken*, while in (2b) the subject *that Ming vase* is singular, so we get ***was*** *stolen*. The other test for subjecthood in English discussed in Chapter 2 was pronominal case: first and third person pronouns have a special form (nominative case) when they are subjects: *I*, *we*, *he*, *she*, *they*. The subject of the active sentence in (2a) is *we*, but in the passive, (2b), *us* does not have nominative case, so is no longer a subject. And the subject of (3b), *the nurse*, could be replaced by the nominative pronoun *he* or *she*, so confirming that this is a subject position.

Although not all languages have a passive construction, it is extremely common in a wide variety of languages. Basic passive constructions in all languages are formed from transitive verbs. There are two hallmarks of the passive. First, the CORE arguments of a transitive verb – its subject and object – both undergo changes in their grammatical relations. Specifically, the object of the active sentence is promoted to be the subject of the passive sentence, while the subject of the active sentence is either removed altogether in the passive (as in *Some great photos were taken with that old camera*) or else is simply demoted. 'Demotion' here means that the NP is still present, but is no longer one of the core arguments of a transitive verb (subject/

object). Instead, the former subject becomes an OBLIQUE argument – for instance, it appears inside a PP, such as the *by*-phrase in English; oblique arguments are never subjects or objects, but instead occur in less prominent positions of the clause. Second, the verb has changed its valency: the number of core arguments that it takes (see Section 2.2.2.3). Verbs signal this by changing their own form in some way. For instance, in English we find *took* becoming *were taken* in the example (1). To summarize, the prototypical passive construction has the following properties cross-linguistically.

The passive construction

- Applies to a transitive clause (the active clause) and forms an intransitive clause.
- Object promoted > subject.
- Former subject demoted > oblique argument, or is deleted; removed from the core.
- Changes occur in the morphology of the verb to signal passivization.

In English, as in numerous other European languages, there is no specifically passive form of the verb: the two distinguishing features of the passive construction, namely auxiliary *be* and the past participle verb form (*seen*, *stolen*, *played* etc.) both occur separately in different constructions: for instance, *I was singing*; *We've stolen them*. So neither auxiliary *be* nor the past participle alone indicates a passive construction in English: only when they occur together do we have a passive.

Examples (4) and (5) illustrate languages which, like English, have an auxiliary-plus-main-verb kind of passive. The (a) sentences are active, the (b) ones passive, and the auxiliary verbs are in bold.

(4) a. Der Frost verdarb den Apfel. (German)
the.NOM frost spoil.PAST the.ACC apple.
'The frost spoilt the apple.'

b. Der Apfel **wurde** vom Frost verdorben.
the.NOM apple became by.the.DATIVE frost spoil. PAST PARTICIPLE
'The apple was spoilt by the frost.'

(5) a. Eglurodd y darlithydd y sefyllfa. (Welsh)
explain.PAST the lecturer the situation
'The lecturer explained the situation.'

b. **Cafodd** y sefyllfa ei egluro (gan y darlithydd).
get.PAST the situation its explain.INFIN by the lecturer
'The situation was explained (by the lecturer).'
(*Literally, 'The situation got its explaining by the lecturer.'*)

As (4b) shows, some other languages also use the past participle form of the verb in the passive construction, but this is by no means universal. Welsh, for instance, has no past participle, and the main verb just has one non-finite form, which is used in

active sentences as well as in passives such as (5b). According to Keenan (1985a), the most common auxiliaries occurring in passive constructions are verbs like 'be', 'become', 'get' and 'receive', as illustrated in (4) and (5). In fact, English also has a commonly used *get* passive, as in *My bike got stolen*.

In the German examples, we can tell that the former object of the active clause becomes the subject of the passive clause by the change in its case-marking: *den Apfel* in (4a) is accusative, the case of direct objects in German, while *der Apfel* in (4b) is nominative, the case of subjects.

Instead of the auxiliary-plus-verb kind of passive, many languages have a specifically passive form of the main verb; this is known as a MORPHOLOGICAL PASSIVE. Each language illustrated in (6) through (8) has a special passive marker on the verb, shown in bold in each (b) example. This affix is the only change in the verb form that indicates the passive. As before, all the (a) sentences are active, and the (b) sentences passive.[1]

(6) a. Si Juan ha dulalak si Jose. (Chamorro)
PN[1] Juan 3SG.SU follow PN Jose
'Juan followed Jose.'

b. D-**in**-ilalak si Jose as Juan.
-PASSIVE-follow PN Jose by Juan
'Jose was followed by Juan.'

(7) a. Neko-ga sakana-o tabeta. (Japanese)
cat-NOM fish-ACC eat.PAST
'The cat ate the fish.'

b. Sakana-ga neko-ni tabe-**rare**-ta.
fish-NOM cat-DATIVE eat-PASSIVE-PAST
'The fish was eaten by the cat.'

(8) a. E kamate-a te naeta te moa. (Gilbertese)
it kill-it the snake the chicken
'The chicken killed the snake.'

b. E kamate-**aki** te naeta (iroun te moa).
it kill-PASSIVE the snake by the chicken
'The snake was killed (by the chicken).'

Note also here that in Japanese, a language with nominative/accusative case-marking, we again see the changes in case that result from the promotion of the object to the subject position, and the demotion of the erstwhile subject. In the passive in (7b), the 'fish' NP *sakana* has become nominative, the case of subjects in Japanese, and the 'cat' NP *neko* has been demoted from subject position to an oblique (i.e. non-core) position, marked by dative case.

[1] The abbreviation PN in (6) is for 'proper noun marker', that is, it marks names in Chamorro. Note also that the passive marker *-in-* is actually an INFIX on the verb in (6b): it's inserted into the stem of the verb itself.

In fact, passive constructions occur most typically in languages which, like German or Japanese, are syntactically and morphologically accusative in their alignment. Recall from Chapter 6 that this gives rise to languages which have a definite *subject* grammatical relation, and which generally also have case-marking and/or verbal agreement which patterns according to the nominative/accusative alignment. Thus, accusative systems treat all subjects the same way (A plus S noun phrases), and treat objects differently (O noun phrases): S = A ≠ O.

But what about the passive in ergative/absolutive languages, which group S and O arguments (the ABSOLUTIVE NPs) in opposition to A arguments (the ERGATIVE NPs): S = O ≠ A? It will help at this point to revise the discussion in Chapter 6 concerning the different ways in which NPs group together in each system. These tables should help to refresh your memory:

Table 7.1
Accusative and ergative case systems

Accusative system	
A S	O
Nominative	Accusative

Ergative system	
A	S O
Ergative	Absolutive

It might seem that ergative languages would not have a passive construction, since the division between all subjects and all objects found in accusative languages is much less evident, or even absent. Indeed, not all ergative languages have passives: for instance, Dyirbal and Lezgian (see Chapter 6) do not. However, a number of ergative languages do have a passive construction, as illustrated in (9) from Inuktitut (Greenlandic), and (10) – slightly adapted – from Tzotzil. As before, the (a) sentences are active, the (b) ones passive, and the passive marker on the verb is in bold. The grammatical relations (A, O, S) are also indicated on the NPs:

(9) a. angut-ip**(A)** arnaq**(O)** taku-vaa (Inuktitut)
man-ERG woman.ABS see-3SG/3SG
'The man saw the woman.'

b. arnaq**(S)** (anguti-mit) taku-**tau**-puq
woman.ABS man-by see-PASSIVE-3SG
'The woman was seen (by the man).'

(10) a. S-mil-ox-Ø **(O)**Xun li Petul-e**(A)** (Tzotzil)
3SG.ERG-kill-PAST-3SG.ABS John the Peter-DEF
'Peter killed John.'

b. Mil-**bil**-Ø ju?un Petul li Xun-e**(S)**
kill-PASSIVE-3SG.ABS by Peter the John-DEF
'John was killed by Peter.'

In (9a), ergative/absolutive alignment is indicated in the active sentence via case marking on the NPs, the A argument being ergative, and the O argument absolutive:

in other words, standard ergative case-marking, given a transitive verb. The verb in (9a) also agrees with both its core arguments (both are third person singular). In the passive, (9b), the former ergative NP meaning 'man' is demoted, and appears in an optional 'by'-phrase. Moreover, the verb is now *intransitive*, so agrees only with its remaining core argument, *arnaq*, 'the woman', which has become the S argument of the intransitive verb. So just as in accusative languages, the NP *arnaq* has undergone a change in grammatical relation in the passive, from O to S. However, in an ergative language, this doesn't change the case marking of the promoted NP: the NP *arnaq* remains absolutive, because this is the case used both for O and for S. Of course, it doesn't become ergative, since this case is reserved for the A argument of a *transitive* verb.

The Mayan language Tzotzil (spoken in Mexico) has no case-marking on the NPs themselves, but has an ergative agreement system, indicated by verbal affixes. In the active sentence in (10a), we see two verbal affixes: an ergative agreement prefix, marking the A argument *Petul*, 'Peter', and an absolutive agreement suffix, marking the O argument *Xun*, 'John'. The passive construction in (10b) shows that the verb has lost the ergative prefix *s-*, since there is no longer an ergative NP for the verb to agree with: the former ergative NP *Petul* is now demoted, again appearing in a 'by'-phrase. The passive verb has become intransitive, as in the other passives we've seen, and so agrees just with its one remaining core argument, the NP *Xun* 'John'. This agreement marker is still absolutive: *Xun*, 'John', has changed from being an absolutive O argument in (10a) to the absolutive S in (10b) – the single argument of an intransitive verb.

Other ergative languages with a passive construction include other Mayan languages, the South Caucasian language Georgian, and the European language isolate Basque.

Since the passive construction in an ergative language doesn't change the *case* of the original O noun phrase – it's still absolutive when it becomes an S, as we've seen – then why have a passive at all? Perhaps the main effect of the passive in ergative systems is to remove focus from the original A noun phrase, in examples such as (9a) and (10a), by removing it from the core: demoting the NP to a 'by'-phrase makes it less prominent. In fact, passives also have this same effect of defocusing the agent in accusative languages as well, as shown for English in (1) through (3) – the agent is either demoted or deleted entirely, and so becomes much less prominent. Cross-linguistically, then, passives have a common pragmatic effect: that of removing focus from the agent NP. This function holds for passives both in accusative systems and in ergative systems.

7.1.2 The impersonal construction

In this section, we will see the IMPERSONAL construction. Here, the subject argument is suppressed, which also occurs in the passive; but unlike the passive, the impersonal construction does not create a new subject (Blevins 2003). The passive construction involves verbs that are transitive, as shown in Section 7.1.1. The impersonal construction can occur with intransitive verbs, as illustrated in (11) from German; the (a) sentence is active and the (b) sentence is the impersonal:

(11) a. Die Leute tanzten. (German)
the people dance.PAST
'The people danced.'
b. Es wurde getanzt.
it became dance.PAST PARTICIPLE
'There was dancing.'
(*Literally*, '*It became danced*.')

In (11b), no core NP has been promoted to subject. The construction is thus 'impersonal' – in fact, the verb here has no core arguments at all. However, (11b) does have what is often called a 'dummy' subject, *es* 'it'; this fills the otherwise empty subject position, but doesn't have any intrinsic meaning. So we can still maintain that the impersonal has no true subject.

Turkish also has an impersonal construction, with no constituent in subject position. Our example sentence is formed from an ordinary transitive verb, but it is again an impersonal because – unlike the passive – it does not create a new subject. As before, the (a) sentence is active and the (b) one the impersonal:

(12) a. Hasan dün bütün gün kitap oku-du (Turkish)
Hasan yesterday whole day book read-PAST
'Hasan read books all day yesterday.'
b. Dün bütün gün kitap oku-**n**-du
yesterday whole day book read-IMPERSONAL-PAST
'Yesterday books were read all day.'
(*Literally*, '*Book reading was done all day yesterday*.')

We can tell in Turkish that the object of the active sentence, *kitap*, 'book', has not been promoted to subject position in (12b) because it must remain in the standard direct object position that it occupies in (12a), which is immediately preceding the verb.

As with the passive, an important function of the impersonal is to remove focus from the former agent by demoting or deleting the subject NP. The difference is that no other NP is promoted to subject in an impersonal construction. Impersonals are quite widespread, occurring for instance in Dutch, Latin and – outside Indo-European – Turkish, Shona (Bantu) and Tarahumara (Uto-Aztecan). If a language has an impersonal construction, then it will also have an ordinary 'personal' passive construction of the type illustrated in Section 7.1.1, which does involve the creation of a new subject.

7.2 THE ANTIPASSIVE

7.2.1 Basic facts

In Section 7.1.1, we saw that both accusative and ergative languages can have a passive construction, although the passive is certainly found more commonly in accusative

languages than in ergative ones. However, another construction which changes grammatical relations also occurs in ergative languages. This is known as the ANTIPASSIVE, and this does not occur in accusative languages. Like the passive, the antipassive also takes a transitive clause and makes it intransitive via a process of promotion of one NP and demotion of another. I will focus first on the DEMOTION effects of the antipassive. Compare the ordinary active sentence in (13a) with the antipassive version in (13b), both from Inuktitut (Greenlandic); the antipassive marker is in bold:

(13) a. arna-p**(A)** niqi**(O)** niri-vaa (Inuktitut)
woman-ERG meat.ABS eat-3SG/3SG
'The woman ate the meat.'

b. arnaq**(S)** niqi-mik niri-**NNig**-puq
woman.ABS meat-with eat-ANTIPASSIVE-3SG
'The woman ate some of the meat.'

In (13a), the 'woman' NP *arnap* is the A argument of a transitive verb, and is therefore ergative, while the 'meat' NP *niqi* is the O argument of the transitive verb, and is therefore absolutive: this is the standard ergative case alignment discussed in Chapter 6. In the antipassive sentence in (13b), the former O argument *niqi* 'meat' is now DEMOTED. It is no longer a core argument of the verb, but is instead an oblique NP: the suffix *-mik* in fact indicates what is known as 'instrumental' case, which I've glossed as 'with'. The effect of this demotion is to give the 'meat' NP a PARTITIVE reading – the woman ate *some* of or *part* of the meat, as indicated in the translation. Since the verb in (13b) is no longer transitive (in Inuktitut), the NP *arnaq* 'woman' is the single S argument of an intransitive verb, and so takes the absolutive case. I recommend that you re-read this section up to this point before moving on.

The antipassive construction has a variety of functions in ergative languages, including giving rise to a partitive reading as shown earlier. Consider first the pair of sentences from the Siberian language Chukchee in (14); the (a) sentence is active, the (b) antipassive, with the antipassive marker in bold:

(14) a. ətləg-e**(A)** keyng-ən**(O)** penrə-nen (Chukchee)
father-ERG bear-ABS attack-3SG/3SG.PAST
'Father attacked the bear.'

b. ətləg-ən**(S)** penrə-**tko**-gʔe keyng-etə
father-ABS attack-ANTIPASSIVE-3SG.PAST bear-DATIVE
'Father ran at the bear.'

In the active sentence, (14a), the 'father' NP *ətləge* is the A argument of a transitive verb, and hence is marked with ergative case, while the 'bear' NP *keyngən* is an O, the object of a transitive verb, and hence is marked with absolutive case. The verb agrees with both these core arguments in (14a): it has a 3SG agreement for each of them (fused into a single marker, along with the past tense morpheme). The antipassive again has the effect of demoting the former object: the 'bear' NP *keyng* in (14b) has become dative, and we get the effect of *running at* the bear rather than attacking it. The

'father' NP *ətləgən* becomes the single argument of an intransitive verb in (14b), and hence is marked as an S – with absolutive case – and the verb now agrees with just this single core argument. In both (13) and (14), the antipassive has the clear effect of DETRANSITIVIZING the verb – making it no longer transitive – and the former object becomes in some way less affected by the action of the verb (Palmer 1994: 181).

Next, consider the pair of sentences from Chamorro in (15). As before, the (a) sentence is active and the (b) sentence is the antipassive, and the antipassive marker is in bold:

(15) a. un-hongge i lahi (Chamorro)
2SG.ERG-believe the man(.ABS)
'You(A) believe the man(O).'

b. **man**-hongge hao [nu i lahi]
ANTIPASSIVE-believe you.ABS OBLIQUE the man
'You(S) believe in / have faith in the man.'

In the active sentence (15a), the 'you' argument is the A, shown by the second person singular ergative verbal inflection, *un-*; there is no independent second person pronoun. The 'man' NP, *i lahi*, is the object of a transitive verb, and is therefore absolutive – this doesn't receive any overt marking in (15a). The effect of the antipassive in (15b) is to demote *i lahi* and remove it from core argument status: it is no longer the O (object of a transitive verb), and now instead has an oblique marker *nu*. Since the verb doesn't have an object NP in (15b), but is now intransitive, the former ergative argument (meaning 'you') must now be marked as the single argument of an intransitive verb. So *hao*, 'you', is marked for absolutive in (15b), as is standard for the S argument in an ergative system. The verb is again detransitivized in the antipassive, and its former object demoted.

An O argument may be merely demoted in the antipassive, but it can also be deleted altogether. In this sense, the antipassive is parallel to the passive construction, where an A argument can be deleted, as in *The vases were stolen*. Again, the verb is detransitivized. In (16), there is an example of O deletion from an Australian language, Yidiny. As before, the (a) sentence is active and the (b) sentence is the antipassive:

(16) a. [Yinydyuu-n bunyaa-n]**(A)** [mayi]**(O)** buga-ng. (Yidiny)
this-ERG woman-ERG vegetables.ABS eat-PRES
'This woman is eating vegetables.'

b. [Yinu bunya]**(S)** bugaa-**dyi**-ng.
this.ABS woman.ABS eat-ANTIPASSIVE-PRES
'This woman is eating.'

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Before going further, outline the effects of the antipassive construction in (16), using the correct grammatical terms. What effects does the antipassive have on the core arguments here? What effect does it have on the verb's valency?

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The active construction in (16a) has a transitive verb, and the clause has the standard case marking in the ergative alignment: an ergative A noun phrase, *yinydyuun bunyaan* 'this woman', and an absolutive O noun phrase, *mayi* 'vegetables'. The antipassive construction in (16b) has only one argument, *yinu bunya* – the absolutive S argument of what is now an intransitive verb – and the former O noun phrase is simply deleted.

7.2.2 Primary grammatical relations and grammatical pivots

So far, we have considered antipassives in which the main effects of the construction are on the O argument of the active verb: this NP has been demoted so it's no longer a core argument of the verb, or it's been deleted entirely. However, another equally important use of the antipassive in ergative languages involves the PROMOTION of the A noun phrase – the ergative 'subject' in the transitive clause – to be an S: an absolutive 'subject' in an intransitive clause. It may surprise you to think of this as promotion. In the more familiar accusative languages, it's easy to see how the passive construction, which changes the grammatical relation of an object NP and makes it the subject, is a process of promotion – consider the difference between the active *A crocodile ate my friend* and the passive *My friend was eaten by a crocodile*. Any native speaker of English would agree that the passive focuses on what happened to the friend in a way the active does not – indeed, the active can sound truly callous!

But why is A > S a promotion? Recall from Section 6.3 that in both accusative systems and ergative systems it's the noun phrase that appears as the S argument which is the most basic in usage. Whether it's a nominative NP, as in accusative systems, or an absolutive NP, as in ergative systems, the S is generally unmarked in both form (case-marking) and function (syntactic constructions). Following Palmer (1994), we can say that the S is always a PRIMARY grammatical relation. In accusative systems, of course, S groups with A to give SUBJECT as the primary grammatical relation, while in ergative systems, S groups with O to give ABSOLUTIVE as the primary grammatical relation.

Table 7.2
Primary grammatical relations

Primary grammatical relations	
Accusative systems	S + A = Subject NPs
Ergative systems	S + O = Absolutive NPs

The passive construction is mostly found in the accusative alignment, while the antipassive occurs exclusively in ergative systems. Both passive and antipassive constructions have the effect of creating a new S argument. The passive does this by promoting O > S, and the antipassive does it by promoting A > S. So both constructions have the effect of making a NONPRIMARY NP into a primary NP: the nonprimary NPs are O in accusative systems, A in ergative systems. Let's see now what sort of effects this has in ergative systems.

In the Mayan language Mam (Guatemala and Mexico), the verb is initial in the clause in the basic constituent order, but an NP can be focused by FRONTING it to the start of the clause. However, the only NPs that can undergo fronting are the two absolutive NPs, the S and the O – the two NPs which form the primary grammatical relation in an ergative language. Examples (17) and (18) illustrate this fronting, in an intransitive and a transitive clause respectively. The fronted NP is shown in bold in each sentence. Verbal agreement markers occur in each example: you can tell which NP the ergative and absolutive markers refer to by the fact that 'the man' NP, *xiinaq*, is always indicated by a 3SG marker, while 'the horses' NP *qacheej* is 3PL. There is no ergative case-marking in this language; the ergativity is shown via verb agreement:

(17) **xiinaq**(S) s-uul (Mam)
man ASPECT.3SG.ABS-arrive.here
'*The man* arrived here.'

(18) **qa-cheej**(O) x-hi kub' t-tzyuun xiinaq(A)
PL-horse ASPECT-3PL.ABS DIRECTION 3SG.ERG-grab man
'The man grabbed *the horses*.'

Examples (17) and (18) are standard active clauses for an ergative language. In an intransitive clause, the S argument is absolutive, and triggers verb agreement, which in (17) is shown by an affix *s-* on the verb. In the transitive clause in (18), the O argument meaning 'the horses' is absolutive, and triggers a verbal agreement marker *-hi*; the A argument *xiinaq* 'the man' is ergative, and triggers a verbal agreement marker *t-*. What if a speaker wants to focus on the A noun phrase in (18), *xiinaq* 'the man'? As (19) shows, it's not possible to do this by simply fronting *xiinaq* in the ordinary active sentence: the result is ungrammatical, because *xiinaq* is an A, not an S or an O, and so is not a primary grammatical relation:

(19) ***xiinaq**(A) chi kub' t-tzyuun qa-cheej(O)
man 3PL.ABS DIRECTION 3SG.ERG-grab PL-horse
(≠'*The man* grabbed the horses.')

Instead, the ergative NP *xiinaq* must first be promoted to be absolutive – becoming a primary NP – so it can then be fronted. This promotion from A > S is achieved by using the antipassive construction:

(20) **xiinaq**(S) x-Ø-kub' tzyuu-n t-e qa-cheej
man ASPECT-3SG.ABS-DIRECTION grab-ANTIPASSIVE 3-OBLIQUE PL-horse
'*The man* grabbed the horses.'

In (20), we find the grammatical version of what (19) was unable to express. The former O argument of the transitive clause, *qacheej* 'horses', is demoted in (20): it is no longer an O in the Mam sentence, but has become an oblique NP, as is indicated by the oblique marker that precedes it (like a preposition). This means that *xiinaq*, 'the man', is now the single argument of an intransitive verb, an S, and so is absolutive

and can be focused. We can tell from the verb agreement (3SG absolutive, agreeing with *xiinaq*) that the promotion has taken place. Hence, the antipassive serves here to allow an NP to be focused where it otherwise couldn't be.

Next we see a second construction requiring the antipassive to promote an NP from ergative to absolutive, from an Australian language, Dyirbal. This involves the CO-ORDINATION of clauses. First, some reminders of facts from a typical accusative language, English. In Section 6.5.2, we saw that a subject can undergo ellipsis (= omission) in the second of two conjoined clauses. You can look back now for revision of this. The subscript index $_i$ or $_j$ shows which NP in the first clause the omitted NP, designated Ø, refers back to:

(21) a. Chris woke up and (Chris) saw Lee.
b. Chris$_i$ disturbed Lee and Ø$_i$ complained bitterly.
c. *Chris disturbed Lee$_i$ and Ø$_i$ complained bitterly.
d. Chris$_i$ greeted Lee and then Ø$_i$ kissed Mel.
e. *Chris$_i$ greeted Lee$_j$ and then Mel kissed Ø$_{i/j}$.

What these examples show is that in accusative languages like English, the ellipsis revolves around *subjects*. So, for instance, (21b) can only mean that it was Chris who complained, and (21c) cannot mean that Lee complained. The grammatical sentences, (21a), (21b) and (21d), show that a subject can undergo ellipsis in the second clause, but only when it's coreferential with (= refers back to) the subject of the first clause. As for the ungrammatical sentences, (21c) shows that an omitted subject can't refer back to the object of the first clause – which is why (21c) can't mean that Lee complained; and (21e) shows that it's only a subject which is omitted in English, and not an object, so that (21e) is ungrammatical whatever the omitted NP refers back to.

We can say that accusative languages which operate like English does in (21) have a SUBJECT PIVOT, comprising the two primary NPs – those with the grammatical relations S and A. A PIVOT links noun phrases together across different clauses, for instance as seen in (21), by allowing one NP to be omitted providing it can refer back to another NP in the first clause. Not all languages have any syntactic restrictions on the interpretation of NPs across clauses. This means that two clauses can be linked together and *any* NP which is repeated can be omitted. In such languages, the equivalent to any of the examples in (21) should be perfectly grammatical in the appropriate context. Languages of this kind don't have a syntactic pivot. In languages that do have a syntactic pivot, it may operate as in English, revolving around the subject relation, or alternatively, in the case of some ergative languages, the pivot may revolve around *absolutive* NPs.

So if a language has an SA pivot, we expect constructions that link NPs to revolve around the S and the A relations. This is what happens in English. First, both S and A noun phrases – that is, all subjects – undergo ellipsis, as we can see from the fact that both an intransitive verb like *complain* and a transitive verb like *see* or *kiss* allow their subject to be omitted. And second, both the S subject of an intransitive verb like *wake up* and the A subject of a transitive verb like *disturb* or *greet* can be the NP that controls an omitted subject in the second clause. Finally, if we want to indicate what

(21c) attempts to do – namely, that it was Lee who complained – we do it by passivizing the first clause, to give *Lee$_i$ was disturbed by Chris and Ø$_i$ complained bitterly*. This, of course, has the effect of promoting Lee to subject position, which makes it a primary grammatical relation, so that it can now control the omitted NP in the second clause.

In a language like Dyirbal, which is syntactically ergative, however, ellipsis revolves around absolutive NPs. So Dyirbal has an ABSOLUTIVE PIVOT: this comprises the two absolutive grammatical relations, S and O, which together form the primary relation. This means that both the NP in the first clause which controls the ellipsis and the NP which undergoes ellipsis must be one of the absolutive NPs, either S or O. Let's see how this works first when ordinary active clauses are co-ordinated, starting with (22). Before you tackle the examples that follow, here are some hints to help you.

- Case is indicated in Dyirbal via a suffix on the nouns, though the absolutive is in fact unmarked (there is no absolutive inflection), while ergative and other cases such as dative each have a particular suffix.
- You can tell which NP refers to which other NP by looking at the subscripts, $_i$. So for instance, in (22), the NP that undergoes ellipsis in the second clause is coreferential with *nguma* 'father' in the first clause.
- Read the glosses and translations carefully and try not to let the constituent order worry you: the absolutive NP is initial in each clause, whether it's an S or an O. I've indicated the grammatical relation of the NPs here in the gloss, with a small subscript (S, O or A), and also in the translation.
- Note also that there's no actual word for 'and' in Dyirbal co-ordination. In these examples I have put each co-ordinated clause in square brackets, to help you see the start and end of the clauses.

(22) [nguma$_i$ yabu-nggu bura-n] [Ø$_i$ banaga-n^{y}u] (Dyirbal)
father.ABS$_O$ mother-ERG$_A$ see-PAST [ ]$_S$ return-PAST
'Mother(A) saw father(O) and [he](S) returned.'

The NP that's omitted in the second clause in (22) has to refer back to *nguma*, 'father', the absolutive O noun phrase – it can't refer back to *yabunggu*, 'mother', the ergative A noun phrase. In English, this is not a possible construction: *Mother saw father and returned* can only mean that mother returned, not that father did. The only way to get that reading in English is to use a pronoun *he* in the second clause, as I've shown in the translation of (22), but crucially, there is no pronoun in the corresponding Dyirbal sentence.

In (22), the two coreferential NPs are an O in the first clause and an S in the second clause. Both are, of course, absolutive. In (23), the first clause has an S and the second clause omits an O which refers back to that S:

(23) [nguma$_i$ banaga-n^{y}u] [Ø$_i$ yabu-nggu bura-n]
father.ABS$_S$ return-PAST [ ]$_O$ mother-ERG$_A$ see-PAST
'Father(S) returned and mother(A) saw [him](O).'

The English translation would again be impossible without the pronoun in the second clause: we don't get **Father returned and mother saw*. But again, there is no pronoun in the corresponding Dyirbal: the O argument can be omitted when it is coreferential with the S of the first clause. Both (22) and (23) show that ellipsis in Dyirbal operates in terms of the absolutive NPs, S and O, rather than with a subject pivot as in English. Dyirbal then has an absolutive pivot.

What happens, though, if a Dyirbal speaker wants to say something that means 'Mother saw father and (mother) returned'? Example (22) does not and could not mean this. Instead, the antipassive construction is used: this promotes the ergative NP meaning 'mother' in a sentence like (22) so that it *becomes* an absolutive, and as an absolutive NP it can be a pivot: it can control the ellipsis of the S in the second clause. Example (24) illustrates; the first clause is the one that's antipassive:

(24) [yabu$_i$ bural-**nga**-n^{y}u nguma-gu] [Ø$_i$ banaga-n^{y}u]
mother.ABS$_S$ see-ANTIPASSIVE-PAST father-DATIVE [ ]$_S$ return-PAST
'Mother(S) saw father and (S) returned.'

In the first clause of (24), what in an ordinary active clause such as (22) would be the O – the object of a transitive verb – has now been demoted: the 'father' NP *ngumagu* is now dative, and the verb is detransitivized with the antipassive suffix. The remaining NP, *yabu* 'mother', is therefore the S argument of an intransitive verb meaning 'see'. As an S, it is absolutive, and so can be a pivot: it allows the omitted NP in the second clause to refer back to it. So the antipassive construction serves to make an NP available as a pivot; here, as the controller of ellipsis.

Second, the antipassive can make an NP into a pivot so it is available to *undergo* ellipsis. This is shown in (25), where this time the second clause has become antipassive, in order to get the reading 'Father returned and saw mother'.

(25) [nguma$_i$ banaga-n^{y}u] [Ø$_i$ bural-**nga**-n^{y}u yabu-gu]
father.ABS$_S$ return-PAST [ ]$_S$ see-ANTIPASSIVE-PAST mother-DATIVE
'Father(S) returned and (S) saw mother.'

In the second clause, the 'mother' NP *yabugu* is not a primary NP but has been demoted, as we can tell by its dative case. The antipassive verb meaning 'see' is again detransitivized: it has only one core argument, the S noun phrase – the single argument of an intransitive verb. As an S, this NP is a possible pivot, so allowed to undergo ellipsis when coreferential with another absolutive NP. So the empty S position in (25) refers back to *nguma*, 'father', in the first clause.

To summarize, the antipassive construction has the following characteristics cross-linguistically:

The antipassive construction

- Applies to a transitive clause (the active clause) and forms an intransitive clause.
- The A argument (ergative) promoted > S argument (absolutive).

- O argument demoted > oblique, or is deleted.
- Changes in the morphology of the verb signal antipassivization.

Both the passive and the antipassive constructions have in common the fact that they change basic grammatical relations by promoting some NPs and demoting others. This results in changes to the valency of the verb. The following two sections introduce two other grammatical relation-changing processes: the applicative and the causative constructions. Like the passive and antipassive, these do not occur in all languages, but are widespread nonetheless.

7.3 THE APPLICATIVE CONSTRUCTION

English has an alternation between the (a) and (b) forms in sentences like (26) and (27). Let's assume that the (a) sentences are the more basic, and the (b) sentences are derived from them by processes of promotion and demotion. (One reason for taking the NP-PP constructions as in (26a) and (27a) to be the more basic is that not all verbs which take NP and *to/for*-PP complements can undergo the alternation: **I dispatched the children the presents* vs. *I dispatched the presents to the children*.)

(26) a. My brother sold his bike to Sue.
b. My brother sold Sue his bike.

(27) a. I baked a cake for Kim.
b. I baked Kim a cake.

This alternation occurs just with certain three-argument verbs in English. In their basic form, these verbs take a direct object NP (such as *his bike*, *a cake*) plus a PP headed by *to* or *for*, such as *to Sue*, *for Kim*. In the (b) sentences, the NPs *Sue* and *Kim* have been PROMOTED to direct object position – immediately following the verb in English – and the original direct object is DEMOTED to become a second object: there is no longer a PP in the (b) sentences. This construction in English is often known as DATIVE MOVEMENT (although English has no actual dative case-marking) because, in some languages, indirect objects such as 'to Sue' are marked dative (see Section 6.5.4).

Now compare the parallel construction found in two completely unrelated languages (unrelated both to one another and to English): an Austronesian language, Indonesian, and a Bantu language, Chichewa (the rather strange-sounding examples from this language are taken from Baker 1988). We examine later the APPLIC (standing for APPLICATIVE) affixes shown in bold type on the verb in the (b) sentences:

(28) a. Mereka mem-bawa [daging itu] [kepada dia]. (Indonesian)
they TRANS-bring meat the to him
'They brought the meat to him.'

b. Mereka mem-bawa-**kan** [dia] [daging itu].
they TRANS-bring-APPLIC him meat the
'They brought him the meat.'

(29) a. Mbidzi zi-na-perek-a msampha kwa nkhandwe. (Chichewa)
zebras SU-PAST-hand-ASPECT trap to fox
'The zebras handed the trap to the fox.'

b. Mbidzi zi-na-perek-**er**-a nkhandwe msampha.
zebras SU-PAST-hand-APPLIC-ASPECT fox trap
'The zebras handed the fox the trap.'

These constructions involve the same changes in grammatical relations as those found in English in (26) and (27). In (28), the NP *dia* 'him', which is originally part of a 'to'-PP *kepada dia* in (a), is promoted in (b) to become the direct object – as in English, this immediately follows the verb in Indonesian. The preposition disappears. The NP *daging itu* becomes a second object. In Indonesian, but not in English, there is also a special marker on the verb to indicate the promotion: the suffix *-kan*. This is glossed as APPLICATIVE, a traditional grammatical term used both for the verbal marker of promotion and for the construction as a whole.

The Chichewa applicative in (29) is exactly parallel: the 'fox' NP *nkhandwe* was an indirect object within a PP in (29a), but is promoted to direct object position in (29b). The original direct object in (29a), *msampha* 'trap', is demoted in (29b), becoming a second object, and again there's an applicative marker on the verb, the suffix *-er*.

The general properties of the applicative construction, including English dative movement, can be summarized as follows:

The applicative construction

- Oblique NP or indirect object > promoted to object.
- Former object > demoted to second object or oblique.
- Changes may occur in the morphology of the verb to signal the applicative construction.

English is fairly restrictive in the type of oblique phrase that can undergo promotion, but cross-linguistically various kinds of oblique phrase can be promoted, including locative expressions (= those involving location, such as 'on the table', 'into the water'), goals (as in *We sent the letter **to Mel** > We sent Mel a letter*), beneficiaries (as in *I baked a cake **for Kim** > I baked Kim a cake*) and instrumental phrases, such as 'with a stick', as in the Dyirbal example in (30):

(30) a. yabu nguma-nggu balga-n yugu-nggu (Dyirbal)
mother.ABS$_O$ father-ERG$_A$ hit-PAST stick-INSTRUMENTAL
'Father hit mother with a stick.'

b. yugu nguma-nggu balgal-**ma**-n yabu-gu
stick.ABS$_O$ father-ERG$_A$ hit-APPLIC-PAST mother-DATIVE
'Father used a stick to hit mother.'

Example (30a) is an ordinary transitive clause in Dyirbal, with an ergative A noun phrase, *ngumanggu*, meaning 'father', and an absolutive O noun phrase, *yabu*, meaning 'mother'. In the English translation, *stick* appears inside a PP headed by *with* – it's an oblique phrase; in Dyirbal, the 'stick' NP *yugunggu* is also oblique, and this is marked by a special INSTRUMENTAL case.[2] Instrumental NPs don't undergo dative movement in English, whereas in Dyirbal the 'stick' NP can indeed be promoted to become a core argument: it's the O in (30b). This NP *yugu* now has absolutive case – the case of normal objects in ergative systems – while the former O noun phrase *yabu*, 'mother', has been demoted, as shown by its dative case marking: *yabugu*.

Finally, an NP which has been promoted by the applicative construction to become a direct object can generally undergo a second promotion by the passive construction, thus becoming a subject. In fact, we have already seen an example of this in Section 1.1.1, in the discussion comparing English and Indonesian. The examples in (31) and (32) are again from Chichewa (English speakers may not find the translation of (31b) grammatical):

(31) a. Kalulu a-na-gul-ir-a mbidzi nsapato (Chichewa)
hare SU-PAST-buy-APPLIC-ASPECT zebras shoes
'The hare bought shoes for the zebras.'
(*more literally, 'The hare bought the zebras shoes.'*)

b. Mbidzi zi-na-gul-**ir-idw**-a nsapato (ndi kalulu)
zebras SU-PAST-buy-APPLIC-PASSIVE-ASPECT shoes by hare
'The zebras were bought shoes by the hare.'

In (31a), *mbidzi* 'zebras' has already undergone promotion by the applicative construction, and has become the direct object: as in English, the direct object immediately follows the verb. Once promoted to direct object position, the NP *mbidzi* can undergo a further promotion in the passive construction, (31b): it becomes the subject. The former subject *kalulu* 'hare' is demoted to an optional *ndi* ('by')-phrase. Crucially, the 'shoes' NP in (31a), *nsapato*, cannot undergo promotion to subject by the passive construction, because it's not the direct object but a second object. We can tell that *nsapato* is not a direct object by the fact that it doesn't immediately follow the verb. If we try to promote the second object in a passive construction, the result is ungrammatical, as in (32):

(32) *Nsapato zi-na-gul-ir-idw-a mbidzi (ndi kalulu)
shoes SU-PAST-buy-APPLIC-PASSIVE-ASPECT zebras by hare
'*Shoes were bought the zebras by the hare.'

[2] The instrumental case in Dyirbal, in fact, has the same suffix as the ergative case, *-nggu*, but there are good reasons to consider the two cases to be syntactically distinct. Dixon (1994: 170, fn. 22) notes that instrumental NPs and ergative NPs have different syntactic behaviour. In the antipassive construction, an ergative NP is promoted from A to S – see (24) and (25) above – but an instrumental NP doesn't get promoted. In the applicative construction, an instrumental NP gets promoted to O whereas an ergative NP undergoes no promotion.

So in Chichewa – and in English – only an NP which is, *or has become*, a direct object can undergo promotion by the passive. Although this restriction is very common cross-linguistically, it's not universal: in some languages both the direct object and the second object of an applicative construction behave like a prototypical object. In Kinyarwanda – another Bantu language – for instance, either type of object can be promoted to subject by the passive construction (see Palmer 1994: Chapter 6.6).

Cross-linguistically, it is usual to find that the applicative (or dative movement) construction feeds into the passive construction, as illustrated for Chichewa in (31b) and for English by the translation of this example. In other words, the applicative creates new direct objects that can then be promoted to subject. However, not all languages have an applicative construction. French, for example, has no construction parallel to English dative movement; so in French (33a) cannot become (33b), with promotion of *Pierre* to direct object position:

(33) a. Marie a donné un cadeau à Pierre. (French)
Marie has give.PAST PARTICIPLE a present to Pierre
'Marie has given a present to Pierre.'

b. *Marie a donné Pierre un cadeau.
Marie has give.PAST PARTICIPLE Pierre a present
(≠ 'Marie has given Pierre a present.')

In turn, this means that the 'dative movement' construction in (33b) is unavailable as input to the passive construction. The passive version of (33a) is (34a), which is fine – the original direct object *un cadeau*, 'a present', has been promoted to subject position. But since *Pierre* is not a possible direct object in (33b), then we'd predict that this sentence won't be a possible input to the passive construction, since the passive in French only promotes direct objects. And, indeed, the passive version of (33b), with *Pierre* promoted to subject position, is ungrammatical in French as predicted, as in (34b):

(34) a. Un cadeau a été donné à Pierre par Marie.
a present has been give.PAST PARTICIPLE to Pierre by Marie
'A present has been given to Pierre by Marie.'

b. *Pierre a été donné un cadeau par Marie.
Pierre has been give.PAST PARTICIPLE a present by Marie
(≠ 'Pierre has been given a present by Marie.')

So cross-linguistically, we find a continuum, which, at one extreme, allows no applicative constructions, as in French, and, at the other extreme, is very free in the kinds of prepositional objects and other oblique NPs that can be promoted to subject position. Chichewa lies at the latter end of the spectrum, as does Dyirbal; see (30). English falls somewhere in the middle, having dative movement with a restricted set of verbs.

7.4 THE CAUSATIVE CONSTRUCTION

So far in this chapter, we have examined constructions that change grammatical relations by promotion and demotion processes, but which don't introduce any new NP arguments. The passive and antipassive either have the same number of arguments as their active counterparts, or they may reduce that number; the *by*-phrases are optional in (1) through (3), for instance. And the applicative/dative movement construction doesn't change the number of arguments in the construction, but simply promotes one to be a core argument and demotes another. In this section, I introduce the last major construction type which changes grammatical relations: the causative. This differs from the constructions seen so far in that it always increases the verb's valency by introducing a new argument – the causative agent – and it often introduces an entire new causative predicate as well. I illustrate first from English.

In English, the main way of expressing the idea of causing someone else to do something is by using a verb such as *make*, *let*, *cause* or *have*. So we get pairs of sentences like those in (35) and (36):

(35) a. The students left.
b. We **made/let** the students leave.

(36) a. The students read the book.
b. We **had** the students read the book.

In both examples, the (a) sentences are basic, simple clauses; (35a) is intransitive, (36a) transitive. The (b) examples in each case are CAUSATIVE constructions. In both, *the students* has been DEMOTED from its original position as the subject of the simple clause, and a new subject, *we*, has been introduced. Note that this new subject hasn't been promoted from anywhere, since it doesn't exist in the (a) sentences; it arises from the causative construction. These two properties are common to causative constructions cross-linguistically: the original subject is demoted and a new subject is introduced.

The causative construction in English introduces a new subject and a new predicate – *We made/let/had* in (35) and (36) – so creating a whole new clause. This means that the causative construction turns the simple sentences (with just one clause) in (35a) and (36a) into complex sentences in (35b) and (36b).

This same kind of causative construction with a 'make' or 'cause' verb plus the basic verb also occurs in many other languages. In (37), from Korean, (37a) is the basic clause with *ku sayka* 'the bird' as subject: it has nominative case. And (37b) is the causative, with the causative verb in bold. This has a newly introduced subject, the causative agent *Yonghoka* 'Yongho', which is nominative. It also has a new predicate, glossed 'do'. (The gloss INDIC stands for INDICATIVE, a 'mood' of the verb which is used to refer to real rather than hypothetical events.)

(37) a. ku say-ka cwuk-ess-ta (Korean)
the bird-NOM die-PAST-INDIC
'The bird died.'

b. Yongho-ka [ku say-lul cwuk-key] **hay-ss-ta**
Yongho-NOM the bird-ACC die-COMP do-PAST-INDIC
'Yongho caused the bird to die.'

As in English, Korean causatives are complex sentences, containing two clauses. The embedded clause is in brackets, and contains a complementizer, *-key*, '(so) that'. Since Korean is head-final, the complementizer *-key* is final in the embedded clause, and the whole complement clause precedes the verb that selects it, *hayssta*. Literally, (37b) means 'Yongho [that the bird died] caused'. The matrix clause is the 'cause' clause with the predicate *ha(y)* 'do, make, cause'.

French causatives also use a 'make' or 'do' predicate of causation, the verb *faire*. In (38), (a) is again the basic sentence and (b) the causative, with the causative verb in bold:

(38) a. Jean a lu ce livre. (French)
Jean has.3SG read.PAST PARTICIPLE this book
'Jean has read this book.'

b. Nous avons **fait** lire ce livre à Jean
we have.1PL make.PAST PARTICIPLE read.INFIN this book to Jean
'We made Jean read this book.'

However, in French, unlike in Korean or English, the causative does not produce a biclausal construction. Although (38b) does contain two independent lexical verbs, the 'make' verb of causation and the 'read' verb, in fact the two verbs behave generally as a single verbal unit and not as predicates in separate clauses. For instance, unlike in English, the two verbs can't be separated by the NP *Jean*, as (39) shows:

(39) *Nous avons fait Jean lire ce livre.
we have.1PL make.PAST PARTICIPLE Jean read.INFIN this book
(≠'We made Jean read this book.')

So *Jean* doesn't behave like the subject of an embedded clause. In the French, the two lexical verbs are actually both inside a single clause, and share a single set of arguments rather than each having its own arguments as they do in English or in Korean; this should remind you of the verb serialization which we discussed in Section 3.3.3.

One kind of typological variation in causatives, then, concerns whether or not the addition of a causative verb gives rise to an additional clause. However, not all causatives are formed by using an actual causative verb. In Korean, the most productive type of causative is that shown in (37b), but there is another type known as a MORPHOLOGICAL CAUSATIVE, illustrated in (40):

(40) Yongho-ka ku say-lul cwuk-**y**-ess-ta (Korean)
Yongho-NOM the bird-ACC die-**CAUS**-PAST-INDIC
'Yongho killed the bird.'

The example in (40) contains only a single clause, and instead of a separate causative verb it has causative morphology: an affix *-y* (glossed as CAUS) on the 'die' verb. Note that *ku saylul* 'the bird' has been demoted to object in this clause: it has accusative case.

Many languages (though not English) also have a causative affix on the verb rather than using a separate causative verb. This situation parallels the one discussed in Section 7.1.1, where we saw that some languages have a special passive affix – see (6) through (8) for instance. Other examples of languages with a morphological causative are shown in (41) and (42): the basic sentence types are shown in each (a) example, the causatives in (b), and the causative affixes are in bold:

(41) a. Mtsuko u-na-gw-a (Chichewa)
waterpot SU-PAST-fall-ASPECT
'The waterpot fell.'

b. Mtsikana a-na-u-gw-**ets**-a mtsuko
girl SU-PAST-OBJ-fall-CAUS-ASPECT waterpot
'The girl made the waterpot fall.'

(42) a. Müdür mektub-u imzala-dı (Turkish)
director.NOM letter-ACC sign-PAST
'The director signed the letter.'

b. Dişçi mektub-u müdür-e imzala-**t**-tı
dentist.NOM letter-ACC director-DATIVE sign-CAUS-PAST
'The dentist made the director sign the letter.'

In the Chichewa examples, the causative (41b) differs from the basic sentence in various ways. Example (41a) is intransitive, while (41b) is transitive. The original subject, *mtsuko*, has been demoted to object in (41b): we can tell because there's an object agreement marker *u-* on the verb, agreeing with *mtsuko* 'waterpot' (in gender, though this isn't shown by the gloss). Also, the verb has a new subject agreement marker *a-* in (41b), and this agrees in gender with *mtsikana* 'girl' (rather than *mtsuko*). Finally, there's a CAUSATIVE suffix *-ets* on the verb in (41b).

In the Turkish examples, there's once again a new subject, *dişçi*, introduced into the causative construction in (42b). The former subject, *müdür*, 'director' is demoted to the position of indirect object in (42b), marked by the dative case; since there's already a direct object, *mektub* 'the letter', it can't take that position.

So far in this section, we have seen two types of causative: first, the 'cause'-verb plus 'effect'-verb type, and, second, the morphological causative, as in (41b) and (42b). Although English has no morphological causative (just as it has no morphological passive), it does illustrate a third type of causative construction, the lexical causative. For instance, some verbs can be used either intransitively, so that no causation is expressed, or transitively, so that they include a causer as their subject: *The bottle broke/I broke the bottle* (also *melt*, *sink*, *smash* and many other verbs). A few intransitive verbs have a closely related causative transitive verb, such as *sit/seat* and *rise/raise*, as in *The wreck **rose** to the surface/We **raised** the wreck to the surface*. Another example of a lexical causative is shown from Greek in (43):

(43) a. pijéno (Greek)
go.1SG
'I go.'

b. pijéno to peði s to sxolío
go.1SG the child.ACC to the school.ACC
'I take the child to school.'

Example (43b) is causative, but there's no marker of this at all – the same verb meaning 'go' is used in both (43a) and (43b). Note that the English translation here also uses a lexical causative, but of a different kind, since *go* is replaced in English with a causative verb *take* (= 'cause to go').

As the examples in this section illustrate, causatives can generally be derived from either a basic intransitive verb or a basic transitive verb. The cross-linguistic properties of the construction are as follows:

The causative construction

- Ø > subject (i.e. a new subject is introduced).
- Former subject demoted > object; or to an oblique argument; or is deleted.
- Verb adding causation is introduced ('make', 'have', etc.), or else the main verb has causative morphology.

An example illustrating the deletion of the original subject in a causative construction is given in (44). Songhai (or Sonrai) is a Nilo-Saharan language of Mali, Burkino Faso and Niger: the basic sentence is in (44a), the causative in (44b), and the causative affix is in bold:

(44) a. Garba nga tasu di. (Songhai)
Garba eat rice the
'Garba ate the rice.'

b. Ali nga-**ndi** tasu di
Ali eat-CAUS rice the
'Ali got someone to eat the rice.'/'Ali caused the rice to be eaten.'

The original subject of the basic clause, *Garba*, is simply deleted in (44b), while a new subject of the causative verb is added, *Ali*.

Finally, recall from Section 7.3 that the applicative construction can feed into the passive construction by creating new object NPs, and these new objects can then be further promoted to subject. Similarly, the causative construction can create new objects by demoting the former subject, and these new objects are then available to be passivized. So the causative often feeds into the passive construction as well. Example (45) illustrates from Chichewa; in (45a) we have the causative construction, and in (45b) the passive formed from it:

(45) a. Buluzi a-na-wa-sek-ets-a ana. (Chichewa)
lizard SU-PAST-OBJ-laugh-CAUS-ASPECT children
'The lizard made the children laugh.'

b. Ana a-na-sek-ets-edw-a ndi buluzi.
children SU-PAST-laugh-CAUS-PASSIVE-ASPECT by lizard
'The children were made to laugh by the lizard.'

The NP *ana* 'children' in (45a) is a direct object: it triggers object agreement on the verb, so the object marker *wa-* agrees with the *ana* NP (in gender, though again not directly shown by the gloss). In the passive, (45b), this former object *ana* has undergone promotion to the subject position of the whole verbal complex: as in English, subjects are initial in the clause. And the object marker, *wa-*, has now disappeared from the verb, since passivized verbs are, of course, intransitive and hence have no object to agree with.

We can conclude, then, that it is quite general for processes that change the grammatical relations of noun phrases to interact with one another, creating further promotions and demotions.

7.5 SUMMARY

'Valency' refers to the number of core arguments that a verb has. We have seen in this chapter that languages typically have one or more valency-changing operation. These may increase the number of core arguments, as, for instance, with the applicative and causative constructions in Sections 7.3 and 7.4. Or alternatively, valency-changing may involve a decrease in the number of core arguments, for instance in the passive and antipassive (Sections 7.1 and 7.2). The processes we've seen also involve promotion and demotion of core arguments, foregrounding some NPs and backgrounding others – removing them from the 'core' – for various pragmatic purposes. We have also seen that these processes interact with one another, for instance by producing a new core argument that can be further promoted.

FURTHER READING

Palmer (1994) will be very useful for many of the issues covered in this chapter, especially passives and antipassives, syntactic pivots, causatives and applicatives. See also Keenan (1985a), Foley and Van Valin (1985) on the passive, and Comrie (1989: Chapter 8; 1985b) and Song (1996) on the causative. Some of the data on processes that change grammatical relations come from Baker (1988), a very advanced work which you should probably only tackle (as opposed to browsing for interesting data) after a course in theoretical syntax. Dixon and Aikhenvald (2000) is an edited collection of papers which all focus on valency-changing processes, and from which I've taken some of the data in this chapter.

EXERCISES

1. In Section 7.3, we considered the type of applicative construction known in English as DATIVE MOVEMENT, an alternation which gives rise to pairs such as *Kim gave the book to Lee/Kim gave Lee the book*. As noted earlier, not all verbs which take an NP and a *to*-PP complement can undergo the alternation. Your task is to work out what factors condition the application of dative movement. I have given a few examples, but you will need to find others, to get a fuller picture. I have also suggested grammaticality judgements which accord with my own intuitions, but you should feel free to disagree with them, and to find or make up other examples to support your case. Given that judgements may vary, the 'correct answer' here is a rather fluid concept!

   (1) a. Lee donated the prize money to her favourite charity.
   b. *Lee donated her favourite charity the prize money.

   (2) a. The shopkeeper refunded the money to me.
   b. The shopkeeper refunded me the money.

   (3) a. Kim passed the ball to Lee.
   b. Kim passed Lee the ball.

   (4) a. I transferred the money to Lee.
   b. *I transferred Lee the money.

   (5) a. We showed/sent/forwarded/texted that message to all our friends.
   b. We showed/sent/?texted/?forwarded all our friends that message.

   (6) a. Kim dispatched that letter to his lawyer.
   b. *Kim dispatched his lawyer that letter.

   (7) a. I faxed my answer to him straight away.
   b. I faxed him my answer straight away.

   (8) a. I handed/delivered the parcel to the publishers.
   b. I handed/*delivered the publishers the parcel.

   (9) a. I awarded/presented fantastic prizes to the best students.
   b. I awarded/*presented the best students fantastic prizes.

   (10) a. I recommended/introduced *Knowledge of Language* to the students.
   b. *I recommended/introduced the students *Knowledge of Language*.

2. Study the data in (1) through (10) (from Klamer 1994) and then say exactly how the causative construction is formed in the Malayo-Polynesian language Kambera. Note that one crucial affix in the Kambera is left unidentified and unglossed. What is it?

   (1) Na pakanabu-ta weling la ài.
   he fall-1PL.OBJ move from tree
   'He made us fall from the tree.'

(2) Da rara hàmu da pàu.
they be.red be.good the.PL mango
'The mangoes are nice and ripe.'

(3) Na lui du ...
it melt EMPHASIS
'It should dissolve ...'

(4) Na palui-ya na liling.
he melt-3SG.OBJ the.SG candle
'He melts the candle.'

(5) Da pakatuda-ya na anakeda.
they sleep-3SG.OBJ the.SG child
'They put the child to sleep.'

(6) Napa jàka u kabeli ...
later if you return
'Later, if you (*sg.*) return ...'

(7) Parara-ya na pàu.
be.red-3SG.OBJ the.SG mango
'Let the mango ripen.'

(8) Da kawàra katuda.
they both sleep
'They both sleep.'

(9) Ta pakabeli-ha da tentara.
we return-3PL.OBJ the.PL soldier
'We get the soldiers to return.'

(10) Ambu ta kanabu.
NEG we fall
'Let's not fall.'

3. The examples in this exercise are from an Australian language, Kalkatungu, and are taken from Blake (2001b).

Tasks: (i) Example (1) shows a basic clause. Work out what construction is illustrated by the data in (2) and (3). (ii) A crucial grammatical morpheme, *ntjama*, is left unglossed. What is its function? (iii) What other changes are seen in (2) and (3) as compared with (1)? Make sure you use the correct grammatical terminology in describing them, as far as possible.

(1) Kalpin-tu intji-mi nga-tji utjan
man-ERG chop-FUT me-DAT firewood
'The man will chop my firewood.'/'The man will chop the firewood for me.'

(2) Kalpin-tu intji-**ntjama**-mi ngayi utjan
man-ERG chop-???-FUT me.OBJ firewood
'The man will chop me firewood.'

(3) Kalpin-tu intji-**ntjama**-mi-ngi utjan
man-ERG chop-???-FUT-me firewood
'The man will chop me firewood.'

4. Southern Tiwa, a native American language from the Tanoan family of New Mexico, has a passive construction illustrated in examples (1) through (10). However, in Southern Tiwa this construction has an important restriction which doesn't occur in English or the other languages seen so far.

Task:

i. What is the syntactic restriction on the passive in Southern Tiwa?

ii. Why are the examples in (4), (6) and (10) ungrammatical?

iii. Finally, do you have any ideas about why a language might have such a restriction on the passive? Think again about PERSON and about what effect the passive has on a subject: compare (3) with (4) and (5) with (6).

Hints

- Note that in examples like (3), (5), (7) and (8) there are no independent pronouns in the Southern Tiwa sources. Instead, the verb *mu* meaning 'see' has bound pronominal prefixes showing the PERSON and NUMBER of the subject and the object (though not all verbs have an object). These prefixes occur in (3) through (9), and specify all the information that in the English translations is realized by independent pronouns (such as ***You*** *saw* ***me***).
- When the verb in Southern Tiwa has both a subject and an object, these markers are fused together to form a single prefix: see (3) and (5), where the gloss indicates these fused forms with /. In (3), the prefix *bey-* means 2SG(SU) and 1SG(OBJ), i.e. it shows simultaneously that the subject is second person singular and the object is first person singular. In (5), the prefix *i-* means that the subject is first person singular and the object is second person singular. Obviously, the fused forms only occur if the verb has both a subject *and* an object. *The answer has nothing whatever to do with the fusion of subject and object markers, or with the appearance or non-appearance of independent pronouns.*
- Read through all the data first. Then go through it step by step, and formulate a hypothesis at each stage about the restriction on the passive. Amend your hypothesis to account for new data as necessary. Compare (4) with (7) and (6) with (8); then compare (6) with (9).
- I've used the notation ≠ in the English translations to indicate what the ungrammatical forms in Southern Tiwa would mean if they were grammatical.

(1) seuanide liora-mu-ban
man lady-see-PAST
'The man saw the lady.'

(2) liora mu-che-ban seuanide-ba
lady see-PASSIVE-PAST man-by
'The lady was seen by the man.'

(3) bey-mu-ban
2SG(SU)/1SG(OBJ)-see-PAST
'You saw me.'

(4) *te-mu-che-ban ʔĩ-ba
1SG(SU)-see-PASSIVE-PAST you-by
(≠'I was seen by you.')

(5) i-mu-ban
1SG(SU)/2SG(OBJ)-see-PAST
'I saw you.'

(6) *a-mu-che-ban na-ba
2SG(SU)-see-PASSIVE-PAST me-by
(≠'You were seen by me.')

(7) te-mu-che-ban seuanide-ba
1SG(SU)-see-PASSIVE-PAST man-by
'I was seen by the man.'

(8) a-mu-che-ban seuanide-ba
2SG(SU)-see-PASSIVE-PAST man-by
'You were seen by the man.'

(9) a-mu-che-ban awa-ba
2SG(SU)-see-PASSIVE-PAST him-by
'You were seen by him.'

(10) *seuanide mu-che-ban na-ba
man see-PASSIVE-PAST me-by
(≠'The man was seen by me.')

The data in this exercise are mostly from Allen and Frantz (1983) – modified slightly – with additional data courtesy of Don Frantz.

5. The data in (1) through (3) in this exercise (taken from Nedjalkov 1997) are from the Tungusic language Evenki, spoken in eastern Siberia.

Task: (i) Examine each pair, and figure out what is the function of the verbal suffix marked in bold in each (b) sentence – I have glossed it simply as SUFFIX, rather than showing its meaning. (ii) Identify exactly what kind of construction arises in the (b) sentences. (iii) What other grammatical changes occur in the (b) sentences? Why do they occur?

Hints

- Different verbs take different forms of the suffix in question, but the function of the suffix is the same in each instance.
- It will help to consider what arguments the verbs have in each pair of examples.
- You will need to concentrate especially on the glosses in each example, rather than on the English translations.

(1) a. Asatkan suru-re-n.
girl go.away-PAST-3SG
'The girl went away.'

b. Atyrkan asatkan-me suru-**pken**-e-n.
old.woman girl-ACC go.away-SUFFIX-PAST-3SG
'The old woman made the girl go away.'

(2) a. Beje eme-re-n.
man come-PAST-3SG
'The man came.'

b. Beje moo-l-va eme-**v**-re-n.
man tree-PL-ACC come-SUFFIX-PAST-3SG
'The man brought firewood.'

(3) a. Tyge d'alup-ta-n.
cup become.full-PAST-3SG
'The cup became full.'/'The cup filled.'

b. Asatkan tyge-ve d'alup-**ki**-ra-n.
girl cup-ACC become.full-SUFFIX-PAST-3SG
'The girl filled the cup.'

6. In Section 7.2, we introduced the idea that syntactically ergative languages can have a pivot which operates in terms of the *absolutive* NPs, whilst syntactically accusative languages can have a pivot which operates in terms of *subject* NPs. (You might like to revise Section 7.2 before tackling this exercise.) The data sets that follow are from two unrelated languages: A. is from Bare, an extinct language of the North Arawak family, from Brazil and Venezuela (the data are from Aikhenvald 1995) and B. is from Guugu Yimidhirr, a native language of Australia (the data are taken from Haviland 1979). Both data sets illustrate co-ordinate clauses with ellipsis of one grammatical relation in the second clause. Each clause is bracketed, and neither language uses actual conjunctions such as 'and'. You will need to look at the index on each NP in order to see which NP in the first clause the omitted NP refers back to.

Task: Examine each data set, and figure out whether each language is syntactically ERGATIVE or syntactically ACCUSATIVE. State your evidence clearly, using the correct grammatical terminology.

Hints

- I haven't labelled the NPs with A, S and O so you will need to work out for yourself which NP is the A, the S and the O in these examples.
- There is no actual case-marking on the NPs in Bare, so you won't be able to tell from the form of the noun phrases whether or not Bare is morphologically ERGATIVE.
- A language that is morphologically ergative may or may not also be syntactically ergative.

A. Bare

(1) a. [kwati$_i$ i-karuka tšinu$_j$] [Ø$_j$ i-baraka]
jaguar 3F.SG-bite dog 3F.SG-run
'A jaguar$_i$ bit the dog$_j$ and [it]$_j$ ran.'

b. [da kwati$_i$ i-d'áwika] [mawaya$_j$ a-kharuka Ø$_i$]
the jaguar 3F.SG-die snake INDEF-bite
'The jaguar$_i$ died (because) a snake$_j$ bit [it]$_i$.'

B. Guugu Yimidhirr

(2) a. [Nyulu yarrga$_i$ gada-y] [Ø$_i$ mayi$_j$ buda-y].
3SG boy.ABS come-PAST food.ABS eat-PAST
'The boy$_i$ came and [he]$_i$ ate the food$_j$.'

b. [Nyulu yarrga-a$_i$ mayi$_j$ buda-y] [Ø$_i$ gada-y]
3SG boy-ERG food.ABS eat-PAST come-PAST
'The boy$_i$ ate the food$_j$ and then [he]$_i$ came.'

7. The data in this exercise (slightly adapted from Chung 1976) are from Indonesian, a syntactically accusative language. The usual constituent order is seen in (1). You have five tasks to complete. (i) Examine these data in (1) first and state what is the unmarked order of the verb, subject, object and indirect object or oblique NP.

(1) a. Monjet men-gigit saja.
monkey TRANS-bite I
'A monkey bit me.'

b. Saja mem-bawa surat itu kepada Ali.
I TRANS-bring letter the to Ali
'I brought the letter to Ali.'

c. Mereka ber-lajar ke Amerika.
they INTRANS-sail to America
'They sailed to America.'

The next set of data illustrate a fronting process in Indonesian. (ii) Examine the sentences in (2) and (3) and figure out what GRAMMATICAL RELATION the fronted constituent must bear. Your answer should account both for the grammatical data in (2) and the ungrammatical examples in (3). (The English translations are deliberately neutral here, so you will need to study the original Indonesian carefully.) Then (iii) say what other grammatical changes occur when the constituent is fronted.

(2) a. Ikan merah itu dia sudah tangkap.
fish red the he PERF catch
'He already caught the red fish.'

b. Itu dapat kita lihat pada mata-nja.
that can we see in eye-its
'We can see that in its eyes.'

(3) a. *Polisi itu saja serahkan sendjata saja kepada.
police the I surrender weapon I to
('I surrendered my gun to the police.')

b. *Danau itu sedang mereka be-renang di.
lake the PROG they INTRANS-swim in
('They were swimming in the lake.')

The next data set illustrates a construction in Indonesian which alters grammatical relations, changing a basic sentence such as (4a) into (4b). (iv) What syntactic processes does this involve? Discuss them in terms of PROMOTION and/or DEMOTION and state the effects of the construction on the grammatical relations.

(4) a. Saya meng-kirim surat itu kepada wanita itu.
I TRANS-send letter the to woman the
'I sent the letter to the woman.'

b. Saya meng-kirim-i wanita itu surat itu.
I TRANS-send-APPLIC woman the letter the
'I sent the woman the letter.'

If the fronting construction you identified in connection with (2) and (3) applies to the examples in (4), the results are as follows: (5a) is ungrammatical but (5b) is grammatical. (v) In light of your answers concerning (4), account for this difference in grammaticality. You will need to say why the constituent can be fronted in (5b) but not in (5a).

(5) a. *Wanita itu saja kirim surat itu (kepada)
woman the I send letter the to
(≠ 'I sent the woman the letter.')

b. Wanita itu saja kirim-i surat itu.
woman the I send-APPLIC letter the
'I sent the woman the letter.'

8. In each of the following three data sets, A. to C., the (b)/(c) sentences show a CAUSATIVE construction derived from the corresponding (a) sentences.

Task: State how the causative is formed in each of the three languages illustrated. Your answer should include:

(i) an explicit statement of how the causative is expressed in each of the languages

(ii) an indication of and explanation for any additional grammatical changes in each example, especially in the verbal morphology, and in the position and morphology of any NP arguments of the verb

(iii) an attempt to explain the reason for the ungrammaticality in examples (8c) and (9c) in the Japanese data set.

Hints

- Don't worry unduly about the actual form of the verbal morphology in these examples. In some cases, there are alternations or irregularities in the morphology, but these need not concern us here.
- You will find it helpful to consider at the start whether the language in each data set is nominative/accusative or ergative/absolutive in its morphology.

A. K'iche' (data from Campbell 2000)

(1) a. š-e:-kam-ik
ASP-3PL.ABS-die-INTRANS
'They died.'

b. š-e:-qa-kam-isa:-x
ASP-3PL.ABS-1PL.ERG-die-CAUS-TRANS
'We killed them.'

(2) a. š-Ø-atin-ik
ASP-3SG.ABS-bathe-INTRANS
'He bathed.'

b. š-Ø-r-atin-isa:-x
ASP-3SG.ABS-3SG.ERG-bathe-CAUS-TRANS
'She washed him.'

B. Amharic (data from Amberber 2000)

(3) a. k'ɨbe-w k'əllət'ə
butter-DEF melt.PERF.3M.SU
'The butter melted.'

b. aster k'ɨbe-w-ɨn a-k'əllət'ə-čč
Aster(female name) butter-DEF-ACC CAUS-melt.PERF-3F.SU
'Aster melted the butter.'

(4) a. lɨǰ-u dabbo bəlla
child-DEF bread eat.PERF.3M.SU
'The child ate some bread.'

b. aster lɨǰ-u-n dabbo a-bəlla-čč-ɨw
Aster(female name) child-DEF-ACC bread CAUS-eat.PERF-3F.SU-3M.OBJ
'Aster fed the child some bread.'

(5) a. aster č'əffərə-čč
Aster(female name) dance.PERF-3F.SU
'Aster danced.'

b. ləmma aster-ɨn as-č'əffər-at
Lemma(male name) Aster-ACC CAUS-dance.PERF.3M.SU-3F.OBJ
'Lemma made Aster dance.'

C. Japanese (data from Dixon 2000 and Tsujimura 1996)

(6) a. Taroo-ga konsaato-e it-ta
Taro-NOM concert-to go-PAST
'Taro went to a concert.'

b. Ryooshin-ga Taroo-o konsaato-e ik-ase-ta
parents-NOM Taro-ACC concert-to go-CAUS-PAST
'His parents made Taro go to a concert.'

c. Ryooshin-ga Taroo-ni konsaato-e ik-ase-ta
parents-NOM Taro-DATIVE concert-to go-CAUS-PAST
'His parents let Taro go to a concert.'

(7) a. Hanako-ga aruita
Hanako-NOM walk.PAST
'Hanako walked.'

b. Taroo-ga Hanako-o aruk-ase-ta
Taro-NOM Hanako-ACC walk-CAUS-PAST
'Taro made Hanako walk.'

c. Taroo-ga Hanako-ni aruk-ase-ta
Taro-NOM Hanako-DATIVE walk-CAUS-PAST
'Taro had/let Hanako walk.'

(8) a. Hana-ga migotoni saita
flower-NOM beautifully bloom.PAST
'The flowers bloomed beautifully.'

b. Taroo-ga hana-o migotoni sak-ase-ta
Taro-NOM flower-ACC beautifully bloom-CAUS-PAST
'Taro made the flowers bloom beautifully.'

c. *Taroo-ga hana-ni migotoni sak-ase-ta
Taro-NOM flower-DATIVE beautifully bloom-CAUS-PAST
(≠'Taro had the flowers bloom beautifully.')

(9) a. Hanako-ga kizetu-sita
Hanako-NOM faint.PAST
'Hanako fainted.'

b. Taroo-ga Hanako-o kizetu-sase-ta
Taro-NOM Hanako-ACC faint-CAUS-PAST
'Taro made Hanako faint.'

c. *Taroo-ga Hanako-ni kizetu-sase-ta
Taro-NOM Hanako-DATIVE faint-CAUS-PAST
(≠'Taro had Hanako faint.')