chapter 5

Split ergativity

1 Introduction

The main hypothesis of this study is that UG allows for two syntactic licensing mechanisms, Accusative case in the complement of V and agreement in the specifier of I. Languages depending on these mechanisms for the realization of their verbal arguments will never be ergative. Their clauses always look as in (1).

(1)

Syntactic licensing of verbal arguments (chapter 2)				
Intransitive:	$[_{IP}\ DP_{S,\varphi}$	$V+I_{\varphi}$		]
Transitive:	$[_{IP}\ DP_{A,\varphi}$	$V+I_{\varphi}$	$DP_{O,Acc}$	]

So far, we have encountered two different environments in which ergativity can occur. The first environment is found in nonconfigurational languages with pronominal arguments (PAs), discussed in chapter 3. In these languages, every argument of the verb is base-generated as a pronoun which is incorporated into the predicate. The predicate-internal positions of the PAs show a clear nominative/Accusative pattern. We can account for this by assuming that object-PAs incorporate into *v*, whereas subject-PAs incorporate into I. Moreover, the phonological shape of the object-PAs often differs from the shape of the subject-PAs, which is explained by Accusative

case marking. Hence, in nonconfigurational languages, UG allows for the following structures:[1]

(2)

Second Pattern Hypothesis (SPH, chapter 3)				
Intransitive:		$[_{IP}\ LA_S$	$[_{IP}\ PA_{S(,\varphi)} + V+I_\varphi$	]]
Transitive:	$[_{IP}\ LA_{A,Erg}$	$[_{IP}\ LA_O$	$[_{IP}\ PA_{A(,\varphi)} + V+I_{(\varphi)} + PA_{O(,Acc)}$	]]]

In order to highlight an argument in the discourse, or in order to provide lexical information about it, a PA may be doubled by an independent pronoun or a full noun phrase. These lexical arguments (LAs) form a chain with their respective PAs, which means that they do not need any additional syntactic licensing. However, as we saw in chapter 3, languages with relatively simple PA-paradigms often use an oblique case marker on one of the LAs. If this marker appears on LA_A, it will be called Ergative.

In chapter 1, I introduced the central problem of this study. Ergativity is a marked phenomenon, both between and within languages. This means that most ergative languages are not exclusively ergative. The accusative pattern is always present somewhere in the grammar. This is called 'split ergativity', and it will be clear that the first type of split discussed in chapter 1 is inherent to the SPH, since this hypothesis entails ergatively patterning LAs versus accusatively patterning PAs.[2] From this point of view, split ergativity appears to be the standard case, rather than an exception.

Things are slightly different for the languages discussed in chapter 4. In those systems, only transitive subjects (A) incorporate, creating a morphologically ergative pattern by having agreement between the verb and

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[1] Case and agreement are put between brackets, since they are not strictly necessary for the licensing of PAs. In principle, incorporated pronouns are morphologically licensed, which means that there is no need for syntactic licensing as well.

[2] The language I mentioned in chapter 1 with respect to this type of split is Djaru.

the intransitive subject (S) or direct object (O). Clauses in these languages will display the structures in (3).

(3)

Ergative as Passive Hypothesis (EPH, chapter 4)					
Intransitive:		$[_{IP}\ DP_{S,\varphi}$	$V+I_{\varphi}$		]
Transitive:	$[_{IP}\ LA_{A(,Erg)}$	$[_{IP}\ \varnothing_{A}/PA_{A}$ +	$V+I_{\varphi}$	$DP_{O,\varphi}$	]]

Person/number marking in these systems always shows an ergative pattern: agreement affixes refer to S/O, the absolutive relation, whereas the A-argument is incorporated. It is either realized by an empty element, as in Kurmanji, or by a fully specified PA, as in Basque, Northwest Caucasian and Mayan.[3] The LA-double of the PA may carry an oblique case marker which will be interpreted as Ergative, as in SPH-languages. The LA typically adjoins to IP, ruling out syntactically ergative constructions.[4] This could be conceived of as a second kind of split ergativity, opposing morphological ergativity against syntactic accusativity. Again, split ergativity is a rule, rather than an exception, even from the perspective of the EPH.

However, apart from the two kinds of splits discussed above, there are at least two other types of morphological splits. In the present chapter, I will focus on these splits and see to what extent my proposal explains each one of them. In section 2, I will discuss systems that reserve the ergative pattern for certain tenses, aspects, moods, or particular types of clauses.[5] It will become clear that both the SPH and the EPH are compatible with such systems, provided that we allow for restrictive application. In section 3, however, we will see that it is less straightforward to account for splits that

[3] As I argued in chapter 4 (section 3), PA-paradigms in EPH-languages sometimes contain an empty category for third person singular.

[4] Dyirbal appears to be one of the few exceptions. The explanation offered in chapter 4 is based on the assumption that the LA in Dyirbal adjoins to *v*P, as it does in canonical passive construction. A further assumption was that the language is in a transitional stage between nonergative and ergative.

[5] The typical example of this split in the present study is Kurmanji (Kurdish).

are determined by grammatical person features. Languages displaying this type of split refer to the same nominal hierarchy that plays a role in differential object marking (cf. chapter 2). DPs below a certain cutoff point pattern ergatively, whereas higher ranking DPs pattern accusatively. In other words, the nominal hierarchy is divided into two (and sometimes three) zones, each of which has its own type of marking. When both arguments of a transitive clause are within the same zone, the clause will either show nominative/Accusative or absolutive/Ergative marking. When both arguments are located in different zones, however, nominative/absolutive or Ergative/Accusative marking occurs. These unexpected patterns are found both within case marking and verbal person/number marking. I will show on the basis of Nez Perce, a native American language from the Penutian stock, that these patterns are best captured under the SPH. This means that every argument in these languages is base-generated as a PA, which is optionally doubled by an LA. For this analysis to apply, it will be necessary to show that the person/number markers on the verb show a neat nominative/Accusative pattern, as we would expect when they are PAs. This approach is new, as it needs additional assumptions about the interplay of person/number markers and *inverse* markers.[6] Once we have taken this step, the only difference with SPH-languages like Warlpiri will be the split in LA-case marking. This split, in turn, will find a straightforward explanation thanks to detailed information in the literature about the historical development of the case markersin Nez Perce. Before moving to the concluding chapter 6, I will summarize the main findings of the current chapter in section 4.

[6] Several languages have a special mechanism for expressing the relative position of the arguments of a transitive clause on the nominal hierarchy. When A is higher than O with respect to this hierarchy, a *direct* marker will be used. In situations where A is lower than O, an *inverse* marker is in place (cf. Givón (1994)).

2 Splits conditioned by tense, aspect, mood or clause type

As already discussed in the previous chapter, Indo-Aryan languages often have an ergativity split that is conditioned by tense or aspect. The Iranian branch is characterized by an ergative pattern that occurs in past tenses only. In Indo-Aryan languages, it occurs in perfective aspect. There is little controversy about the historical explanation for these restrictions: the ergative construction has developed out of a passive construction. This construction once functioned as a periphrastic alternative to a synthetic verbal form indicating past tense/perfective aspect. When the latter was lost, the periphrastic construction became the only way to express past/perfective, thus entirely replacing the active construction in that particular tense/aspect (Dixon 1994, Bubeník 1998). In subsection 2.1, I discuss the ergative construction in Kurdish, which is restricted to past tense. It will become clear that this split can be explained by simply restricting the EPH to past tense environments. In passing, we will see that Sorani, a Southern Kurdish dialect, gives an interesting twist to the EPH in that it has constructions where Accusative case is used in order to license the direct object, instead of agreement. In subsection 2.2, I will briefly look at Georgian, for which it can be argued that the SPH is active in the aorist/perfective. Finally, in subsection 2.3, several Mayan languages will be discussed in order to show that accusative patterns are sometimes derived from an ergative EPH-pattern. In 2.4, I will summarize the implications of these splits for my proposal. The main observation will be that split ergativity of the type discussed in this section is to be expected on the basis of inflectional variation found across languages.

2.1 Kurdish

Under the present proposal, a split governed by tense, aspect, mood (henceforth TAM) or clause type suggests that the SPH or the EPH applies to a subset of TAM-combinations or clause types. Recall from Kurmanji,

discussed in the previous chapter (subsection 2.2), that present tense clauses in this language show the accusative pattern. In these clauses, Kurmanji is just like English in having Accusative objects and verbs agreeing with their subjects. In past tense clauses, however, the language uses an ergative pattern on the basis of the EPH: the A-argument is realized by an incorporating empty category, whereas S and O are licensed by agreement. The LA-double is marked for Ergative case.

The second variant of the EPH, according to which transitive subjects are realized by fully specified PAs (cf. (3)), is found elsewhere in Kurdish. As is the case in Kurmanji, this ergative pattern is found in past tense clauses only. Consider the following examples from Sorani.[7] This dialect lacks overt case marking, but in present tense the verb agrees with the subject.

(4) **Sorani** (Indo-European, Indo-Iranian, Iranian, Kurdish)

a. *min* *da-ro-m*
1SG PROG-go.PRS-1SG
'I am going.'

b. *to* *da-ro-ît*
2SG PROG-go.PRS-2SG
'You are going.'

c. *min* *to* *da-bîn-im*
1SG 2SG.ACC PROG-see.PRS-1SG
'I am seeing you.'

d. *to* *min* *da-bîn-ît*
2SG 1SG.ACC PROGT-see.PRS-2SG
'You are seeing me.'

(Mariwan Kanie)

[7] Sorani, which is predominantly spoken in Iran and Iraq is often called Suleimaniye Kurdish. Most Kurmanji speakers originate from Turkey and Syria. Whereas Sorani is referred to as Central Kurdish, Kurmanji is termed Northern Kurdish. A third group of dialects is called Southern Kurdish, but I do not have any linguistic information about them (source: Ethnologue).

In (4a/c), verbal agreement with a first person singular subject is indicated by the suffix *–(i)m*; in (4b/d), the suffix *–ît* indicates agreement with a second person singular subject. Assuming that the direct objects in the above sentences bear abstract Accusative case, Sorani is no different from English in present tense clauses.

In past tense clauses, only intransitive subjects seem to be able to trigger agreement on the verb. Transitive subjects are obligatorily represented by a PA that cliticizes to some constituent that comes early in the sentence, for instance the direct object.

(5) **Sorani**: ergative constructions

a. *min* *ro-îsht-im*
1SG go-PST-1SG
'I went.'

b. *to* *ro-îsht-ît*
2SG go-PST-2SG
'You went.'

c. *min* *to=m* *bîn-î*
1SG 2SG=1SG.A see-PST
'I saw you.'

d. *to* *min=it* *bîn-î*
2SG 1SG=2SG.A see-PST
'You saw me.'

(Mariwan Kanie)

The agreement suffixes *–im* and *–ît* in (5a/b) belong to the same agreement paradigm as the verbal suffixes in (4).[8] The suffixes that attach to the direct object in (5c/d) belong to a different paradigm. Not only do the forms of this paradigm differ from the agreement markers, they also show different

[8] There is one difference though. In past tense clauses, third person singular triggers an empty morpheme, which contrasts with *–et* in present tense environments.

syntactic behaviour.[9] Rather than exclusively attaching to the verb, they seem to behave like second position clitics (cf. MacKenzie (1961), Bynon (1979) for more details). This is perfectly compatible with the EPH, which states that PAs incorporate into I. Both MacKenzie (1961:76,77) and Bynon (1979:217) argue that these markers have the status of pronouns, as they allow for omission of an independent noun or pronoun, which is supposed to be an adjunct under the EPH. Indeed, the following sentences have been accepted as alternatives to the ones in (5c,d):

(5') **Sorani**:

a. *to-m* *bîn-î*
2SG=1SG.A see-PST
'I saw you.'

b. *min-it* *bîn-î*
1SG=2SG.A see-PST
'You saw me.'

(Mariwan Kanie)

The fact that PAs attach to constituents like the direct object can be captured by assuming that in this type of sentence, the verb stays in its base-position. V-to-I movement takes place after Spell Out. The structure of (4d) is given in (6).[10]

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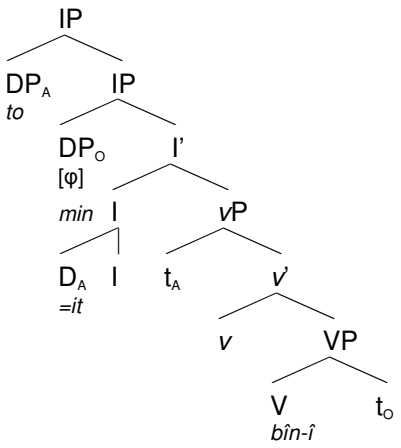
[9] The formal differences are found with the following person/number combinations (agreement vs. PA): third person singular (*-(ê)t* vs. *-î/-y*) and plural (*-in* vs. *-yân*); first person plural (*-în* vs. *–mân*) and second person plural (*-in* vs. *-tân*). The corresponding independent forms are *aw* ('3SG'), *(h)êma* ('1PL'), *êwa* ('2PL') and *awân* ('3PL') (MacKenzie 1961:73,76,89). These independent pronouns do not correspond to either of the PAs in any transparent way, except perhaps for *awân*, which seems to be closer to the PA (*-yân*) than the agreement suffix (*-in*), as we would expect. As I have done in the case of Basque, I will assume that the PAs use roots that are no longer available in the independent forms.

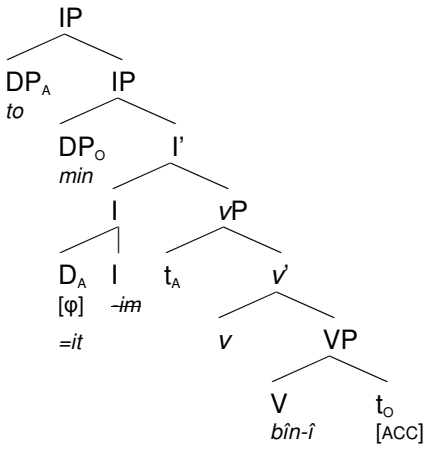
[10] Note that although the verbal suffix *-î* represents past tense, it does not originate under I. According to the recent minimalist view, lexical items are fully inflected when they enter the syntactic derivation.

(6) Past tense transitive clause in Sorani: standard EPH-approach (cf. (4d))



The tree in (6) suggests that licensing of the object is done by agreement. However, there is no overt agreement morphology in the transitive sentences (5c,d). Both MacKenzie and Bynon argue that such sentences contain an *empty* agreement morpheme, which, according to MacKenzie, is an allomorph of the agreement suffixes in intransitive clauses (cf. (5a,b)). Bynon (1979:220-224), on the other hand, argues that the transitive subject is the trigger of such an empty agreement morpheme. Because of the fact that we are dealing with empty agreement, we should consider both options. Following MacKenzie appears to be the most logical option according to the EPH. Bynon's analysis, however, should not be ruled out either. Recall from chapter 4 (subsection 2.4) that languages like Ukrainian have passive constructions in which the internal argument is licensed through Accusative case. The explanation I proposed in order to deal with these examples, assumes that agreement must be unavailable to the object. This effect is ascribed to the empty A-argument, which triggers agreement while incorporating. Translating this analysis to Sorani results in the following tree:

(7) Past tense transitive clause in Sorani: alternative EPH-approach (cf. (4d))



In (7), the direct object is licensed by Accusative case. The transitive subject is an incorporating PA which triggers agreement. I assume that the agreement suffix is realized in the structure, but that it is deleted in the pronunciation. The reason for this might be that it marks the verb redundantly for the same argument. The direct object moves to Spec,IP because of the extended projection principle, not in order to check agreement. By itself, the analysis in (6) is not better or worse than the one presented in (7), but I will prefer the latter because it more or less explains why intransitive clauses have overt agreement, unlike transitive clauses: in the latter, agreement is triggered by an incorporating PA, whereas in the former, it is triggered by an independent DP.

It is not impossible for a transitive verb to show overt person/number marking referring to the internal argument. This is illustrated in (8). In these sentences, a suffix belonging to the agreement paradigm is used in order to refer to the direct object. Remarkably, this type of verbal marking must not co-occur with an independent object noun or pronoun.

(8) **Sorani**: transitive verbs marked for person/number of the object

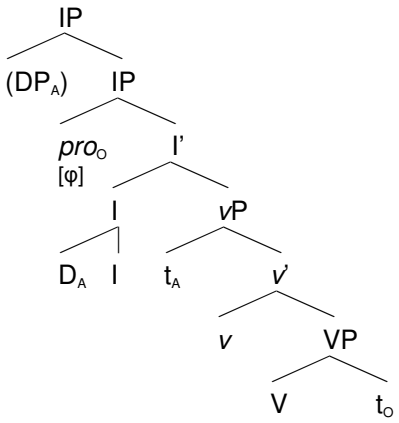
a. *(*to)* *bîn-î-m-ît*
2SG see-PST-1SG.A-2SG
'I saw you'

b. *(*min)* *bîn-î-t-im*
1SG see-PST-2SG.A-1SG
'You saw me'

(Mariwan Kanie)

The following situation obtains in Sorani past tense clauses: unlike intransitive subjects, direct objects appear to be in complementary distribution with their corresponding person/number suffix. Recall from chapter 2 (section 3) that exactly this distribution is the key characteristic of *anaphoric agreement*. This type of agreement often represents the first stage of the development from pronoun to agreement marker. Thus a plausible analysis for this state of affairs is that the anaphoric agreement marker only allows for a *pro* object. Compare the tree below with the one in (7).

(7') Past tense transitive clause in Sorani: agreement with O (cf. (8), (8'))



In this tree, the transitive subject incorporates but does not trigger agreement. Hence, the direct object is licensed by agreement, and not by Accusative case. The agreement suffix follows the incorporated A, and is not

deleted because it provides relevant information, namely person and number of the O-argument. The following sentences show that doubling the incorporated A is still possible in these constructions:

(8') **Sorani**:

a. *(min)* *(*to)* *bîn-î-m-ît*
1SG 2SG see-PST-1SG.A-2SG
'I saw you'

b. *(to)* *(*min)* *bîn-î-t-im*
2SG 1SG see-PST-2SG.A-1SG
'You saw me'

(Mariwan Kanie)

Concluding the discussion of Kurdish, we can say that Northern Kurdish (Kurmanji) and Southern Kurdish (Sorani) both have an ergative construction that is restricted to past tenses. Historical analysis shows that the ergative construction developed out of a passive construction. This calls for an analysis along the lines of the EPH. Kurmanji appears to follow the pattern in which transitive subjects are licensed by an incorporating empty argument. Sorani, however, chooses to incorporate overt pronouns, and hence has a PA-paradigm. This language differs from the languages discussed in chapter 4 in having constructions where incorporation apparently goes along with agreement. In these constructions, the direct object is licensed by Accusative case. This, in turn, resembles certain passive clauses in Ukrainian. Alternative constructions show that the transitive verb does show agreement with the internal argument, which is necessarily empty (*pro*).

In languages with the type of ergative split found in Kurdish, the EPH appears to be active in only a subset of its clauses. Application of the EPH in these languages is conditioned by functional features such as tense, aspect or mood. Whatever the exact cause may be of this conditioning, it is clear that the attested patterns fit in well with my proposal. Not a single assumption made in the previous chapters needs to be dropped.

2.2 Georgian

Theoretically speaking, it is imaginable that a given language X would restrict application of the SPH similarly to Kurdish. However, I am not aware of any language that has PAs for all verbal arguments for only part of its TAM-combinations. Usually, nonconfigurational PA-languages seem to be consistent in having PAs in every utterance that involves a finite verb and one or more arguments. What we do find, are full-fledged PA-languages in which ergative case marking on LAs is restricted by tense/aspect. Georgian appears to be such a language.[11] Recall from chapter 1 (subsection 3.1) that every finite verb in Georgian carries subject and object markers that pattern nominative/Accusatively irrespective of tense, aspect or mood. In non-aorist, nonperfect tenses, the corresponding LAs follow the same pattern. Subjects are in the unmarked case, whereas objects appear in the Accuative.[12]

(9) **Georgian**: accusative LA-marking in non-aorist, nonperfect tenses

a. *is* *seirn-ob-s*
3SG walk.PRS-TS-3SG.S
'S/he is going.'

b. *is* *∅-ban-s* *mas*
3SG 3O-wash.PRS-3SG.A 3SG.ACC
'S/he is washing him/her/it.'

(Kakhi Sakhltkhutsishvili)

In (9), *-s* is the third person singular subject PA. This argument may be doubled by *is* which is the unmarked independent pronoun for third person singular. The direct object-LA, which is empty for third person singular, is doubled by the independent pronoun *mas*, carrying Accusative case. In aorist and perfect tense, the LA-case pattern is ergative.

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[11] For an analysis of Georgian along the lines of Jelinek (1984), see Boeder (1989).

[12] In Georgian, core case distinctions on LAs are only shown by third person nouns and pronouns. The direct object case is usually called Dative because it is homophonous to the case marker found on indirect object-doubles.

(10) **Georgian**: ergative LA-marking in aorist and perfect tenses

a. *is* *i-seirn-a*
3SG AOR-walk-AOR.3SG.S
'S/he was going.'

b. *man* *da-∅-ban-a* *is*
3SG.ERG PREV-3O-wash-AOR.3SG.A 3SG
'S/he was washing him/her/it.'

(Kakhi Sakhltkhutsishvili)

In the aorist, a third person singular subject-PA is contained in the portmanteau morpheme *–a*, which also expresses aorist tense. Again, this PA can be doubled by *is* in case of an intransitive subject, but a transitive subject requires the use of *man*, which consequently functions as an Ergative form. The direct object, realized by an empty PA-prefix, can only be doubled by an unmarked form, *is* in (10b).[13] Georgian appears to be just like Warlpiri, as long as sentences are in aorist/perfect tenses.

As I have argued in chapter 3 (section 4), the case system found on LAs in SPH-languages seems to be determined by the availability of oblique cases. When there are multiple oblique cases, there is no a priori reason to exclude the possibility that the choice of LA-case marking differs with respect to tense, aspect or mood. Again, this does not involve any change of the current proposal.

2.3 Mayan

Within the Mayan family, split ergativity comes in different types, with most splits being based on aspect and clause type. The morphologically ergative pattern described in chapter 4 (sub-subsection 3.1.4) is common to all

[13] Georgian appears to allow for true distributive quantifiers (cf. Gil (1995)) which may occur in all argument functions (Kakhi Sakhltkhutsishvili, p.c.). This suggests that an SPH-analysis is only tenable when empty prefixes like the one in (9b) and (10b) receive an analysis similar to the one given for the empty A-argument of a passive. I consider this a topic for future research.

Mayan languages, and can be explained by the EPH as depicted in (3).[14] Mayanists seem to agree on the hypothesis that proto-Mayan was morphologically ergative too (John Justeson (p.c.), see also England (1983:261)). Hence, any alternative pattern is probably best analyzed as a deviation from the ergative pattern. Interestingly, quite different kinds of patterns are found (cf. Dixon 1994:100). At least three different kinds of deviation from the standard ergative pattern have been reported in the literature.

The first alternative pattern is found in two languages of the Ch'olan sub-branch, Chontal and Ch'ol. In imperfective contexts, *intransitive* subjects trigger the verbal paradigm that is normally used for transitive subjects. This is shown in the following sentences, notably (11b).

(11) **Ch'ol** (Mayan, Ch'olan-Tzeltalan, Ch'olan): imperfective clauses

a. *ca* *til-iy-on*
ASP come-PRF-1SG
'I came.'

b. *mi-h* *suht-el*
ASP-1SG.S return-IPFV
'I return.'

c. *mi-h* *wahl-en-et*
ASP-1SG.A mock-IPFV-2SG
'I ridicule you.'

(Quizar & Knowles-Berry 1988:77,78)

Aspect in Ch'ol is expressed by means of a particle that hosts PAs and by a verbal suffix.[15] In (11a), a sentence with perfective aspect, there is

[14] Recall from the previous chapter that Mayan languages lack overt case marking, and that they have a PA-paradigm for transitive subjects (A) and an agreement paradigm referring to the absolutive relation (S/O).

[15] In general, the PA-markers are considered to be a set of verbal prefixes in Ch'olan, but these examples show that the members of this set suffix to preceding aspectual particles.

agreement between the verb and the intransitive subject (*-on* '-1SG'). In (11b), which has imperfective aspect, agreement morphology is absent. Instead, the aspectual particle hosts a suffix (*-h* '1SG.S') which is identical to the transitive subject-PA in the c-sentence, the occurrence of which is independent of aspect. Although I do not have any data on quantification, I will henceforth assume that imperfective clauses in Chontal and Ch'ol instantiate the following pattern:[16]

(12)

Chontal & **Ch'ol**: alternative pattern (cf. (3))				
Intransitive:	$[_{IP}\ LA_S$	$[_{IP}\ PA_S + V+I$		]]
Transitive:	$[_{IP}\ LA_A$	$[_{IP}\ PA_A + V+I_\varphi$	$DP_{O,\varphi}$	]]

According to (12), subjects (S/A) incorporate, whereas objects (O) are licensed by agreement. The morphological pattern depicted here is formally *accusative*, instead of ergative, since subjects are treated alike, and opposed to the object.[17] According to Larsen & Norman (1979:354), the deviant accusative pattern found in Chontal and Ch'ol is also attested in Ixil, Pocomam (both in the Quichean-Mamean branch) and the Yucatecan branch.

In Ch'orti', the third Ch'olan language, a variation on the pattern described above is encountered: intransitive subjects in imperfective clauses are marked by a *third* set of verbal affixes (termed Set C).[18] Compare the following examples from Ch'orti' with the Ch'ol sentences in (11):

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[16] In Chontal, the alternative pattern is restricted to affirmative imperfective contexts, the ergative pattern being maintained when an imperfective sentence is negated.

[17] It is imaginable that the subject-PAs will eventually be reanalyzed as agreement markers, whereas the agreement paradigm functions as a set of object-PAs.

[18] Note that the paradigm that I refer to as 'PA' is traditionally called 'Set A', whereas my 'Agr.' paradigm is commonly called Set B by Mayan linguists.

(13) **Ch'orti'** (Mayan, Cholan-Tzeltalan, Ch'olan)

a. *wayan-et*
sleep-2SG

'You slept.'

b. *i-wayan*
2SG.S-sleep

'You sleep.'

c. *a-ira-en*
2SG.A-see-1SG

'You see me.' or 'You saw me.'

(Quizar 1994:122,133,134)

Unlike its sister languages, Ch'orti' does not have overt aspectual morphology. Aspectual differences are marked through different person/number markers for intransitive subjects. The use of the agreement marker *-et* ('2SG') in (13a) implies perfective aspect. In order to interpret the sentence as having imperfective aspect, a Set C marker (*-i* '2SG.S') has to be used (cf. (13b)). Remarkably, transitive clauses are ambiguous with respect to aspect, since they always have a PA marker for the subject and an agreement marker for the object (cf. (13c)). Markers of Set C do not occur in transitive sentences. The three paradigms of verbal person/number marking in Ch'orti' are listed in (14) below.[19]

[19] Allomorphs are not listed in Quizar & Knowles-Berry's table because they involve the metathesis of vowels and are thus too numerous.

(14) **Ch'orti'**: verbal marking

		Verbal marking			
		S/O	A (PAS)		'Set C' (S)
SG	1	*-en*	*in-/ni-*		*in-*
	2	*-et*	*a-*		*i-*
	3	*-∅*	*u-*		*a-*
PL	1	*-on*	*ka-*		*ka-*
	2	*-oš*	*i-*		*iš-*
	3	*-ob'*	*u-…-ob'*		*a-…-ob'*

(Quizar & Knowles-Berry 1988:75)

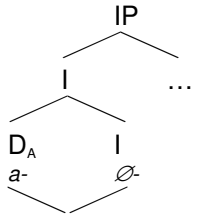
The table in (14) suggests that *imperfective* clauses employ a tripartite system: transitive verbs carry a PA-prefix for the A-argument and an agreement suffix referring to O.[20] Intransitive verbs carry a unique prefix expressing features of the intransitive subject. *Perfective* clauses never use Set C, they are subject to the EPH. Comparison of Set C with the other two paradigms reveals that Set C and the PA-paradigm are closely related, both with respect to the type and form of the affixes. Therefore, it is very likely that Set C has been developed out of the PA-paradigm, and hence has the same status (as I have indicated in the glosses in (14)). I will assume that Ch'orti' is like its sister languages Ch'ol and Chontal in using the PA-markers for all subjects of imperfective verbs.

I propose to explain the difference between the PA-paradigm and Set C as follows: Set C consists of PA-markers plus imperfective morphology. In other words, intransitive clauses with imperfective aspect contain an overt aspectual marker in I, unlike other clauses. When a PA-marker incorporates into imperfective I, a Set C-marker spells out the complex I-head. This is shown in (15b):

[20] Recall from chapter 1 (subsection 2.4) that languages like Kham show tripartite case marking.

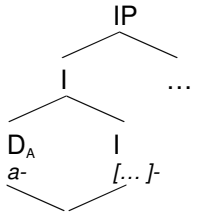
(15) **Ch'orti'**: imperfective I after incorporation of the subject

a. Transitive (cf. (13c))



a- (PA)

b. Intransitive (cf. 13b))



i- (Set C)

Transitive subjects are always realized by a member of the PA-paradigm. The structure in (15a) represents the situation in perfective and imperfective aspect, as it is assumed that I is zero in both types of aspect. Intransitive verbs, however, only allow for incorporation of their single argument when the clause has imperfective aspect. This is shown in (15b), where it is assumed that I is overt. Fusion of the PA-marker and the overt I yields a Set C-marker. I conclude that aspectual morphology is not entirely absent from Ch'orti'. In intransitive clauses, I is represented by an overt affix when a clause is imperfective. The question why transitive clauses cannot be marked for imperfective aspect, remains unanswered under this analysis.

The advantage of the proposed solution is that split ergativity in Ch'orti' does not differ significantly from the split pattern found in its sister languages. In fact, Quizar (1994) provides indirect support for the hypothesis that the Set C markers are PAs. Recall that such a hypothesis puts restrictions on the referentiality of the LA-doubles. Now word order in Ch'orti' intransitive clauses appears to be sensitive to the topicality of the subject. Quizar shows "that SV is used when S is a previously established topic within the discourse, and VS is used when S is a nontopic (either for an NP that is to be considered a nontopic or for the initial introduction of a topic NP)." (1994:135-136). Test analysis shows that when new topics are established as intransitive subjects, this is primarily done by stative constructions. Stative predicates in Ch'orti' behave like perfective intransitives, that is, they license their subject by agreement, instead of realizing it by an LA (doubling a Set C

marker). A tentative conclusion is that introducing new referents is preferably done in argument position, not in adjunct positions. This fact is compatible with the idea that set C markers are PAs, rather than agreement markers. Of course, more data will be needed in order to fully investigate this claim. For more morphological details on the patterns discussed above, see Larsen & Norman (1979) for Mopán (Yucatecan) and Quizar & Knowles-Berry (1988) for the three Ch'olan languages.

So far, we have seen two examples of split ergativity in Mayan that is determined by aspect. Another determining factor is clause type. The two non-ergative patterns described above not only occur in Ch'olan clauses with imperfective aspect, but also in certain kinds of subordinated clauses. The same is true for the Kanjobalan sub-branch (cf. Larsen & Norman 1979:354) and Mamean (England 1983:259-276). In Mam, as well as in Aguagatec, a third alternative to the general Mayan ergative construction is found: in certain *subordinated* clauses, agreement morphology is absent and all arguments seem to be represented by a member of the PA-paradigm. This is illustrated by the temporally subordinated clauses in (16b,c):

(16) **Mam** (Quichean-Mamean, Greater Mamean, Mam)

a. *ma* *chi* *kub'* *t-tx'ee7ma-n* *xiinaq* *tzee7*
RPST 3PL DIR.AUX 3SG.A-cut-DR man tree
'The man cut the trees.'

b. *[ok* *<u>t</u>-ku'-x* *ky-awa-'n* *xjaal* *kjo7n* *], …*
when <u>3SG.O</u>-DR-DR 3PL.A-plant-DR person cornfield
'When the people plant the cornfield, …'

c. *n-chi* *ooq'* *[<u>t</u>-poon* *ky-txuu'* *]*
PROG-3PL cry <u>3SG.S</u>-arrive 3PL.POSS-mother
'They were crying when their mother arrived.'

(England 1983:259; 1988:527)

Consider *t-* ('3SG.A-') in (16a). This prefix represents the A-argument in a main clause, which is typical of the Mayan ergative construction. While the main clause predicates in (16a,c) contain agreement morphology referring to

O or S (*-chi* '-3PL'), the embedded clauses exclusively employ members of the PA-paradigm. In (16b), *t-* appears to realize '3SG.O', whereas in (16c), it realizes '3SG.S'. In main clauses, these two arguments would only trigger an agreement prefix, which has the allomorphs *∅-/tz-/tz'-/k-* (cf. England (1988:526)). In subordinated clauses, however, there is no formal difference between the person/number marking triggered by S, A or O. Note that subordinate clauses do not differ from main clauses with respect to the positions occupied by the markers referring to S/O. The PA-forms in S/O-function of subordinated verbs occur in the same position as agreement markers on main clause predicates.[21]

Under the present proposal, a possible explanation for this phenomenon is that every core argument is realized by a pronominal argument in Mamean subordinated clauses. If we assume that all these PAs are licensed by incorporation, we expect to find patterns typical of SPH-languages. As I showed in chapter 3 (sub-subsection 2.3.2), direct object PAs incorporate into *v*, whereas subject-PAs incorporate into I. This means that S/A-PAs occupy the same slot, which differs from the slot occupied by O-PAs. This is not true for Mamean subordinated clauses, so this cannot be the whole story. Thus an additional assumption would have to be that S/O-PAs first move to Spec,IP, where they trigger agreement. Unlike in main clauses, agreement is covert in the clauses under investigation. Finally, S/O-PAs

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[21] More specifically, the order of elements in the predicate is as follows:

ASPECT + S/O + (DIRECTIONAL AUXILIARY) + (A) + stem + ENCLITIC

(England 1988:526)

It should be noted that England's examples do not distinguish between morphemes and words in a consistent way. For example, although the agreement marker *chi* ('3PL') in (16c) is analyzed as a verbal prefix, it is written as a separate word. I will analyze every agreement marker as a bound affix, but I will remain indeterminate with respect to aspectual morphemes and so-called directional auxiliaries.

cliticize phonologically to preceding or following material.[22] This is shown in the following structures:[23]

(17)

Mamean: alternative pattern (cf. (3) and (12))	
Intransitive:	$[_{IP}\,[_{IP}\,PA_{S,\varphi} = V{+}I_{\varphi}\quad]\quad LA_{S}\,]$
Transitive:	$[_{IP}\,[_{IP}\,[_{IP}\,PA_{O,\varphi} = V{+}I_{\varphi} + PA_{A}\,]\quad LA_{A}\,]\quad LA_{O}\,]$

Recall from chapter 4 (sub-subsection 3.2.4) that Mamean languages provide syntactic evidence for the EPH by prohibiting interrogation, negation and focusing of the A-argument. The patterns in (17) suggest that in subordinated clauses, these restrictions apply to every verbal argument. As I have not been able to check this, I have to leave the issue for future research. What is important here, is that Mamean points us to another theoretical possibility predicted by my proposal: the pattern in (17) is an alternative version of the EPH in (3).

Concluding the discussion on Mayan languages, we have seen that it seems to be possible to extend the use of PAs, normally used for transitive subjects only, to intransitive subjects. This only happens in imperfective clauses, as exemplified by the Ch'olan branch.[24] Subordinated clauses in Mamean suggest that the EPH allows for a version where every core argument is realized as a PA. The EPH in its original version, then, appears to be restricted to clauses with perfective aspect or main clauses. Again, this fact does not urge us to change any of the assumptions made so far.

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[22] Recall from chapter 3 (sub-subsection 2.3.4) that phonological cliticization plays a role in Straits Salish. For this language, I have assumed that C phonologically cliticizes to its specifier. In Mamean subordinate clauses, this type of cliticization is of course only possible when the aspectual morpheme is an independent word, instead of a verbal morpheme (see footnote 21).

[23] Notice that in Mam, independent argument-doubles attach to the right of IP.

[24] Note that the same pattern is found in certain subordinate clauses, which I have not discussed for these languages. More information can be found in Quizar & Knowles-Berry (1988).

2.4 Conclusion

In this section, I have discussed various kinds of split ergativity based on TAM/clause type. In most cases, we are dealing with restrictive application of some version of the EPH. In Kurdish, only past tense clauses are subject to the EPH. In Mayan languages, perfective aspect or main clauses may trigger EPH-ergativity. Non-ergative contexts in Kurdish are comparable to accusative patterns in English, but in Mayan they appear to be derived by extending the use of verbal PA-markers to S-function and/or O-function.

The question is of course why the languages in question restrict the application of the EPH in the ways just described. According to Dixon (1994:97-104), there is a general tendency to reserve the ergative pattern for clauses that describe some definite result, which is exactly what past tense and perfective aspect seem to do. There are other examples of languages where ergativity is obligatory in the indicative mood, but optional in non-indicative moods. Dixon suggests that the rationale behind this is that speakers tend to describe events from the perspective of the *agent* in present and future tense, imperfective aspect and non-indicative moods. In past tense, perfective aspect and indicative mood, speakers tend to describe events from the perspective of the *undergoer*. This reminds us of the functional distinction between active and passive clauses. The A-argument of an active clause is more topical than the O-argument, whereas in a passive clause, O is much more topical than A.

Recall that the ergative construction in languages like Kurdish is historically related to a passive construction. At a certain stage in the proto-language, this construction functioned as an alternative to the synthetic past. Although the ergative construction in present-day Kurdish dialects does not function as a passive anymore, we can at least understand why it is restricted to past tense, assuming that Dixon's explanation is on the right track. The same might be true for Georgian, which I analyze as an SPH-language. Recall from chapter 3 that LA-case marking in SPH-languages depends on the availability of oblique cases. If a language has several cases

available, both the A-argument and the O-argument may be marked. The tendency to describe past/perfective events from the perspective of the undergoer is compatible with an ergative case pattern, which leaves the O-LA unmarked. The tendency to describe present/imperfective events from the perspective of the actor is compatible with an accusative case pattern, which leaves the A-argument unmarked.

With respect to Mayan languages, Dixon's explanation is less straightforward. There is no evidence at all suggesting that the ergative construction in these languages once functioned as a passive construction. By assuming that the non-ergative constructions in these languages are recent innovations, we could perhaps say that the similar treatment of S and A are driven by the tendency to describe events from the perspective of the actor. When both S and A are realized by a PA, and O is licensed by agreement, as appears to be the case in Ch'olan, the treatment of O is actually marked with respect to S/A, resembling the situation in accusative systems. Realizing every argument by a PA, as appears to be done in Mamean, is perhaps a step in the same direction.

Considering the fact that the inflectional domain often shows variation triggered by certain TAM-values or clause types, it does not come as a surprise that incorporation of the A-argument or choosing a particular LA-case pattern shows similar variation. Whatever may be the exact motivation for the general patterns found in TAM/clause type-split ergativity, the most important conclusion is that my proposal can deal with it. All we need to do is assume that the SPH or EPH sometimes applies in a restricted area of the grammar. For Kurdish and Mayan, we can roughly say that the behaviour of I is parameterized. When I represents past tense (in Kurdish), it allows for incorporation of A, following the EPH. When representing present tense, incorporation is impossible. In Mayan, I always allows for incorporation of the A-argument. Imperfective I, however, allows for incorporation of S as well (in Cholan). Combined with Dixon's observation, we now have a plausible account for the fact that ergativity is often restricted within languages. In

comparison to other approaches to ergativity, the present proposal has the advantage of relating the phenomenon to specific behaviour of I. Just like other types of behaviour of I, incorporation behaviour may show variation determined by TAM/clause type. The mere fact that ergativity is restricted in one way or another, is in accordance with the idea that it is a marked grammatical option.

There is, however, a further type of split ergativity causing the ergative and the accusative pattern to co-occur in the same clause: the split determined by grammatical person. For instance, when a certain language has nominative/Accusative marking on first and second person arguments, and absolutive/Ergative on third person arguments, it may produce transitive sentences with nominative/absolutive or Ergative/Accusative marking. The former situation obtains when A is first/second person and O is third person; the latter situation has a third person A and a first/second person O. Within Mayan, this split is only found in Mocho (Kanjobalan, see Larsen & Norman (1979:352-353)). In the next section, I will discuss person split ergativity with respect to Nez Perce, showing that the SPH can account for it.

3 Splits conditioned by grammatical person: the case of Nez Perce

Person split ergativity is found in a large number of languages scattered over the world. Often, this type of split applies to the case system of languages that do not have overt person/number marking on the verb. This is the case in many Australian languages, such as Dyirbal (cf. Blake (1977), (1987); Silverstein (1976)). Other Australian languages, as well as various Tibeto-Burman and native North American languages (DeLancey 1980:2), have split ergativity in combination with overt verbal person/number marking. In those cases, person split ergativity is found in the case system and/or in the verbal markers. In the present section, I will focus on languages of the latter type. The fact that they have overt verbal person/number markers means

that they are good candidates in order to determine to what extent the SPH or the EPH applies.

According to Silverstein (1976), the most common pattern found with respect to person splits is as follows:

(18) Person split ergativity

	1st	2nd	3rd	
S/A	NOM	NOM	ERG	A
O	ACC	ACC	ABS	S/O

(see also subsection 2.4 (chapter 1))

Recall from chapter 1 that in a language like Dyirbal, first and second person pronouns show nominative/Accusative case marking, whereas third person pronouns and nouns pattern absolutive/Ergatively. There is a universal person/animacy hierarchy, according to which first person is ranked higher than second person, which in turn is ranked higher than third person. The category of third person may further be divided into pronouns and nouns, and the latter may distinguish nominal categories like animacy and definiteness. Every language that has split ergativity determined by the person/animacy hierarchy applies the ergative pattern to the lower ranking categories, whereas the accusative pattern is used for the higher ranking categories. Dyirbal draws a neat vertical line, as in (18), resulting in a purely accusative pattern for first and second person and a purely ergative pattern for third person. Other languages, however, draw a less neat line, resulting in a transition zone where both Ergative and Accusative are used. This results in tripartite marking: unmarked case on S, Ergative case on A and Accusative case on O. In chapter 1, this pattern was exemplified by Kham. In the following subsection, I will present data from Nez Perce, another language that is famous for its tripartite marking (cf. (Dixon 1994); (Bittner and Hale 1996)).

3.1 Split case marking

Nez Perce is a native North American language from the Penutian stock, spoken in Northern Idaho. The data presented in this subsection stem from personal communication with Noel Rude and from Rude (1987, 1988, 1991, 1992, 1994, 1997).

In Nez Perce, Accusative case is found on every direct object. Ergative case, however, only applies to third person transitive subjects.

(19) **Nez Perce** (Penutian, Plateau Penutian, Sahaptin): case marking

	1st	2nd	3rd
A	nominative	nominative	Ergative
S	nominative	nominative	unmarked
O	Accusative	Accusative	Accusative

The result of this is that first and second person arguments are case-marked according to the nominative/Accusative pattern, and that third person arguments display a tripartite pattern. Some example sentences are given in (20).[25]

(20) **Nez Perce**

a. *'íin ∅-'ipsqilíik-ce*
1SG 1-walk.PRS.PROG.SG
'I am walking.'

b. *'íin ∅-capáakayk-sa*
1SG 1>2SG-wash.PRS.PROG.SG
'I am washing you.'

[25] Since I am using the term 'nominative' exclusively for the combination of (unmarked) S and A, and 'absolutive' for the combination of (unmarked) S and O, I use the label 'unmarked' (unm) when S does not share its form with any other grammatical function.

c. *'íin-ne* *∅-capáakayk-sa-m*
1SG-ACC 2>1SG-wash.PRS.PROG.SG-CIS
'You are washing me.'

d. *'ipí* *hi-'psqilíik-ce*
3SG 3-walk.PRS.PROG.SG
'S/he is walking.'

e. *'ip-ním* *'ip-né* *páa-capakayk-sa*
3SG-ERG 3SG-ACC 3>3SG-wash.PRS.PROG.SG
'S/he is washing him/her.'

(Noel Rude)

Although it should be noted that independent nouns and pronouns are often omitted when functioning as arguments, they have been included in the examples above for expository reasons. The sentences in (20a-c) show that a first person singular subject triggers the use of (nominative) *'íin*, whereas in object function the form *'íine* (Accusative) must be used. Third person singular, however, has *'ipí* for S, *'ip-ním* for A and *'ip-né* for O function, as can be seen in (20d-e). These are the unmarked, Ergative and Accusative forms, respectively.

Ignoring verbal person/number marking for the moment, we roughly have two possible accounts for the appearance of Ergative case on third person transitive subjects: either the SPH or the EPH applies to Nez Perce. According to the SPH, every argument is realized as a PA that is optionally doubled by an LA. Because of the fact that there is Accusative case marking as well, Nez Perce presents us with a rare case, as most languages either apply an accusative or an ergative pattern, or no pattern at all when it comes to LA-case marking. However, as we have seen in subsection 2.2, SPH-languages like Georgian may have different oblique cases available, so there is no reason to exclude the possibility that these are used within the same clause (as Ergative and Accusative). If Nez Perce is an SPH-language, it displays the patterns in (21).

(21)

Nez Perce: Second Pattern Hypothesis (cf. (2))				
Intransitive:		$[_{IP}\ LA_{S}$	$[_{IP}\ PA_{S(,\varphi)} + V+I_{\varphi}$	]]
Transitive:	$[_{IP}\ LA_{A,Erg}$	$[_{IP}\ LA_{O,\ Acc}$	$[_{IP}\ PA_{A(,\varphi)} + V+I_{(\varphi)} + PA_{O(,Acc)}]]]$	

According to the EPH, Nez Perce might display one of the two patterns found in Sorani, in which A incorporates *and* triggers agreement, forcing O to be licensed by Accusative case (cf. (5') and (7)). This situation is depicted in (22).

(22)

Nez Perce: Ergative as Passive Hypothesis (cf. (3))				
Intransitive:		$[_{IP}\ DP_{S,\varphi}$	$V+I_{\varphi}$	]
Transitive:	$[_{IP}\ LA_{A(,Erg)}$	$[_{IP}\ \varnothing_{A,\ \varphi}/PA_{A,\ \varphi} + V+I_{\varphi}$	$DP_{O,\ Acc}]]$	

Alternatively, we could even try to account for the facts in (20) by partial application of either the SPH or the EPH. Although third person arguments show Ergative case, first and second persons pattern nominative/Accusatively. This might suggest that first and second person arguments are licensed syntactically, just like in English. Below, I will argue on the basis of verbal inflection and nonconfigurational properties that overall application of the SPH (cf. (21)) is the analysis we should opt for. The historical analysis of the Nez Perce case suffixes provides further support for this hypothesis.

3.2 The PA-status of verbal marking

Person/number marking on the Nez Perce verb is complicated, but economical. Most arguments trigger overt person/number prefixes on the predicate. In (23), the *intransitive* paradigm is given.

(23) **Nez Perce**: intransitive verbal marking

		Number	
		SG	PL
Person	1	*∅-*	*∅-pe-*
	2	*∅-*	*∅-pe-*
	3	*hi-*	*hi-pe-*

An odd characteristic of Nez Perce is that the absence of an overt prefix implies first or second person singular, whereas third person triggers an overt prefix *hi-*. An additional prefix, *pe-*, indicates plurality for all persons. This marker is absent whenever the verb is in progressive or habitual aspect, or in imperative mood. Under those circumstances, the number of the intransitive subject is expressed by the verb's TAM suffix (cf. Rude (1987:34-38)).[26]

(24) **Nez Perce**: plural subject marking

a. *hi-'psqilíik-in*
3SG-walk-PFV
'S/he has walked.'

b. *hipe-'psqilíik-in*
3PL-walk-PFV
'They have walked.'

c. *hi-'psqilíik-ce*
3-walk-PRS.PROG.SG
'S/he is walking.'

d. *hi-'psqilíik-cix*
3-walk-PRS.PROG.PL
'They are walking.'

(Noel Rude)

[26] This applies to transitive subjects as well.

In (24a,b), plurality is marked by the presence of *pe-*. In (24c,d), *pe-* is absent, and the present progressive suffixes *-ce* and *-cix* distinguish between a singular and a plural subject.

In *transitive* clauses, the A-argument triggers exactly the same verbal markers as intransitive subjects, provided that the object is first or second person.

(25) **Nez Perce**: transitive clauses with first/second person object

a *'ée* *∅-capáakayk-sa*
2SG 1-wash-PRS.PROG.SG
'I am washing you.'

b. *'ip-ním* *'íin-ne* *hi-capáakayk-sa*
3SG-ERG 1SG.ACC 3-wash-PRS.PROG.SG
'S/he is washing me.'

(Noel Rude)

In (25a), the empty prefix refers to a first person subject, whereas *hi-* in the b-sentence refers to a third person subject. When the object of a transitive verb is singular, as is the case in (25), person/number marking is entirely similar to that of an intransitive verb. In case of a plural object, *-nées* follows the subject prefix. This is illustrated in the table in (23).[27]

[27] In this table, cells representing an equal A and O are marked with 'XX' because these combinations trigger a special reflexive marker on the verb. Those combinations of subject and object that are marked with '??' have not been elicited because they are pragmatically odd.

(26) **Nez Perce**: transitive verbal marking (1st/2nd person object)

			O-argument			
			SG		PL	
			1	2	1	2
A-argument	SG	1	XX	*∅-*	??	*∅-nées-*
		2	*∅-*	XX	*∅-nées-*	??
		3	*hi-*	*hi-*	*hi-nées-*	*hi-nées-*
	PL	1	??	*∅-pe-*	XX	*∅-pe-nées-*
		2	*∅-pe-*	??	*∅-pe-nées-*	XX
		3	*hi-pe*	*hi-pe*	*hi-pe-nées-*	*hi-pe-nées-*

So far, verbal inflection shows a neat accusative pattern. The prefixes *∅-*, *hi-* and *pe-* exclusively refer to subjects, whereas *nées-* refers to plural objects only. Note that the presence of both subject and object markers already suggests that we are dealing with PAs, pointing to an analysis along the lines of either the SPH or the EPH. The fact that verbal marking shows an accusative pattern implicates that an analysis along the lines of the SPH is the best candidate.

However, the SPH-analysis seems to be contradicted immediately by constructions with a third person object.

(27) **Nez Perce**: transitive verbal marking (3rd person object)

			O-argument	
			3SG	3PL
A-argument	SG	1	*'e-*	*'e-nées-*
		2	*'e-*	*'e-nées-*
		3	*pée-*	*hi-nées-*
	PL	1	*'e-pe-*	*'e-pe-nées-*
		2	*'e-pe-*	*'e-pe-nées-*
		3	*pée-*	*hi-pe-nées-*

Here again, the main division is between first/second and third person subjects. First and second person subjects trigger *'e-(pe-)* instead of *∅-pe-*,

whereas a third person subject triggers *pée-* instead of *hi-(pe-)* (provided that the object is singular).[28] The markers *'e-(pe-)* and *pée-* cannot be prefixed to an intransitive verb (cf. (23)), and therefore they are generally regarded as 'ergative' markers. In other words, these markers are uniquely associated with transitive subjects. We could try to account for this by assuming that the EPH applies to Nez Perce just whenever a clause contains a third person direct object. This would mean that *'e-(pe-)* and *pée-* are PAs, whereas the subject markers in (23) and (26) are agreement prefixes. According to what I have assumed so far with respect to ergativity, this cannot be right. Ergative case appears to occur on every independent DP that is a third person transitive subject, irrespective of the verbal prefix.

(28) **Nez Perce**: Ergative case with every kind of direct object

a. *'ip-ním* *'ip-né* *páa-capakayk-sa*
3SG-ERG 3SG-ACC 3>3SG-wash-PRS.PROG.SG
'S/he is washing him/her.'

b. *'ip-ním* *'íine* *hi-capáakayk-sa*
3SG-ERG 1SG.ACC 3>1SG-wash-PRS.PROG.SG
'S/he is washing me.'

(Noel Rude)

In (28a), the direct object is third person, and *páa-* ('3>3SG-') is doubled by a DP with Ergative case (*'ip-ním* '3SG-ERG'). This is predicted if we assume that *páa-* is a PA. In the b-sentence, however, there is a first person singular direct object, requiring *hi-* ('3>1SG') instead of *páa-*. The independent pronoun referring to the subject still carries Ergative case, which is not to be expected if *hi-* can only be an agreement prefix. Moreover, the EPH is not at all able to account for the object prefix *nées-* in (27). According to the EPH, direct objects are licensed by agreement. If, however, *nées-* is considered to be an agreement prefix, it could never co-occur with *hi-*, because a verb

[28] It should be noted that *pée-pe* does not occur.

maximally agrees with one argument. Furthermore, the fact that *nées-* never refers to an intransitive subject suggests that an agreement analysis is most unlikely.

In order to capture all the facts discussed above, I would like to propose a much more elegant solution based on the SPH. Suppose that the 'ergative' verbal paradigm contains an overt marker for a third person singular object: *'e-(nées-)*.[29] Suppose further that *first and second person subjects* are invariably expressed by *∅-(pe-)*. When the object is third person singular, we get *'e-(pe-)* (cf. first column of (27)), which is actually analyzed as *∅-(pe-)* + *'e-*.[30] The prefixes used in case of a third person plural object, *'e-(pe-)nées-* (cf. second column of (27)) are analyzed as *∅-(pe-)* + *'e-nées-*.[31] For *third person subjects*, we obviously need a rule that turns *hi-* + *'e-* into *pée-* (cf. (27), first column). An interesting explanation for this emerges when we compare *pée-* to its counterpart in Nez Perce's sister language Sahaptin, which I will do in the next sub-subsection. Furthermore, there must be a rule deleting *'e-* in *hi-(pe-)* + *'e-nées-*, which surfaces as *hi-(pe-)nées-*. This deletion process finds independent support in a phonological rule mentioned by Rude. According to this rule, 'inherently short vowels often delete when not in an initial syllable (and not word final) and not stressed' (Rude 1987:19). Thus, *'e-* is dropped when *hi-(pe-)* is prefixed. Implementing these rules, my proposal results into the following PA-paradigms:

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[29] Rude suggests that there might be historical evidence for this claim. The pronoun *'é* was a classic North American obviative pronoun.

[30] I will neglect the fact that these prefixes surface in the reversed order (*'e-pe-* instead of *pe-'e*).

[31] The remark made in footnote 30 applies here as well.

(29) **Nez Perce**: Pronominal Arguments (proposal)

		S/A	O
SG	1	*∅-*	*∅-*
	2	*∅-*	*∅-*
	3	*hi-*	*'e-*
PL	1	*∅-pe-*	*∅-nées-*
	2	*∅-pe-*	*∅-nées-*
	3	*hi-pe-*	*'e-nées-*

Additional (phonological) rules:

- delete *pe-* when the TAM-suffix shows overt number agreement (cf. (24))
- replace *hi-(pe-)* + *'e-* by *pée-* (cf. (27))
- delete *'e-* in *hi-(pe-)* + *'e-nées-* (cf. (27))

On the basis of (29), Nez Perce is like the languages discussed in chapter 3 in having PAs that show a neat accusative pattern. Split ergativity only occurs in the LAs: first and second person independent pronouns show a nominative/Accusative pattern, whereas third person independent pronouns and nouns show tripartite marking.

(30) **Nez Perce**: Lexical Arguments (proposal)

		S	A	O	
SG	1	*'íin-*		*'íine*	
	2	*'íim*		*'imené*	
PL	1	*núun*		*núune*	
	2	*'imé*		*'imuuné*	
SG	3	*'ipí* *háama*	*'ipním* *háama-nm*	*'ipné* *háama-ne*	'man'
PL	3	*'imé* *háham*	*'iméem* *hahám-nim*	*'imuuné* *hahám-na*	'men'

Schematically, the situation in Nez Perce can be represented as follows:

(31)

Nez Perce: Second Pattern Hypothesis (cf. (2), (21))				
a. first and second person arguments:				
Intransitive:		$[_{IP}\ LA_{S}$	$[_{IP}\ PA_{S,\varphi} + V+I_{\varphi}$	]]
Transitive:	$[_{IP}\ LA_{A}$	$[_{IP}\ LA_{O,Acc}$	$[_{IP}\ PA_{A,\varphi} + V+I_{\varphi} + PA_{O,Acc}$	]]]
b. third person arguments:				
Intransitive:		$[_{IP}\ LA_{S}$	$[_{IP}\ PA_{S,\varphi} + V+I_{\varphi}$	]]
Transitive:	$[_{IP}\ LA_{A,Erg}$	$[_{IP}\ LA_{O,\ Acc}$	$[_{IP}\ PA_{A,\varphi} + V+I_{\varphi} + PA_{O,Acc}$	]]]

Note that in this language, incorporation of the subject-PA may trigger overt number agreement, as I have shown in (24). As we will see below, constituent order is entirely free, which supports the SPH-approach. Moreover, inherently nonreferential LAs are not encountered in Nez Perce.

3.3 Nez Perce as an SPH-language

In the following sub-subsection, I will first discuss historical and comparative data from the literature supporting the analysis proposed in the previous sub-subsection. This will yield a convincing argument for the hypothesis that a third person subject and a third person singular object trigger the PA *pée-* rather than *hi-(pe-)'e-*. Finally, I will present evidence for the fact that independent nouns (and pronouns) are adjuncts, which means that they cannot be inherently nonreferential.

First of all, the Ergative case marker *–nim*/*-nm*/*-m* can be reconstructed to a cislocative directional ('hither') (cf. Rude (1987:142-146), (1991:36-44), (1997:119-122)).

(32) **Nez Perce**: cislocative suffix

a. *hi-kúu-ye*
3SG.S-go-PFV

'He went.'

b. *hi-kúu-me*
3SG.S-go-CIS.PFV

'He came.'

(Rude (1987:49), citing Phinney (1934:81))

The Nez Perce equivalent of 'come' is derived from the equivalent of 'go' via the cislocative suffix *-m*. In (20b/c), repeated below, we saw that the cislocative helps to disambiguate sentences with first/second person singular arguments.

(33) **Nez Perce**: disambiguating function of the cislocative (cf. (20b/c))

b. *'íin* *∅-capáakayk-sa*
1SG 1.A>2SG.O-wash-PRS.PROG.SG
'I am washing you.'

c. *'íine* *∅-capáakayk-sa-m*
1SG.ACC 2.A>1SG.O-wash-PRS.PROG.SG-CIS
'You are washing me.'

First and second person singular are always represented by empty PAs. When the LAs are omitted from a sentence like *∅-∅-capáakayk-sa*, all that is stated is that there is some washing activity between speaker and hearer. However, the cislocative suffix is added whenever the activity proceeds in the direction of the speaker, that is, if the hearer is subject and the speaker is object. The default interpretation, in absence of the cislocative marker, assumes that the activity is instigated by the speaker. This is similar to a system of direct/inverse marking, where situations are assessed according to the person/animacy hierarchy (cf. footnote 6). When, according to this hierarchy, the subject of a transitive sentence outranks the object, the *direct* construction is used. Sentences describing a situation in which the object outranks the subject, must use the *inverse* construction. Third person subjects are the lowest category on Nez Perce's person hierarchy (cf. (19)), and therefore they will never outrank the object. At most, they equal the object (when it is third person). Rude (1991:41-44) suggests that the cislocative marker was a clitic in an earlier stage of the language, which

explains why it appears on third person transitive subjects. There, it has grammaticalized into an Ergative case marker.[32] The reason why first person subjects never bear overt Ergative case is clear: they have the highest ranking on the person/animacy hierarchy, and therefore never appear in inverse constructions. Second person subjects do appear in inverse constructions, but they never carry overt Ergative case either. Unlike third person subjects, they always co-occur with the verbal cislocative suffix. This is probably so because second person (singular) PAs are zero, whereas third person PAs are always overt. Given the fact that independent pronouns are commonly omitted, leaving the cislocative on the verb in case of a second person subject is particularly useful, because of its disambiguating function.

The Nez Perce Accusative case *-ne* can be reconstructed to a directional 'thither' (cf. Rude (1987:147), (1991:39-40,46-48), (1997:115-119)). [33] The Accusative pronoun *'íine* in the b-sentence in (33), then, re-emphasizes that the washing is directed towards the speaker. Similarly, the

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[32] And also into a Genitive marker, which attaches to (pro)nouns of any person (cf. Rude (1987:147), (1991:44-45), (1997:126-129)).

[33] Note that there is a second set of independent pronouns for first and second person which do not show any case distinctions (cf. (25a)).

(i) **Nez Perce**: indeclinable independent pronouns

		Number	
		SG	PL
Person	1	*kíyex*	*kíye*
	2	*'ée*	*'éetx*

(Rude 1987:125-127)

Rude (p.c.) suggests that these pronouns are recent innovations, since they do not have equivalents in the only sister language (Sahaptin), whereas the declinable pronouns show great similarity with declinable pronouns throughout the Penutian stock. The first person plural form *kiye* includes the addressee, whereas the declinable form *núun* does not.

following sentence, repeated from (20e), could be paraphrased as follows: 'from him/her to him/her, there is washing going on':

(34) **Nez Perce** (cf. (20e))

'ip-ním	*'ip-né*	*páa-capakayk-sa*
3SG-ERG	3SG-ACC	3.A>3SG.O-wash-PRS.PROG.SG

'S/he is washing him/her.'

This brings us to the analysis of the verbal prefix *pée-*, realized by the allomorph *páa-* in the sentence above. The Sahaptin equivalent, *pa-*, is a true inverse marker which is obligatorily present when the object outranks the subject, but optionally present when both arguments are third person. I propose that in Nez Perce, *pée-* stems from a similar inverse marker, which has grammaticalized into a portmanteau morpheme for two third person singular PAs (cf. (27), (29)).[34]

As I have argued in the previous sub-subsection, person/number marking in Nez Perce appears to reflect a nominative/Accusative pattern. Assuming the basic hypothesis in chapter 2, the fact that the transitive verb is inflected for two arguments and the occurrence of Ergative case marking suggest that we are dealing with a full-fledged SPH-language. This is confirmed by constituent order. Each of the permutations of A, O and V occurs (Rude p.c.). Rude (1987:227-241; 1992) illustrates this with examples from Nez Perce texts gathered by Aoki (1979) and Phinney (1934).[35] The conclusions Rude (1992) reaches for the principles underlying this freedom of word order, resemble Mithun's (1986) notion of 'newsworthiness' (see

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[34] Recall from chapter 4 (subsection 2.2) that Straits Salish speakers never produce an active construction in which a third person subject acts upon a first or second person object. Instead, a passive construction has to be used. When both arguments are third person, the verb carries a suffix *-s* which is normally perceived as a third person singular transitive subject suffix. Alternatively, this suffix could be analyzed as an inverse marker, just like Nez Perce *pée-*.

[35] So far, every example cited shows SV or AOV order. These sentences, however, have been elicited in isolation, and Rude explicitly mentions that the order in none of these examples should be considered as fixed.

chapter 3, subsection 2.1). This means that focalized information comes first in the sentence, whereas less newsworthy constituents appear towards the end of a sentence, if they are overtly realized at all. This is compatible with an SPH-analysis.

Like Warlpiri, Mohawk and many other nonconfigurational PA-languages, DP constituents in Nez Perce can be discontinuous. This is shown in the following examples:

(35) **Nez Perce**: discontinuous constituents

a. ***kii*** *'ee* *ku'ús* *∅-'i-ní-se* ***cúukwe***
this 2SG thus 1SG.A-3SG.O-give-PRS.PROG.SG spirit/ knowledge

'Thus I am giving you this spirit.'

(Rude 1987:249)

b. *…,* *kaa* *hi-nées-'nehna'n-yo'qa* ***konmá*** *neqéey* ***sík'em***
and 3SG.A-PL.O-take-PST.COND that.PL across horse

'…, and they would take those horses of ours [back] across.'

(Rude 1987:251)

In (35a) the direct object-LA *kii cúukwe* ('this spirit') is discontinuous. The first half occupies the leftmost position in the sentence, the second half appears sentence-finally. In the b-sentence, *konmá sík'em* ('those horses') is split up by the particle *neqéey* ('across'). Discontinuous LAs like these can be found easily in the texts at hand, which is to be expected on the basis of the SPH.

As for the referential properties of LAs, there is good evidence that true D-quantifiers are absent from Nez Perce, as predicted by the SPH predicts. First of all, universally quantified DPs invariantly trigger plural PAs.

(36) **Nez Perce**: universal quantification

a. *hi-'psqilíik-**cix*** *la'ám-wa-m* *háham*
3SG.S-walk-PRS.PROG.**PL** all-HUM-PL man.PL

'All the men are walking.'

b. *la'ám-wa-m* *hahám-nim* *pée-p-**cix***
all-HUM-ERG man.PL-ERG 3SG.A>3SG.O-eat-PRS.PROG.**PL**

timaaníi-na
apple-ACC

'All the men are eating apples.'

c. *'áayat-om* *hi-**náas**-capakayk-sa* *la'ám-wa-na*
woman-ERG 3SG.A-**PL**.O-wash-PRS.PROG.SG all-HUM-ACC

pipít'ini-ne
girl.PL-ACC

'The woman is washing all the girls.'

(Noel Rude)

The universal quantifier *la'ám* ('all') is able to quantify over every grammatical function. In (36a,b), this element occurs in the subject-LA and hence requires plural agreement via the TAM-suffix *-cix* ('-PRS.PROG.PL'). When occurring in the direct object, as is the case in the c-sentence, the plural object-PA *nées-* has to be prefixed to the verb. Distributive readings are not impossible in Nez Perce.[36] However, they do not involve a universal D-quantifier. Instead, a distributive prefix *wíi-* is added to the verb, which again overtly agrees with a plural subject or contains *nées-*.

(37) **Nez Perce**: distributive readings

a. *hi-wíi-'psqilíik-**cix*** *háham*
3SG.S-DISTR-walk-PRS.PROG.**PL** man.PL

'Each of the men is walking.'

b. *hahám* *hi-wíi-p-**six*** *náaqc* *timáanit*
man.PL 3.A-DISTR-eat-PRS.PROG.PL one apple

'Each of the men is eating an apple.'

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[36] Rude (1987:42) states that in order to be able to interpret the transitive subject distributively, the verb must be used in an antipassive construction. The antipassive in Nez Perce is formed by removing all the case markers (Ergative and Accusative) from the LAs and by treating the verb as an intransitive predicate, that is, by allowing it to have a PA for the intransitive subject only. Indeed, (37b) suggests that the distributive prefix cannot be construed with an ordinary transitive subject.

c. *'áayatom* *hi-**náas**-wi-capakayk-sa* *pipít'ini-ne*
woman-ERG 3SG.A-**PL**.O-DISTR-wash-PRS.PROG.SG girl.PL-ACC
'The woman is washing each of the girls.'

(Noel Rude)

The plural LAs in (37) c-command plural PAs.[37] The verb itself, by means of the distibutive marker *wíi-*, ensures that the described action is interpreted as applying to every member of the plural argument it is supposed to modify.[38] Even with respect to distributive quantification, then, the behaviour of Nez Perce LAs is compatible with the SPH.

When arguments are questioned or negated, Nez Perce appears to use words that are interpreted as indefinite pronouns in affirmative contexts.

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[37] Rude (1987:43) notes that direct objects with a distributive interpretation often correspond to a singular marker on the verb. There are two possible explanations for this. Firstly, we might be dealing with a simplification of Nez Perce morphology, which in this case is expressed by deletion of the direct object plurality marker *nées-*. This analysis is perhaps supported by the fact that the plural forms of the indeclinable pronouns listed in footnote 33 also allow for the omission of *nées-*. Alternatively, one could assume that *wíi-* somehow turns a singular PA into a syntactic variable. This analysis does not violate the referentiality restrictions on LAs. On the contrary, it could actually pave the way for the development of inherent D-quantifiers, since their absence is solely motivated by the fact that PAs are always definite. Recall from chapter 4 (sub-subsection 3.2.3) that I make a similar proposal with respect to the PA *z-* in Circassian, which realizes the A-argument in relative clauses.

[38] Rude (1987:80) mentions a further (nominal) distributive prefix: *pe-*. This prefix attaches to nominals in adverbial expressions like *péemmey* ('every.morning') and *pée'inwim* ('every.year'), but is also found on LAs.

(i) **Nez Perce**: nominal distributive *pe-*

*∅-'e-**nées**-hek-ce* *pe'túu-ne*
1.A-3**PL**.O-see-PRS.PROG.SG various.things-ACC
'I see things.'

(Noel Rude)

This example shows that *pe-* co-occurs with a plural PA (*nées-* 'PL.O'), and that the interpretation is not strictly distributive. According to Rude (p.c.), this prefix is at best only semi-productive. Recall that *pe-* is also used as a PA-pluralizer for subjects in sentences where the TAM-suffix does not show overt number agreement (cf. 29).

(38) **Nez Perce**: indefinite pronouns

a. *'inekíix* *'ée* ***'itúu-ne*** *∅-'a-mc'í-yo',*
even.though 2SG **something-ACC** 2SG.A-3SG.O-hear-IRR

'isíi-ne *∅-'e-mssú'-ku',* *méetmet*
someone-ACC 2SG.A-3SG.O-voice.recognize-IRR do.not

q'o' *∅-q'íilaw-no'*
INTS 2SG.S-look.back-IRR

'Even though you hear anything, recognize anyone, absolutely do not look back.'

(Rude (1987:131), citing Phinney (1934:213))

b. … *ka-koná* *ke* ***'itúu-nm***
REL-DEM.LOC REL **something-ERG**

pa-payn-óo-sa *ke* ***'itúu-nm***
3.A>3SG.O-arrive-DT-PRS.PROG.SG REL **something-ERG**

pée-te'nwe-se
3.A>3SG.O-speak-PRS.PROG.SG

'…, where something which comes to one, something which speaks to one, …'

(Rude 1987:249)

The roots *'isíi* ('someone') and *'itúu* ('something') may occur in every syntactic function, as is illustrated above for A and O. The following sentences illustrate how these words are used in negative and interrogative contexts:

(39) **Nez Perce**: negative quantification

a. *wéet'u* ***'isíi*** *hi-'sqilíik-caqa* *temenikées-pe*
not **somebody** 3SG-walk-PST.PROG.SG garden-LOC

watíisx
yesterday

'Nobody was walking in the garden yesterday.'

b. *wéet'u* ***'isíi-ne*** *páa-capakayk-siqa*
not **somebody-ACC** 3.A>3SG.O-wash-PST.PROG.PL

watíisx
yesterday

'They were not washing anybody yesterday.'

c. *wéet'u* ***'isíi-nm*** *timaaníi-na* *pée-p-e*
not **somebody-ERG** apple-ACC 3SG.A>3SG.O-eat-PST
watíisx
yesterday
'Nobody ate an apple yesterday.'

(Noel Rude)

In (39), the presence of the negative adverb *wéet'u* implies a negative interpretation on the indefinite pronouns, which is perfectly compatible with the SPH. Independent pronouns cannot be inherently negative, but they may have a negative reading under the scope of a negative adverb, as I have discussed in chapter 3 with respect to Mohawk (sub-subsection 3.2.1).

Constituent questions apparently cannot depend on such an adverb.

(40) **Nez Perce**: interrogative quantification

a. ***'isii*** *hi-'sqiliik-caqa* *temenikées-pe* *watíisx?*
who 3SG.S-walk-PST.PROG.SG garden-LOC yesterday
'Who was walking in the garden yesterday?'

b. ***'itúu-ne*** *∅-'e-hípe* *watíisx?*
what-ACC 2SG.A-3SG.O-eat yesterday
'What did you eat yesterday?'

c. ***'isíi-nm*** *timaaníi-na* *pée-p-e* *watíisx?*
who-ERG apple-ACC 3SG.A>3SG.O-eat-PST yesterday
'Who ate an apple yesterday?'

(Noel Rude)

One of the few requirements on word order in Nez Perce is that question words appear sentence-initially. There are no separate question words, only indefinite pronouns receiving an interrogative interpretation in sentences like the ones in (40). I take it that these pronouns are inherently indefinite, and hence, that they are free variables. Free variables can be translated as quantifiers when they are under the scope of a quantificational adverb.

Alternatively, as I have discussed with respect to Mohawk in chapter 3, they receive a quantificational interpretation when there is an interrogative C-head. Just like any other LA, they adjoin to IP. Subsequently, they move to Spec,CP, from where their index is copied onto the interrogative C.

I close this section by concluding that the person split pattern in Nez Perce finds a natural explanation in terms of the SPH. First of all, I have argued that the PA-paradigms can be interpreted as showing a neat accusative pattern. Furthermore, there is historical evidence showing that the Ergative and Accusative LA-case markers have the status of oblique cases. First and second person LAs show a nominative/Accusative pattern, whereas third person show tripartite marking. This is explained by the fact that the Ergative case marker stems from a cislocative marker that only appears in contexts where the O-argument outranks the A-argument on the person/animacy hierarchy. Finally, my SPH-analysis is supported by flexible constituent order, the possibility of having discontinuous LAs and the structural absence of true D-quantifiers.

4 Split ergativity under the SPH and EPH

As discussed in chapter 1, there are two reasons for calling ergativity a marked phenomenon. First, there is the fact that non-ergative languages outnumber ergative languages by far. Second, ergative patterns often have a limited occurrence within languages. The two hypotheses that I have developed in chapters 3 and chapter 4, namely the SPH and the EPH, supposedly account for the fact that only a minority of the world's languages displays ergativity. Furthermore, as they are derived from the main hypothesis presented in chapter 2, they entail split ergativity in each language that applies either of them. PAs will always show an accusative pattern according to the SPH, whereas the EPH predicts that ergative languages will always be syntactically accusative.

In the current chapter, I have discussed several examples of languages that show clear splits with respect to morphological ergativity. In these languages, accusative morphology appears in one context, ergative morphology in the other. When the split in a given language L is determined by tense, aspect or mood (TAM) or by clause type, it turns out that L applies the SPH or the EPH in a restricted area of its grammar. Structurally, this is explained by the assumption that I only allows for incorporation of the transitive subject when it has a certain value. In languages where the A-argument is always realized by an incorporated PA, intransitive subjects may be realized similarly when I has certain values. This way, the present proposal can deal with these patterns quite easily. More research is needed, but it seems that a plausible explanation for the distribution of accusative and ergative pattern in split ergative languages relies on discourse considerations. Dixon (1994:97-104), for instance, argues that there is a universal tendency to describe events in the past from the perspective of the O-argument.

At first sight, ergativity that is split by grammatical person seems to be more problematic for my proposal. It may feature the combination of both the accusative and the ergative pattern in one and the same clause, suggesting that arguments can only be PAs when, for instance, they are third person. I have shown on the basis of Nez Perce that this type of split appears to be less dramatic than it seems. Verbal person/number marking in Nez Perce can be argued to be entirely nominative/Accusative, shifting the problematic person split to LA-case marking. Analyzing Nez Perce as an SPH-language, it is less difficult to account for the occurrence of both Ergative and Accusative LA-case. As discussed in chapter 3 (section 4), the cases that appear on LAs in SPH-languages are largely determined by the availability of oblique case markers. There is nothing against having a tripartite pattern, and this is attested in Nez Perce. Furthermore, the language appears to meet all the SPH-criteria mentioned in chapter 3, empirically supporting my analysis.