**1. The Issue of Structural Case**

**1.1 Introduction: some challenges of structural case assignment**

Case in the linguistic sense is known to be a morphosyntactic device that helps to indicate—imperfectly, but often usefully—what role a noun phrase (NP, DP, etc.) has within a larger grammatical structure. But what kind of device is it exactly? This is a standard topic in morphosyntax, and has been studied extensively from many perspectives. For example, see Blake (2001) for empirical background, Butt (2006) for orientation to a range of theoretical approaches, and many contributions in Malchukov and Spencer (2009) for a sample of current perspectives. And yet there is still much to be done and much to understand, particularly from a perspective that tries to combine formal-generative explicitness and precision with a relatively broad typological awareness of the range of natural language phenomena (“Formal Generative Typology” in the sense of Baker 2010).

For example, nominative and accusative are two structural cases in Sakha, a Turkic language spoken in Siberia (also called Yakut) (Baker and Vinokurova, 2010, Vinokurova, 2005). I begin with this language because it is not particularly familiar, but neither is it particularly strange, it being a reasonably typical nominative-accusative language. (I also happen to know something about it.) In a simple clause, the subject or agent is nominative, which is morphologically unmarked (there is no overt affix on the noun stem), whereas the object or theme if there is one bears an allomorph of the accusative suffix *-(n)I*.

1. a. Min kel-li-m.

 I.NOM come-PAST-1sS

 ‘I came.’

b. Min oloppoh-u aldjat-ty-m. (Vinokurova, 2005: 285)

 I.NOM chair-ACC break-PAST-1sS

 ‘I broke the chair.’

c. Erel kinige-ni atyylas-ta.

 Erel.NOM book-ACC buy-PAST.3sS

 ‘Erel bought the book.’

For this type of data, it does not matter too much whether one states the case marking principles in terms of thematic roles, grammatical functions, structural positions, or some combination of the three. All versions can get the same results because the simple examples are, well, simple.

Indeed, for some cases, there might be little more to say than this from a syntactic perspective. For example, the ablative case in Sakha is not used for core arguments or grammatical functions, and it does have a fairly straightforward meaning. To a good first approximation, it is used on all and only those NPs with the meaning ‘from’ (Krueger, 1962: 84, Stachowski and Menz, 1998: 429), as in (2).[[1]](#footnote-1)

1. Bihigi beqehee Saaska-ttan suruk tut (Vinokurova 2005: 241)

 we yesterday Saaska-ABL letter receive.

 ‘We received a letter from Sakha yesterday.’

So we might say that the ablative suffix –*ttan* in Sakha corresponds fairly directly to the preposition *from* in English. It has a similar meaning, and it plus the associated noun phrase has a similar syntactic distribution—for example, as an “extra” adjunct phrase included in the larger verb phrase. We may then say that *Saskattan* in (2) is, essentially, an adpositional phrase (PP).[[2]](#footnote-2) That is perhaps nearly all there is to say about this sort of so-called semantic or inherent case with regard to syntax. And languages may have many inherent cases of this sort: for example Finnish has eleven (Olli, 1958: 35-36) and Lezgian has fourteen (Haspelmath, 1993: 74).

 But this is certainly not all there is to say about accusative or nominative in Sakha, which do not correspond to adpositions in English, which do not have consistent semantic values, and which seem to be used more dynamically. It is these so-called structural cases that this book is primarily about.

**1.1.1 The problem of language particular detail**

The structural-grammatical cases are notably not like the inherent-semantic cases in that they can change depending on the syntactic context. For example, the passive sentence in (3) contains a theme argument semantically comparable to the one in (1b). But in (3) this nominal is marked with the (null) nominative case, not with the accusative.

1. Caakky aldjat-ylyn-na. (B&V: 608)

cup break-PASS-PAST.3sS

 ‘The cup was broken.’

Therefore, the affix *-(n)I* cannot simply be regarded as a marker of the theme-patient thematic role, the way that -*ttan* can be regarded as a marker of the source thematic role.

 Conversely, the embedded sentence in (4) has an agentive subject, comparable to the one in (1a) (Vinokuroka 2005: 366). Nevertheless in this sentence the comer is marked accusative, not nominative.

1. Keskil [Aisen-y kel-bet dien] xomoj-do.

Keskil Aisen-ACC come-NEG.AOR.3sS that become.sad-PAST.3sS

 ‘Keskil became sad that (because) Aisen is not coming.’

Examples like these show that one cannot state (nearly) exceptionless rules that relate these morphological markings to thematic roles like agent and patient-theme in Sakha. Indeed, one cannot state them for structural cases in most other languages either. In functionalist terms (Malchukov and De Swart, 2009, Seiwierska and Bakker, 2009), the *indexing* (or *characterizing*) role of these structural cases is much less clear.

One might then switch to stating the rules of structural case marking in terms of grammatical functions like subject and object, rather than in terms of thematic roles. In these terms, a noun phrase is nominative if it is the subject of the clause and accusative if it is the object. This type of formulation might work for (3) as well as for (1), assuming that the object of a transitive sentence corresponds to the subject of the passive version. But it is less clear that it works for (4). This would only work if one said that (4) (like so-called exceptional case marking in English), is an instance of “raising to object.” But there is little motivation for this in Sakha, apart from the case marking. Note that the matrix verb in (4) is an intransitive one, ‘become sad’, which is not the sort of verb that one would expect to take an object, thematic or otherwise. Indeed, it bears the anticausative suffix -*j*, which otherwise marks intransitive verbs of the unaccusative class; see Baker and Vinokurova (2010: 617-618) for discussion and further evidence.

Another problem for equating structural case directly with grammatical function is that the object in a sentence like (5) is not accusative, but rather nominative/unmarked, in contrast to (1c). This is true despite the fact that ‘book’ is clearly not the grammatical subject here, but rather *Erel* is, as confrimed by subject-verb agreement, subject-object-verb word order and other considerations. (This is an instance of so-called differential object marking; see Aissen [2003] among many others; (2) is another example.)

1. Erel kinige atyylas-ta. (Vinokurova, 2005: 322)

 Erel book buy-PAST.3sS

 ‘Erel bought a book/books.’

So the structural case of an NP is not a direct function of that NP’s independently determined grammatical function, any more than it is a direct function of its thematic role.

Perhaps then we should use structural terms instead of thematic roles and grammatical functions to formulate the principles of case distribution. Indeed, in this work I claim (non-uniquely) that this is essentially the correct approach. But it is not an easy or trivial approach, because the structural differences can be subtle. For example, there is no gross syntactic difference in the position of the theme/object between (1c) and (5); if anything, the superficial difference appears to be a semantic one, whether the object is interpreted as a nonspecific indefinite (‘some book(s)’) or as specific (‘the book’ or ‘a certain book’). However, a structural difference comes to light when an adverb is included. The bare object with a nonspecific indefinite interpretation must be immediately before the verb, whereas the accusative object with a specific or definite interpretation need not be—indeed prefers not to be—as seen in (6).

1. a. Masha türgennik salamaat-(y) sie-te. (B&V: 602)

 Masha quickly porridge-ACC eat-PAST.3sS

 ‘Masha ate porridge quickly.’ (ACC on ‘porridge’ only if it has contrastive focus)

 b. \*Masha salamaat türgennik sie-te.

 Masha porridge quickly eat-PAST.3sS

 ‘Masha ate porridge quickly.’

c. Masha salamaat-y türgennik sie-te.

 Masha porridge-ACC quickly eat-PAST.3sS

 ‘Masha ate the porridge quickly.’

Another sign that subtle, arguably structural differences can influence case marking in Sakha is the fact that the theme argument in a passive clause can be accusative rather than nominative (see (3)). Indeed, the theme argument must be accusative if agent-oriented adverbs like ‘intentionally’ and ‘with a hammer’ are present, as shown in (7).

1. Caakky-ny sorujan ötüje-nen aldjat-ylyn-na. (Vinokurova 2005: 336)

 cup-ACC intentionally hammer-INST break-PASS-PAST.3sS

 ‘The cup was intentionally broken with a hammer.’ (\* with *caakky* ‘cup.NOM’)

Baker and Vinokurova argue that the agent-oriented adverbs in (7) imply that there is a covert agent in the syntactic representation of the clause in (7) but not in (3), and this covert agent influences the case-marking on the theme.

A third sign that structural differences influence case in Sakha is that the subject of an embedded clause may be nominative as well as accusative as in (4). Indeed the embedded subject must be nominative if it follows an adverb that modifies the lower verb, as shown in (8b) as opposed to (8a) (B&V: 615-616).

1. a. Min ehigi/ehigi-ni bügün kyaj-yax-xyt dien erem-mit-im.

 I you/you-ACC today win-FUT-2pS that hope-PAST-1sS

 ‘I hoped that you would win today.’

1. Min [sarsyn ehigi-(\*ni) kel-iex-xit dien] ihit-ti-m.

 I(NOM) tomorrow you-(\*ACC) come-FUT-2pS that hear-PAST-1sS

 ‘I heard that tomorrow you will come.’

This range of data shows us two things. The first is that syntactic structure has the potential to explain fine-grained differences in structural case marking that cannot be explained purely in terms of thematic role or simple grammatical function. The term “structural case” is thus not a misnomer, but points toward an important truth. The second is that it will be none too easy to get an account even in structural terms. The syntax will have to be fairly detailed to distinguish (1c) from (5), (3) from (7), and (8a) from (8b). It may not be immediately obvious how to get a unified syntactic account of these three differences, which may not seem to have much to do with each other.

 Part of the challenge of structural case, then, is that it is easy to get principles of case assignment that *sort* *of* work, but it is hard to get ones that work *exactly*, over a broad domain in a particular language. Nor is Sakha notably more difficult than other languages in these respects. There is nothing unique to my framing of this problem; it has been a classic problem in syntactic theory for years. But it is not a solved problem. In this work, I attempt to take a big step forward in solving it.

**1.1.2 The problem of crosslinguistic generality**

The issue of structural case gets even harder and more interesting when it is given a crosslinguistic dimension, within a theory that has universal aspirations. We have seen that structural details matter in Sakha. They also matter in other languages, and they matter differently.

 I chose a less-familiar language for my initial presentation in the hope that many readers would be struck by both similarities and differences with languages they already know. For example, there are many languages with data like (1) in Sakha, in which the object of a transitive verb is distinguished from the subject of a transitive or intransitive verb by bearing a morphological marker. They include Turkish, Tamil, Amharic, Korean, Quechua, Hopi, Russian—and even English when one considers the differing forms of some personal pronouns. But when it comes to examples like (3)-(8), one notices unfamiliar details. For example, English has a passive, but the theme argument of a monotransitive passive must be nominative, never accusative, even in the presence of agent-oriented adverbs.

1. a. He was beaten on purpose with a hammer.

b. \*Him was beaten on purpose with a hammer.

Similarly, in English the subject of an embedded clause can be marked accusative, but only if the clause is nonfinite ((10a) vs. (10b)), whereas the embedded clause is finite in (8a) from Sakha. Also the embedded clause must be a complement of the matrix verb in English, whereas it can be an adjunct in Sakha, as seen in (4). This type of accusative case marking is also possible with a smaller range of matrix verbs in English than in Sakha, so (10b) is not very good with the verb *hope* (cf. (8a))..

1. a. I hoped/expected that she (\*her) would win today.

b. I expected/ ??hoped her to win today.

Indeed, it is notable that Turkish, although it is historically related to Sakha, is more like English than like Sakha in these details (George and Kornfilt, 1981). So we can have significant differences in the grammar of structural case marking within a family, and significant similarities in the grammar of case marking across families.

 Turkish is like Sakha in that some objects are marked accusative and others not ((1b,c) versus (5)). But not all languages with overt accusative marking on common nouns are like this. Cuzco Quechua (CQ), for example, is not: in its matrix clauses, objects are marked with overt accusative case even if they are nonspecific indefinites adjacent to the verb (Liliana Sanchez, personal communication 2012):[[3]](#footnote-3)

1. Juan wawakuna-man miski-\*(ta) qunpuni.

Juan children-DAT candy-ACC give.3S.HAB

‘Juan gives candy to the children (habitually).’

In terms of the recent literature, Turkish and Sakha are differential object marking (DOM) languages (Aissen, 2003), but Quechua is not.

 So we find ourselves a familiar kind of quandary. We want to capture the similarities across languages that characterize a system of (say) accusative case marking. But we also need to capture the differences. This raises questions like what is the core of the notion of accusative case marking (if any), and what is its range of allowable variation? This is the classic Principles and Parameters question (Chomsky and Lasnik, 1993) applied to this particular empirical domain—a domain that is relatively finite and accessible, with much crosslinguistic information available, and one that is interesting and strategic for our understanding of grammar as a whole.

 There are also larger scale differences among languages when it comes to case marking. It is well-known that not all languages with overt case-marking have a nominative-accusative system, where there is a special case marker for the direct object of a transitive clause. Famously, there are also ergative languages, in which a special affix marks the subject of a transitive clause, while the subject of an intransitive clause and the object of a transitive clause have the same marking (often null) (Blake, 1994, Comrie, 1978, Dixon, 1979, Dixon, 1994). (12) shows a pattern of this kind in Shipibo, a language from the Panoan family, spoken in Peru (Baker, In press, Valenzuela, 2003).

1. a. *Maria-nin-ra* ochiti noko-ke. (Shipibo)

 Maria-ERG-PRT dog find-PRF

 ‘Maria found the dog.’

b. Maria-ra ka-ke.

 Maria-PRT go-PRF

 ‘Maria went.’

Indeed, ergative languages are not much less common than accusative languages among languages with overt structural case markers (e.g., 32 ergative to 46 accusative languages out of 190 total languages in Comrie 2005).[[4]](#footnote-4) Some rarer alignment types are also known to exist: tripartite languages, in which intransitive subjects, transitive subjects, and transitive objects are all marked differently (4 out of 190), and marked nominative languages, in which it is the subject of the clause (transitive or intransitive) that bears an overt affix rather than the object (6 out of 190). This work attempts to account for these seemingly larger scale differences in case marking as well as the smaller scale differences.

 A final piece of the introductory puzzle is that even languages that seem to have quite different kinds of case systems can show surprising similarities when one considers details of the system. For example, Shipibo has a small number of verbs that take two distinct NP arguments, neither of which is marked ergative; rather, both NPs are absolutive in (13) (see Valenzuela 2003:339, 342-344; Baker in press).

1. Jose-ra yapa keen-ai.

José-PRT fish want-IMPF

‘José wants some fish.’

These verbs have psychological meanings, where the subject is an experiencer or possessor, rather than an agent. Korean is quite different from Shipibo in that it is a nominative-accusative language. But it also has a minority pattern in which both arguments have the same case, namely nominative. Moreover, it is nonagentive predicates with experiencer subjects that have this special behavior in Korean, just as in Shipibo.

1. a. Chelswu-ka sangca-lul mantul-ess-ta. (normal transitive)

 Chelswu-NOM box-ACC make-PAST-DEC (Koak, 2012: 58)

 ‘Chelswu made a box.

b. John-i Mary-ka mwusep-ta. (experiencer predicate)

 John- NOM Mary-NOM be.afraid-DEC (Levin, 2013: 2)

 ‘John fears Mary.’

These two languages thus have something in common in that their special case for transitive clauses (accusative or ergative) is not used with certain experiencer predicates—a similarity that cuts across the distinction between ergative and accusative languages.

Another cross-cutting comparison of this type can be made between the ergative language Eastern Ostyak and accusative Sakha. We saw above that in Sakha when the object is a nonspecific indefinite next to the verb it is not marked for accusative case (see (5)). Something analogous happens in Eastern Ostyak: when the object is a nonspecific indefinite next to the verb, the subject is not marked for ergative case. This is shown in (15a), as compared to the normal ergative clause (15b) (Gulya, 1966: 135).

1. a. *Mä* t’əkäjəγlämnä ula mənγäləm.

 We.dual(NOM) younger.sister.COM berry pick.PAST.1pS

 ‘I went to pick berries with my younger sister.’

 b. *Mə-ŋən* ləγə əllə juγ kanŋa aməγaloγ.

 We-ERG them large tree beside put.PAST.3pO/1pS

 ‘We put them (pots of berries) beside a big tree.’

Here too we can discern something significant that Sakha and Eastern Ostyak have in common, that transcends the fact that one language is accusative and the other is ergative. Similarities like these suggest that ergative and accusative are not radically different systems, with very different principles and logics, but rather variations of a single abstract system. That is why the same kinds of factors—factors like the agentivity of the subject and the specificity of the object—can be relevant to both. We see, then, a complex pattern of both difference in the midst of similarity and similarity in the midst of difference. This is what I aspire to say something about.

**1.1.3 The goals of the inquiry**

A key feature of this book, then, is that it attempts to address both the problem of language-particular detail and the problem of crosslinguistic variation in a balanced way. Of course, it is impossible to do this fully in one go: one cannot go both deeper and broader to the fullest degree in one book of limited length, even if one had all the expertise needed to do so. But there is some value in trying to advance simultaneously along both dimensions, given that some of the interesting crosslinguistic differences—and also some of the interesting crosslinguistic similarities!—only appear when one reaches a certain level of detail. Therefore, this book follows what I have called “The Middle Way” (Baker, 2010). It is built on a study of a medium number of languages in a medium amount of detail. Roughly this has amounted to considering some 20 languages from different families to the extent of studying at least one complete grammar of the language (not just the obvious pages on case marking) or a series of articles (not just one article), trying to take into account most of what comes up regarding structural case. The languages I have chosen to focus on are listed in (16), sorted according to their alignment types. Languages I have done direct fieldwork on are in italics.

1. a. Accusative languages: *Sakha, Tamil, Amharic*, Cuzco Quechua, Korean, Finnish

b. Ergative languages: *Shipibo*, Burushaski, Chukchi, Lezgian/Ingush, Greenlandic; also

 more briefly Kewa and Wardaman

c. Tripartite languages: Nez Perce, Coast Tsimshian, Semelai, Diyari/Warlpiri

d. Marked nominative languages: Choctaw, Oromo, Tukang Besi, Maricopa/Mojave

 (also arguably Korean)

e. Marked absolutive language: Nias

I mention some of these languages less often than others in this book—and sometimes I cite data of special interest from other languages, like Eastern Ostyak—but the core ideas have been developed in the laboratory of trying to construct relatively complete analyses of structural case marking for this selection of languages.

A related goal is that, for each language considered, I seek principles of case assignment that are as unified as possible. This means that, for a language like Sakha, I seek one rule of accusative case assignment that captures when NPs are accusative and when they are not over the entire range that accusative is used in in the language—and similarly for ergative, nominative, absolutive, dative, and genitive. At least that is the ideal I aim for.

 Some readers will question whether this is the right goal. (Sometimes I question it myself.) Descriptive grammars typically do list a variety of disparate-seeming uses of (say) accusative case. Modern theories along the lines of construction grammar would presumably also follow this practice, saying that it is a property of certain constructions that they have an accusative NP in them, and a property of other constructions that they do not, without necessarily trying to find a structural property that all and only the former have in common that distinguishes them from the latter. That is certainly the easier way. It is also a useful way to present material in a practical grammar, and it may thus seem to get at kind of truth in some cases. But I assume that for theoretical purposes a unified account of each of the structural cases is desirable where it can be found, for the usual reasons: Ockham’s razor, elegance, learnability, and so on. Indeed, seeing whether we can provide a unified account, and if so at what cost, goes a long way toward showing whether or not we should have a unified account.

 As should also be clear by now, this book is about what is sometimes called morphological case, as opposed to so-called abstract case in the Chomskian literature—otherwise known as the licensing of overt NPs. A famous idea that was characteristic especially of the Government-Binding era and that persists in various forms to the present day was Jean-Roger Vergnaud’s, adopted by Chomsky (1981), that all languages make use of case assignment in the syntax. Overt (or argumental) NPs are then subject to a Case filter, such that they are ruled out if they are in a position where they do not receive a suitable case (see Vergnaud, 2008). This hypothesis then played a prominent role in forcing movement to take place, in determining the distribution of PRO, and other important syntactic matters. However, the idea that Universal Grammar includes a Case filter, and that (therefore) case assignment takes place in all languages is now controversial, and many have suggested dropping it or replacing it with other notions. For critiques, see Marantz (1991), McFadden (2004), and Diercks (2012), among others; for alternative principles that cover some of the domain of classic case theory, see Pesetsky and Torrego (2004) and Richards (2010). In any case, these matters are not what this book is about. I will take no official stand on whether languages have a Case filter or not,[[5]](#footnote-5) will assume that movement to subject positions (when it happens) is triggered primarily by EPP features (the “extended projection principle”), and will have nothing to say about the distribution of PRO, except in passing. Rather this book is unabashedly about the distribution of NPs with overt case affixes in languages that happen to have them. This topic has been taken to be less “deep” and theoretically significant than the topic of abstract case, perhaps. But it exists and it turns out to be more and more interesting the more one looks at it.

**1.2 Related topics to be identified and put aside**

Having given a sense of what this book is about, I should also be more explicit about two related topics that this book is not about, even though those topics are closely related to my main interest. Here I focus on structural case rather than inherent case, and on the syntax of case assignment rather than the morphology of case realization. Let me say a little more, then, about these distinctions and how one might recognize them for the purposes of putting them aside.

**1.2.1 More on inherent case and how to recognize it**

Nearly every fully-articulated case theory draws a distinction between structural-grammatical case and inherent-semantic-quirky case in one way or another (Butt, 2006). I appealed to the distinction already when I distinguished accusative case from ablative case in Sakha, where ablative but not accusative can simply be treated as the morphological realization of a PP. But between relatively clear cases like these there are intermediate cases that make it harder to draw the line between the two. A classic case in point is dative case, which is either something in between a structural case and an inherent case, or—better, I think—a case that has some structural uses and some inherent uses (depending on the language). For example, in Sakha, a nominal in dative case can be added to a wide variety of clauses (even if the verb is intransitive) to mean that the event was done for the benefit of the referent of the dative nominal. An example is (17).

1. Kündül ynaq-ar ot ürgee-te. (Vinokurova 2005: 330)

Kündül.NOM cow-3.DAT grass pick-PAST.3sS

 ‘Kündül picked grass for his cow.’

This could be an instance of inherent case, not significantly different from a PP like *for the cow* with respect to the syntax. However, dative case in Sakha is also used to express the agent of a caused action in a morphological causative if and only if the root verb is transitive—a common pattern crosslinguistically. Thus, the causee is dative in (18b) but not in (18a) (B&V: 607).

1. a. Sardaana Aisen-y/\*Aiseŋ-ŋa yta(a)-t-ta.

 Sardaana Aisen-ACC/\*Aissen-DAT cry-CAUS-PAST.3sS

 ‘Sardaana made Aisen cry.’

b. Misha Masha-qa miin-(i) sie-t-te.

 Misha Masha-DAT soup-(ACC) eat-CAUS-PAST.3sS

 ‘Misha made Masha eat (the) soup.’

This is probably an instance of structural case, because the dative NP does not have a fixed thematic role—it is not a benefactee, like the dative NP in (17), but rather an agent—and because whether that NP is dative or not depends on aspects of the broader structure, such as the presence of an object of the caused verb. So a unified rule of structural dative case will presumably not cover all instances of dative case in Sakha, because there are two kinds of dative case that should not be unified.

Accepting this, just where the line should be drawn between the two is a theoretical matter. For example, dative case is also used on the goal argument of ditransitive verbs in Sakha, as in (19).

1. Masha Misha-qa at-y bier-de. (B&V: 595)

Masha.NOM Misha-DAT horse-ACC give-PAST.3sS

 ‘Masha gave Misha a horse.’

Now it is not hard to imagine extending the notion of inherent dative case in (17) to (19). This is plausible because the goal of a giving event is often also the beneficiary of that event. Goals and benefactees are thus similar theta roles, and we might well expect the same inherent case (adposition) to mark both. But it is also not hard to imagine extending the notion of structural dative case in (18b) to (19). The presence of the theme object in (18b) presumably plays a role in triggering the dative case on the causee in (18b) but not in (18a) (see section 4.2.2.1 for an explicit proposal). But there is a theme argument distinct from the goal argument in (19) too, so it could be possible extend whatever principle gives dative case in (18b) to (19) as well. There are thus two reasonable analyses of the dative case in (19), one in which it is structural, hence inside my domain of inquiry, and one in which it is inherent, hence outside it.

Which of these views is correct? I know of two ways forward. One is to let the theory decide, by stating a rule for the clearest instances of structural dative case and seeing whether it does in fact account for (19) more or less “for free.” If so, then it is reasonable to say that dative here is a structural case. The other is to hope that one can find some fine-grained syntactic properties which distinguish the two kinds of dative in (17) and (18b): a process of clefting, perhaps, or quantifier floating—the sorts of syntactic phenomena known to apply to NPs but not to PPs in some languages. Then one can see how (19) behaves with respect to those tests. This second way depends both on knowing rather a lot about the syntax of the relevant language and on being a bit lucky to find a construction that makes the crucial distinction. We can reasonably expect such data to be available in some instances but not all in a work of this scope, and at the current stage of linguistic inquiry. So there will be some indeterminacy at the borderline between structural and inherent case, where there is for now no choice but to let the theory decide which it is.[[6]](#footnote-6)

Now what is fairly clearly true for dative case is probably also true to some degree even for the more prototypical structural cases. For example, accusative is used on adverbs of duration and extent in many Indo-European (IE) languages, including English. (This was more visible in older stages of the language, and still is visible in the German example in (20c).)

1. a. He threw the ball *a full fifty meters*.

b. She stayed in London *five weeks*.

c. Ich habe [den ganzen Tag] gearbeitet.

 I.NOM have.1sS the.M.ACC whole.M.ACC day worked.PAST

 ‘I have worked the whole day.’ (Butt, 2006: 7)

These are probably instances of inherent accusative case, not structural case. First, they are associated with well-defined meanings, for which one might expect an adposition to be used in another language. Second, they are unlike structural accusative case object-themes in English in that they do not have to be adjacent to the verb. Third, they do not alternate with nominative case in related sentences such as passives:

1. a. \*A full fifty meters was thrown the ball.

b. \*Five weeks were stayed in London.

If these nominals bear inherent case, then the structural principle that assigns accusative should not apply to them. But again, there may be no easy way to tell the difference, particularly across languages, and in some instances the theory will have to decide.

 To make things even more interesting, similar-looking examples might fall out differently with respect to the inherent-structural distinction in different languages. For example, the European but not Indo-European language Finnish also uses accusative case to mark adverbs of duration. Thus, the adverb in (22b) is marked the same as the object in (22a).[[7]](#footnote-7)

1. a. Tuo-n karhu-n. (Kiparsky 2001:333)

 bring-1sS bear-ACC

 ‘I’ll bring the/a bear.’

b. (Minäa) viivyin matkalla viiko-n. (Maling, 2009: 78)

 I.NOM stay.1sS trip-ADESS week-ACC

 ‘I stayed on the trip one week.’

But in marked contrast to English, in a Finnish impersonal passive the case on this sort of adverb does switch to nominative ((23b)), just as the case on an object does ((23a)).

1. a. Siellä näh-tiin karhu. (Kiparsky, 2001: 353)

 there see-PAST.PASS bear.NOM

 ‘A bear was seen there.’

b. Siellä viivyt-tiin kokonainen viikko. (Maling 2009: 78)

 there.ADESS stayed-PAST.PASS [whole week].NOM

 ‘We/they/one stayed there a whole week.’

This gives us two reasons to think that accusative case on adverbs is structural case in Finnish. First, whether it appears or not depends on structural properties of the containing clause, such as whether or not it is passive. Second, the alternation it undergoes is manifestly the same as the alternation that normal accusative direct objects undergo in Finnish—a paradigmatic example of structural case. We thus have a clear motive for including them both under the same principle. I conclude that accusative case on adverbs of duration is structural case in Finnish, and within my domain of inquiry, whereas accusative case on adverbs of duration is (probably) inherent case in English, and outside the domain of inquiry. Similarly, I have little doubt that what might be called dative (or allative) case on the goal arguments of ditransitive verbs will turn out to be structural case in some languages and inherent case in others, depending on other properties of the overall system (see section 4.2.2.1). I take this kind of variation to be another illustration of the overarching theme that the details of case theory vary in interesting ways from language to language—part of the motivation for the current study.

Similar issues arise for other cases in other languages. For example, ergative is a structural case on subjects of transitive clauses in Diyari, Warlpiri, Wardaman, and many other Australian languages (and also in Shipibo and Chukchi). We know this for Diyari because ergative NPs act as subjects with respect to the switch reference system (Austin, 1981: 117-123), among other things (also in Shipibo; Valenzuela 2003), and we know it for Wardaman because the verb shows subject agreement with ergative subjects (Merlan, 1994: 65, 67). But ergative in these languages is also homophonous with instrumental case, which has quite different syntactic properties: the switch reference system is not sensitive to instruments in Diyari and Shipibo, for example, and the verb does not agree with instruments in Wardaman. When the relevant affix appears on instruments, it is presumably an inherent case, with the same syntactic status as a PP headed by *with* in English, even though it shares the same morphological exponent as the structural case ergative found on subjects.

The existence of inherent case could thus give me a way of cheating. If a certain NP unexpectedly has case X in language Y, I can say X doubles as an inherent case. But there is no apparent way around this for now: structural versus inherent is a theoretical distinction, and theory is going to have to help us discern where it is drawn.[[8]](#footnote-8) I will have to exercise good judgment on what is included and what is not, and the reader will have to decide whether or not I did.

1.2.2 Morphological as opposed to syntactic factors in case

The fact that an inherent case can sometimes be realized by the same affix as a structural case brings us to the second general issue to be identified, examined briefly, and largely put aside. This is the evident truth that the topic of case has a purely morphological dimension as well as a syntactic dimension. The two are logically distinct, but are intertwined in both theory and practice.

 The distinction between syntax and morphology in this domain can be framed in the following way, using broadly the conception of Distributed Morphology (DM) (Halle and Marantz, 1993). At least for structural case, syntax decides what case a given NP has as a function of its structural position relative to other grammatical elements. Exactly how this is done constitutes the main topic of this book. We may conceptualize this as the syntax determining a value for the case feature of a nominal constituent, one of several feature attributes in its feature structure, alongside its intrinsic features like person, number, and gender. Then it is the job of the morphology to decide what affix a given word bears as a result of that word or a phrase that contains it having this feature value.

In the simplest cases, this mapping from feature to affix is straightforward enough that we might contemplate forgoing altogether the distinction between case assignment in the syntax and case realization in the morphology (at PF). For example, the accusative case value in Quechua corresponds uniformly to the suffix -*ta* on the item that has that bears that value (cf. (11)). We can state this correspondence as follows.

1. X [Case: ACC] 🡪 *X-ta* Quechua

But almost all linguists who have thought about the matter agree that case realization is not always this simple (e.g. see Blake 2001: 19-29). Rather, there are situations in which the same case value may be realized as different affixes, and other situations in which different case values may be realized as the same affix. This means that even if our primary interest is syntax, we need to keep a watchful eye on the morphology as well.

 The possibility of a single case value being spelled out as different affixes in different contexts is common but relatively benign and easy to recognize. Sometimes the variations are purely phonological. For example, the underlying form of accusative in Sakha is roughly –(n)[V +high]; it shows up as –*u* in (1b) because it follows a consonant-final root with back round vowels, and as –*ni* in (1c) because it follows a vowel-final root with front unrounded vowels (this is normal Turkic vowel harmony). The morphological rule for accusative in Sakha therefore does not need to be any more complex than the Quechua role in (24). In other situations, allomorph selection may be phonologically conditioned but not purely phonological. For example, ergative case in Shipibo is spelled out as –*nin* after three syllable roots, as –*n* after two syllable roots with initial stress, and as –*kan* after two syllable roots with final stress (Loriot et al., 1993). More striking in that the allomorphs have no phonological material in common is the fact that nominative in Korean is realized as –*i* after nouns that end in a consonant and as –*ka* after nouns that end in a vowel, as in (25) (Blake 2001: 11).

1. X [Case: NOM] 🡪 X-*i* if X ends in a consonant. (Korean)

X [Case: NOM] 🡪 X-*ka* (otherwise, if X ends in a vowel)

If one is not aware of this generalization about Korean, it will not be obvious that the two NPs bear the same case as assigned by the syntax in (14b). In yet other situations the conditioning factor is lexical properties of the case-bearing item, rather than it phonological properties—although this is less common in the languages in my sample than it is in prototypical IE languages. A classic example is Latin, where the nominative plural ending is -*ae* after one set of nouns (declension 1), -*i* after another set (declension 2), and -*ēs* after a third set (declension 3). Similarly, in Sakha, case markers have special forms when they follow possessive agreement markers attached to the noun: accusative, for example, is realized as -*n* in this context. Although situations like this are common, they do not usually cause serious confusion or theoretical uncertainty. Careful descriptions identify the factors other than the case feature value that go into determining what affix a given noun bears, and those factors can then be abstracted away from.[[9]](#footnote-9)

 Conceptually no different but much trickier in practice is the possibility that case realization rules at PF could assign the same morphological exponent to nominals with different case values, resulting in case syncretism. This can happen in several ways. The simplest is that we could have two distinct realization rules that happen to stipulate the same affixal material for two different case values. This seems to be the situation in Finnish, where the accusative singular on non-pronouns has the same exponent -*n* as the genitive singular, and the accusative plural has the same exponent -*t* as the nominative plural. These homophonies are stipulated by the rules in (26) (see Olli, 1958: 35-36).

1. X [Case: ACC, Number: SG] 🡪 X-n

X [Case: GEN] 🡪 X-n

X [Case: ACC, Number: PL] 🡪 X-t

X [Case: NOM, Number: PL] 🡪 X-t

X [Case: NOM, Number: SG] 🡪 X

Accusative thus has no affixes on nouns that are unique to that case in Finnish. Nevertheless, it is still (fairly) clear that there is a feature value [ACC] at work in Finnish grammar; otherwise we need to complicate the case assignment rules with odd statements like “the direct object is nominative if it is plural and genitive if it is singular”—not impossible, perhaps, (cf. Kiparsky 2001) but not very attractive either. Indeed, historically the singular accusative ending in Finnish was -*m*, distinct from genitive -*n*, but the difference was neutralized by phonological changes (Olli 1958: 109). This fits with the idea that what we have in Finnish is essentially an accidental homophony.

Multiple case values can also map onto a single affix in somewhat more principled ways within a realizational system of morphology such as DM. For example, a particular case affix might have the role of the “elsewhere” case within a set of disjunctively ordered rules, like the one outlined schematically in (27):

1. X [Case: Y] 🡪 X-affix1

(X [Case: Z] 🡪 X-affix2…)

Elsewhere: X 🡪 X-affix3

For example, accusative could have the same exponent as genitive in a language if other cases (nominative, dative, etc.) have their own characteristic affixes, leaving the same “default” affix to be used for all other cases, including both accusative and genitive. Where the facts warrant it, this is a more elegant way to account for case syncretism, because it avoids having multiple rules that introduce the same phonological material. See Baker and Atlamaz (2013) for a case system that is crucially like (27) in Kurmanji.

 Given that nothing rules out the logical possibility that case realization rules could insert the same phonological material for different case values, it becomes a debatable matter whether two nouns have the same affix (including the null affix Ø) because the nominals they head get the same case value in the syntax or because they get different case values in the syntax but morphology assigns the same affix to both. Even for Finnish, this is somewhat debatable, but it would be more so if allegedly accusative objects used the same suffixes as allegedly genitive possessors in the plural as well as in the singular. Once again, we would need to look for indirect evidence or let the theory decide in situations like these. In section 2.5.3, I show how the behavior of a certain kind of agreement might bear on this matter, giving us a possible source of indirect evidence. In section 4.4, I claim that genitive and ergative in languages like Shipibo and Greenlandic are really instances of (almost) the same case being assigned in both clauses and nominals, whereas genitive and accusative in a language like Finnish is an accidental homophony. This distinction is based partly on the empirical fact that total or near-total syncretism between ergative and genitive is significantly more common than total or near total syncretism between accusative and genitive, but also partly on the theoretical fact that my analysis of ergative case can naturally extend to possessors in complex nominals but my approach to accusative can cannot extend in this way. This is another instance of letting the theory guide the analysis, to some degree.

 A third way in which a realizational morphology can attribute the same affix to two cases assigned by different rules in the syntax is if the two cases share a subfeature in common. To take a probable real life example, it happens that in Shipibo the ergative case on transitive subjects is identical with the genitive case on possessors inside noun phrases for all but two lexical items in the language: only the singular first and third person pronouns have distinctive genitive forms. This is shown in (28).

1. a. **Jose-kan** ochiti ben-ai; **Jose-kan** ochiti (see also Valenzuela [2003: 324])

 Jose-ERG dog seek-IMPF Jose-ERG dog

 ‘José is looking for a/the dog.’ ‘José’s dog’

b. **E-n** ochiti ben-ai; **nokon** ochiti (cf. Valenzuela 2003:185-186)

 I-ERG dog seek-IMPF my.GEN dog

 ‘I am looking for a/the dog.’ ‘my dog’

This puts us in a quandary: the homophony of ergative and genitive is so pervasive (and so recurrent across languages) that we would like our theory to render it nonaccidental. However, the fact that there are even two items that distinguish genitive from ergative shows that the syntax must maintain a difference, since *en* and *nokon* are not used randomly, in free variation. The compromise solution would be to treat ergative and genitive as complexes of features, such that they share at least one feature, but they are also distinguished by at least one feature. Then the special exponent of genitive for first person singular pronouns can be inserted in the context of the specific feature, whereas the general exponent of ergative-genitive is inserted in the context of the shared feature. This gives us a system like (29).

1. a. Syntax: assign {X, Y} to the subject of a transitive verb (=ergative)

 assign {X, Z} to the possessor in DP (=genitive)

b. Morphology:

 i. [1, SG, X, Z] 🡪 *nokon*

 ii. [3, SG, X, Z] 🡪 *jawen*

 iii. [X] 🡪 -*n*

 iv. (elsewhere) 🡪 Ø

Here the morphological rules (bi) and (bii) take care of the very special genitive forms, whereas (biii) otherwise handles all ergative and genitive nominals with a single (nonaccidental) rule. (biv) takes care of other nominals, including absolutive arguments and caseless nominals like predicate nominals and NPs in syntactic isolation. A morphological system like this allows us to handle a few specific forms when necessary, but also to account for neutralizations of case distinctions that are pervasive and seem principled. Indeed, my syntactic analysis in chapter 4 yields a plausible proposal about what features X, Y and Z are : genitive will be [+higher, +nominal] and ergative will be [+higher, -nominal]. This reflects the fact that the two cases are assigned in similar syntactic configurations (to the higher of two nominals) but in different spell out domains (DP vs CP). It would be a very worthwhile project to consider more thoroughly and systematically what decomposition of the traditional case labels into sets of features would both emerge naturally from how those cases are assigned in the syntax and underwrite the finer morphological details like those in (28) in Shipibo. However, that project goes beyond what I attempt here; there is plenty just on the syntactic side to fill up one book.[[10]](#footnote-10)

 This issue of case syncretism is important because it can affect how we think of case typology at the highest level. Julie Legate (2008) in particular has clearly pointed out the importance of the assignment-realization distinction for the theory of ergativity. She argues that many ergative languages in Australia and other places should actually be analyzed as tripartite languages. Tripartite languages are ones which draw a three-way distinction between nominative case on intransitive subjects, ergative case on transitive subjects, and accusative case on transitive objects. Nez Perce is a clear instance of this type, where all three forms are distinct (the nominative is morphologically unmarked).

1. a. Hi-páay-na háama. (Rude, 1986: 126)

 3S-arrive-ASP man.NOM

 ‘The man arrived.’

 b. Háama-nm hi-néec-‘wi-ye wewúkiye-ne. (Rude 1986:127)

 man-ERG 3S-pO-shoot-ASP elk-ACC

 ‘The man shot the elk(plural).’

One of Legate’s arguments that many Australian languages are less-obvious exemplars of this same type comes from the fact that they are actually split ergative languages, with splits based on the person/animacy features of the NPs involved. What this means is that they have some nominal items that have a nominative-accusative paradigm and others that have an ergative-absolutive one. Diyari from my sample is like this: its first and second person plural pronouns are inflected for accusative, but not for ergative as distinct from nominative, whereas singular common nouns and masculine names are inflected for ergative but not for accusative. Some Australian languages also have a third class of items that show a three-way paradigm all by themselves, just as all common nouns do in Nez Perce. Diyari happens to have a relatively large class of nominals that behave this way, including nonlocal pronouns, plural common nouns, and feminine names, making its tripartite nature more evident than that of some of its kin. Diyari’s nominal inflection system is summarized in (31), based on Austin (1981: 47, 51, 61).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Nonsingular 1&2 *ŋali* us | Other pronouns*tana* ‘they’  | nonsingular common N*kanawara*- | Female names*ţirimiri*- | Male names*watamaŋka*- | Singular common N*kanku* ‘boy’ |
| Transitive subject: ERG | -Ø | -li | -li | -ndu | -li | -li, -yali |
| Intransitive subject NOM | -Ø | -Ø | -Ø | -ni | -na | -Ø |
| Transitive object ACC | -na | -na | -na | -na | -na | -Ø |
| Pattern | Nom-Acc |  Tripartite: Erg-Nom-Acc |  Erg-Abs |

Legate points out that this low-level, item-by-item variation within a single language typically has no other influence on the syntax: nominative-accusative pronouns have the same word order and binding properties as ergative-absolutive NPs, for example.[[11]](#footnote-11) It is most easily understood if the syntactic rules of case assignment are tripartite across the board and then case is spelled out differently after different lexical items. Thus, accusative has an overt morpheme -*na* after nouns other than singular common nouns, and ergative has an overt morpheme -*li* or -*ndu* after anything but a nonsingular local pronoun.[[12]](#footnote-12) Proper names even have an overt nominative affix (-*ni* for females, -*na* for males). The elsewhere case is spelled out as a null morpheme; this can realize ergative, nominative, or accusative, depending on what other affixes are attachable to a given noun. If the largest class of items—common nouns—happens to spell out ergative case but not accusative case as a special morpheme, there is a temptation to call the language ergative, but that has little syntactic significance. Another language might have fewer items that show tripartite inflection than Diyari does—in the limiting case, it might have none—but that gap needn’t affect the analysis if the broad pattern of the language, averaging over nominals of different kinds, is tripartite in the way that (31) is.

Strong indirect evidence for Legate’s mophocentric view of this kind of split ergativity comes from case concord. Normally all the elements in an NP in these Australian languages agree with each other in case, similar to what happens in IE languages with overt case like Latin or Russian. Now when the elements of a single NP come from different declension classes, they can reveal case distinctions that are otherwise covert. This is more limited in Diyari than in some of the Australian languages that Legate discusses, because case normally shows up only on a pronominal determiner (if any) and on the last noun in a complex nominal (Austin 1981: 94). But since pronouns have tripartite inflection and singular common nouns do not, some apparent mismatches arise. Consider the data in (32). (32a) shows an example in which the pronominal determiner straightforwardly agrees with a common noun in ergative case as well as in gender (feminine) and number (singular). (32b) and (32c) show two examples of a pronominal determiner agreeing with the common noun *kanku* ‘boy’, the phrase used as intransitive subject in (32b) and as transitive object in (32c).

1. a. [na-ndu pala-kaɲţi-yali] mada kampa-yi. (Austin 1981: 39)

 3.SG.F-ERG sexual.desire-excess-ERG stone.ABS collect-PRES

 ‘The sex maniac collects money.’

b. [nawu kanku] dalki-yi ŋandi-ni (Austin 1981: 115)

 3.SG.NOM boy.ABS disobey-PRES mother-LOC

 ‘The boy disobeyed (his) mother.’

c. Nali [ni-na-ya kanku] mani-yi. (Austin 1981: 115)

 1.DU.NOM 3.SG-ACC-near boy.ABS get-PRES

 ‘We get the boy.’

Now ‘boy’ does not show any case distinction in (32b) versus (32c): in both examples it is in bare-absolutive form, as expected given that it is a singular common noun. But the agreeing pronominal determiner does show a case distinction: it is nominative in (32b) but accusative in (32b). Given the general law of case concord inside nominals, this shows that the NP as a whole is nominative in (32b) and accusative in (32c), even though this does not show up on the common noun, for superficial morphological reasons. First and second person plural pronouns also occur in multi-word NPs on occasion, as shown in (33).

1. [Nayani waka-li] tana-na nayi-yi. (Austin 1981: 96)

we.PL.NOM small-ERG them-ACC see-PRES

‘We small ones watch them.’

Here we see ergative case on the common noun/adjective ‘small’ but not on the local pronoun. Again the law of concord implies that the local pronoun really is ergative with respect to the syntax, but ergative case is not realized as an overt affix on nonsingular local pronouns by the morphology at PF. Therefore, rather than making horrendous complications to the rule of case concord so that it can be stated over the varied surface case forms, there is a clear benefit to keeping the syntactic case assignment rules simple and exceptionless and leaving to the morphology the different paradigms that different words have to partially realize those cases. I take this argument to be decisive, and adopt Legate’s view for person/animacy based ergativity splits.[[13]](#footnote-13) Typically, this means that if anything in a language shows a three-way case distinction, or if the language contains both ergative and accusative subparadigms, then the language as a whole is tripartite. A practical consequence of this is that there are more tripartite languages than is commonly thought, and having a good account of them should be a higher priority for linguistic theory (see section 2.3).

 At this point, we could contemplate taking a more radical view, which would claim that *all* languages are really tripartite languages in their syntactic case marking. A few like Nez Perce wear this on their sleeve. Others conceal it in part (Diyari), and still others conceal it more systematically. For example, ergative Shipibo could be a language that spells out ergative case on all nouns, but spells out accusative on none. Similarly, accusative Sakha could be a language that spells out accusative on all nouns, but spells out ergative differently from nominative on none. Finally, the Bantu language Lubukusu (Diercks, 2012) could have the very same tripartite case system underlyingly, but it spells out all cases the same, using a single elsewhere form (namely -Ø), resulting in a so-called neutral language (the most common type of all [Comrie 2005]). On this view, the syntactic principles of structural case assignment would be universal in the strongest sense of being essentially invariant across languages, and all the “parameters” would be morphological. Some strict minimalist theorists might find this view attractive. However, I believe that this universalist view goes too far. Rather, I claim that languages are parameterized to some degree in the way they assign case feature values in the syntax, as well as in how they realize cases at PF. Indeed, the strong universalist view will lose much of its attraction once we see a fuller range of structural cases that can be assigned in syntax, including dative, oblique, and marked nominative as well as nominative, ergative, and accusative. In section 2.5.3, I also show that the behavior of agreement in certain languages tells against the strongest universalist view. If this conclusion is correct, then there is indeed syntactic variation in case assignment that precedes and provides the skeleton on which is built morphological variation like that touched on briefly in this section. It is the syntactic variation that I concentrate on here, putting aside the purely morphological aspects of variation as best I can.

1.3 The structure of the book

My exploration into how structural case is assigned in the syntax across a typologically diverse range of languages begins in chapter 2 by considering the relationship of case assignment to agreement. A prominent view in recent Chomskian syntax has been that all structural case is assigned by designated functional heads under a relationship of agreement. Chapter 2 argues that this is false (expanding on B&V and Baker [2012a,b]). Rather, I claim that some structural case is assigned by principles of dependent case assignment in the sense of Marantz (1991). Agreement can then have one of three relationships to case marking: agreement can assign case (Chomsky, 2000, Chomsky, 2001), or it can be independent of case (Baker, 2008: ch.5), or it can be sensitive to the results of case that has already been assigned (Bobaljik, 2008).

 The syntax of agreement has been well studied, and we have a fair idea of how it works (Chomsky 2000, 2001, Baker 2008, many others), and therefore how case assigned by agreement works. But the idea of dependent case has been considered in much less detail, even though the number of linguists adopting this view has been increasing gradually. In light of this, the heart of this work will be articulating its details and exploring the parameters of variation that it is subject to, so that dependent case can take its place with confidence within formal generative theory and typology. That exploration is the business of chapters 3-5. More specifically, chapter 3 focuses on the c-command condition on dependent case assignment, chapter 4 on the locality domains that are relevant to dependent case assignment, and chapter 5 considers what categories participate in dependent case assignment.

 The final chapter takes up issues of timing: when precisely does case assignment take place in the course of a syntactic derivation? I claim it happens at spell out, along with the fixation of word order, as the c-command relationships that characterize syntax proper are transduced into PF relationships like linear order and phonological form. In addition to its conceptual advantages, this proposal can account for some subtle situations in which dependent case marking does not apply ((13), for example). It can also help to address complex questions concerning how structural case assignment applies to adverbs as opposed to arguments, and how it interacts with scrambling and other forms of movement.

 I had originally intended there to be a second part to this book, which would be organized by language type rather than by theoretical topic. For example, there would have been a chapter on tripartite languages in which I provided explicit analyses of the four unrelated tripartite languages in my sample (Nez Perce, Coast Tsimshian, Semelai, and Diyari). However, the projected first part of the book has taken over the whole. This is partly because I wanted to bring the best illustrations of my general points forward from the case studies into the general discussion of those points. Another reason for the change is that I found it more instructive to explore systematically how the same factors play a role in case systems of different types, and I wanted to illustrate that fully. I do not regret that I have done this—but I do have a twinge of regret over what I not done here. Therefore, I will look for opportunities to make the case studies available in other ways.

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1. As a small addendum, ablative in Sakha can also be used on causal adjuncts, like *ardaq-tan* ‘because of the rain’. [↑](#footnote-ref-1)
2. See, for example, Blake (2001) on the functional equivalence of semantic cases and adpositions, and the diachronic relationships between them. From a generative perspective, there are two plausible ways to work this out, which are technically different. One is to say that the morpheme -*ttan* is a direct realization of the P meaning ‘from’; it appears on the noun as a result of cliticization or morphological merger (see (ia)). The other is to say that the P meaning ‘from’ corresponds to a null morpheme, but it assigns its own distinctive brand of oblique case to its NP complement, and that is realized as ablative, as sketched in (ib) (Emonds 1985: 224-237, McFaddon 2004, also Baker and Kramer (2014) on Amharic, and others). Indeed, in some languages both the P and the case it assigns seem to be spelled out as separate morphemes on the noun, resulting in what can be described as bimorphemic case markers, like the Lezgian example in (ic).

(i) a. [Saaska+OBL FROM] 🡪 *Saaska-Ø-ttan*

 b. [Saaska+ABL FROM] 🡪 *Saaska-ttan Ø*

 c. [BEAR-OBL UNDER] 🡪 *sew-re-k* ‘under the bear’ (Lezgian, Haspelmath 1993: 74)

Which of these analyses is to be used for which inherent/semantic cases is presumably to be decided by careful consideration of the morphological details. (For example, does the case spread onto modifers of the noun? Is the same case assigned by any other element? How does the oblique nominal compare to clearer instances of PP in the language, with overt separate P?) These questions are interesting on a local level, but typically do not have too much broad syntactic significance. Therefore, I do not consider them here. [↑](#footnote-ref-2)
3. See also Cole (1985: 70-71) on Imbabura Quechua. Some embedded clauses in CQ are different, in that accusative case can be or must be omitted on the object, because the clauses are nominalized (Lefebvre and Muysken 1988). I discuss this briefly in sections 4.1.3 and 5.3. [↑](#footnote-ref-3)
4. It is well-known that languages can be ergative in different senses. In some, the subject of a transitive verb is distinguished from the subject of an intransitive verb and the object of a transitive verb only by case marking and/or agreement (morphological ergativity). In others, there are also syntactic processes that treat transitive subjects in a distinctive way (syntactic ergativity: see Anderson 1977, Dixon 1994, Marantz 1984). Putting aside the special case of Dyirbal, current literature shows that syntactic ergativity concerns primarily A-bar extraction phenomena (Polinsky To appear; Deal In press). Since this book is about case marking, I will be concerned with case marking in ergative languages of both types, but what distinguishes them is not investigated. In practice, Shipibo and the other ergative languages I have studied most are morphologically ergative. [↑](#footnote-ref-4)
5. For what it is worth, I am inclined to think now that the Case filter exists, but is parameterized, holding in some languages but not others. On the one hand, Baker and Vinokurova (2010) argue that the Case filter does hold in Sakha. On the other hand, I am inclined to agree with Diercks (2012) that it does not hold in Lubukusu and certain other Bantu languages. Either way, the arguments become intricate: Nadya Vinokurova and I worked on case for more than a year before we recognized the need for a Case filter in Sakha. [↑](#footnote-ref-5)
6. Note that this is not the most troubling problem to have: it is much better to have two plausible analyses for (19) than to have none.

 The text example is not ideal in that it is not at all far-fetched that a rule of structural case that assigns dative in both (19) and (18b) could extend to cover (17) as well. (17) could be analyzed as an applicative (see Pyllkänen 2008), with a null applied affix and ‘cow’ as the NP argument that it introduces. This NP would then get dative case when in it is in the environment of a distinct theme NP, just as the goal NP does in (19) and the causee does in (18b). However, this analysis will not work for all unselected dative expressions, especially in Sakha, where the old Turkic locative case has been lost, and its function has been taken over by the dative (Stachowski and Menz 1998: 421, 429). For example, it is very doubtful that any generalization of a structural case rule for (18b) and (19) will also account for the dative case on the locative adjunct to an unergative verb like (i). Therefore, the basic point about the same morphological form being used as both structural case and inherent case goes through whatever one thinks about (17).

(i) En baaŋ-ŋa ülelee-ti-ŋ. (Vinokurova 2005: 254)

you bank-DAT work-PAST-2sS

‘You worked in the bank.’ [↑](#footnote-ref-6)
7. There are controversies in Finnish about how to individuate the structural cases, caused by the fact that the accusative is homophonous with the genitive on singular common nouns (but not on plurals or pronouns). I follow the standard descriptive tradition and Maling (1993, 2009) rather than Kiparsky (2001) in regarding the -*n* suffixes in these examples as exponents of accusative case, not genitive. See the discussion of (26) below and note 13. [↑](#footnote-ref-7)
8. It helps that these analytical ambiguities typically go only one way: one cannot so easily get out of a problem of the form “NP X does not have case Y and should have it” by appealing to inherent case. [↑](#footnote-ref-8)
9. Another issue concerning how case is realized is whether it is spelled out as an affix on the head noun, or as a case clitic/head at the edge of the nominal as a whole—or even as a P heading what then counts as a PP, as in English where certain *of* phrases are taken to realize genitive case (Chomsky 1986) and in Romance where phrases headed by *á* realize dative case (Kayne 1975). I largely abstract away from these differences of detail. Polinsky (to appear) ascribes considerable syntactic importance to whether ergative case in particular is realized as a PP or an NP: on her view, this is the reason why some ergative languages also display syntactic ergativity and others do not (see note 4). If she is right about this, I would still take the difference to be a matter of how ergative case is realized in a language, not a difference in the fundamentals of how it is assigned syntactically. However, this would require me to bring (this aspect of) case realization into the syntax proper, so that its outcome can interact with things like A-bar movement. (Indeed, very similar issues arise for genitive in English and dative in Romance, even though it is still not clear how to work out the details.) [↑](#footnote-ref-9)
10. One might very well also suppose that some natural classes of cases are defined by semantic features rather than formal-syntactic ones. Indeed, that might be the right way to think about the widespread ergative-instrumental syncretism mentioned at the end of section 1.2.1. Intuitively, agents and instruments have something in common semantically in that both play a role in causing the event denoted by the verb to happen. Given this, a semantic feature like [+cause] could trigger the insertion of the same case affixes in two different syntactic contexts. Similar remarks could apply to dative-benefactive syncretism, and perhaps even accusative-durational syncretism. However, I do not develop this here, since the idea of cases (especially inherent ones) being defined by semantic features is a familiar one, going back to at least to work by Roman Jakobson. Its prospects and challenges are both fairly well-known, and I have nothing special to add in this domain. [↑](#footnote-ref-10)
11. I think this observation tells against fancier, more syntactic accounts of NP-based split ergativity like those of Merchant (2008) and Coon and Preminger (2012), where nominative-inflected subjects move to a different position from ergative-inflected subjects—although more careful investigation would be appropriate. [↑](#footnote-ref-11)
12. Since Silverstein’s (1976) famous study, much has been said, especially in the functionalist literature, about how it is not accidental which items have an ergative paradigm and which have an accusative paradigm. It is supposed to be the nominals that are highest on the animacy-definiteness hierarchy that have overt accusative (i.e., local pronouns) and those that are lowest on this hierarchy that have overt ergative (i.e., inanimate common nouns). The usual intuition is that language users expect ‘I’ and ‘you’ to be agents, so they benefit from an overt marker to show when they are not, whereas they expect inanimate common nouns to be patients and benefit from there being an overt marker when they are not. Although this intuition does not play a major role in my formal account, it could play some role. In particular, it could help to define why “everything but first and second pronouns” is a natural class of items for ergative -*li* to attach to, and why “everything but singular common nouns” is a natural class for accusative -*na* to attach to.

I confess, however, that I am not always fully persuaded by the cogency of this (neo)-Silversonian intuition. Does it, for example, account for the sensitivity to number in Diyari? Are plural local pronouns more likely to be objects than singular ones, and are plural common nouns more likely to be subjects than singular ones? Is there any relevant difference in definiteness and animacy between female named individuals and male named individuals? Is there not a degree of morphological arbitrariness here? But I leave it to others to sort this out. [↑](#footnote-ref-12)
13. Kiparsky (2001: 321) uses similar reasoning to reach the opposite conclusion in Finnish. He claims that singular nouns and adjectives with -*n* are syntactically genitive, not accusative, because some speakers do not like examples in which such items are in a concord relationship with pronouns, which are explicitly marked accusative by the special affix -*t*. Hence (i) is “peculiar.”

(i) ?He pan-i-vat [minu-t para-n] siivoa-ma-an.

 They.NOM put-PAST-3pS I-ACC poor-ACC?/GEN? clean-INF-ILLAT

 ‘They made poor me clean up.’

But his argument cuts both ways, since some speakers do accept this form. I assume that those who do not impose a PF-matching requirement on concord (here), as well as a case-matching requirement. [↑](#footnote-ref-13)