

Domains of case changing and case maintaining movements

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Abstract

With recent developments in Case Theory, movements in which a DP acquires a different case to the one it would have received had it not moved have been accepted as a possibility. In this paper we examine a number of such movements from a variety of languages to attempt to characterise and understand them more fully. Based in Dependent Case Theory, our analysis claims that case change does not really happen, but case assignment is allowed to be delayed under certain circumstances creating the illusion of one case over-writing another. In explicating these circumstances, we are not only able to provide a better understanding of when ‘case change’ can and can’t happen, but also develop the theory in ways which address certain conceptual problems that it faces.

Keywords: Dependent Case Theory, domains, unmarked case, case change

1. Introduction

Early developments in Minimalist syntax suggesting that case features were not responsible for the surface distribution of DPs opened up new paths for investigating case phenomena with numerous positive consequences. One of these was that empirical observations from a number of languages seemingly showing movement from one ‘case position’ to another could be properly investigated rather than being dismissed as being nothing to do with case (see Szabolcsi 1994, for example) or just flatly ignored.

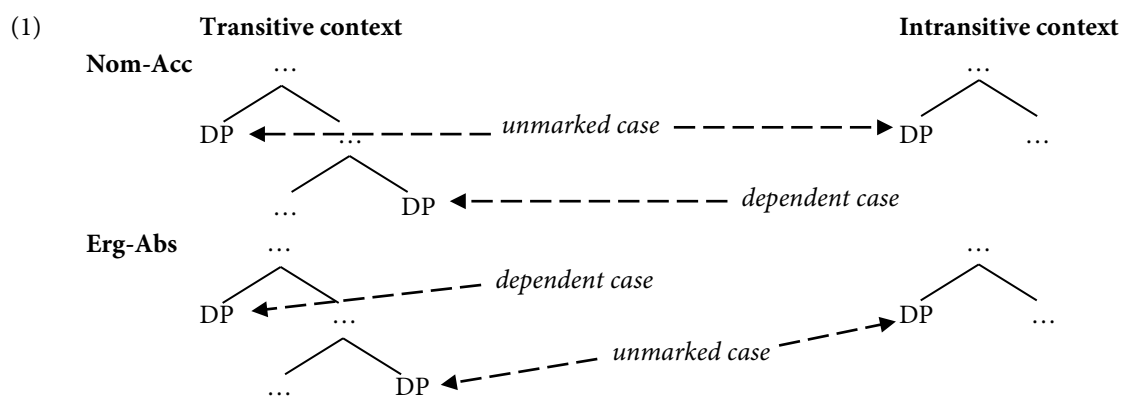
In this paper we investigate such case changing movements and attempt to account for the difference between case changing and case maintaining movements. In the next section we will introduce our adopted framework, Dependent Case Theory, and its development by Baker (2015). We then investigate a number of case changing movements to try to establish differences between them and case maintaining movements. After showing that there is no one factor which accounts for the differences by itself, we argue that it is a combination of factors which define the conditions in which case change under movement is possible. An account of why these particular factors in combination allow for case change is proposed and the repercussions of this for the framework investigated.

2. Dependent Case Theory

Dependent Case Theory was first proposed by Marantz (1991) and subsequently developed by Baker (2015). Marantz claimed that different types of cases are assigned to a set of eligible DPs in a given order: lexical (inherent) case > dependent case > unmarked case > default case. As lexical and default case will not enter our analysis, we will discuss only dependent and unmarked case here.

Dependent case is dependent on the structural configuration for its assignment. It can only be assigned in transitive contexts; that is, there must be at least two items on the list of case eligible DPs. If this condition is met, dependent case can be assigned to one or the other of the two, giving rise to different case systems, as we will demonstrate shortly. Once a DP is assigned case, it drops off the list. Any DPs remaining on this list are then assigned unmarked case.

Depending on which DP is assigned the dependent case, either a nominative-accusative system or an ergative-absolutive system will result, as shown in the following diagram:



Note that the single DP in the intransitive context always gets unmarked case, as in this configuration dependent case cannot be assigned. Thus, either the object (absolutive) or the subject (nominative) of the transitive context gets the same (unmarked) case as the subject of the intransitive context.

3. Domains

In Marantz's system, the set of DPs on the list for any determination of case assignment was kept local to each other via the standard Case Theory notion of government by the same head. One of the developments that Baker (2015) introduced was to make the system more in-line with Minimalist assumptions by limiting the set of eligible DPs through a notion of a case domain. These domains, Baker asserted, are essentially the phases relevant for structure building (Chomsky 2001). Case assignment should be seen as a part of the Spell Out process and hence takes place when a phase head is introduced. In this way, only those DPs introduced into the structure since the last spell out would be considered for case assignment.

Another advantage of the notion of a domain is that different dependent and unmarked cases can be defined with respect to separate domains of a language. So, while nominative

might be the unmarked case of a clausal domain, genitive could be the unmarked domain of the nominal domain; ergative might be the dependent case of the clause, but inside the VP dative might be dependent. This allows a language to have more than just two structural cases. However, although Baker's use of domains draws case theory closer to the rest of the minimalist system, it highlights an unexpected difference between case assignment and other syntactic operations, which he does not discuss. For movement purposes, *v* is assumed to be a universal phase head, making VP a fixed Spell-Out domain. However, it appears that languages differ in terms of whether VP counts as a case domain or not. In some languages the presence of an object within the VP has a role in determining the assignment of dependent case at the clausal level. Thus, both the subject and the object must be visible at clause spell out. This implies that VP is not a case domain. This is so for Hungarian, for which it is usually assumed that an object to the right of the verb remains inside the VP and one to the left occupies a VP external position:¹

(1)

- a. *János* [_{VP} *kivágta* *a fá-t*].
 John down-chop-PAST-3S the tree-ACC
 "John chopped down the tree."
- b. *János a fá-t* [_{VP} *vágta ki* -].²
 John the tree-ACC chop-PAST-3S down
 "It was the tree that John chopped down."

Regardless of where the object is placed, however, it is assigned dependent (accusative) case, which means that it is evaluated for case assignment in the same domain as the subject and hence the VP is not a domain for case assignment. In Sakha, however, it makes a difference whether the object is within the VP or not. As Baker points out, the indefinite DP remains inside the VP while the definite DP is extracted out of it:

(2)

- a. *Masha türgennik* [_{VP} *salamaat sie-te*].
 Masha quickly porridge eat-PAST.3SS
 'Masha ate porridge quickly.'
- b. *Masha salamaat-y türgennik* [_{VP} - *sie-te*].
 Masha porridge-ACC quickly eat-PAST.3SS
 'Masha ate the porridge quickly.'

As we can see, the VP internal indefinite object is unmarked for case, whereas the extracted definite is accusative. Baker interprets this under the assumption that in this language VP is a case domain, so the VP internal object is evaluated independently of the subject. As it is the only DP in the domain, it is assigned unmarked case. The extracted DP, however, is moved

¹ We use the following abbreviations in examples: cases (small caps) NOM = nominative, ACC = accusative, GEN = genitive, DAT = dative; tenses (small caps) PAST = past, PRES = present, INF = infinitive, AOR = aorist; persons are given by numbers 1, 2, 3; number (small caps) S = singular, PL = plural; grammatical function (capitals) S = subject; miscellaneous (small caps) POSS = possessor, DEC = declarative, AF = affirmative, NOML = nominaliser.

² It is possible that the verb has moved out of the VP in this case and only the pre-verb is left inside it. For the purposes of the argument, however, it is only important to recognise that the object is not within the VP.

into the same domain as the subject and therefore is evaluated along with it. As this domain has a transitive configuration, dependent case can be assigned to the object and hence this appears in the accusative.

Note that the two examples above exemplify case maintaining and case changing movements respectively. We will consider further examples in the following section to try to get a broader perspective on the phenomenon.

To account for this typological distinction, Baker introduces two different types of case domain. Phase heads are claimed to be parameterized in terms of the Spell-Out domains they introduce: a *hard phase head* introduces a Spell-Out domain whose contents are fully spelled out immediately and hence the DPs it contains are not available for consideration in subsequent phases; a *soft phase head* introduces a domain whose contents are spelled out, but its DPs remain visible at the next phase and so can play a role in determining the conditions of dependent case assignment, and even be the recipient of such a case.

This may solve the empirical problem, but it raises several conceptual problems in its wake. Merely describing the difference between the two types of domains does not explain how the difference is possible under general assumptions. It clearly does not account for how DPs which have already been spelled out can remain active and even acquire new features in subsequent phases. Moreover, we are also left without explanation of the difference between case and other grammatical processes: why is the notion of a soft domain relevant only to case assignment? We will return to these issues once we have a clearer idea of what determines when movements allow case change and when they do not.

4. Further case changing and case maintaining movements

There are languages which allow case change of a DP extracted from the possessor position. For example, Baker (2015) claims that the following Japanese sentences can be analysed as demonstrating the case change of a possessor, from genitive to nominative, when it is extracted from the possessive DP into a focus position:

(3)

- a. $[_{DP} \textit{John-no} \textit{otoosan}]\textit{-ga} \textit{sin-da}$.
 John-GEN father-NOM die-PAST
 ‘John’s father died.’
- b. $\textit{John-ga} [_{DP} \textit{-otoosan}]\textit{-ga} \textit{sin-da}$.
 John-NOM father-NOM die-PAST
 ‘It is John whose father died.’

There is an interesting contrast between these data and similar phenomena in Hungarian, where an extracted dative possessor maintains its case:

(4)

- a. $\textit{El-veszett} [_{DP} t_i [\textit{a} \textit{fiú-nak}] \textit{a} \textit{kalap-ja}]$.
 away-lost the boy-DAT the hat-3S.POSS
 ‘The boy’s hat got lost.’

- b. [A *fiú-nak*]_i *veszett el* [_{DP} *t_i a kalap-ja*].
 the boy-DAT lost away the hat-3SG.POSS
 ‘It was the boy’s hat that got lost.’

These observations clearly show that we cannot attribute case change to the kind of movement involved, as presumably a very similar process is used in both (3) and (4).

Furthermore, it doesn’t seem that we can attribute the feature involved in case changing movement to specific languages, as although possessor extraction in Hungarian is a case maintaining movement, movement of the possessor within the DP is case changing:

- (5)
- a. *a fiú kalap-ja*
 the boy.NOM hat-3S.POSS
 ‘the boy’s hat’
- b. *a fiú-nak a kalap-ja*
 the boy-DAT the hat-3S.POSS
 ‘the boy’s hat’

It is generally accepted (following Szabolcsi 1983, 1994) that the nominative possessor occupies a lower position in the Hungarian DP and that the dative possessor is raised to a higher DP internal position, as indicated by its position relative to the determiner in (5b). As this movement involves case change, one cannot maintain that Hungarian does not allow case changing movement at all. Generally, then, it seems that different movements in different languages can change or maintain case.

5. Possible accounts of the difference

5.1. Unmarked case

Baker (2015) notes that it is only DPs originally assigned unmarked case that experience case change under movement. He provides a number of examples of dependent case marked DPs which do not change their case when moved. For example, in Sakha, which we have seen has case changing movement of definite objects, Baker argues that dative is the dependent case of the VP domain, assigned to the higher DP in double object and causative constructions.³ The dative case is maintained, however, in constructions in which this DP is moved to subject position, such as the possessive construction in (6):

- (6) *Ucuutal-ga student-nar tijj-bet-ter.*
 teacher-DAT student-PL suffice-NEG.AOR-3S
 ‘The teacher doesn’t have enough students.’

Other evidence in favour of Baker’s claim comes from possessor extraction data. We saw that Japanese possessors change case when extracted. Baker argues that genitive case is unmarked

³ It is because the dative case is not assigned to an argument with a particular thematic interpretation that Baker argues it is not an instance of inherent case, as it is in some other languages.

in this language. Evidence for this is that Japanese assigns genitive to both possessors and noun complements in the DP:

- (7) *yuubokumin no toshi no hakai*
 nomad GEN city GEN destruction
 ‘the nomad’s destruction of the city’

This means that genitive cannot be a dependent case in the nominal domain, as otherwise it would be assigned to either the possessor or the noun complement, but not both. Baker then claims that languages which do not have such double genitive constructions, assign dependent genitive to their possessors and this correlates with case maintaining possessor extraction, as is demonstrated in the Cuzco Quechuan data below:⁴

- (8)
 a * *Marsila-q Maduna-q llimp’i-sqa-n.*
 Marsila-GEN Madona-GEN paint-NOML-3PL
 ‘Marsila’s picture of Madona.’
 b *Pi-qpa-man-mi qulqi-ta [- ususi-n-man] qu-ni?*
 who-GEN-DAT-AF money-ACC daughter-3-DAT give-1S
 ‘I gave money to whose daughter?’

Despite these observations, there is reason to believe that Baker’s claim that DPs with unmarked case are subject to case change on movement cannot be the whole story as there are examples where a DP with unmarked case maintains this when moved. Thus, while it may be true that having an unmarked case is a necessary condition for case change, it is not a sufficient condition. Hungarian dative possessor extraction provides an example of an unmarked case which is maintained on movement. Newson and Szécsényi (2020) argue that in Hungarian dative case is the unmarked case of domains associated with a non-finite inflection, such as is found in the possessive DP. One reason to believe this is the fact that this inflection appears on a type of infinitive and such clauses have dative subjects:

- (9) *Muszáj [Péter-nek haza-men-ni-e].*
 must Peter-DAT home-go-INF-3S
 ‘Peter must go home.’

The dative subject of the inflected infinitive behaves in exactly the same way as the nominative subject of the finite clause, in that it appears in both intransitive (9) and transitive contexts:

- (10) *Nem szabad [Péter-nek meg-néz-ni-e ez-t a film-et].*
 not allowed Peter-DAT pv-watch-INF-3S this-ACC the film-ACC
 ‘Peter is not allowed to watch this film.’

⁴ Obviously, the fact that the moved wh-phrase in (8b) gets an extra dative case stacked on its original genitive adds an extra complication, which we will not go into here. The important observation, however, is that the extracted possessor maintains the genitive case which was assigned in the possessive DP.

As it follows that dative must be seen as the unmarked case in this domain and as the appearance of the same inflection and a dative DP in the possessive DP seems more than a coincidence, we extend this analysis to dative possessors too. Therefore, the data in (4) provide us with an example of a DP with an unmarked case which is maintained when it is moved out of the possessive DP.⁵

5.2. *Soft domains*

If it is not the type of case borne by a DP that determines whether or not the DP can change its case when it moves, then perhaps it is the kind of domain that it moves out of that influences the phenomenon. There is reason to believe that movement out of a hard domain does not trigger case change. As DPs do not interact with each other for case purposes across clause boundaries, it seems that TP is a universally hard domain. Movements out of TP, such as *wh*-movement, never seem to involve case change and this might be taken to suggest that it is only movement out of soft domains which allows DPs to acquire another case in their landing site.⁶

However, once again, while movement out of a soft domain appears to be a necessary condition for case change, it is not a sufficient one as there are examples of such movements which maintain the original case of the DP. We pointed out above that the Hungarian VP must be taken to be a soft domain to allow VP internal objects to interact with the subject in the TP domain. We also showed that extraction of the object from the VP does not result in case change (see (1)). Therefore, not all movements out of soft domains involve changing case.

5.3. *The combined approach*

So far, we have argued that all case changing movements involve DPs assigned an unmarked case and are movements out of soft domains, but case change is not attested in every moved DP with an unmarked case or every DP extracted from a soft domain. Here we will argue that it is the combination of these two factors which provides the sufficient and necessary conditions for case changing movement.

⁵ A reviewer suggests that we might bolster the claim that dative is unmarked in Hungarian by considering passive constructions; the passive subject is generally seen as receiving unmarked case. Unfortunately, Hungarian does not have passive constructions. There are other observations, however, which point to the same conclusion. For example, Hungarian allows inherent dative ('quirky') subjects and it is well known that such subjects trigger unmarked case on the object. In finite clauses, verbs with dative subjects do indeed take nominative objects, but in inflected infinitives such verbs have both subjects and objects in dative:

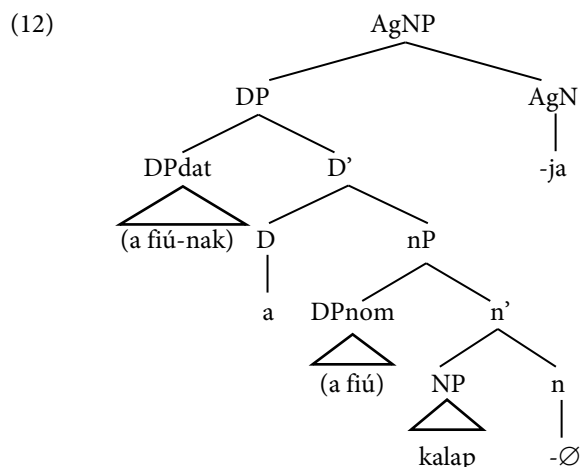
- (i) *Mindenkinek tetsz-ik ez a könyv.*
 everybody-DAT like.3S this the book.NOM
 'Everybody likes this book.'
- (ii) *Nem kell mindenki-nek tetsze-ni-e en-nek a könyv-nek.*
 Not must everybody-DAT like-INF-3S this-SAT the book-DAT
 'It is not necessary for everyone to like this book.'

⁶ The Sakha data concerning the movement of definite objects would appear to be a counter example to this if we accept Baker's analysis. We will address this issue towards the end of the paper.

We can use the Hungarian data to set this up. The facts are provided in (5) and (4b), repeated here as (11) for convenience:

- (11)
- a. *a fiú kalap-ja*
 the boy.NOM hat-3S.POSS
 ‘the boy’s hat’
- b. *a fiú-nak a kalap-ja*
 the boy-DAT the hat-3S.POSS
 ‘the boy’s hat’
- c. *[A fiú-nak]_i veszett el [DP t_i a kalap-ja].*
 the boy-DAT lost away the hat-3S.POSS
 ‘It was the boy’s hat that got lost.’

The lower possessor position is a nominative position, whereas the higher one is dative. Only extraction from the dative position is possible, which indicates that both the complement of the determiner and the DP are phases.⁷ Newson and Szécsényi (2020) argued that this is because both the determiner and the non-finite agreement are phase heads, assuming the following structure:



Being a phase head, the determiner induces the spell out of its complement, headed by *n*, the element which introduces the possessor. The possessor is the only DP in the case domain and hence is eligible for unmarked (nominative) case. We claim that the Hungarian determiner is a soft phase head and hence *nP* is a soft case domain. Consequently, movement of the possessor out of this domain allows for case change, both conditions for this being met. Once the possessor has moved to the specifier of DP, it finds itself in a different case domain. This time, the phase head is the non-finite agreement (AgN), which is a hard phase head. The

⁷ A reviewer asks about wh-movement in Hungarian as a way of supporting our claims that *nP* is a soft domain and DP a hard one. In fact, wh-movement works in exactly the same way as focus movement does: an extracted wh-possessor is always dative and therefore has to move via the DP specifier. However, a wh-possessor can never be nominative and therefore must move to the DP specifier position whether extracted further or not. Because of this, we do not get a complete paradigm of all possibilities for possessors, which is why we concentrated on focus movement here.

possessor, however, is still the only one in the domain and hence is again eligible for unmarked case, which is dative for this domain (as evidenced by the dative subject of the inflected infinitive in (9) and (10)). If the possessor moves from this position, as in (11c), case change will not happen as the domain it moves from is a hard one.

The claim that the DP is a hard domain is supported by the fact that the phase head, AgN, also introduces clauses, which are always hard domains. Further evidence comes from the comparison of the Hungarian possessive DP to the equivalent structure in Korean. As we saw in (3), the Japanese possessor changes its case when extracted from the possessive DP. From our perspective that must mean that the Japanese DP differs from the Hungarian one in being a soft rather than a hard domain. Nakamura (2002) demonstrates that, like Japanese, Korean possessors can receive nominative case, but in Korean they can also receive accusative:

(13)

- a. *Swunsang-uy pyeng-i choykun simha-ta.*
The Prime Minister-GEN illness-NOM recently serious-PRES
- b. *Swunsang-i choykun peyng-i simha-ta.*
The Prime Minister-NOM recently illness-NOM serious-PRES
'The Prime Minister is seriously ill.'

(14)

- a. *Mary-ka John-uy tali-lul cha-ss-ta.*
Mary-NOM John-GEN leg-ACC kick-PAST-DEC
- b. *Mary-ka John-ul tali-lul cha-ess-ta.*
Mary-NOM John-ACC leg-ACC kick-PAST-DEC
'Mary kicked John's leg.'

This is somewhat problematic for Baker's account of double nominative constructions, which assumes that the extracted possessor is an adjunct and as such is evaluated after the other arguments have been case marked. This means that the possessor is evaluated as the sole remaining DP in the domain, and hence is assigned nominative. Presumably the same analysis is applicable to (14b), but then it is unexpected that the possessor would get accusative rather than nominative. Furthermore, as Ryu (2014) points out, the label 'double' nominative/accusative construction is a misnomer as the assignment of nominative and accusative case is not restricted to two DPs:

(15)

- a. [*ttokki-ka*] [*kwi-ka*] [*kkuth-i*] [*thel-i*] *kil-ta.*
rabbit-NOM ear-NOM top-NOM fur-NOM be.long-DEC
'The fur of the top of the ears of the rabbit is long.'
- b. *Hans-ka [ttokki-lul] [kwi-lul] [kkuth-ul] cap-ass-ta.*
Hans-NOM rabbit-ACC ear-ACC top-ACC grab-PAST-DEC
'Hans grabbed the top of the ears of rabbits.'

While Baker's extraction analysis might remain valid for one of the nominative possessors, as the word order in (13) suggests, it is unlikely that it can be applied to all the other cases. Whatever the mechanism that is in operation in these multiple nominative and accusative constructions, the case system must have access to DP internal DPs at the clausal level. It

therefore follows that the DP must be a soft domain in this language. No such similar observations can be made in Hungarian and we argue that this is precisely because the Hungarian DP is a hard domain

6. Emerging questions

The data discussed so far strongly indicate that we are on the right track when we propose a combined account according to which a DP assigned unmarked case in its extraction site can be assigned another case in its landing site if it moves out of a soft domain.

There are several questions that emerge from this though, which, once sufficiently answered, can lead to deeper generalizations, and therefore lend greater explanatory power to the theory. We will address three of these:

1. Why does the combination of the initial assignment of unmarked case and movement out of a soft domain result in case change?
2. How is case change even possible if it involves the movement of a DP from one Spell-Out domain to another?
3. Why is the soft/hard distinction relevant for case phenomena but not for movement?

This last point is especially pertinent given that the problem arises from Baker's attempt to unify movement and case through the identification of case domains as Spell-Out domains.

In Baker (2015) the distinction between hard and soft domains is a mechanism needed to overcome a problem without much explanatory content. Our proposal will refine the definition of the soft domain, leading to an elevation Baker's distinction to a more explanatory level.

In order to do so, we reach back to Marantz's (1991) original idea that once a DP has been assigned a case, it drops out of the competition and has no further role to play, either to receive another case or to determine the case assigned to another DP. We will term this assumption the Invisibility Principle:

(16) **The Invisibility Principle 1**

Once a DP is assigned case it becomes invisible to the case system.

Clearly Baker's assumption that a DP with unmarked case is available for further case marking goes against the Invisibility Principle.⁸ But we can recast the idea to extend Baker's attempt to incorporate Case Theory into Phase Theory:

(17) **The Invisibility Principle 2**

Once a DP is *fully* spelled out, it is inactive in higher phases.

⁸ Baker marginalises this part of Marantz's system by parameterising it. He claims that there are some ergative languages which still assign dependent case to the subject when the object is assigned an inherent case and so the object must still be visible after it is case marked. He rejects the possibility that ergative might be an inherent case as it is not tied to a specific interpretation. However, this does not rule out the possibility that ergative is a 'lexical' case, in the sense of Woolford (2006).

Lying behind this definition is the idea that a DP will only be fully spelled out when it is assigned a case. What needs to be addressed is when exactly case features are assigned. This is where the distinction between soft and hard domains turns out to play a central role. According to the Invisibility Principle those DPs which seem to undergo ‘case change’ cannot actually be assigned case before they move and hence must still be active in the case system. This is exactly what the soft/hard domain difference boils down to in our proposal which defines soft domains as follows:

(18) **Soft domain**

A soft domain is one for which unmarked case is not assigned at its point of spell-out.

Hard domains in turn are defined as domains where all cases are assigned at spell-out. The effect of this is that the assignment of unmarked case within a soft domain will be delayed until the next hard domain. Therefore, a DP eligible for unmarked case in a soft domain remains active until the next hard domain and, if it moves, it will be eligible for the case determined for it in its landing site. In other words, ‘case change’ never really happens, but some DPs can be eligible for different cases, depending on their position at the point of spell out of a hard domain.

The Invisibility Principle also offers a principled account of why the distinction between hard and soft domains is relevant for case but not for movement. What keeps a DP active after the domain it is generated in is spelled out is its lack of case and case features play no role in determining whether or not movement takes place. Therefore, the distinction between hard and soft domains will be relevant only for case assignment.

7. Analysis

We are now in a position to offer an account for why the movement of some DPs ‘changes’ the case of those DPs while the movement of others does not. In this section we present some sample derivations to illustrate our claim.

The central component of our proposal is the assumption that unmarked case assignment in soft domains is delayed until the next hard domain. It has the following empirical consequences: (i) DPs eligible for unmarked case in soft domains remain visible after the domain has been spelled out; (ii) these DPs are assigned case as determined in the subsequent hard domain, potentially resulting in ‘case change’; (iii) unmarked case will also be fixed in hard domains and so movement out of hard domains is case maintaining.

If soft domains are characterised as those domains in which unmarked case is not assigned, it follows that any DP within such a domain will remain active until we get to the next hard domain. At this point all unassigned cases must be assigned, including those remaining from the previous soft domain.

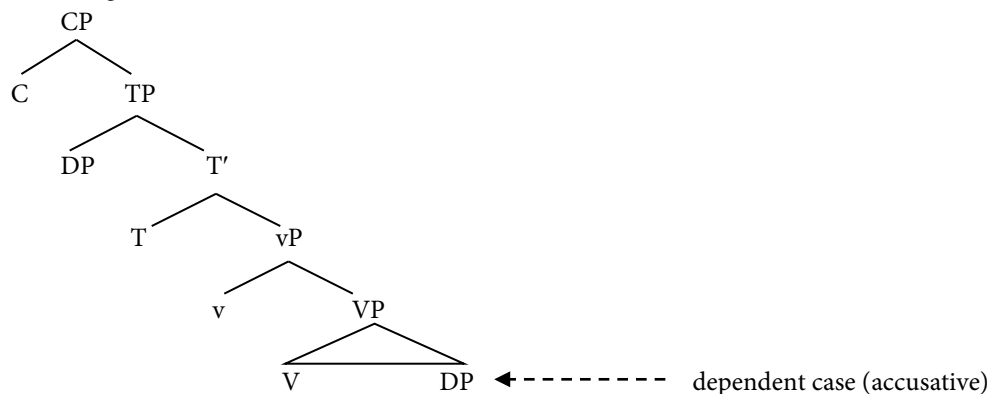
We start with a simple example: the Hungarian VP which is a soft domain spelled out when *v* merges into the structure. At this point, the object is eligible for unmarked case, being the sole DP in the domain. This case assignment is delayed and the DP remains active.

(19) Case assignment within VP (a soft domain):



We need to be more precise, however, about what case will be assigned to such still active DPs once we get to a hard domain. This will partly depend on whether the DP remains within the soft domain or whether it has moved. If the active DP remains in the soft domain, then it can interact with a DP in the higher hard domain and may therefore be eligible for dependent case assignment associated with the higher domain. This is what happens in the majority of nominative-accusative systems. In such languages, the VP is soft and so no unmarked case will be assigned to the object. When the universally hard TP is spelled out, the object is still active and therefore can be assigned the dependent case associated with TP, i.e. accusative.

(20) Case assignment within TP (a hard domain):

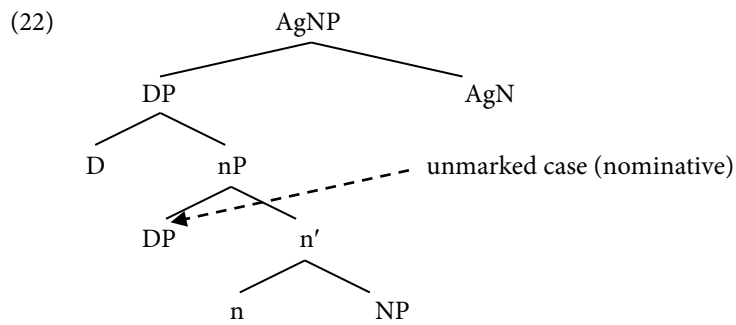


However, if there is no other DP in the hard domain, the still active DP will be assigned the unmarked case associated with the domain it is situated in. This is what happens in the case of Hungarian nominative possessors. As the lower nominal domain is soft and the higher one hard, we get the following sequence:

(21) Nominative case in possessive DPs:

- | | | | | | |
|--|---|---------------------------|---|--|---|
| <ul style="list-style-type: none"> a. The possessor is merged into the structure along with the NP; b. The determiner is merged with nP as its complement; c. As D is a soft phase head, nP is spelled out, but case assignment delayed; d. AgN merges with DP as its complement; e. As AgN is a hard phase head, DP is spelled out and all cases are assigned. | <table border="0" style="border-left: 1px solid black; border-right: 1px solid black;"> <tr> <td style="padding: 0 10px;">[_{nP} DP n NP]]</td> </tr> <tr> <td style="padding: 0 10px;">[_{DP} D [_{nP} n DP NP]]</td> </tr> <tr> <td style="padding: 0 10px;">[_{AgNP} [_{DP} D [_{nP} n DP NP]] AgN]</td> </tr> <tr> <td style="padding: 0 10px;">[_{AgNP} [_{DP} D [_{nP} n DP_{nom} NP]] AgN]</td> </tr> </table> | [_{nP} DP n NP]] | [_{DP} D [_{nP} n DP NP]] | [_{AgNP} [_{DP} D [_{nP} n DP NP]] AgN] | [_{AgNP} [_{DP} D [_{nP} n DP _{nom} NP]] AgN] |
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| [_{AgNP} [_{DP} D [_{nP} n DP _{nom} NP]] AgN] | | | | | |

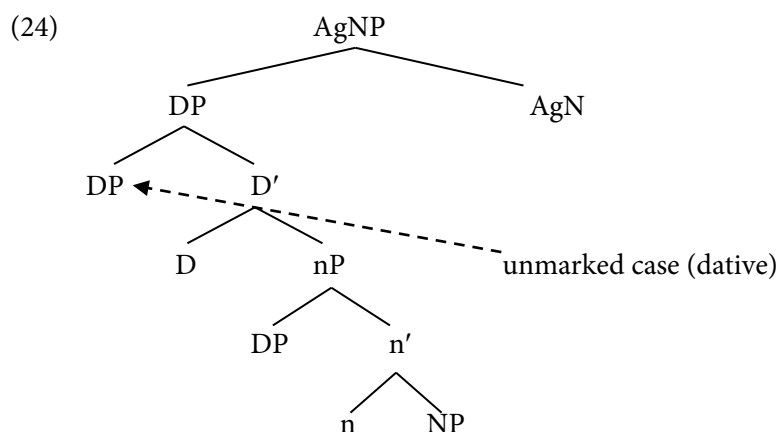
The possessor gets nominative case even though the assignment happens when the DP, which has dative as its unmarked case, is spelled out. This is because case assignment is relative to the position of the DP and the delayed unmarked case is not overridden by any case determined in the hard domain.



Compare this to what happens if the possessor is moved to the higher domain. Steps (21a), (b) and (c) will be the same, so we do not repeat them here:

- (23) Dative case in possessive DPs:
- a. The possessor moves to the specifier of DP [_{DP} DP D [_{nP} DP n NP]]
 - b. AgN is merged and the DP is spelled out: all cases assigned [_{AgNP} [_{DP} DP_{dat} D [_{nP} DP n NP]] AgN]

Under these circumstances, the case assigned to the possessor is dative, the unmarked case associated with the Spell-Out domain of AgN, as the possessor moved into this domain.



Given that DP is a hard domain, once a possessor is assigned dative case, this cannot be changed even if it moves to a higher domain. Indeed, it can play no further role in the case system at all and so even if it is moved to a position higher than a subject, the subject will still be assigned unmarked nominative:

- (25) *Jánosnak vágta ki Mari [AgNP - a fáját].*
 John-DAT cut-PAST-3S down Mary-NOM the tree-3S-ACC
 ‘It was John’s tree that Mary cut down.’

In sum, ‘case change’ is the result of a delayed assignment of unmarked case. If, at the spell out of the next hard domain, conditions are such that another case can be assigned instead of the original unmarked one, that case will be assigned. If the conditions are not altered, the original unmarked case will be assigned. Case maintaining movement is merely the result of case assignment as this makes the recipient invisible to the case system.

8. A potential problem

The system we have outlined would appear to make the wrong predictions concerning case assignment to objects in Sakha. If we assume that the Sakha VP is a hard domain, as Baker does, as discussed following (3) above, then we predict that the unmarked case will be assigned to the object whether or not it remains inside the VP. Hence, the moved definite object will not be available for accusative case assignment. On the other hand, if we assume that the VP is soft, then the object will be eligible for accusative case assignment regardless of whether it moves. Hence the indefinite object should also be accusative.

However, Baker's account of definiteness-based differential case marking is problematic. Turkish displays similar definiteness-based differential object marking to Sakha, but in this case both the definite and indefinite objects remain inside the VP:

(26)

- a. *Ahmet dün akşam pasta-yı ye-di.*
 Ahmet yesterday evening cake-ACC eat-PAST
 'Yesterday evening, Ahmet ate the cake.'
- b. *Ahmet dün akşam pasta ye-di.*
 Ahmet yesterday evening cake eat-PAST
 'Yesterday evening, Ahmet ate cake.'

Kornfilt (2003)

Another analysis is therefore called for. We propose that definiteness-based differential object marking in Hungarian suggests a solution. In Hungarian, definite and indefinite objects are not assigned different cases, but they play a role in determining the agreement pattern on the verb. There is one agreement pattern associated with a definite object and another associated with intransitive verbs or those with indefinite objects. The pairing of indefinite objects with intransitive contexts suggests that the indefinite object appears to be invisible to the system and that only definite objects play a role in determining agreement marking. Applying this idea to Sakha and Turkish, we propose that indefinite objects are simply invisible in the case systems of these languages and hence are not eligible for case assignment. Thus, the movement of the definite object in Sakha is irrelevant to its case assignment. We claim that both Sakha and Turkish have soft VP domains and so the visible (definite) objects are assigned accusative, whether or not they move. This captures the facts more accurately than Baker's analysis and is fully compatible with our assumptions that unmarked case is not assigned in soft domains.

9. Conclusion

In this paper we have addressed the soft/hard domain distinction introduced in Baker (2015). This distinction is mechanically forced by specific properties of case for Baker, but why case behaves differently in different languages is not explained and the framework cannot be used to make predictions in this regard.

The main contribution of our paper is the proposal that unmarked case assignment in soft domains is delayed and all cases are assigned in hard domains. ‘Case change’ is just case assignment at another domain and case maintenance is simply the result of the already familiar case assignment mechanisms under movement. In order to present our account, we mainly used Hungarian data but our conclusions carry over straightforwardly to other languages. An apparent counterexample has been shown to involve independent factors.

Our analysis is not only more consistent with the principles of Dependent Case Theory, but the difference between case and movement also falls out from it. Recasting Marantz’s (1991) Invisibility Principle in phase-theoretical terms has further increased the explanatory power of the theory.

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