Case Locality: Pure Domains and Object Shift

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What are the locality conditions on Case licensing relationships, and to what extent are these the same as the locality conditions that restrict movement or binding? General formulations of locality conditions that are also applicable to Case are put forth in Rizzi 1990, 2001 and Chomsky 2000, formalizing the intuitive notion that ‘like blocks like’. In Relativized Minimality (Rizzi 1990) an intervening Wh phrase blocks Wh movement, an intervening NP blocks NP movement, and an intervening head blocks head movement and Case licensing. More generally, an intervening target may block a source-target relationship (Rizzi 2001). A similar general formulation of locality is proposed in Chomsky 2000 under which a closer goal with matching features may block a probe-goal relationship; for Case, this means that a closer DP with the right Case feature can block a head from checking the Case of a further DP. This notion that ‘like blocks like’ also appears in work on locality in binding, in the sense that a closer potential binder can prevent the binding of an anaphor by a further binder (Chomsky 1986). ¹

While this notion that ‘like blocks like’ seems to be on the right track, the above attempts to formalize this notion into a generalized locality condition do not take into account an interesting range of new data on Case locality effects to be presented here. We will see that just as in movement and binding, there are cross-linguistic differences in Case locality effects. Nominative Case checking by Infl/Tense is blocked by the presence of a

¹John McCarthy (personal communication) points out that this idea, that an intervening element that is like the source or like the target may block a source-target relationship, appears in work on locality in phonology as well, as early as Jensen 1974.
closer DP with inherent Case in some languages, contra previous assumptions that inherent Case is inert in this situation (e.g. Chomsky 2000). This kind of blocking falls under the rubric of defective intervention effects, because it involves a situation where a DP whose Case feature does not match that of the head (and thus cannot be checked by that head) can nonetheless block that head from checking the Case of another DP with the right Case feature. What is perhaps more surprising, a DP does not need to intervene, or even to be closer, in order to block Case checking: a further DP can also block Case checking, if it is not very much further. This situation arises when object shift moves the object outside the VP, bringing it rather close to the subject. Here too there is cross-linguistic variation: object shift blocks nominative licensing to the subject in some languages, but not in others.

The goal of this paper is to build upon the work of Rizzi and Chomsky, focusing on locality as it applies to Case. This paper will propose a modification in the way that the notion that ‘like blocks like’ is formalized in the theory. Without modification, the above proposals cannot account for the fact that even a further DP can block the Case checking of a closer DP. The modification proposed here formalizes a simple intuitive idea: when a head checks the Case of a DP, it must do so within a checking domain, and that checking domain is ideally pure, in the sense that it contains no additional DPs whose Case is not checked by that head.

The notion that locality involves a checking or binding domain is not new. It is
standard for the binding of anaphors (e.g. Chomsky 1986).\footnote{The idea of a domain also appears in phonology in work on locality in vowel harmony in Benua and Smolensky 2001.} In the proposal in Chomsky 1995, Case locality crucially involves a checking domain. In Chomsky 1995, a checking domain includes only the region between a head and its maximal projection, limiting Case-checking to Spec-head configurations; however, this definition is revised in Chomsky 2000, so that the Case-checking domain of a head now also includes the material in the complement of the head, and Case-checking can take place under c-command (as argued in work such as Sigurðsson 1989 and Samek-Lodovici 1996). Although later in Chomsky 2000, the necessity of postulating a checking domain at all is questioned, I will argue here that it is crucial to retain checking domains in the theory in order to account for the full range of Case locality data.

I will also argue that it is crucial for locality theory as it applies to Case to incorporate an idea from binding theory: the size of a domain is relative to its contents. In Chomsky 1986, an anaphor has to be bound within a ‘local domain’, but the size of that domain is relativized. That is, the domain can extend beyond the clause if no potential binder is present in the clause containing the anaphor.\footnote{This early work on locality in binding actually confounds two phenomena that will be separated here. One is the idea that ‘like blocks like’: a closer DP can block a further DP from binding an anaphor. The other is the idea that the region inside a (successful) binding domain can be larger or smaller to some extent, but that it must include both the actual binder and the anaphor. It is this latter idea that we are now also adding here for Case checking.} For Case-checking, we need the notion that...
checking domains can vary somewhat in size. However a checking domain must always be large enough to contain both the checking head and the DP whose Case is checked; if not, no checking can occur, and if no checking occurs, there is no checking domain.

How large or small can a Case-checking domain be? The upper edge of the Case-checking domain of a head is always fixed, as the maximal projection of that head, as specified in Chomsky 1995. It is only the lower boundary of a Case-checking domain that can vary. Chomsky 2000 specifies that the checking domain of a head includes material c-commanded by that head, although he does not discuss the lower boundary of that domain. It is nevertheless clear from that discussion that the Case-checking domain of Infl/Tense can extend down to include the entire clause, which is necessary in nominative object constructions, as in the Icelandic example below:

(1) Eirík-i líkar þetta hús. [Icelandic]
Eric-DAT likes this house(NOM)
‘Eric likes this house.’ (Jónsson 2003:141)

However, in constructions with a nominative subject as in (2), the smallest possible Case-checking domain of Infl/Tense does not include the VP. The further accusative DP cannot block nominative licensing here, and this is because it is not inside the checking domain of Infl/Tense.

(2) She(nom) will see him(acc).

Nevertheless, it is crucial for this account that the lower boundary of a checking domain is not entirely flexible. The proposal here is that checking domains are bounded only by what
I will call major maximal projections. To account for the data discussed in this paper, the smallest possible checking domain for Infl/Tense extends down to VP (vP), although if necessary, the domain can extend down to the clause boundary. The selection of vP and CP as possible boundaries of checking domains corresponds with the selection of these major maximal projections by Chomsky 2000 for the boundary of phases. This view of what can be the lower boundary of a checking domain allows us to capture the fact that when object shift moves a DP, it lands inside the smallest checking domain for Infl/Tense and blocks nominative licensing in some languages.

We can now express the intuitive idea to be formalized here with respect to Case locality in fairly simple terms. When a head checks the Case of a DP, it does so inside the smallest possible Case-checking domain that is large enough to hold both elements. Any additional DP that lies outside that domain is irrelevant; it cannot block the Case-checking. In contrast, any additional DP that lies inside that checking domain makes the domain impure and this is undesirable. Nevertheless, languages differ as to whether they will tolerate impure domains.

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4Note that the idea that Case checking can be limited to the specifier position, as in Chomsky 1995, is ruled out in Chomsky 2000, where the theory is modified to prohibit principles from making reference to the specifier position.

5An earlier version of parts of this analysis was presented at the FASL meetings in Amherst and published in the proceedings (Woolford 2003b); the extension of this account to object shift constructions is new here.
This domain view of Case locality subsumes effects previously attributed to intervention; that is, a DP that intervenes between a head that the DP whose Case it checks is necessarily inside the Case-checking domain that holds those elements, and thus makes the domain impure. This domain view also subsumes blocking effects attributed to a closer DP, because a closer DP must be inside the Case-checking domain. However, this domain approach goes beyond previous approaches to also capture the fact that blocking is also possible by a further DP, but only if that further DP is not so very far away. That is, a further DP can block Case-checking only if it is inside the smallest possible Case-checking domain.

This domain approach to Case locality will be formalized here in terms of Optimality Theory (Prince and Smolensky 1993). The above mentioned array of Case locality effects, and the associated cross-linguistic variation, can be accounted for if we replace the idea that a closer DP blocks the Case checking of a further DP (“locality reduces to closest c-command” Chomsky 2000:122), with the idea that any DP anywhere inside the Case-checking domain of a head is a potential blocker, but that this is a violable constraint, as in (3):

(3) Pure Domain The Case-checking domain of a head must not contain any Case other than that checked by that head.6

The relative rank of the Pure Domain constraint with respect to other markedness and

6This Pure Domain constraint is a revised version of the 1-1 Domain: Case constraint in Woolford 2003b.
faithfulness constraints involving Case, previously established in Woolford (2001, 2003a), determines whether this constraint will be obeyed in a particular language. One way languages can avoid a Pure Domain violation is to select a different Case for the DP in question, which is licensed by a different head in a different domain (one that does not incur a Pure Domain violation). However, the penalty for selecting a more marked Case for a DP is a violation of an additional markedness constraint. As established in Woolford 2001, 2003a, Case markedness constraints capture the intuition that languages try to use the least marked Case that can be licensed in any context. Thus a language may tolerate an impure checking domain in order to use a less marked Case.

This paper is organized as follows. Section 1 presents the array of data to be accounted for, and the range of cross-linguistic variation involved. The languages discussed include Faroese, Icelandic, Hindi, and Nez Perce. Section two reviews background information about Case theory and Case licensing that will be assumed in the formal account. Section 3 introduces the constraints to be used in more detail. Section 4 shows how the relative ranking of Pure Domain with respect to faithfulness and markedness constraints determines whether or not a subject with inherent Case blocks nominative licensing to the object. Such blocking occurs in Faroese and Pitta Pitta, but not in Icelandic or Hindi. In section 5, we see in detail how object shift can interfere with nominative licensing of the subject, as it does in Nez Perce. We also see that the constraint ranking for the relevant languages established in section 4 already predicts whether or not the Pure Domain violation caused by object shift will be tolerated in the language. The
consequences of these Case results for locality theory in general are the topic of section 6, and the consequences of these results for Case theory are discussed in section 7. One of these consequences is a strong argument against the popular notion that nominative is not a Case.

1. Cross-Linguistic Differences in Case Locality

This section presents data showing the nature of the cross-linguistic differences in what blocks Infl/Tense from licensing/checking nominative Case. We begin with dative subjects, move on to ergative subjects, and finish with shifted, marked objects.

1.1 Cross-linguistic differences involving dative subjects

In Icelandic, the presence of a dative subject is no impediment to nominative licensing/checking of the object, as we see in (4).

(4) Eirík-i líkar þetta hús. [Icelandic]

Eric-DAT likes this house-NOM

‘Eric likes this house.’ (Jónsson 2003:141)

In contrast, a dative subject blocks nominative licensing of the object in Faroese, a language that is closely related to Icelandic. In the presence of a dative subject, the object is accusative in modern Faroese, as in (5).
The descriptive label ‘absolutive’ came into common use to gloss the morphologically unmarked Case on intransitive subjects and transitive objects in ergative languages in the mid 1970s, e.g. Anderson 1976, Chung 1978, Dixon 1980; in earlier work, it was standard to identify this Case as nominative, e.g. Hockett 1958, Hohepa 1969, Dixon 1972 (Joseph Foster, personal communication). The change had progressed sufficiently by the mid 1970s that Catford 1976 felt it necessary to include a footnote to the effect that although some people use the label ‘absolutive’, he does not. Although ‘absolutive’ might be useful as a descriptively neutral label to use as a placeholder until the identify of the Case or Cases involved can be determined, there is no evidence for the following examples:

(5) Mær líkar hana væl.
    me-DAT likes(3sg) her(ACC) well

‘I like her a lot.’ (Thránisson et al. 2004:255)

We can be sure that it is the dative subject that blocks nominative licensing into the VP in the above example because Faroese allows, and in fact requires nominative licensing into the VP in unaccusative constructions, where no dative subject is present, as in (6).

(6) Tað eru komnir nakir gestir í gjár. [Faroese]
    there are-PL come-PL some guests-NOM.PL yesterday

‘Some guests came yesterday.’ (Jonas, personal communication)

1.2 Cross-linguistic differences involving ergative subjects

We can see the same contrast in languages that allow ergative subjects. Many ergative languages pattern like Icelandic, allowing a nominative object when the subject has a lexical/inherent Case. In Hindi, nominative objects can occur with either a dative or an

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(6) Tað eru komnir nakir gestir í gjár. [Faroese]
    there are-PL come-PL some guests-NOM.PL yesterday

‘Some guests came yesterday.’ (Jonas, personal communication)
ergative subject.\textsuperscript{8} As in Icelandic, the nominative object controls the agreement.

\begin{center}
\begin{tabular}{l l l l l}
(7) & Siitaa-ko & laRke & pasand & the. & \textbf{[Hindi]} \\
 & Sita-DAT & boys-\textsc{nominative},MASC & like & be(past,masc.pl) & \\
& & & & & \\
& & & & & ‘Sita liked the boys.’ & \textbf{(Mahajan 1991 (7))} \\
(8) & Raam-ne & roTii & khaayii & thii. & \textbf{[Hindi]} \\
 & Ram-\textsc{ergative} & bread-\textsc{nominative},FEM & eat(perf, fem) & be(past,fem) & \\
& & & & & ‘Ram had eaten bread.’ & \textbf{(Mahajan 1990, 73)}
\end{tabular}
\end{center}

But not all ergative languages work like Hindi. There is another class of ergative languages that behaves like Faroese, disallowing nominative objects when an ergative subject (or any other subject) is present. This type of ergative language uses an ergative-accusative Case pattern instead of an ergative-nominative pattern. Goddard 1982 argues that the ergative-accusative pattern is characteristic of most ergative languages in Australia, citing Dhalandji (Austin 1981), Pitta-Pitta (Blake 1979), and Wangkumara (Breen 1976) as especially clear examples based on their three-way distinction in the Case morphology, where nominative is not marked morphologically, but ergative and accusative

\textsuperscript{8}With specific/animate objects, Hindi uses an ergative-dative Case pattern instead of an ergative-nominative pattern (Mahajan 1990), as we will see in section 1.3.
9 Goddard (1982) may overestimate the proportion of ergative languages in Australia that disallow the ergative-nominative pattern, because he assumes that the presence of any marked objects in a language is sufficient to conclude that all objects get accusative Case. We know this assumption is not universally valid from our discussion of Hindi above: Hindi has marked objects, but Hindi uses an ergative-nominative pattern for unmarked object constructions. The Case difference on marked and unmarked objects in Hindi, as in most languages with differential object marking, is a difference in abstract Case choice, and not just a difference in whether or not the same abstract Case is spelled out morphologically at PF, as we can tell by the accompanying change in the agreement pattern (Mahajan 1991; Woolford 1995, in press; Bhatt 2006). Goddard’s conclusion is a natural, but incorrect extrapolation from the fact that the familiar differential subject marking situation where ergative Case is only morphologically marked on third person subjects really is just a matter of differential spell-out at PF (Goddard 1982:171, Comrie 1991, Woolford, in press).

We can see this pattern in the Pitta-Pitta example below:

(9) \( t'\text{ira-}\eta a \quad \eta a-\text{tu} \quad \eta u\text{akuri-ya} \quad \text{paya-}\eta a \quad \text{tuwa-li}\text{na}. \) [Pitta-Pitta]

boomerang-ACC I-ERG make-pres bird-ACC hit(with missile)-purp

‘I’m making a boomerang to kill birds.’

(Blake 1979:210)

An Australian language that lacks such distinguishing Case morphology, but nonetheless conforms to Goddard’s claim is Warlpiri (Legate 2006). Legate provides evidence that objects in Warlpiri get accusative Case, in contrast to intransitive subjects which get nominative Case. Although neither nominative nor accusative is morphologically marked in Warlpiri, Legate shows that these two Cases are treated differently in nonfinite clauses:

\[ \text{...} \]
nominatives become dative in this context (presumably because there is no nominative licensing head available), as in (10). In contrast, accusative objects remain accusative in this context, as in (11).

(10) ... [ngaju-ku jarda-nguna-nja-rlarni]
    ... I-dative sleep-lie-infin-obvc
    ... while I was asleep (Legate 2006 (19))

(11) ... [karnta-patu-rlu miyi purra-nja-puru]
    ... [woman-pauc-ERG food(ACC) cook-infin-tempc]
    ... while the women are cooking the food (Legate 2006 (20))

Additional evidence that Warlpiri distinguishes nominative and accusative Case is the fact that objects in Warlpiri are cross-referenced with an accusative clitic as shown in (12), and never with the agreement form that cross-references nominative subjects as in (13) (Woolford 2005):

(12) Kurdu-ngku ka-ju nya-nyi ngaju.
    child-ERG pres-1sgCL see-nonpast me(ACC)
    ‘The child sees me.’ (Simpson 1991:99)

(13) Ngaju ka-rna wangka-mi.
    I(NOM) pres-1sgAgr speak-nonpast
    ‘I am speaking.’ (Hale 1982 (9a))

Thus we see that languages with ergative subjects divide into two classes, paralleling languages with dative subjects: in some languages, a subject with inherent Case blocks
nominative Case licensing to the object, but in other languages, nominative licensing to the object occurs despite the presence of a subject with inherent Case. Let us now turn to a second locus of cross-linguistic variation, involving object shift.

1.3 Cross-linguistic differences in the effect of object shift

In languages with object shift, objects with certain semantic features or properties (e.g. specificity) move out of the VP. We see object shift in the following pair of Icelandic examples, where the non-specific object remains inside VP in (14a), while the specific object in (14b) has moved across the negative to a position outside the VP.

(14)a. Hann las ekki bækur
   he(NOM) read not books-ACC

   ‘He did not read books.’  (Diesing 1996 (4b))

b. Hann las bækur-nar ekki
   He(NOM) read books-the-ACC not

   ‘He did not read the books.’  (Diesing 1996 (4c))

What concerns us here is that there is a cross-linguistic difference in languages with object shift as to whether or not the Case of the subject is affected when the object shifts. The Case of the subject is not affected by object shift in Icelandic, nor in Hindi where, as we see in the examples below, the nominative subject remains nominative even after object
These Hindi constructions involve movement of the object out of the VP, paralleling object shift in Icelandic.\(^\text{10}\)

(15)a. Mina haar uṭhaa rahii thii. [Hindi]
   Mina(nom) necklace(acc) lift prog be-fem.sg
   ‘Mina was picking up a necklace.’

   b. Mina haar-ko uṭhaa rahii thii.
   Mina(nom) necklace-KO lift prog be-fem.sg
   ‘Mina was picking up the necklace.’ (Bhatt 2006 (1))

In object shift, the object often changes Case, as it does in Hindi, but that is not our focus here.

In contrast with languages such as Icelandic and Hindi, object shift blocks nominative licensing to the subject in the Sahaptian language Nez Perce. Without object shift, the Case pattern in Nez Perce is nominative-accusative, as shown below.

(16) 'ipí+/0 hi+kúu+ye.
   he+NOM 3rd +go+ASP
   ‘He went.’ (Rude 1982 (19))

(17) Háama+/0 hi+'wi+ye wewůkiye+/0.
   man+NOM 3rd +shoot+ASP elk+ACC (object of low topicality)
   ‘The man shot an elk’. (Rude 1988 (31))

In contrast, in object shift constructions (where the object is specific or of high topicality),

\(^{10}\)These Hindi constructions involve movement of the object out of the VP, paralleling object shift in Icelandic (Mahajan 1991, Bhatt 2006).
the subject Case changes: it cannot be nominative, but must instead get ergative Case.¹¹

(18) Háama+nm  pée+wi+ye   wewúkiye +ne.

   man+ERG  3/3+shoot+ASP  elk +OBJ (*NOM) (high topicality object)

   ‘The man shot an elk.’

   (Rude 1988 (30))

In the next section, we turn to the proposed formal account of these kinds of cross-
linguistic variation and blocking that can occur in nominative licensing. We begin by
laying some theoretical groundwork on aspects of Case theory that are relevant to this
analysis.

2. Background: Case Theory

Cases come in two basic types, structural and non-structural (lexical/inherent). In this
paper, we will be concerned primarily with locality restrictions on the licensing or
checking of nominative Case, one of the structural Cases, but an understanding of how
other Cases are licensed, and what other kinds of constraints are relevant to Case choice, is
necessary background to a treatment of the data in section one.

¹¹As in Hindi, the Case of the object also changes in object shift constructions in Nez Perce.
Although no attempt will be made here to analyze this change in object Case, this object Case
change associated with objects that are specific or of high topicality is taken here as diagnostic of
the presence of object shift. as in Woolford 1995. In Nez Perce, this object shift is also associated
with object agreement, which is not present in the unshifted form. This agreement pattern is
analyzed as evidence for the presence of object shift in Nez Perce in Woolford 1997.
2.1 Structural Case

Structural Case is licensed or checked by heads in syntax, based on the surface position of the argument in question. Nominative Case is checked by a functional head that I will identify here as Infl/Tense; its precise identity will not be crucial here. In earlier versions of Case theory (e.g. Chomsky 1995), it was thought that structural Case checking was limited to Spec head configurations, but the more recent view, adopted in Chomsky 2000, is that heads can license/check Case under c-command, subject to locality conditions. This more recent view allows the theory to handle the licensing of nominative objects in the Icelandic and Hindi constructions discussed above in section one in a simple and straightforward manner. In Icelandic and Hindi, Infl/Tense can license/check nominative on the object when the subject has a lexical/inherent Case such as dative, ergative.

(19) a.  [ Dative Infl/T [ V nominative ]]
   b.  [ Ergative Infl/T [ V nominative ]]

2.2 Lexical/Inherent Case

Lexical/inherent Case is licensed in conjunction with θ-marking (Chomsky 1986). That is, the head that θ-marks each argument may also license an associated lexical/inherent Case on that argument. For example, the little v that licenses external arguments also licenses ergative Case (Woolford 1997, 2006; Massam 2002; Legate 2006). Similarly, a goal/experiencer may get dative Case from the head that θ-marks these
arguments, and an internal argument or theme may get one of a variety of non-structural Cases lexically selected by the particular verb that θ-marks that argument.\textsuperscript{12}

Lexical/inherent Case can take priority over the structural Case that would otherwise be licensed on an argument. For example, in the examples in section one with a dative or an ergative subject, these lexical Cases take priority over the nominative Case that would otherwise be licensed/checked on the subject of a tensed clause. The reason that lexical/inherent Case can take priority over structural Case is that lexical/inherent Case is licensed at a level distinct from or prior to that at which structural Case is licensed. In Chomsky 1986, that level was D-structure; however, in a technical sense, D-structure has been eliminated from the theory (Chomsky 2000), so we need to update Case theory so that the relevant level of lexical/inherent Case licensing is argument structure or vP structure (Woolford 2006).

Previously, it was though that lexical/inherent Case always takes priority over structural Case (Chomsky 1986), but as I argue in Woolford 2001 this depends on the relative ranking of faithfulness and markedness constraints (section 2.3). On the one hand, languages want to be faithful to the lexical/inherent Cases licensed at argument structure or vP structure, but on the other hand, languages want to use the least marked Case that is available to each argument (and, as we will see, they want to maintain pure checking domains). When these goals conflict, it is the relative ranking of the relevant constraints

\textsuperscript{12}For more detail and a review of the evidence that ergative belongs among the lexical/inherent Cases, see Woolford 2006.
that arbitrates such disputes, producing different Case patterns in different languages. One of the many benefits of such an approach is that it allows us to derive the effects attributed to Burzio’s Generalization (section 2.4).

2.3 Case Markedness and Faithfulness Constraints

Woolford 2001 establishes a set of violable markedness and faithfulness constraints relevant to Case, which are derived from a universal Case markedness hierarchy.

(20) Universal Case Markedness Hierarchy:

\[
\text{ergative} > \text{dative} > \text{accusative} > \text{nominative}
\]

The related Case markedness constraints are formulated as follows, and assumed for our purposes here to be in a fixed ranking:13

(21) Case Markedness Constraints:

\[
*\text{ergative} >> *\text{dative} >> *\text{accusative}
\]

This set of Case markedness constraints captures the generalization that, all other things being equal, languages prefer to use the least marked Case that can be licensed in any situation. In this paper, we will primarily be concerned with the preference for nominative

13There is no empirical need for a *nominative constraint and Gouskova 2003 argues that, in general, no constraint can refer to the lowest element on any hierarchy. In addition, de Lacy 2002 shows benefits from formulating constraints that make reference to a hierarchy in a manner that eliminates the need for a fixed ranking. Reformulated in this way, the Case markedness constraints would be *ergative; *ergative, dative; *ergative, dative, accusative.
over accusative, but other phenomena such as the preference for accusative over dative on causees can also be captured by these Case markedness constraints.

The related Case faithfulness constraints require the preservation in syntax of Cases that are licensed at the prior level of argument structure or vP structure. These are formulated as follows:

(22) Case Faithfulness Constrains:

\[
\text{Max(erg) } \gg \text{Max(dat) } \gg \text{Max(acc)}
\]

If a language ranks Max(dative) higher than *dative, datives licensed at argument structure will be preserved in syntax, instead of being replaced by a less marked structural Case, as would be the situation under the opposite ranking.

2.4 Deriving Burzio’s Generalization Effects

The question that lead to the formulation of Burzio’s Generalization (Burzio 1986) is the following: why don’t unaccusative subjects that remain inside the VP get accusative Case from V?

(23) All’improvviso è entrato un uomo dalla finestra.

\[
\text{suddenly entered a man-NOM/*ACC from the window}
\]

Suddenly a man entered from the window.’ (Belletti 1988 (17))

Burzio (1986) concluded that V must lack the ability to license accusative Case in unaccusative (and passive) constructions. His hypothesis, that a verb can license accusative Case if and only if it also licenses an external subject, has come to be known as Burzio’s
Generalization. Burzio’s Generalization also covers examples with a dative experiencer subject and a nominative object, under the assumption that such experiencer subjects do not qualify as external subjects.

(24) Siitaa-ko laRke pasand the. [Hindi]
Sita-DAT boys-NOM,MASC like be(past,masc.pl)

‘Sita liked the boys.’ (Mahajan 1991 (7))

However, there are many exceptions to the predictions of this generalization. For one, experiencer subject verbs in English take accusative objects.

(25) She liked him.

For another, in Hindi clauses with agentive external arguments, the verb does not take an accusative object as predicted by Burzio’s Generalization; instead it takes a nominative object (when the object is non-specific).

(26) Raam-ne roTii khaayii thii. [Hindi]
Ram-ERG bread-NOM,FEM eat(perf, fem) be(past,fem)

‘Ram had eaten bread.’ (Mahajan 1990, 73)

Recent work on this problem by Burzio 2000 and others (see Reuland 2000, Woolford 2001, 2003a, and additional literature summarized in Woolford 2003a) has lead to a change in the view of how the relevant generalization should be formulated. The prevailing view now, among those who have given this problem serious study, is that the ability of verbs to license accusative Case has nothing at all to do with its θ-licensing capabilities. Instead, the consensus now in this literature is that in any situation where an argument can
potentially be licensed/checked for either nominative or accusative Case, *nominative takes priority*.

Under this new view, there is no need to claim that unaccusative or passive verbs, or verbs with experiencer subjects lack the ability to license accusative Case. Instead, when nominative has not been licensed on the subject (either because there is no subject, or there is a subject with lexical/inherent Case), nominative is available for licensing on the object. When there is a choice of licensing either nominative or accusative Case on an argument, it is the nominative that takes priority.

The reason that nominative takes priority over accusative is simply that nominative is the less marked Case; all other things being equal, nominative is preferred over accusative because, in general, language try to use the least marked Case that is licensed in any situation (Woolford 2001, 2003a).

Let us review how this intuitive idea is captured formally in terms of Optimality Theory, focusing on unaccusative examples. With one argument present in the clause, c-commanded by both Infl/Tense and by V, two candidates are possible with legitimately licensed Cases. (We retain the standard assumption that all Cases must be licensed by a head.) The candidate in (27b) incurs a violation of *accusative, leaving the candidate in (27a) as the winner.
(27) unaccusatives

<table>
<thead>
<tr>
<th></th>
<th>Max(dat)</th>
<th>*dative</th>
<th>*acc</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The situation is much the same dative subject constructions. Dative Case is licensed in the argument structure or vP structure, which I assume serves as input to the level of syntax where decisions concerning structural Case are made (Woolford 2006). The high ranking Max constraint insures that this lexical/inherent Case is preserved on the subject, eliminating the candidate in (28c) which does not preserve that dative. The lower ranked *dative constraint has no effect since the remaining candidates tie on this constraint. Then, as above, *acc makes the final decision by eliminating the (28b) candidate, leaving the candidate in (28a) with the dative-nominative Case pattern as the winner.

(28)

<table>
<thead>
<tr>
<th>input: DP-dative DP</th>
<th>Max(dat)</th>
<th>*dative</th>
<th>*acc</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. DP-dative DP-nom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. DP-dative DP-acc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. DP-nom DP-acc</td>
<td>*!</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A similar tableau can be constructed with ergative replacing dative, and the ergative-nominative Case pattern would beat any competitor with an accusative object for the same reasons.

If there were no additional constraints relevant to Case, the (b) candidate in the above tableau would never win in any language, regardless of how these constraints are ranked.
But we know that the (b) candidate does win in some languages. Thus we now turn to the formal account of why nominative does not always take priority over accusative.

2.5 The Problem of Faroese

In Faroese, dative subjects occur with an accusative object\(^{14}\):

(29) Henni manglar pening/*peningur.

her\(\text{DAT}\) lacks money\(\text{ACC}\)/nom

‘She lacks money.’ \(\text{(Thráinsson et al. 2004:229)}\)

(30) Mær vantar ein bil.

I\(\text{DAT}\) lack\(3\text{sg}\) a car\(\text{ACC}\)

‘I need a car.’ \(\text{(Thráinsson et al. 2004: 228)}\)

(31) Mær hóvar lítið ta nýggju vinnuna.

me\(\text{DAT}\) likes\(3\text{sg}\) little the new job\(\text{ACC}\)

‘I don’t particularly like the new job.’ \(\text{(Thráinsson et al. 2004:228)}\)

Why does Faroese differ from Icelandic in this way? The answer is that the Case locality constraint, Pure Domain, is ranked higher in Faroese than in Icelandic. The effect of this is that the candidate with a nominative object is rejected because it has an impure nominative checking domain (due to the presence of the dative).

\(^{14}\)Historically, Faroese was like Icelandic in allowing nominative objects with dative subjects and Thráinsson et al. 2004: 229 note that there are still “some verbs that take a dative subject and a nominative object, at least optionally and for some speakers.”
3. A Pure Domain Approach to Case Locality

Languages ideally maintain pure Case-checking domains. That is, the Case-checking domain of a head should not contain any Case other than that checked by that head. But this ideal of a pure checking domain is not always maintained, either within or across languages, because the Pure Domain constraint is a violable constraint ranked among the other violable constraints.

(32) **Pure Domain:** The Case-checking domain of a head must not contain any Case other than that checked by that head.

Assign one violation mark for each Case inside the Case checking domain of a head that is not checked by that head.

The nominative Case checking domain of Infl/Tense will be pure if it contains no Case other than nominative.

3.1 Case-checking domain boundaries

The checking domain of a head has to be large enough to contain that head and the DP whose Case it checks, but how large or small can a checking domain be, and what determines its boundaries? Let us begin with the upper boundary. Chomsky 1995 defines the checking domain of a head to include everything contained in the first maximal projection dominating that head. A head can check Case in its specifier position, but not in some position above its maximal projection. For the nominative checking domain of
Infl/Tense, this upper boundary is the maximal projection of Infl, IP.

It is crucial for the analysis below that minimal checking domain of a head include the specifier of that head. We need the following definition from Chomsky 2000:

(33) “The minimal domain of a head H is the set of terms immediately contained in projections of H (Chomsky 2000:123).”

This is crucial because a language cannot avoid a violation of the Pure Domain constraint by setting the upper domain boundary of the nominative checking domain of Infl/Tense at I’ so as to exclude the specifier of that head containing the dative subject:

(34) ILLEGAL DOMAIN:  * [ DP-dative Infl/T [ V DP-nominative ]]

The above checking domain (indicated by underlining) has an illegal upper boundary, because the checking domain of a head necessarily includes its specifier since it must extend up to the maximal projection of that head.

Now let us consider the lower boundary of Case-checking domains. Heads can check Case under c-command (e.g. Chomsky 2000), as Infl/Tense does in unaccusatives, as in the Italian example in (35), and in constructions with a dative subject and a nominative object, as in the Icelandic example in (36).

(35) All'improvviso è entrato un uomo dalla finestra. [Italian]

suddenly entered a man-NOM/*ACC from the window

‘Suddenly a man entered from the window.’ (Belletti 1988 (17))
We put aside here the interesting question of the absolute lower limit of checking domains.

There is little or no evidence that the checking ability of Infl/Tense can reach inside a DP, NP, or PP. The checking domain of V can extend across an embedded IP, at least to the Spec of that IP, in ECM constructions, under the assumption that ECM constructions do not involve movement into the upper clause.

(36) Barninu batnaði veikin. [Icelandic]

child-DAT recovered-from disease-NOM

‘The child recovered from the disease.’ (Yip, Maling, and Jackendoff 1987: 223)

In these examples, the checking domain of Infl/Tense (indicated below by underlining) is the entire clause.15

(37) a. [IP Infl/T [V DP-nominative]]

b. [IP DP-dative Infl/T [V DP-nominative]]

A Case-checking domain has to be large enough to contain both the head and the argument whose Case that head checks, but making the checking domain larger than necessary may incur unnecessary violations of the Pure Domain constraint. This would occur in ordinary nominative-accusative clauses such as (38) if the checking domain of Infl/Tense were always the entire clause, as above, so that it would also include the accusative object.

(38) He saw him.

But the checking domain of Infl/Tense need not be so large; it can extend just down to VP and still include both the head, Infl/Tense, and the nominative DP being checked.

(39) [DP-nominative Infl/T [VP V DP-accusative]]

15We put aside here the interesting question of the absolute lower limit of checking domains. There is little or no evidence that the checking ability of Infl/Tense can reach inside a DP, NP, or PP. The checking domain of V can extend across an embedded IP, at least to the Spec of that IP, in ECM constructions, under the assumption that ECM constructions do not involve movement into the upper clause.
The correct intuition is that checking occurs in the smallest possible legal checking domain. Technically, in this OT account, candidates with different sized legal domains compete with each other. However, no constraints favor an unnecessarily large domain. Rather, an unnecessarily large domain may incur a violation of Pure Domain that is avoided in the candidate with the smaller domain.

3.2 It takes two to make a checking domain

Another important intuition that we need to capture formally is that if there is no checking going on, there is no checking domain:

(40) A head that is not checking any Case has no checking domain.

This is crucial, or else languages could not avoid an impure nominative checking domain by selecting a candidate without a nominative. If the mere presence of Infl/Tense meant that it had a checking domain, even if no nominative checking were going on, it would mean that the presence of a dative subject would always make that domain impure. If this were so, Faroese could not improve things by selecting a dative-accusative pattern over a dative-nominative pattern. Thus we crucially need the idea that a head has no checking domain unless it is actually checking another element. (One can assume, if necessary, that a head that does not check anything has the relevant feature it carries deleted.)

In the next section, we see how the addition of the Pure Domain constraint to the markedness and faithfulness constraints discussed above allows us to capture the difference between Icelandic and Faroese in dative subject constructions.
3.3 Icelandic and Faroese: the ranking of Pure Domain and *accusative.

In a clause with a dative subject, Infl/Tense can potentially license a nominative object, but it can only do so at the expense of a Pure Domain violation. The alternative is not to license a nominative at all, allowing the V to licensing accusative Case on the object instead; but this has a cost as well since accusative is a more marked Case than nominative. Which of these is considered the lesser of the two evils in a particular languages is encoded in the grammar in terms of the relative ranking of the Pure Domain and the *accusative constraints. Faroese views the Pure Domain violation as worse, as expressed by ranking it above *accusative:

(41) Faroese: Pure Domain >> *accusative

Icelandic takes the opposite view, that using the less marked Case is more important, and so it ranks *accusative above Pure Domain.

(42) Icelandic: *accusative >> Pure Domain

We see these constraints in action in Faroese in the following tableau. The (a) candidate with a nominative object incurs a Pure Domain violation because of the dative subject inside the nominative checking domain of Infl/Tense. There is no legal way to make the domain smaller in order to avoid that violation. The only alternative is not to have a nominative domain at all (by not checking a nominative), and this is what occurs in the (b) candidate, which wins this contest before the lower constraint can have an effect.
(43) Faroese  (for verbs that take a dative subject)

<table>
<thead>
<tr>
<th>input: DP-dative DP</th>
<th>Pure Domain</th>
<th>*acc</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. [DP-dative Infl/T [V DP-nom]]</td>
<td>*!</td>
<td></td>
</tr>
<tr>
<td>b. [DP-dative Infl/T [V DP-acc]]</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

Reranking these two constraints, as in Icelandic, causes the decision to be made in terms of the relative markedness of the two Cases, nominative and accusative, so that the (44a) candidate is the winner. Here the Pure Domain violation is tolerated:

(44) Icelandic

<table>
<thead>
<tr>
<th>input: DP-dative DP</th>
<th>*acc</th>
<th>Pure Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. [DP-dative Infl/T [V DP-nom]]</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>b. [DP-dative Infl/T [V DP-acc]]</td>
<td>*!</td>
<td></td>
</tr>
</tbody>
</table>

For those who are used to thinking about language differences in terms of parameter setting, the piece of information that needs to be learned in the ‘parameter’ that is set here, is the relative ranking of these two universal constraints.

We account for the difference between ergative languages that do and do not allow nominative objects in the same manner. Those that do not, rank Pure Domain above *accusative, as in Pitta Pitta (see section 1.2 for the relevant example).
(45) Pitta-Pitta

<table>
<thead>
<tr>
<th>input</th>
<th>Pure Domain</th>
<th>*acc</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. [DP-erg Infl/T [V DP-nom]]</td>
<td>*!</td>
<td></td>
</tr>
<tr>
<td>b. [DP-erg Infl/T [V DP-acc]]</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

In contrast, ergative languages that do allow nominative objects rank *accusative above Pure Domain:

(46) Hindi

<table>
<thead>
<tr>
<th>input</th>
<th>*acc</th>
<th>Pure Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. DP-erg Infl/T [V DP-nom]</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>b. DP-erg Infl/T [V DP-acc]</td>
<td>*!</td>
<td></td>
</tr>
</tbody>
</table>

Some readers familiar with the traditional labeling of Hindi Cases may be confused at this point, since in addition to the ergative-nominative pattern, Hindi also allows an ergative-dative Case pattern (which is traditionally labeled ergative-accusative). In such constructions, the specific/animate object has undergone object shift (Mahajan 1991), a process that is familiar from work on Icelandic (e.g. Vikner 1991, Zwart 1994, Diesing 1996), although Hindi differs from Icelandic in that the shifted object takes a different
There have been claims in the literature that in the structure without object shift, the object has undergone incorporation (e.g. Mohanan 1994 for Hindi). The motivation for that claim is semantic, to try to account for the non-specific reading of these objects. The idea is that non-specific objects are somehow forced to incorporate, so that they do not get Case. However, the fact that the unshifted objects in Hindi still trigger the agreement associated with nominatives is evidence against this incorporation account. There is no syntactic motivation for treating these constructions any differently than nominative object constructions in other languages. Moreover, there are other approaches available in the literature to account for the semantic differences between marked/shifted and unmarked/unshifted objects, e.g. Diesing 1996, Woolford 1995.

4. The Potential Effect of a Further DP: Object Shift

The domain approach to Case locality correctly predicts that an intervening or closer DP can potentially interfere with the ability of a head to check the Case of a further DP. However, this domain approach to Case locality makes an interesting additional prediction, that even a further DP can cause trouble in the right situation:

(47) Prediction of the checking domain approach to Case locality:

A DP that is further from the head can potentially interfere with the checking of a closer DP if the further DP is inside the checking domain of that head.

A potential example of such a situation involves object shift. In object shift, the object...
moves out of the VP, typically due to the semantic features of that object, such as its specificity (Diesing 1996). The question is, does object shift necessarily move the object into the Case-checking domain of Infl/Tense? The answer to this question depends on the technical detail of the characterization of what the boundaries of checking domains can be. If just any maximal projection could serve as the bottom boundary of a checking domain, then the answer would be no; the maximal projection into which the object raises, say the Agr-O phrase, would not have to be part of the smallest possible checking domain of Infl:

\[(48) \quad [\text{DP-nom Infl/T} \quad [\text{AgrOP Object Agr-O} \quad [\text{VP} \quad ]]]\]

On the other hand, if domain boundaries correspond only with major maximal projections, VP (or vP) and CP (cf. phase boundaries (Chomsky 2000)), then object shift would necessarily put the object inside the smallest legal checking domain for Infl/T.

What we will see in this section is that we get a very interesting result if we assume that the answer is yes, that object shift does necessarily move an object into the nominative Case-checking domain of Infl/Tense, creating a Pure Domain violation.

\[(49) \quad \begin{align*}
\text{a. Without object shift} & \quad [\text{DP-nom Infl/T} \quad [\text{VP} \quad \text{DP-acc} \quad ] ] \\
\text{b. With object shift:} & \quad [\text{DP-nom Infl/T} \quad \text{DP-acc}_{[\text{VP} \quad ]} \quad ] \quad \text{Pure Domain Violation}
\end{align*}\]

As we saw above, the way to avoid a Pure Domain violation with respect to the nominative checking domain of Infl/Tense is not to have a nominative at all (since a head that does not check Case has no Case-checking domain). This is what we will now see in Nez Perce:
nominative cannot be used on the *subject* when object shift occurs.

4.1 Nez Perce

In constructions without object shift, the Case patterns of Nez Perce look like those of English. Subjects get nominative Case and objects get accusative.

(50) Nez Perce Case Patterns (in the absence of object shift)

<table>
<thead>
<tr>
<th>Type</th>
<th>Case Patterns</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>intransitive</td>
<td>nominative</td>
<td>(51) 'ipí+/0 hi+kúu+ye. ‘He went’. (Rude 1982 (19))</td>
</tr>
<tr>
<td>transitive</td>
<td>nominative [vp accusative]</td>
<td>(52) Háama+/0 hi+'wí+ye wewúkiye+/0. ‘The man shot an elk.’ (Rude 1988 (31)) (non-specific/low topicality object)</td>
</tr>
<tr>
<td>ditransitive</td>
<td>nominative [vp accusative accusative]</td>
<td>(53) 'áayat-/0 hi+'ni+ye tíim’es-/0 háama-/0. ‘The woman gave her husband a book.’ (Rude, personal communication)</td>
</tr>
</tbody>
</table>

These Nez Perce Case patterns result from the same constraint ranking as in English.
(54) English and Nez Perce constraint ranking

a. *ergative >> Max(ergative)

b. *dative >> Max(dative)

In both languages, these higher ranked Case markedness constraints favor eliminating the more marked inherent Cases, and the lower ranked Max constraints cannot preserve them. We see this in the tableau below for a ditransitive construction which entered syntax from the argument structure level with ergative Case on the external argument and dative Case on the goal.

(55) English/Nez Perce (without object shift)

<table>
<thead>
<tr>
<th>Input:</th>
<th>DP-erg</th>
<th>DP-dat</th>
<th>DP-*</th>
<th>*erg</th>
<th>*dat</th>
<th>Max(erg)</th>
<th>Max(dat)</th>
<th>*acc</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. DP-nom</td>
<td>*V</td>
<td>DP-acc</td>
<td>DP-acc</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>b. DP-erg</td>
<td>[V</td>
<td>DP-dat</td>
<td>DP-nom]</td>
<td>*!</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. DP-nom</td>
<td>[V</td>
<td>DP-dat</td>
<td>DP-acc]</td>
<td>*!</td>
<td></td>
<td>*</td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

So far, Nez Perce is like English; but things change when object shift occurs.

4.2 Nez Perce Constructions With Object Shift: emergence of the marked input

Like Hindi, Nez Perce has object shift, shifting specific/highly topical objects out of the VP (Woolford 1997). This results in a dramatic change in the Case pattern. The subject Case is now ergative. (There is also a change in the object Case, as we noted above for marked objects in Hindi, but we put this problem aside here.)
Surprising as this might seem, this change in subject Case is actually predicted if Pure Domain is ranked higher than *ergative in Nez Perce. The reason is that object shift brings the object up inside what would have been the smallest possible domain in which Infl/T could check the nominative Case on the subject. The alternative is not to have a nominative.

(58) Nez Perce

<table>
<thead>
<tr>
<th>input:</th>
<th>DP-ergative</th>
<th>Pure Domain</th>
<th>*ergative</th>
<th>Max(erg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. [DP-erg</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. [DP-nom</td>
<td>*!</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ergative Case in the winning candidate is preserved from the input (under the assumption that the external argument is marked with ergative Case at argument structure, or some other level that is the input to syntax). Although the ergative is normally eliminated by *ergative in Nez Perce, as in English, that constraint never gets a chance to apply here. Instead, the higher ranked Pure Domain constraint removes candidate (b) with the nominative subject. This is because the raised object has entered the nominative checking domain of Infl/Tense, producing a Pure Domain violation (regardless of the...
identity of that Case). The (a) candidate incurs no such violation because it has no nominative, and thus no nominative checking domain.17 (With respect to the question of other possible candidates, recall that we are assuming the presence of an inviolable Case filter here, so that no candidate with an unlicensed Case can be considered. A candidate (c) with an ergative-nominative pattern would also be eliminated by Pure Domain.)

Thus Nez Perce differs from English in allowing the ergative Case that is inherited from argument structure to survive in syntax in this one construction. One might call this the emergence of the marked input.18 We expect this result under the domain approach to

17I assume here that we do not have to be concerned about the checking domain for ergative (or dative) Case in syntax, since these Cases were already checked at the prior argument structure level and thus have no checking domain in syntax. If the Case of the shifted object (labeled simply objective in this Nez Perce data) is a structural Case, as argued in Woolford 1997, it would have a checking domain, but that domain would not contain the ergative subject. The checking domain of whatever functional head (say AgrO) licenses the Case of that marked object would extend only up to the maximal projection of that head (AgrOP).

18The Case alternations that we see in Nez Perce qualify as a ‘transitivity’ effect, under the view of Hopper and Thompson (1980) that constructions with semantically marked objects are more transitive than ordinary transitive constructions, and are often morphologically marked as such. In this paper, we make formal sense of one of these kinds of transitivity in terms of object shift. This raises the question of whether we can make similar sense of other such points on the scale of increasing transitivity described by Hopper and Thompson in terms of known syntactic phenomena that are already present in the theory, without making any formal reference to different
Case Locality laid out in this paper, under its prediction that:

(59) A further DP can interfere with Case licensing of a closer DP if that further DP is inside the smallest possible checking domain of the relevant head.

In the next section, we take up the question of why we do not see a similar Case change in connection with object shift in Icelandic.

4.3 Object Shift in Icelandic

It is well-known that object shift also occurs in Icelandic, with definite or specific objects (Holmberg 1986, Jónsson 1996, Diesing 1996).

(60) a. Hann las ekki bækur

   he(NOM)   read  not  books-ACC

   ‘He did not read books.’ (Diesing 1996 (4b))

b. Hann las bækur-nar ekki

   He(NOM)   read  books-the-ACC  not

   ‘He did not read the books.’ (Diesing 1996 (4c))

Under the standard assumption that the negative is located outside the VP, we see that the object inside the VP in (a) has shifted across the negative in (b) and is thus located outside the VP, and inside the smallest possible nominative checking domain of Infl/T.

(61) a.  [DP-nom V neg [VP DP-acc ]

b.  [DP-nom V DP-acc neg [VP ]  ]  Violation of Pure Domain

kinds of transitivity.
Given what happened above in connection with object shift in Nez Perce, one might wonder why we do not find ergative subjects popping up in Icelandic as we see in Nez Perce. The answer follows from what we already know from our discussion above, that the Pure Domain constraint is ranked low in Icelandic, lower than *accusative. We know this (and a child would learn this) from the fact that dative-nominative constructions occur in Icelandic (see the tableau in (44)). Since *ergative is universally ranked above *accusative (given the universal Case markedness hierarchy in (20), we now know that *ergative must be ranked above Pure Domain in Icelandic, unlike the situation in Nez Perce.

(62) Icelandic constraint ranking: *accusative >> Pure Domain  (established in (44))
(63) Universal constraint ranking: *ergative >> *accusative  (universal)
(64) Conclusion for Icelandic ranking: *ergative >> *accusative >> Pure Domain

The high rank of *ergative means that ergative Case never surfaces in Icelandic. The low rank of Pure Domain means that Icelandic will tolerate an impure nominative checking domain in object shift constructions, just as it does in dative-nominative constructions.

(65) Icelandic (for a verb with an external argument) with object shift

<table>
<thead>
<tr>
<th>input:</th>
<th>DP-ergative</th>
<th>DP</th>
<th>*ergative</th>
<th>Max(erg)</th>
<th>*acc</th>
<th>Pure Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. [DP-erg  DP-acc ]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. [DP-nom  DP-acc ]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In contrast in Nez Perce, the very high rank of Pure Domain both causes the preservation of ergative Case in object shift constructions, and it accounts for the fact that
Nez Perce has no nominative objects.\(^{19}\) In both situations, selecting a licensed Case other than the nominative allows the language to avoid an impure nominative licensing domain.

This is an interesting and an important result: the domain approach to Case locality ties together several seemingly unrelated Case effects: why Faroese uses accusative objects in dative subject constructions, while Icelandic uses nominative; and why the subject changes from nominative to ergative Case when the object shifts in Nez Perce, but not in Icelandic. All these effects are determined by the relative rank of the same constraint, Pure Domain.

\(^{19}\)At this point, readers may wonder about what effect object shift might have on Case in Faroese, since we know that Pure Domain is ranked higher in Faroese than in Icelandic. However, Faroese does not allow object shift, except with unstressed pronouns, a phenomenon which is argued to be distinct from object shift (Vikner 1991:297, Zwart 1994, Jónsson 1996, Thráinsson et al. 2004:245). It is possible that it is the high rank of Pure Domain in Faroese (in combination with high ranked constraints against the Case changes that would avoid violating Pure Domain) that is responsible for blocking object shift in Faroese, but at the moment we must leave this as an interesting speculation.
5. Implications for Locality Theory:

This paper has focused on locality as it relates to Case, and several interesting conclusions have been reached: Case locality involves a checking domain, another DP inside this domain can interfere with Case checking, but languages differ as to whether they tolerate another DP inside a Case-checking domain. In this section we turn to the question of the applicability of these results to locality theory in general.

One of the big picture questions in locality theory has to do with the exact interpretation of the intuition that ‘like blocks like’. That is, in any source-target relationship, is it the presence of an additional potential source that can block the relationship, or is it the presence of an additional potential target? Or can either an additional potential source or target block the relationship? This general question concerning locality was raised in phonology as early as Jensen 1974.

Chomsky 2000 takes the position that it is another potential target (or goal, in his terminology) that can block a source-target relationship (or a probe-goal relationship, in his terminology). For Case, this is consistent with the conclusion reached here, that the presence of another DP can interfere with a Case-checking relationship. This conclusion requires the assumption that the head is the source of the Case feature, while the target is the DP whose Case is licensed or checked by that head.

The opposite position is taken in the original version of Relativized Minimality (Rizzi 1990), at least with respect to Case. Rizzi 1990 proposes that a closer head blocks a Case-checking relationship, just as a closer head blocks head movement. However, there is very
little empirical basis for this conclusion. Rizzi 1990 mentions the fact that Case cannot be licensed across a PP boundary, attributing this to the presence of the P head. In this paper, however, we have seen no evidence that V, as a closer head, ever blocks Infl/T from licensing Case into the VP. As far as I know, there is no language where unaccusative subjects that remain in the VP get accusative instead of nominative. We saw above that such unaccusative subjects get nominative Case in Faroese, even though nominative objects are blocked in dative subject constructions. Given that such a blatant violation of Burzio’s 1986 Generalization would probably have been prominently discussed in the literature, we can probably conclude with some confidence that V never blocks Infl/T from licensing Case. If this is true, then what does Case tell us about the general question of whether a closer source ever blocks a source-target relationship? The answer depends on exactly why Case checking across a PP boundary is blocked. If it is indeed because of the P head, as Rizzi 1990 suggests, then we must conclude that some kinds of heads are blockers, but other kinds are not, and we would need a theory of which kinds will and will not block. On the other hand, if certain kinds of boundaries such as PPs and DPs are simply always impermeable to Case licensing relationships, we can conclude that there is no evidence that a closer head ever blocks Case checking, and we need a theory of why Case locality domains can never extend down into PPs or DPs.

It is interesting that in the revised version of Relativized Minimality in Rizzi 2001, he reaches the same general conclusion as Chomsky 2000, that in source-target relationships (chain formation), it is the presence of an additional potential target that can block the
relationship. He argues that this conclusion holds for movement and binding, but he encounters difficulty extending it to Case, due to the fact that he still assumes that it is a closer head that can block Case licensing relationships. To accommodate Case, he is thus forced to identify the head as the target, and the DP as the source, a view that is consistent with the earlier proposal in Chomsky 1995:262 that Case checking involved feature raising from the DP to the head. But Rizzi’s problem with Case disappears under the conclusion reached here, that it is not a closer head that blocks, but rather a closer DP. Rizzi’s revised Relativized Minimality now extends to Case with no modification required. For Case, as for movement and binding, it is a potential target that can block source-target relationships.

Readers may take from the above discussion that it is not always obvious what to label as the source and what to label as the target in particular locality situations. This is a major stumbling block that must be overcome before we can confidently conclude what kind of element blocks a source-target relationship - an element like the source or an element like the target. For Wh movement, Rizzi 2001 takes the position that the top (c-commanding) element in a chain is the target, while the bottom element is the source. This makes intuitive sense in terms of movement, where the source is the starting point, and the target is the landing site, and this enables Rizzi to account for Wh island effects, where an intervening Wh that has already moved to a Spec CP position blocks another Wh from moving across it. However, Chomsky 2000 takes a different view of Wh movement situations. For him, Wh movement is driven by a feature in C which attracts a Wh. Under that view, the Wh movement relationship is something like a Case checking relationship,
both involving a head as the source and an XP as the target. This view enables Chomsky to account for superiority relationships, where it is the highest Wh that moves to Spec CP, and a lower Wh is blocked by the higher Wh.

(66)a. Who bought what?
   b. *What did who buy?

A second question that is relevant to a general theory of locality is whether or not locality relationships crucially involve a domain. We know that binding relationships do crucially involve a domain, and we have seen in this paper the same is true of Case licensing relationships. The obvious question now is whether Wh movement relationships also involve a domain? That is, do at least some of the cross-linguistic differences in the island effects that govern Wh movement reduce to differences in whether or not the language tolerates another Wh inside the domain in which Wh movement takes place? We can ask the same question about binding. Can cross-linguistic differences in whether anaphoric binding is short distance or long distance be understood in terms of whether or not the languages in question tolerate impure binding domains, containing an additional potential binder?

6. Some Implications For Case Theory

The analysis in this paper, although formulated within Optimality Theory, crucially depends on keeping many standard assumptions about Case Theory from work such as Chomsky 2000. Some of these have already been discussed above in section two, but it is
worth placing special emphasis on two crucial assumptions supported by this account.

(67) Two Standard assumptions crucial to this proposal:

i. Case is licensed by heads

ii. Nominative is a Case

In this paper, we have seen that nominative Case licensing by Infl/T can be blocked. This supports that standard view that there is a licensing relationship involved. If nominative were not a Case, it would not need to be licensed/checked, and there would be no licensing/checking relationship to block.

One of the ways that scholars have tried to account for the unmarked behavior of nominative Case is to appeal to Jakobson’s 1936 claim that nominative is not a Case, but rather the absence of Case (Andrews 1982, Falk 1991, Taraldsen 1996). However, the claim that nominative is not a Case seems to create many more problems than it solves. Under the standard view that nominative is licensed by Infl/T, we understand its distribution fairly well; in contrast, if nominative is not a Case, it becomes very hard to account for its distribution. Why can’t nominative occur inside DPs? Why is nominative only sometimes available to the object? Why does any DP need Case if some DPs do not need Case? Those who advocate the view that nominative is not a Case need to add elements to the theory to answer such questions and predict when DPs will have Case and when they will not have Case, and why.

Moreover, we do not need the idea that nominative is not a Case. We have seen here, and in Woolford 2001, that we can easily account for the unmarked behavior of nominative
within Optimality Theory without saying it is not a Case. We do this by using standard Case markedness constraints based on a Case markedness hierarchy in which nominative occurs at the least marked end. The advantage of such an approach is that it extends beyond the nominative, enabling us to also account for other markedness effects involving Case, such as the fact that languages prefer to use accusative rather than dative to mark a causee, when there is already an accusative present in the clause. In this way, we unite the behavior of the nominative with markedness phenomena related to hierarchies in other areas of syntax (e.g. animacy hierarchy effects) and in phonology (e.g. sonority hierarchy effects).

None of the results achieved in this paper would be possible if nominative were not a Case, and thus had no licensing relationship that could be blocked.

7. Conclusion

This paper has shown that there are cross-linguistic differences involving Case locality. Although one gets the impression from languages such as Icelandic that inherent Case is inert in the sense that it never blocks nominative Case licensing, this is not universally true: subjects with dative or ergative Case do block nominative licensing in languages such as Faroese and Pitta Pitta. In addition, one gets the impression from languages such as Icelandic that object shift has no effect on subject Case; but languages differ in this respect as well, since object shift blocks nominative licensing in Nez Perce.

An important result of this paper is that these two cross-linguistic differences are
shown to be related. Both follow if we replace the standard idea that a closer DP blocks Case licensing from Chomsky 2000 with a violable constraint prohibiting the presence of another DP anywhere inside the relevant Case-checking domain.

**Pure Domain:** The Case-checking domain of a head must not contain any DP other than the DP whose Case is checked by that head.

The relative rank of this constraint with respect to the small set of faithfulness and markedness constraints involving Case set out within Optimality Theory in Woolford 2001 determines whether or not a particular language in question insists on pure Case-checking domains, or whether impure domains will be tolerated in order to avoid using a more marked Case. The two phenomena noted above are connected, because both involve situations in which another DP sits inside the smallest possible checking domain for nominative Case. A language that tolerates this in dative and ergative subject constructions will also tolerate it in object shift constructions, as Icelandic and Hindi do. A language that insists on pure domains will not tolerate this in either situation, as in Nez Perce.

A key difference between this domain approach to Case locality and approaches that refer only to blocking by an intervening or closer DP is the prediction here that even a further DP is expected to interfere with nominative licensing by Infl/T, if that further DP is inside the minimal Case-checking domain of Infl/T. Under this domain approach, we tie together several seemingly unrelated effects: why Faroese uses accusative instead of nominative Case on objects in dative subject constructions, but Icelandic does not; why Nez Perce disallows nominative objects, while Hindi allows them; and why the subject
changes from nominative to ergative Case when the object shifts in Nez Perce, but not in Icelandic.

This approach requires us to retain several standard assumptions about Case that are sometimes dropped in other OT work on Case: all DPs require Case, Case is licensed by heads, and nominative is a real Case. However, we do not need certain other standard assumptions, such as the idea that there can be cross-linguistic differences in the Cases that can be licensed or the heads that license these Cases. Instead, under this approach, we can assume that the same heads potentially license the same Cases in all languages. When more than one Case could be licensed on a DP in a particular construction, the choice of which Case is used is determined by the way the universal constraints are ranked in that language. Because of this, the Cases selected for particular constructions may differ cross-linguistically. Similarly, it may happen that a language never uses a particular Case, but there is no need to claim that the language lacks the potential to license that Case.

The principle three conclusions of this paper for Case locality are (i) support for the idea that another DP can block Case licensing/checking (but no support for the idea that another head can block Case) (ii) a checking domain is crucial for Case, just as it is for binding, and (iii) at least some cross-linguistic differences involving locality reduce to a difference in whether the language will tolerate an additional potential target inside a locality domain.
References


abstract: Case Locality: Pure Domains and Object Shift

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Languages appear to differ in the locality conditions that regulate nominative Case checking: a dative or ergative subject blocks nominative checking of an object in Faroese and Nez Perce, but not in Icelandic or Hindi. Languages also differ in the effect that object shift has on subject Case: object shift has no effect on subject Case in Icelandic, but causes ergative Case to appear on the subject in Nez Perce. These superficially unrelated effects follow if one violable locality constraint is added to the small set of Case faithfulness and markedness constraints within Optimality Theory. This locality constraint, Pure Domain, requires that the checking domain of a head contain only Cases checked by that head. Differences in the relative rank of Pure Domain with respect to Case faithfulness and markedness constraints produces the cross-linguistic variation noted above. This domain approach to Case locality captures the standard notion that a closer DP can interfere with the checking of a further DP, but it also captures the fact that a further DP can interfere with the checking of a closer DP, if that further DP is close enough, a situation that arises with object shift.

Keywords: Case, locality, nominative objects, transitivity, optimality