The Syntax of Case and Agreement: its Relationship to Morphology and Argument Structure

By

Vita G. Markman

A Dissertation submitted to the Graduate School – New Brunswick

Rutgers, The State University of New Jersey

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Graduate Program in Linguistics

written under the direction of

Professor Mark Baker

and approved by

Professor Mark Baker

Professor Viviane Deprez

Professor Ken Safir

Professor Carson Schutze

New Brunswick, New Jersey

October 2005

ABSTRACT OF DISSERTATION

The Syntax of Case and Agreement: its Relationship to Morphology and Argument Structure

by VITA G. MARKMAN

Dissertation Director

Professor Mark Baker

In this thesis I argue for a non-arbitrary relationship between the syntax of case and agreement and its morphological realization, as reflected in the following linguistic universals: *1. If a language overtly case-marks the subject, it overtly marks the object; 2.If a language has overt object agreement, it has overt subject agreement* (Moravcik 1974, Comrie 1988, Lehmann 1982). The goal of this thesis is to explain the nature of the morphology-syntax connection the above universals embody and explore the consequences it has for syntactic theory, grammars of individual languages, and for UG.

In this dissertation I depart from the Universal Approach (e.g. Chomsky 1981, Rouveret and Vergnaud 1980, and later in Chomsky 1995, 2000, Harley 1995, Sigurdsson 2003 inter alia) that treats case and agreement as universal properties of language and their overt realization as arbitrary and language specific. Building on a proposal presented in Pesetsky and Torrego 2001 that features are interpretable but may become uninterpetable if placed on a wrong head, I argue that case and agreement features are misplaced interpretable features used by languages to create PF-records of thematic relations. I further argue that misplaced features

are not universal: in the absence of case and agreement features PF-records of thematic relations are preserved via rigid word order.

I further demonstrate that restrictions on feature misplacement together with the inherent properties of misplaced features and the syntactic configurations in which misplaced features are valued account for the above universals, derive a constrained cross-linguistic case and agreement typology, and has consequences for (non)-configurationality. In particular, I argue that languages without case features but with agreement features will be non-configurational, languages that have both case and agreement features may allow but not require NP dislocation, and finally languages that lack case and agreement features will have rigid word order. This is the topic of Chapter 4. In this thesis I also address (quirky) dative subjects (Chapter 2), infinitives (Chapter 3), and ergativity (Chapter 5).

DEDICATION

To All My Parents

ACKNOWLEDGEMENTS

First and foremost I would like to thank my advisor, Mark Baker, without whom this work would certainly not be possible. What I can fit into a paragraph in the acknowledgments to my thesis would never be enough to adequately express my gratitude to you. Your book on Lexical Categories instilled in me a desire to write a dissertation in syntax. Thank you for being my inspiration and my role model. Thank you for your intellectual input, for the time you have devoted to me. Thank you for having faith in me and for your understanding, both on a personal and a professional level. To me, you are and always will be an example of a great teacher, a caring mentor and a brilliant researcher. I am honored to be your student. Thank you.

I owe many thanks to Ken Safir and Viviane Deprez who took their time to comment on my work throughout the two years that I have worked on this project. Thank you for your patience, your time, your input and your guidance. Thank you to Carson Schutze, for taking the time to be my external committee member, for meeting with me and providing detailed and thought-through comments. You all made a great committee together and I value and appreciate your help! I thank you all for the time and effort you have invested in me.

I am also very grateful to other faculty members at the Rutgers Linguistics Department who significantly contributed to my education. Thank you to, Veneeta Dayal, Bruce Tesar, Maria Bittner and Matthew Stone for being my professors, my teachers, my mentors. I would also like to thank Anna Szabolsci and Richard Kayne who were my first professors of linguistics. Because of you I was able to fulfill my dream of getting into Rutgers which was and remains my first choice graduate school. Thank you for the encouragement you have given me, for your help and support.

I would like to thank all the students at the Rutgers Linguistics Department for being a part of this great community and making my time here so much fun. I would like to thank Seye Adesola, Slavica Kochovska, Jessica Rett, Seung Hun, Beto Ellias-Ulloa, Natalia Kariaeva and all the members of our Syntax Group *STaR for offering valuable input on my presentations.

Thank you for being my classmates and my friends. Special thanks go to Anubha Kothari for providing judgments on Hindi and to Xiao Li for the judgments on Chinese. Thank you Anubha and Xiao for being my patient and helpful informants.

I would like to thank the Rutgers Linguistics Department as a community for helping me get this far. Thank you all for being my colleagues, my mentors, and my friends. You are a great department and I feel privileged to be a part of you. A special thanks goes to Joanna Stoher who has been and continues to be the best office manager in the world. Thank you, Joanna, for all your invaluable help, your infinite patience and understanding.

I also owe many thanks to the students and faculty at the Department of Linguistics at UCLA where I spent the Fall 2004 quarter as a visiting student. Special thanks go to Tim Stowell who welcomed me to the department and allowed me to use its numerous resources. Thank you to Hilda Koopman and Anoop Mahajan for teaching an incredibly stimulating seminar on Quirky Subjects.

No words would be enough to express the gratitude I feel towards my family, especially to all my parents: Gary, Lyuda, Sasha and Arkadij, my sister Ilona and my brother Denis. I feel especially grateful to my Mom, who unfortunately is not here to share with me this joyful and important occasion, but who is forever in my heart. My dear parents, my debt to all of you is the greatest. Gary, you raised me. You instilled in me the very values that drove me to pursue higher education, and in particular, obtain a doctoral degree. You have taught me to appreciate and seek knowledge, to strive for self-improvement and take joy in creative intellectual pursuits. The impact you have had on my life truly cannot be measured. For this and for much more I am infinitely thankful to you. My dear Sasha and Arkadij, your house I have been calling 'home' for over 10 years now. Thank you for your warmth, for your welcome, for your kindness for your moral support. Thank you all for being my family. Always.

I owe many thanks to all my friends outside of the department. In particular, to my precious little girl Sophie for her brilliant mind and her kind soul. The help and support you have

offered and continue to offer me is invaluable. Thank you for the stimulating discussions about linguistics and about life…Thank you for proofreading my papers, handouts, and abstracts countless times. Thank you for listening to my practice talks. Thank you for taking an insane amount of time to help me do the editing and formatting revisions for my thesis. If I were to name one person outside of my committee who had a direct impact on making this thesis possible, it would be you. It is you. Thank you my dear for keeping me from going nuts, for being my best friend and my confidante.

My dear friends Felix, Ella M., Ella A. Olja, Yasha, Alik, Robert, Josh, Sam, and Asya, all of you have helped me enormously in your own way. My dear Ellas, when I am around you I rest mentally and emotionally. I thank you both for that. Felix, thank you for being an incredibly kind and sensitive person, a great friend, and for being so much fun to hang out with. Alik, you have taught me to appreciate excellent music. This thesis was written while listening to Chet Baker, Bill Evans, John Coltrane and Jim Hall, to name a few. Thank you for introducing me to these great musicians and for teaching me to love jazz.

I would like to extend my thanks to the members of the Argentine Tango Community in New York and Los Angeles for making it possible for me to forget about syntax and my dissertation when I needed to.

Last, but certainly not least, I would like to thank my friend and dance partner Alex. You are the soul of tango. Thank you for your kindness, for your incredible patience, for your support and understanding, for giving me the strength to go on. Thank you for your smile, for your dance and for the magic of you. You fill my days with joy and laughter and light. I cannot tell you how grateful I am to you for that.

Table of Contents

ix

Appendices 289

References 307

Curriculum Vitae 314

x

Chapter 1   Introduction: Case, Agreement, and the Universal Approach

1.0   Outline

In this chapter I lay out the main issues that will be dealt with in this dissertation and state

the central claims that I will advance. In Section 1 I introduce the view espoused in the Universal

Approach and point out some of its shortcomings. In Section 2 I present the two universals of

case and agreement as supporting evidence for the principled relationship between syntax and

morphology thereby providing further evidence against the Universal Approach. In Section 3 I

outline the central aspects of the proposal I advance. In Section 4 I show how the proposed theory

accounts for the universals discussed in Section 2. In Section 5 I conclude the discussion in this

chapter and lay out the issues that will be dealt with in subsequent chapters.

1.1   Introduction

Throughout much history of generative grammar, case and agreement have been

considered to be universal properties of language and only their morphological realization to be

language specific. The strongly universalist position referred to in Sigurdsson 2003 as the

Universal Approach (to be defined shortly) has been the dominant view of case and agreement

within generative grammar and has been either explicitly stated or presupposed in most

generative work (Chomsky 1981, 1995, 2000, 2001a, Harley 1995, Bittner 1994, Bittner and Hale

1996, Sigurdsson 2003 inter alia). This view was explicitly expressed with respect to case in the

formulation of the Case Filter: "All NPs must have case to be LF and PF visible" (Rouveret and

Vergnaud 1980, Chomsky 1981), and was extended to agreement (phi-features) in the later 90's

with the advent of the Minimalist Program (Chomsky 1995). The view became particularly

prominent in the later Minimalist work i.e. Chomsky 2000, 2001a, Sigurdsson 2003. Clearly,

case and agreement *morphology* is not universal since there are many languages that mark only

agreement (Mohawk, Bantu), only case (Japanese, Korean), some mixture of the two (English,

Russian) or nothing at all (Haitian Creole, Chinese). Below I present some examples. They will be discussed in detail in Chapter 4:

MOHAWK (from Baker 1996: 116)

(1) a. Wa'-   ke-   tshvri-   kikv   kahure

        Fact-   1sS-find-PUNC   this   gun

        I found this gun

    b. Sak   a'share   wa-ha-tshvri-'

        Sak   knife   Fact-MsS-find-Punc

        Sak found the/a knife

CHICHEWA (BANTU) (from Bresnan and Mchombo 1984)

(2)   Alenjne zi-   na-   wa-   lum-   a   njuchi

        Hunters SM   past   OM   bite-   INDIC bees

        Bees bit the hunters

JAPANESE

(3)   Taro-ga   pizza-o   tabe-ta

        Taro-NOM   pizza-ACC   eat-past

        Taro ate pizza

RUSSIAN

(4)   Homer   udaril   Bart-a

        Homer   hit-3rd-SgMasc Bart-ACC

        Homer   hit   Bart

CHINESE (from Sigurdsson 2003)

(5)   a. Ta   bu   chi   rou

       She/he not   eat   meat

       She/he does not eat meat

       b. Wo   jiao   ta   mai   juzi   chi

       I   tell   she/he buy   orange eat

       I told him/her to buy oranges to eat

HAITIAN CREOLE (examples adopted from Deprez 1991)

(6)   a. Li   renmen Mari

       He   like   Mari

       He loves Mari

       b. Mari   renmen li

       Mari   like   him

       Mari   likes him

The above is but a tiny drop in the sea of morphological diversity of case and agreement systems in languages of the world (for detailed discussions of head-marking and dependant-marking languages see Nichols 1986, Nichols 1992, Blake 1994, inter alia). However, the fact that languages vary so much with respect to their case and agreement morphology has not prevented many generative linguists from arguing that agreement and case features are universal. Another view along these lines is advanced by theories advocating separation of morphological case (m-case) and NP licensing (Marantz 1991, Harley 1995, Schutze 1997, McFadden 2004). The proponents of this approach argue that NPs must be universally licensed in specific syntactic

configurations (a version of Abstract Case), while the m-case they receive may depend on various language-specific properties. In the discussion to follow I will mainly focus on the Universal Approach as it is presented in Sigurdsson 2003, since his paper 'Case: Abstract vs. Morphological' gives a very succinct statement of the universalist view. Importantly, I would like to emphasize that while I use Sigurdsson's formulation of the Universal Approach, he is not the only scholar to adopt it. This view or the one along these lines has been assumed in virtually all generative accounts of case and agreement from Chomsky 1981 (and previous work) through the recent Minimalist theories that rely on AGREE (Chomsky 2000). Building on Chomsky 2000, 2001a, 2001b, Sigurdsson's 2003 makes a proposal regarding the status of case in human language which he calls the Universal Approach stated in (7):

(7)   Universal Approach

        DPs are universally 'cased', at least abstractly.

                              (Sigurdsson 2003: 3).

        Sigurdsson also accepts the Uniformity Principle of Chomsky 2000:2, Sigurdsson 2003:3 that states that languages are uniform [with respect to their syntax], which means that the crosslinguistic variation we see is mainly attributable to the variation in the Phonological Components (PF/MF) of individual languages. From this it is plausible to conclude that Sigurdsson 2003 as well as other proponents of the Universal Approach to case would extend this view to agreement as well. The strongest universalist claim then would be that case and agreement features are abstract universal properties of syntax and may or may not be morphologically realized in each particular language. Thus, with respect to case, Sigurdsson 2003:3 writes: " … one may conceive of abstract case as a universal feature or phenomenon… It forces us to conceive of morphological case as a PF exponent, whereas abstract case is … a narrow syntax phenomenon that is not necessarily expressed at PF." Putting this claim together with the Uniformity Principle, he claims that "it is inevitably the case that PF is arbitrary to a

much higher degree than usually assumed, not only crosslinguistically, but even language internally." (Sigurdsson 2003: 3). He further defines syntactic/abstract case as a relation between a DP and its syntactic surroundings which may or may not be semantically realized[1]. (This is similar to the notion of 'licensing' employed in the work of Harley 1995, Schutze 1997). Thus, the existence of purely head-marking and purely dependant-marking languages such as Mohawk, Chichewa, Japanese, Korean, Batsby, Dyiarbal and many others discussed in Nichols 1986 is accounted for by saying that it is the morphology that is lacking in these languages, not case/agreement *features*.

While throughout this thesis I will argue against treating the relationship between morphology and syntax as arbitrary, I will admit from the beginning that divorcing overt morphology from syntax is oftentimes a useful and necessary strategy. For example, while English lacks overt accusative case morphology on nouns, it preserves it on pronouns: "John sees him." Consequently, the claim that "Bill" in "John likes Bill" has a null accusative morpheme is motivated. Another instance where one can posit a null morpheme comes from the accusative case-marking on inanimate masculine nouns in Russian. As seen from the examples below, masculine inanimate nouns in Russian do not have overt accusative case marking while the animate masculine nouns do:

(8)　a. Dima videl stol　　　　　　b. Dima videl mal'chik-a /*mal'chik

　　　Dima saw table　　　　　　　　Dima saw　boy-ACC　/　boy

　　　Dima saw a table　　　　　　　Dima saw a boy

---

[1] Inherent cases (dative) are semantically realized while structural cases (nominative, accusative) are not. Crucially, whether structural or inherent cases are morphologically realized or not is arbitrarily determined.

However, while the marking on the inanimate masculine nouns is null in Russian, it is overt on the pronouns that appear in the same position. It is also overt on inanimate feminine nouns:

(9)　a. Dima videl ego /　*on　　　　　　　b. Dima videl trjapk-u /* trjapka

　　　Dima saw　he-ACC he-NOM　　　　　Dima saw　rag-ACC　/rag-NOM

　　　Dima saw him　　　　　　　　　　Dima saw a rag

It is thus plausible to posit a phonologically null but syntactically present accusative case on the object NP in Russian, since other NPs and pronouns do have overt morphology in the same position. There are many other examples of this sort: Japanese and Korean allow case-markers to be dropped; English subject-verb agreement in the plural form is homophonous between the 1st, 2nd and 3rd person, etc. Furthermore, there are more subtle instances of non-cooperative morphology, such as when two different agreement features get spelled out as one portmanteau morpheme (e.g. Mohawk 2nd person subject and 3rd person object), etc. The fact that noun phrases in syntactically distinct positions sometimes show up with identical morphology, as well as the fact that morphemes are oftentimes missing or fused together, lends significant credence to the claim that morphology is idiosyncratic and not predictable.

However, matters are more complex, especially when it comes to positing pervasive null morphology crosslinguistically. Postulating syntactically present but unpronounced case and agreement morphemes without independent support can put us in danger of downplaying some important syntactic differences that exist between languages and missing interesting crosslinguistic generalizations. Let us take an example. Since Chomsky 1993, 1995, case and agreement are assumed to be directly related: case and agreement features are checked at the same time (universally), but whether or not they are overtly realized is subject to PF / MF

requirements of individual languages[2]. That is, the T checks its phi-features with those of the NP, resulting in agreement on T and nominative case on the NP. The same is assumed for accusative case and phi-features on v (Chomsky 2000). In previous theories that relied on AGR projections (Polluck 1989, Chomsky 1991, Watanabe 1993, Harley 1995, Kayne 1989 for participles) the parallelism between nominative cases and subject agreement on the one hand and accusative case and object agreement on the other was captured by treating both as checked in AgrS and AgrO projections respectively. The direct relationship between nominative case and subject agreement is supported by much crosslinguistic evidence from all Indo-European language as well as from those non-Indo-European languages that were in close contact with Indo-European languages (M.Baker, pc). Even more significant is the fact that when the subject NP is not nominative, there is no agreement with it, as illustrated by the well-known quirky subjects in Icelandic, Russian, Hindi and other languages. Instead, agreement is with the nominative object:

ICELANDIC (from Sigurdsson 2003)

(10) a. Kjartani   likiDu   Pessir   bilar

Kjartan-DAT liked-3Pl   these   cars-NOM

Kjartan liked these cars

b. Henni hofDu ekki   likaD   Peir

Her-DAT   had-3PL not   liked   they-NOM

She did not like them

RUSSIAN

(11)   Mne   nuzhna   eta kniga

---

[2] Some accounts attribute the presence or absence of feature spell-out to the strength vs. weakness of features where strong features trigger overt movement (see Chomsky 1995, Ura 1994, 2000). However, this is hardly explanatory given that we do not have an independent definition of featural weakness or strength.

Me-DAT   needed-3rd-Sg-fem this book-3rd-Sg-fem-NOM

I need this book

The crosslinguistic correlation between nominative case and subject agreement makes it very tempting to propose that agreement always goes hand-in-hand with case regardless of whether it is nominative or accusative. But making this conclusion may be too hasty: Woolford 1999a points out that languages with object agreement do not have overt accusative case on the object[3]. The same is seen in Nichols 1992, whose typological study of head-marking languages indicates that languages with much agreement tend not to (though can) use dependent-marking as well (Nichols 1992, quoted in Baker 1996: 131). Furthermore, Baker 1996 in his discussion of Polysynthetic languages that have obligatory object agreement finds no Polysynthetic language that would have accusative case marking on the object. Languages with obligatory or optional object agreement either have ergative case systems with absolutive (morphologically unmarked) case on the object or no case marking at all. This is true for Polysynthetic and non-Polysynthetic languages with object agreement. Hindi, a (non-Polysynthetic) split-ergative language presents a good illustration of this fact because while object agreement and accusative case marking are present in the language, they never appear in the same construction. Hindi has agreement with the object only in those constructions where the object is not marked with an overt case-marker – ko. When the case marker on the object is present, object agreement is not possible.

HINDI (Data adopted from Mohannan 1994: 103)

(12) a. Ravii   roTii-ko   uthaaegaa [*no obj. agrmnt*]

---

[3] She mentions two exceptions : Quechua and Hungarian. However, Quechua has agreement with 1st and 2nd person objects that cliticize onto the verb and pro-drop. 3rd person objects have case marking but do not show agreement. In Hungarian, object agreement appears on the verb when the object is 3rd person and definite. This kind of agreement is plausibly attributable to definiteness-marking rather than to an instance of object agreement (Woolford 1999aa: 8; Kiss 1987: 145; Cole and Jake 1978; Muysken 1981; Milken 1984). Davies 1986 also argues that Choctaw is a language that has overt accusative case and object agreement.

Ravi-NOM-masc bread-ACC-fem lift-fut-masc-Sg

Ravi will lift up the bread

b. Ravii-ne   roTii   khaayii   [agreement with obj.]

Ravi-erg   bread-NOM-fem eat-perf-sg-fem

Ravi ate bread

c. Ravii-ne baalikaa-ko   uthaayaa   [no agreement with obj.]

Ravi-erg girl-NOM-fem lift-perf-masc-Sg

Ravi lifted up the girl

Thus, as the above Hindi data illustrate: when there is overt accusative-marking on the object, there is no object agreement even when the subject is overtly marked with ergative case (cf12(c)). If we posit null object agreement in languages with overt accusative case by assuming that accusative case should work just like the nominative one (i.e correlate with agreement) and ignore what morphology tells us, we will risk missing an important crosslinguistic generalization that overt accusative case correlates with the *absence* of overt object agreement. Positing pervasive null object agreement in languages that never show it overtly such as Russian, German, English and positing pervasive null accusative case for languages with no overt case marking such as Mohawk and Bantu appears to lack motivation. Also, if the connection between syntactic NP licensing and m-case were language specific, we would expect there to be languages with overt object agreement and overt accusative case along with languages with object agreement and no accusative case marking. In fact, the right generalization here concerns morphology: overt agreement implies absence of overt case where the nominative case is morphologically

unmarked[4] (sometimes referred to as the default case (Bittner 1994, Bittner and Hale 1996,

Marantz 1991). The question why morphologically unmarked case correlates with agreement is

answered in section 3 of this chapter.

1.2   Universals of case and agreement

The Universal Approach faces an even more serious challenge that comes from the

existence of Case and Agreement universals stated below. The universals[5] are discussed in much

typological literature (Croft 1988, Moravcik 1974, 1988, Keenan 1974, Lehmann 1982), but have

received little attention from generative linguists (with some exceptions, i.e. Bobaljik 2005).

Consider the universal in (13) first:

(13)   *If a language overtly marks case on the subject, it overtly case-marks the object (Also*

Greenberg's Universal 38).

When the subject bears overt case[6] (in transitive and intransitive constructions), the language

must contain at least some constructions where the object is also overtly case-marked. For

convenience, I will refer to the above universal as the Case Universal in subsequent discussions.

To see what it means for a language to obey the Case Universal, consider Japanese. Japanese has

---

[4] There are ergative languages that have agreement with overtly-marked ergative subject. These cases will
be addressed in Chapter 5.
[5] The universals will later be restated in terms of reference to thematic roles – agent and theme. For now I
will use the somewhat less formal terms "subject" and "object" to refer to them. I also use the term
'subject' for the argument that is the highest in the vP/ VP that gets attracted to the spec TP.

[6] A version of the above universal though stated somewhat differently comes from Comrie (1989: 126),
who attributes it to Greenberg's Universal # 38. The universal states: "where there is a case system, the
only case which ever has only zero allomorphs is the one which includes among its meanings that of the
subject of the intransitive verb". Comrie notes that there are very few languages which violate this
universal, naming only Mojave Yuman languages where the nominative case involves a suffix "ch" while
the accusative takes no suffix.

overt case- marking of the subject in transitive and intransitive sentences and also has overt case-marking on the object in transitive sentences:

(14) a. Taro-ga   hanbaagaa-o   tabe-ta

         Taro-NOM   hamburger-ACC ate-past

         Taro ate a hamburger

     b. Taro-ga   sin-ta

         Taro-NOM   die-past

         Taro died

In (14a), the morpheme –ga marks the nominative, while the morpheme –o marks the accusative, in accordance with the universal. According to the Case Universal, a language that would overtly mark the subject but not mark the accusative is impossible[7].

Interestingly, we find that a converse pattern holds with respect to agreement-marking: marking agreement with the object entails marking agreement with the subject. I will refer to this universal as the Agreement Universal:

 (15)   If a language has overt object agreement, it has overt subject agreement.

---

[7] Ergative languages have overt subject marking and null object marking [absolute] in transitive clauses. While I will address this apparent violation of the Case Universal in Chapter 5, it is important to note that ergative languages do not have overt subject marking in *all* constructions; in particular, unaccusative verbs appear with absolutive subjects that are unmarked in ergative languages (Comrie 1989).

    Also, there are languages such as Icelandic (also Greek) that seem to have a more complex form for the nominative than for the accusative. I take this to be an instance of suppletion. The nominative case is not an extra morpheme added to the simplex stem in these languages; rather the nominative and the accusative are two suppletive forms.

Swahili is an example of a language that obeys the Agreement Universal. Consider the following:

SWAHILI:

(16)   Juma   a- li-   wa- ahidi   watoto a-ta-enda
       Juma   he-past- them –promise children he-fut-go
       Juma promised the children he would go

While we find many languages that would mark subject agreement and have optional object agreement marking or no object agreement at all, we do not find non-ergative languages with overt object agreement without overt subject agreement.

Importantly, the universals discussed in this dissertation should be viewed as statements about languages, not about particular constructions. That is, it is possible for a language with subject and object agreement to have a gap in some paradigm such that the agreement with the subject in this paradigm would be null while object agreement is overt. What is not possible is to have a language in which for all constructions and paradigms there is overt object agreement without overt subject agreement. The same holds for case – it is not possible to have a language that would overtly mark case on the subjects in transitive and intransitive constructions without also overtly marking the object[8] .

As will be discussed extensively in Chapter 5, ergative languages may appear to violate the Agreement Universal since many of them have agreement with the absolutive object without agreement with the ergative subject (cf the Hindi example in (11b)). While ergative languages do

---

[8] Thank you to Carson Schutze for bringing up this point.

not technically present a counter-example to the agreement universal because they have

agreement with absolutive (morphologically unmarked) subjects, it is still an interesting question

why transitive sentences have object agreement without subject agreement in these languages. I

address this question in Chapter 5 and argue that the case and agreement patterns we see in

transitive constructions in ergative languages already exist in the more familiar dative subjects

constructions (discussed in Chapter 2) that are present in nominative-accusative languages such

as Icelandic and Russian. I will argue that the absence of subject agreement is due to a blocking

configuration that precludes the subject NP from agreeing with the verb. Crucially, the Hindi-like

pattern of agreement never obtains in non-dative subject constructions in languages with

morphologically realized nominative-accusative case systems (Woolford 1999a).

One may try to come up with a purely functionalist explanation of the Case and

Agreement universals: the subject is somehow more prominent and therefore must be overtly

marked on the verb in the form of agreement. But this would leave unexplained why the exact

opposite holds of subject case. If we were to attribute the above universals to the morphology

proper and disconnect them from syntax, we would also have no way to explain why the opposite

patterns do not arise: why don't we see languages with overt subject case without overt object

case and languages with overt object agreement without the overt subject agreement. Even if we

adopt a Distributed Morphology approach to syntax (Halle and Marantz 1993), and say that

morphology is inserted post-syntactically at PF, we would still have to explain the correlation

between overt morphology and syntactic functions of subject and object or rather thematic roles,

such as agent and theme which are syntactically determined (Baker 1988, 1997). The actual

morphemes can be inserted at PF, but where they are inserted and how, must be determined prior

to PF/MF. To relegate case and agreement entirely to the post-syntactic component as argued in

Bobaljik 2005, McFadden 2004 would leave unaccounted for the relationship between

agents/subjects, themes/objects and the morphological realization of case and agreement, or else would require a separate theory to connect morphology and thematic/grammatical roles.

Thus, if syntactic case and agreement features are present universally and their realization is highly language-specific, as claimed in the Universal Approach, we would not expect there to be universal principles that would link morphology and syntactic positions (i.e. subject/object). For example, we should expect to have languages with overt nominative case on the subject without overt accusative case on the object. Conversely, we should expect to have languages with overt object agreement without overt subject agreement. Yet, this is not the case.

1.3. Theoretical Framework

1.3.1 The main idea

In this thesis I will argue that morphological marking does tell us quite a lot about the syntax of case and agreement and that the right theory should capture the above two universals and explain the diversity of case and agreement systems without attributing it to the accidents of language-specific morphology. I will adopt what Sigurdsson 2003 refers to as the Language Specific Approach to case (and agreement) and argue that whether a language has case or agreement features is a parameter that varies from language to language. Building on the recent work by Pesetsky and Torrego (2001, 2003) who propose that all features are interpretable but may become uninterpretable by virtue of being misplaced, I will argue that misplaced features (case features and phi-features) provide records of thematic relations at PF but are not the only means of keeping such records – word order is another option (cf Kiparsky 1997 for a somewhat similar idea). Hence, it is possible to have caseless and agreement-less languages in the syntactic sense, along with those that have a mixture of case and agreement features.

The idea that case-features may not be present at least on some NPs in a language is already present in the accounts that assume default case (e.g. Schutze 1997). However in Schutze 1997, it is only the morphological case that is absent; NPs still must be licensed, where licensing

is in a way an equivalent of Abstract Case in that it may or may not have a morphological spell-out. In this thesis, I assume no version of Abstract Case independent of case features. I will show that the properties of misplaced features together with the restrictions on where they can be misplaced and configurations in which they are licensed derives the Case and Agreement Universals and accounts for their apparent violations. In addition, I will show that the way in which a language chooses to misplace features (i.e. whether only case or only agreement features are misplaced or whether a combination of them is chosen) derives a typology of case and agreement systems and has important consequences for word order. Namely, I will argue that languages with no case features on NPs have obligatory dislocation of agreed-with NPs. In contrast, languages that lack both case and agreement will have rigid word order, and finally languages that have a combination of case and agreement features may allow but not require NP dislocation. Importantly, in this thesis I will only be dealing with verbal agreement, especially as it pertains to case-licensing. Issues raised by adjectival and participial agreement, while interesting and important, are beyond the scope of the current discussion and will be set aside for future research.

1.3.2 *Case and Agreement features*

In their paper Pesetsky and Torrego 2001 (from now on referred to as P&T 2001) proposed the idea they called Relativized Extreme Functionalism which states that there are no inherently uninterpretable features. All features are interpretable on some head but become uninterpretable if placed on the wrong head, i.e. if misplaced. I will refer to this idea as *Relativized Uninterpretablity*. This is one of the central assumptions that lies at the heart of the current work.   P & T 2001 propose that nominative case is a T feature on D. Extending their idea, I will take all case features to be interpretable functional head features misplaced onto nominal heads N or D. Unlike their original proposal, I am not limiting case features to only T features on the NP. Case features are interpretable features of non-nominal functional heads e.g.

Tense (actually, Finiteness, as I will argue in Chapter 3), Caus/v or Prepositional features that become uninterpretable when placed on the N/D. Misplaced functional head features will be also referred to as F-features.

Similarly, phi-features are interpretable on the NP but not on functional heads such as T. Importantly, I adopt the idea from Chomsky 2001 that T with misplaced phi-features becomes a probe capable of deleting a case feature on the NP it agrees with. Misplaced features are thus not created equal – phi-features make T's into deletors, while misplaced functional head features that appear on NPs as case do not make NPs into probes. This is an asymmetry that is a part of the design of the system adopted from Chomsky 2001. I will leave as a stipulation here. More will be said about the nature of probes and their capacity for deletion shortly.

One may wonder why Relativized Uninterpretablity is desirable. The answer is that it allows us to state what the inventory of features consists of, which is important given that Minimalist syntax is heavily reliant on feature-driven operations. Since all features are interpretable, the feature inventory is significantly constrained. Furthermore, since uninterpretable features are misplaced, we can ask why languages misplace features. I will turn to this question in section 5. In addition, Relativized Uninterpretabily gives us a clear way to explain why languages may look so diverse with respect to their morphological case and agreement systems without attributing this to accidents of morphology. Since case and agreement features are misplaced, it is possible that a language will simply fail to misplace either functional head or phi-features on the wrong category. In addition, as we shall see in Chapter 2, Relativized Uninterpretabilty allows us to dispense with the EPP feature, a kind of feature that is uninterpretable onto any head, in the standard view.

1.3.3 What exactly gets misplaced?

Starting with case features we have an important question to answer: do languages misplace the actual Caus/v or P features, or are they variables ranging over features that get

filled-in by the appropriate heads. While Pesetsky and Torrego 2001 do not directly address this question I would like to claim that a language that misplaces features selects actual phi and/or functional head features and places them on a wrong category. To be true to the spirit of Relativized Uninterpretability we cannot treat phi-features and case features as variables the way it is done in Chomsky 2000, for example. Doing so would undercut the proposal's true intent – getting rid of uninterpretable features – since after all, variables have no intrinsic interpretation. Misplacing actual interpretable features proceeds something like this: we take phi-features that we would ordinarily insert into a D/N node but instead misplace them onto T. The same goes for functional head features such as v, Fin, etc. (The algorithm for feature misplacement is in *Appendix 1A*). However, once misplaced, features (despite having actual values) are treated by the grammar as uninterpretable and need to be either valued/licensed by the heads that have the corresponding interpretable features or else deleted. Otherwise, they will crash the derivation. Crucially, I assume that the processes of feature valuation and deletion are distinct; they yield distinct morphological consequences, as we shall see shortly. Below I address each of the two processes in turn.

1.3.4 Legitimizing misplaced features: Valuation vs. Deletion

Feature valuation or licensing is a process by which a misplaced feature is made legitimate at LF/PF when (and only when) it is locally c-commanded by a head that carries the corresponding interpretable feature. (I will use the term 'valuation' in the sense of 'licensing' not in the sense of filling in the value of a variable. The misplaced features are not variables.) Feature valuation is a two step process: first a proper configuration is created, then identity is established between the misplaced and the interpretable features. (However, 'default' agreement which will be discussed shortly has laxer requirements on feature valuation/licensing). The requirement that the head/phrase with the interpretable features locally c-commands the

head/phrase with the misplaced features is referred to as the Valuation/Licensing Requirement. (A detailed algorithm for feature-valuation/licensing is given in *Appendix 1B*). Consider the following simple sentence of English as an illustration, starting with case feature valuation/licensing:

(17) He sees them
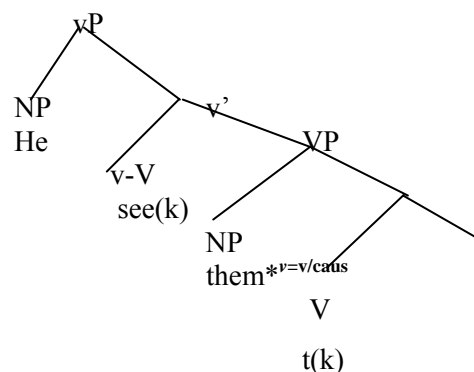
In the above representation the italicized boldface ***v/caus*** - a misplaced feature -- is valued/ licensed by the corresponding interpretable v feature under local c-command and can now be shipped to LF/PF. Although I will later use the label F to stand for misplaced functional head features (case features), it should be kept in mind that it is just a general name for v, T, P features misplaced on a nominal head.   Only the heads with the corresponding interpretable features can value misplaced features on NPs. For example, if we misplace a v-feature on the object then only v can make it legitimate at the interface levels. Crucially, valued misplaced features need not be deleted at the interface levels but must be morphologically marked. This is an important departure from Chomsky 1995, 2000, 2001, made possible by Relativized Uninterpretabilty. Since misplaced features are interpretable, they are not problematic for the interface levels and hence can be preserved as long as they are properly licensed.

Phi-feature valuation/licensing also requires the NP with the interpretable phi-features to locally c- command the head carrying the uninterpretable phi-features (which is usually the T). In

other words, the NP must be in spec of TP – contra AGREE (Chomsky 2000). Phi-feature

valuation /licensing ('matching' in Chomsky's terms) is spec-head, not downward probing. The

valuation of phi-features results in the appearance of morphological agreement on T much like

the valuation of misplaced functional head features results in morphological case on the NP. The

process responsible for the appearance of morphology is thus essentially the same for case and

agreement. Crucially, as mentioned briefly earlier, the T with misplaced phi-features is a deletor

-- it will delete the case feature on the NP that values its features [9]. A picture of case feature

deletion and the resulting agreement on T is presented below:

(17')

$$
\begin{array}{c}
\text{TP} \\
\\
\text{NP}^{\mathbf{F}} \qquad \text{T'} \\
\text{he} \\
\text{phi} = 3^{\text{rd}} \text{ sg } \text{T}^{\text{ PHI = 3rd sg.}} \quad \text{vP} \\
\\
\text{NP} \qquad \text{v} \\
\text{t(i)}
\end{array}
$$
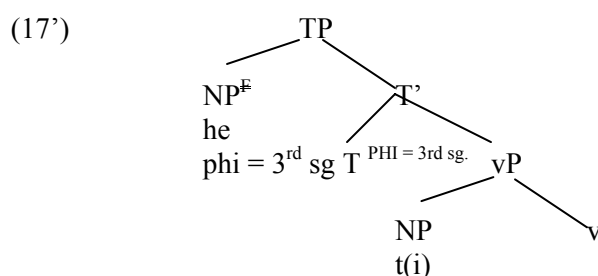
In the above example, the T agrees with the NP in its spec, which crucially means that the

misplaced 3rd person phi-features on T are identified with the interpretable features of the NP.

The NP's case feature is deleted as a result. Morphologically, the valued misplaced phi-features

on T are realized as subject agreement while the deleted case feature on the NP is not realized at

all – the nominative case has zero morphological marking in languages with agreement. The

result of feature deletion is the absence of morphology.

Importantly, I depart from Chomsky 2000 in that I assume no notion of an active goal:

any NP with available phi-features would value the probe's misplaced phi-feature. The category

---

[9] We can in principle misplace any feature on the NP that is agreed-with, not necessarily a T feature. Also, note that I depart from Pesetsky and Torrego 2001 proposal that nominative case is a T feature on D and instead treat nominative case as a result of deletion of any case feature.

with which the T agrees with need not have a case feature. Furthermore, I take the probe to be an indiscriminate deletor – it will delete anything in return for agreement, including the interpretable features of the NP (i.e. the NP's lexico-semantic content) in the absence of a misplaced feature. This is an axiom of probehood and will play a crucial role in deriving the relationship between case, agreement and configurationality as we shall see in much detail in Chapter 4. Another important property of probehood is that the probe cannot value misplaced features on the NP; it can only delete them. This is due to economy. Let us see why. In order to get its own phi-features valued/licensed, the probe will delete the NP's case feature. If the probe first values the case feature on the subject NP and then deletes the already valued feature, two operations are performed (deletion and valuation) when only one (deletion) is needed to legitimize the misplaced phi-features on T and the case feature on the NP. Thus, allowing the probe to value features is counter-economical and hence prohibited. The probe can and will only delete misplaced features.

Note that while there are two ways to get case features legitimized – valuation and deletion, phi-features can only be valued – there is nothing to delete them. A case feature on the NP is incapable of performing a deletion operation and phi-features on T cannot self-delete. However, in Chapter 2 I will discuss an additional mechanism for legitimizing phi-features on T. In particular, I will argue that languages may have a designated 'default' set of phi-features (usually 3rd person, with no number feature) that can be valued without establishing identity with an NP. Any XP with or without phi-features would be able to value default phi-features on T provided that it c-commands the T carrying them. However, default features would not be able to delete anything since no identity is established between the T and the XP c-commanding the T, and identity is a requirement for deletion.

To sum up so far, a misplaced case feature must be either valued by the corresponding interpretable feature, or it must be deleted. Phi-features cause the heads on which they are misplaced to become probes that need to perform a deletion operation in return for agreement

(modulo default agreement). Misplaced features are thus not created equal – phi-features can

cause heads to become deletors while case features (misplaced functional head features) cannot.

Furthermore, distinct processes of legitimizing misplaced features have distinct morphological

consequences: feature deletion leaves no morphological mark on the NP while feature-

valuation/licensing causes misplaced feature to be spelled-out overtly. Valued/licensed features

are not deleted.

1.3.5 Misplaced features and PF records of thematic relations

In this section I address the question that Relativized Uninterpretability allows us to raise:

namely, why would languages misplace features. Taking Pesetsky and Torrego's idea a step

further, I argue that misplaced features are used by languages to record at PF the thematic

relations that hold within the vP between the theta-assigner (the verb[10]) and at least one of its

arguments. While the configurations for theta-assignment are universal (UTAH Baker 1988,

1997), and all movements are preserved via traces, the syntax must also create a record of

thematic relations at PF. Because misplaced features are valued in strict syntactic configurations,

they reflect the initial c-command relationships that exist within the vP at merge. The c-command

relationship between the verb and its arguments are then used to reconstruct thematic relations at

PF since theta-roles are assigned in universally fixed syntactic configurations in accordance with

UTAH. The claim that thematic relations must be preserved at PF can be viewed as a

generalized version of the Projection Principle whereby theta-roles must be preserved in all levels

of representation [as pointed out by K. Safir, pc] (Chomsky 1981). The idea that theta

---

[10] I will concentrate here on recording thematic relations within the vP between the verb and at least one of its NP arguments. The theta-marking verb is viewed as a conflation of V and small v in transitive and unergative clauses. It is V in unaccusatives. Below I will be mainly concerned with simple transitive (two-participant) verbs denoting two-participant events. The account can then be extended to unaccusatives and unergatives. However, the claim I am making is actually more general and applies to recording thematic relations within a PP as well, i.e between a theta-marking P and its argument NP. This will become important in subsequent chapters when we discuss dative subject constructions and ergative languages. Finally, I assume that PF records of theta-relations are required only for those theta-bearing elements that are themselves overt. Pro and PRO that are not pronounced at PF will also lack a morphological thematic reflex. This assumptions may have some important consequences, but I will not explore them here.

preservation is relevant not only at LF but also at PF is present in Marantz 1984 and also Baker 1988. While I argue against universal case and/or agreement features, I claim that the need to preserve PF records of theta-roles at all levels of representation is universal; the means for doing so, however, may vary from language to language. Importantly, there only needs to be one record of theta-relations (e.g. between the verb and the theme, for example) in order to 'reconstruct' the entire thematic complex[11]. Also, if we see overt evidence that a language misplaces features on some members of the paradigm, it is enough to posit misplaced features on the rest of the members of the paradigm. For example, English shows evidence of misplaced case features only on pronouns and evidence of agreement features only on 3rd person present tense. Yet, it is sufficient to posit morphemes on the rest of the paradigm. (Thanks to Carson Schutze for bringing this point to my attention). Importantly, while languages may misplace some, all or no features, once a language makes a particular choice with respect to feature misplacement it is fixed for the language.

Misplaced features can be viewed as picture frames into which the v or NP places its imprint/image[12]. If the object NP did not carry a misplaced feature, the v in a transitive clause would still c-command it, but there would be nothing on the object to record this fact. A misplaced feature on the NP, however, could preserve a reflex of a c-commanding functional head such as v. The valuation of a misplaced feature on the NP by v which gets spelled-out as accusative case thus records at PF the fact that the NP is a theme since only a theme could bear a reflex of v in simple transitive sentences (refer to the illustration of feature valuation in (17)). For example, languages that have overt accusative morphology on object NPs such as Russian, Japanese, and English preserve a PF record of the theta role 'theme' on the NP via case-marking:

(18) a. Taro-ga pizza-**o** tabe-ta   [JAPANESE]

---

[11] This is not so for traces of movement – every moved argument must leave a trace in order to satisfy the Projection Principle. I will set aside the question why it must be so.
[12] Thank you to Mark Baker for the interesting conceptual discussion on this point.

Taro-NOM pizza-ACC eat-past

Taro ate a pizza

b. Homer udaril   Bart-**a**   [RUSSIAN]

Homer hit   Bart-ACC

Homer hit Bart

c. John sees hi**m**

The tree for misplaced v-feature valuation is the same one as in (17) above. In Russian and

English there is an addition theta-record kept via agreement on T (to which I will turn shortly). In

Japanese, there is an additional record kept via overt case-marking on the subject. While only

one record is necessary languages do not particularly dislike redundancy: languages with a

mixture of case and agreement are common. As we shall see in Chapter 4, it is also possible for a

language to misplace features on only one of the arguments within the vP. It is not necessary for

languages to take the 'all or nothing' stance on feature misplacement. However, partial feature

misplacement is subject to restrictions: a language cannot misplace a feature on the higher

argument in the vP without also misplacing one on the lower. The causes and consequences of

this restriction will be addressed in detail in Chapter 4.

Turning to agreement, phi-features on T are valued by the closest NP with the available

phi-features. In a vP it is the agent; in a VP it is the theme. Consider the following example from

Swahili:

(19) a. Juma   **a-**li-kufa   saa   usiki   (data adopted from Vitale 1989: 33)

Juma   he-past-die   hour   night

Juma died at 7pm

b. Watoto **wa-**li-simama   kwa   muda   mrefu

   Childen they-past-stood for   period   long

   Childen stood for a long time

c. Fatuma **a-**na-pika   chakula

   Fatuma she-pres-cook   food

   Fatuma cooked food.

Subject agreement preserves a PF record of the theta-role assigned to the highest argument in the vP/ VP. The tree for phi-feature valuation is the same as given in (17').

1.3.6 A restriction on feature misplacement and object agreement

Now, one may wonder why is it the T that carries phi-features, and not say, v. As we shall see in a moment, v cannot host phi-features under the current assumptions, even if we are dealing with object agreement. To see why not, let us look at what would happen if agreement features were misplaced on v.   Suppose we had the following configuration:

(20)
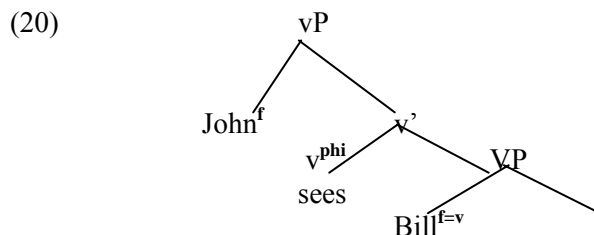
In the representation above we have misplaced features (Case) on both NPs and phi-features on v. All of the misplaced features need to be either valued/licensed or deleted. Since the NP 'John' has interpretable phi-features and is merged immediately into the spec of vP, the configuration for phi-feature-valuation and the subsequent case feature deletion is already satisfied. The phi-

features on v will delete the misplaced feature on John and get valued in return. However, this would leave the misplaced feature on Bill stranded – there is nothing that can delete or value it. Recall that a probe cannot value misplaced features and crucially it also cannot perform two deletion operations. (Once phi-features on the probe are valued by one NP, it loses its deleting capacity but does not cease to be a probe in the formal sense – it is still a carrier of phi-features -- and hence cannot value another NP's misplaced feature either). The misplaced feature on Bill will thus survive at LF/ PF and crash the derivation. Hence a derivation that has phi-features misplaced on v would result in a crash[13]. That features cannot be misplaced on v is an important restriction on feature misplacement that will figure prominently when we discuss the Agreement Universal in section 4.

Since phi-features cannot be misplaced on v, there is a question how object agreement ever comes about. To this end I propose that object agreement is a result of T having two sets of phi-features. (At this point, I leave it as a stipulation that V cannot host phi-features, which is essentially an adaptation of the traditional view that V cannot assign accusative case while v can. Thank you to M. Baker for pointing this out to me). Languages with obligatory object agreement such as Mohawk would involve two sets of phi-features on T valued by the object (theme) and the subject(agent). The question how the two sets of phi-features are valued and why object agreement is possible 'long-distance', i.e. without moving the object into a spec of TP will be addressed in much detail in Chapters 2 and 4. More on object agreement will also be said shortly in section 4. For now, consider the following example as an illustration:

MOHAWK

(21) a. Sak   **rak**e- nuhwe'-s   (data from Baker 1996: 130)

---

[13] Note that if we had a language without case features it would make it possible for v to have phi-features. However, even in that case, phi-features on v would not result in object agreement: the thematic subject merged in spec vP would value phi-features on v immediately resulting in subject agreement. The only way to have object agreement in this case is to have 2 sets of phi-features on v.

Sak   MsS/1sO-like-hab

Sak likes me

b. Sak **ri**-nuhwe'-s

Sak 1sS/MsO-like- Hab

I like Sak

In Mohawk, the object and subject agreement is often spelled out as a single morpheme ('rake' a portmanteau morpheme for 3rdSgMascSubject and 1SgObject; 'ri' – a portmanteau morpheme for 1st person singular subject and 3rdMasculine object). This is an instance of morphology failing to co-operate with the syntax: there are two misplaced features but only one morpheme. However, as we see in (21a, b), the fused morphemes are distinct depending on the person features of the subject and object: 'rak' vs. 'ri' (21). In some cases, though, portmanteau morphology can result in ambiguity:

(22)   Sak   wa-ho-[a]hseht-e'

          Sak   fact-MsS/MsO-kill-punct

          Sak killed him or He killed Sak

                         (from Baker 1996: 130)

The ambiguity such as in (22) may be resolved contextually or via SVO word order (Mark Baker, pc) if overt NPs are present, a significant fact as we will see shortly.

However, feature misplacement is not obligatory or universal. In the absence of either case or agreement features, thematic relations can be represented via rigid word order within the vP where linear precedence created via linear mapping of the vP/ VP will indicate the initial asymmetric c-command that existed in the vP. Hierarchies translate into linear order as follows:

if v c-commands NP (asymmetrically) then v precedes NP in a left-headed language. This means that the last terminal dominated by v precedes the first terminal dominated by the NP/DP. If an NP c-commands v then NP precedes v.

(23)

```
            vP
    NP            v'
    john    v          VP
          see     NP
                  Bill
```
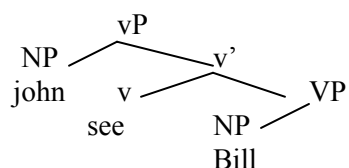
        Linearize: NPi   v   NPj

In right-headed languages the linearization process is reversed for head-complement strtures and is the same as in left-headed languages for spec-head structures. Thus, if we assume (contra Kayne 1994) that there are right-headed languages, the PF component must have information about headedness in order to linearize structures:

(23')

```
                      vP
          NP(i)              v'
          John
                    VP              v  V(k)
                                       see
              NP(j)      t(k)
              Bill
```
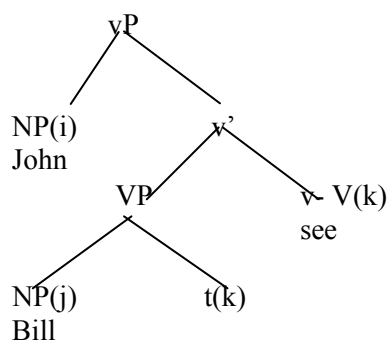
        Linearize: John Bill see

If the verb (v+V) asymmetrically c-commands the NP, the first terminal dominated by the verb follows the last element dominated by the NP (opposite of the head-initial languages). If the

NP asymmetrically c-commands the verb (v+V), the last terminal dominated by the NP precedes the first terminal dominated by the verb (same as in the head-initial languages). (cf Fox and Pesetsky 2004 on the details of linearization algorithm). In Chapter 4 we will come back to the issues concerning linearization in more detail.

Below, I repeat some examples of languages that I will argue lack both case and agreement features and preserve thematic relations via rigid word order.

CHINESE

(24) a. Wo   jiao   ta   mai   juzi   chi

       I   tell   she/he   buy   orange   eat

       I told him/her to buy oranges to eat

     b.*jiao   ta   wo mai   juzi   chi

       tell   she/he   I   buy   orange   eat [with the meaning in (a)]

       I told him/her to buy oranges to eat

HAITIAN CREOLE   (examples adopted from Deprez 1991)

(25) a. Li   renmen Mari

       He   like   Mari

       He loves Mari

     b.*Renmen li Mari

       Like   he Mari

       He likes Mari

Following Fox and Pesetsky 2004 I adopt the view that cyclic spell-out always applies, i.e. a sub-part of the derivation – a phase in the sense of Chomsky 2001a, such as a vP/ VP is

spelled-out and linearized as soon as it is built and the relative order of the v and the NPs in it is recorded right away. (Fox and Pesetsky 2004 do distinguish between spell-out domains and phases, but this distinction is not relevant for my purposes). Once fixed, the linear order within a spell-out domain cannot be undone. Also, since spell-out domains are shipped to the interface levels, they can contain no uninterpretable features despite the fact that the derivation will continue, and in later spell-out domains, features can get deleted. I take it as a crucial property of grammar that well-formedness conditions on derivations must be respected at all levels intermediate or not. Finally, departing from Fox and Pesetsky's proposal, I take the smallest spell-out domain to be a v+VP, not a VP. In transitive constructions the VP cannot be spelled out without a v – the verb will be incomplete.   However, a domain for linearization could be increased to include the spec of vP if the lower argument – the theme – lacks a case feature. More on cyclic spell-out and the size of linearization domains (also referred to as spell-out domains and phases) will be said in subsequent chapters.

The main ideas of the proposal are summarized below:

(1) Following P&T 2001, case and agreement features are interpretable features that were misplaced and became uninterpretable. There are no intrinsically uninterpretable features (Relativized Uninterpretability)

(2) Misplaced features must be valued/licensed by the corresponding interpretable features under local c-command or deleted. Valued/licensed features are morphologically marked while deleted features are not.

(3) Misplaced features are not created equal – phi-features misplaced on T make the T into a probe that must perform a deletion operation in return for agreement. If an NP has a

case feature, it will be deleted; if not, the NP's interpretable features (its lexico-semantic

content) will be deleted in return for agreement. A probe cannot value misplaced features.

A T can receive a set of 'default' features that need not be identified by a corresponding

interpretable features but needs to be c-commanded by some XP in spec TP.

(4) Misplaced features create PF records of theta-relations within the thematic complex.

One record per vP is enough; misplaced features are not universal: without them PF reflexes

will be kept via linear mapping.

 (5) There are important restrictions on where features can be misplaced e.g. phi-features

cannot be misplaced on v. Object agreement is a result of T having two sets of phi-features

instead of just one.

1.4   Restrictions on feature misplacement and the universals of case and agreement

In this section I propose an explanation of the two universals stated in the beginning of

the chapter. As we shall see, they are derived from the restrictions on feature misplacement,

inherent properties of misplaced features [such as phi-features' ability to delete] and the

configuration in which misplaced features are valued/deleted.

1.4.1 The Agreement Universal

Let us start with the Agreement Universal which states that languages with overt object

agreement also have overt subject agreement. Recall that since phi-features cannot be misplaced

on v, object agreement is the result of two sets of phi-features appearing on T where each set gets

valued by the phi-features of a distinct NP:

(26)

                                 TP

NP(i)　　　T

T $^{PHI (i) = phiNP(i);}$
$_{PHI (j) = phiNP(j)}$　　　vP

NP(i)$^{-F}$　　　v

v　　　VP

NP^{-F}(j)
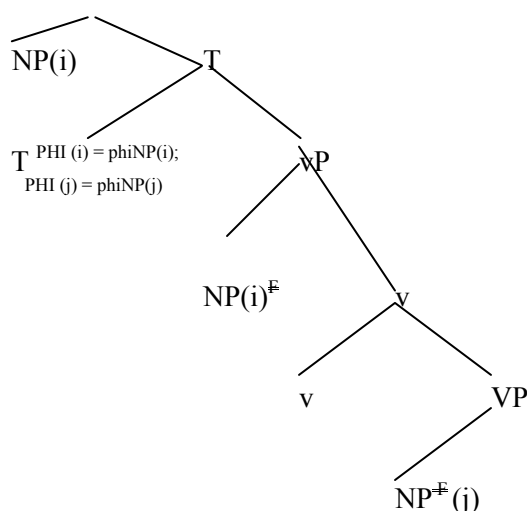
The reason why only the subject NP gets attracted to spec TP while the object values the second set of phi-features long distance will be discussed in subsequent chapters. Importantly, the object NP cannot value the phi-features on T before the subject (agent) does so because the agent is closer and will value the phi-features on T first.   This is due to Minimality that requires us to select the closet NP where NP(i) is closest to a probe T if there is no other NP(j) between NP(i) and T where NP(j) c-commands T. (Similarly, if the T has only one set of phi-features, the object could never value it if there is also an NP that is projected higher in the vP). Hence, regardless of whether T has two sets of phi-features or just one, we could not have object agreement without also having subject agreement. The restriction on feature misplacement that precludes the appearance of phi-features on v together with Minimality – the requirement to select the closest NP for phi-feature valuation gives us *the Agreement Universal*: if a language has overt object agreement, it has overt subject agreement.

1.4.2 The Case Universal

Turning to the Case Universal, let's see why it is not possible to have overt subject case without overt object case. Recall that the subject cannot have overt case if it is agreed-with because agreement (phi-features on T) deletes case.   Japanese and Korean – languages with overt

nominative case indicated by the morphemes 'ga' and 'ka'– do not have agreement. The kind of nominative case we see in these languages is not a result of feature deletion; it is a result of feature valuation/licensing. Now, if a construction lacks overt accusative case, then the case feature on the object must have been deleted by the phi-features on T[14]. But for this to happen the T must have had phi-features and if it had them, the case feature on the closest NP – the subject -- would have been deleted. Consequently, it is not possible for a language to have overt case on the subject in transitive and intransitive clauses without also having overt case on the object. This gives us the *Case Universal:* if a language has overt subject case, it has overt object case.

Restrictions on feature misplacement together with the properties of misplaced features and configurations in which features are valued/deleted (i.e. local c-command) derive the two universals. The proposal also explains a crosslinguistically significant fact stated at the outset of the chapter which is that a language cannot have object agreement with objects that have overt accusative case. This is so because agreement deletes case features and deleted case features do not receive a morphological spell-out. In Chapter 4 we will see a fuller picture in which the two universals fit, as well as derive a typology of possible case and agreement systems when we consider what happens when languages lack case or agreement features.

1. 5   Conclusion

To sum up I have argued against the view that case and agreement are universal properties of language that may or may not be reflected in morphological spell-out. The Universal Approach advocated in Chomsky 1981, 1995, 2001a, Harley 1995, Sigurdsson 2003, inter alia does not account for the existence of crosslinguistic generalizations concerning the morphological

---

[14] Since I allow for partial feature-misplacement, it is possible for a language to not misplace a case feature on the theme while misplacing one on the agent. A language without agreement and with a case feature only on the agent will violate the Case Universal. However, as indicated earlier, in Chapters 4 I will discuss another important restriction on feature misplacement which precludes a language from misplacing a case feature on the agent without also misplacing it on the theme.

realization of case and agreement. If we take the Case and Agreement Universals to heart, we

would have to admit that the relationship between case, agreement and their morphological spell-

out cannot be as arbitrary as claimed in the Universal Approach. If so, then languages that have

no case and no agreement marking are linguistically significant. We cannot dismiss the fact that

case-marking is entirely absent from Mohawk, Bantu, Chinese, and Haitian Creole while present

in Japanese, Russian and Korean and unwaveringly maintain that case and agreement features are

present in these languages but simply fail to be morphologically realized. I will argue extensively

in Chapter 4 that languages such as Mohawk that mark only agreement and languages such as

Japanese that mark only case are not just caseless and agreementless on the surface; they may

actually lack the syntactic case and/or agreement features. Importantly, since under my proposal

absence of case morphology can be due to two sources (absence of case features and deletion of

case features) we will need a way to distinguish these two options. I will argue that these options

are distinguished by agreement such that a language without case features will be non-

configurational if it has agreement because phi-feature on T will delete the actual NP's lexical

content instead of case features leaving null pros behind as residue of deletion. Any overt NPs we

would see in a language like that would be adjuncts. In contrast, languages with case features and

agreement features will allow overt NPs in argument positions because phi-features on T will

delete only the NPs' case features leaving the actual NPs intact. Finally, languages without case

features and agreement features will have a rigid word order because it is the only way to

preserve thematic relations at PF. I will show in Chapter 4 that Mohawk and Bantu exemplify the

first option while Nahuatl exemplifies the second and Chinese, Haitian Creole exemplifies the

third. In this chapter I will also discuss languages that have only case features as well as

languages that misplace a mixture of case and agreement features.

Thus, building on the idea of Relativized Extreme Functionalism proposed in Pesetsky

and Torrego 2001, I argue that case -features and agreement (phi-features) are not universal

properties of language. Feature misplacement is a way to record in the syntax and preserve at PF

the relative c-command relations that hold between at least one the NP argument and the theta-assigner at the time the thematic complex is built. The c-command relations in turn reflect the thematic relations within the vP. While a morphological record is not required, there must be some record at PF of thematic relations within the vP. In the absence of morphology, strict word order that reflects the initial c-command relations within the vP is required. The need to preserve thematic relations at PF – an extension of the Projection Principle -- is universal; the means of doing so (via morphological spell-out of misplaced features or via linear mapping) can vary from language to language.

The current proposal derives the Case and Agreement Universals from the properties of misplaced features, configurations in which misplaced features are legitimized, and restrictions on where features can be misplaced. Thus, we have seen that the fact that v cannot host phi-features is an important restriction relevant for the Agreement Universal. There will be additional restrictions on feature misplacement relevant to the Case Universal. Those will be addressed in detail in Chapter 4.

In the next chapter I deal with quirky subject constructions and show that they can be accounted for within the theory proposed here. Quirky subjects present a pressing problem for case theory in general and for the current proposal in particular because under Relativized Uninterpretabilty there can be no such thing as inherent case. This notion of quirky / inherent case is simply not statable in the current framework: all case features are interpretable features misplaced on nominal heads and need to be either valued or deleted. Inherent case cannot be a result of deletion; it must be a result of valuation/licensing. If so, we have to have a theory of how this valuation/licensing takes place and why subjects that usually have their case feature deleted can have overt case in some cases. In Chapter 2 I analyze three different kinds of dative-subject constructions in Russian, Icelandic and Hindi. I argue that all of them involve a blocking configuration that precludes the probe from deleting the case feature on the NP and value its phi-features. I further relate the dative subject constructions to a particular parameter governing

argument structure. Namely, I claim that the configuration that gives rise to dative subjects involves a head Caus (an event-introducing head) that is separate from an agent introducing head Voice / v following a proposal in Pylkkannen 2002: Ch.3. At the end of Chapter 2 we will see that there really isn't any particular quirk to quirky case. In fact, dative subjects will be related to the more familiar prepositional phrases that appear as complements of the verb in constructions like "John threw a ball to Bill".

Chapter 3 deals with infinitival constructions; namely, it addresses the question why overt NPs have a restricted distribution in infinitival constructions. In this chapter we get a first glimpse of a language partially misplacing features and the consequences partial feature misplacement has. In particular, I will argue that the infinitival T is not a probe; it lacks misplaced phi-features. The discussion of infinitives will thus foreshadow a more extensive discussion of (partial) feature misplacement in Chapter 4 while using evidence of the familiar kind – infinitival constructions in English. In Chapter 4 I come back to the discussion of case– less and agreement-less languages and show that ways of feature misplacement together with restrictions on where features can be misplaced derives a typology of attested case and agreement systems in addition to deriving the Case and Agreement Universals. As mentioned before, in this chapter we shall also explore the connection between feature misplacement and freedom of word order. I will argue that a language without case features, but with agreement features, will require dislocation of agreed-with NPs (Mohawk, Bantu), a language with case features and agreement features (Nahuatl, Russian, English) as well as a language with only case features (Japanese, Korean) may allow but will not require NP dislocation, and finally a language without case and agreement features will have obligatory rigid word order (Haitian Creole, Chinese). Chapter 4 thus presents a typology of feature misplacement, discusses the interaction of misplaced features and shows how restrictions on feature misplacement such as the impossibility of misplacing phi-features on v and the impossibility of misplacing a case on the agent without misplacing a one on the theme, constrain the possible case and agreement systems.

Chapter 5 discusses ergativity-related issues, presents a typology of ergative languages and shows how they fit into the broader crosslinguistic case and agreement typology presented in the thesis.

Chapter 2   Dative Subjects

2.0   Outline

In this chapter I present a theory of quirky[1] (dative) subjects with a particular focus on Russian.   In Section 1 I argue that Russian experiencer constructions with dative subjects are different from the experiencer constructions with nominative subjects. Although both seemingly involve experiencers, 'experiencer' is too coarse a term to adequately account for the theta-properties of the two constructions.   In Section 2 I present evidence that dative subjects are subjects – occupy spec TP. In Section 3 I argue that the syntax of the dative subject construction involves a blocking configuration where the phi-features on the NP are blocked by a theta-marking P under which the NP is embedded. I then show that the presence of the theta-marking P explains the theta-role distinctions between the nominative and dative experiencer constructions. In Section 4 I discuss the nature of default agreement in dative subject constructions. In Section 5 I discuss transitive constructions with dative subjects and nominative objects. In Section 6 I discuss the nature of EvP and address the question of what allows a language to have dative subjects. Section 7 is the conclusion.

2.1   Introduction

One of the central goals of the discussion is to answer the following questions: if dative subjects are subjects, why are they dative and not nominative? Previous theories have assumed that non-nominative case on the subject is due to inherent case-marking (Zaenen, Maling and Thrainsson (1985), Sigurdsson (1989: Ch.5, 6), Harley 1995: 179, Chomsky 2000 references therein, Sigurdsson 2003). However, this leaves many questions unanswered. First, it is unclear where inherent case is assigned. Claiming that it is assigned in the lexicon is ad hoc because all other instances of case-marking are argued to take place in the syntax and are subject to strict

---

[1]   In this chapter I will discuss only the dative subject constructions, and set other 'quirky' cases aside. This is done for two reasons: first, genitive and accusative subjects may involve a different account that would simply extend outside of the scope of this discussion. Second, in this chapter I focus primarily on Russian – a language that has a significant number of dative subjects but very few accusative subjects and no genitive ones. I will suggest that other 'quirky' cases are due to different prepositions, possibly with subtly different meanings.   I will set aside other instances of 'semantic' case.

syntactic requirements such as locality and spec-head or head-complement configuration or AGREE (Chomsky 1995, Harley 1995, Chomsky 2000). The view that inherent case is assigned by certain verbs along with a theta-role is also a mere description of the facts. It provides no explanation as to how exactly inherent case gets assigned, under what conditions and by which verbs. Second, there is a question why must inherent-case be non-nominative, that is morphologically marked? Third, why don't all languages have subjects bearing inherent case? English, for example lacks them while allowing dative case (which has syncritized with the accusative) on the complements of the preposition 'to' as in 'to him'.

Inherent case[2], especially when it appears on subjects, is particularly important to address given the claims advanced in this dissertation. This is so not only because we want to understand better the nature of case licensing in these constructions but also because dative subject constructions are language-internal violations of the Case and Agreement Universals stated in Chapter 1. Although quirky subjects do not present counterexamples to the universals because the universals are statements about languages, not constructions, it is still interesting why such constructions exist. Moreover, the very notion of inherent case is not statable within a framework that assumes Relativized Uninterpretabilty: if all case features are functional head features that are interpretable though misplaced, what would distinguish inherent case from any other kind of case?

As was already foreshadowed in Chapter 1, I will argue that dative case on the subject NP is a result of a particular configuration in which the NP originates. This configuration is also responsible for the fact that the dative NP is obligatorily non-agentive. Namely, I will show that the NP in dative subject constructions comes embedded under a theta-marking preposition P[TO]; the PP is subsequently merged into the spec of EvP where EvP is a phrase headed by an event-introducing head Ev. The preposition assigns a recipient theta-role to the NP resulting in a non-

---

[2] Other instances of inherent case, e.g. not on the subject (for discussion see Pesetsky 1982) will not be discussed in this chapter but the proposal can be extended to those as well..

agentive experiencer interpretation of the construction. (This proposal is similar to the one

advanced in Harley 1995, Landau 2003a, inter alia. The authors argue that dative (quirky)

subjects involve a PP where the P is responsible for 'inherent' case). The P also blocks the phi-

features on the NP, making it impossible for them to value the phi-features on the T. The T must

get default agreement – a set of 3rd person phi-features without the number feature. The notion of

default agreement will be discussed in more detail in section 4. Dative case, in turn, appears

when the misplaced feature on the NP is valued by the interpretable P-features.

2.2   Dative Subjects

2.2.1 Not all experiencers are created equal

In this section I begin by looking at the adverbial experiencer construction (1) that

involves a dative subject and contrast it with the verbal experiencer construction (2) that involves

a nominative subject. This discussion is relevant to the main goal of the chapter for the following

reason: we know that dative subject constructions are experiencers[3] (Harley 1995, Perlmutter and

Moore 2000), but we also know that there are experiencer constructions that involve nominative

subjects. Now if we have two identical theta-roles assigned in two identical configurations, we

have no way to explain the case and agreement differences between the two constructions. Yet, if

the two configurations are distinct then we have problems for UTAH (Baker 1988, 1997). One

may argue that UTAH should be relaxed in order to allow for identical theta-roles to be assigned

in distinct configurations since we already see this in the passive construction where the

preposition '–by' and a v both assign an agent theta-role. However, in this chapter I argue that

relaxing UTAH would not help us in this case because there is empirical evidence indicating that

the theta-roles in the adverbial experiencer and verbal experiencer constructions are not identical.

The verbal and the adverbial experiencer constructions do not originate in identical configurations

---

[3] They may also be goals and recipients but what is crucial is that in the subject position they are never
agents.

and consequently do not have the same case and agreement properties. In the subsequent sections

I will argue that while the adverbial construction involves a recipient theta-role, the nominative

construction is ambiguous between a holder and do-er theta-roles. The do-er theta-role is

completely different from the recipient theta-role; the holder-theta role while similar to the

recipient is also not identical to it. 'Experiencer' is thus a coarse-grained term for the recipient

and holder theta-roles.   In the discussion to follow I will be referring to the adverbial

experiencers also as 'dative experiencers' and to the verbal experiencers as 'nominative

experiencers'.   Consider the constructions below:

Adverbial Experiencers[4]:

(1)   Mne   bylo   skuchno / grustno / smeshno

        Me-DAT was   boring / sad   /   funny

        I felt/was bored / sad / like laughing

Verbal Experieners

(2)   Dima   skuchal / grustil / smejalsja / veselilsja

        Dima-NOM   bored / sadded / laughed   / happied

        Dima was (being) bored / sad / laughing / happy

        While similar at a first glance, these constructions are not semantically identical[5].   First,

the verbal experiencer has an agentive reading in addition to the pure experiencer reading,

whereas the adverbial experiencer lacks it. Second, even on the pure experiencer or as I will refer

---

[4] I will refer to the dative experiencers in (1) as 'adverbial' although the corresponding constructions are referred to as 'adjectival' in the Icelandic literature (Sigurdsson 1989). I do so because morphologically they appear to be adverbs in Russian, and currently I do not see strong arguments in favor of calling them adjectives. Also, for the purposes of the current discussion the adverbial/ adjectival distinction is not particularly relevant, though it may be important in other contexts. I will not go into the issues here for reasons of space.

[5] I am greatly indebted to S. Malamud for pointing out this contrast to me (pc)).

to it the 'holder' reading, the verbal experiencer is not identical to the adverbial one. Let us consider these differences in turn.

In (2) there is a reading on which Dima is acting sad or bored, but may or may not actually experience boredom or sadness. The agentive reading can be brought out if we add an agent-oriented adverbial or a purpose clause to the nominative experiencer:

(3) a. Ja grustil   special'no   chtob vyzvat'   k sebe zhalost'

I   sadded purposefully to   call-INF to self   pity

I was being sad to invoke pity in others

b. Ja veselilsja special'no   chtob razveselit'   detej

I   happied   purposefully to   make-happy-INF children-ACC

I was being purposefully happy to make the children happy

In contrast, the adverbial experiencer lacks the agentive reading and consequently, does not allow the addition of an agent-oriented adverbial or a purpose clause:

(4) a. # Mne   bylo strashno special'no   chtoby napugat' detej

Me-DAT was scary   purposefully to   scare   children-ACC

I was scared on purpose to scare the children

b. # Mne   bylo special'no   grustno chtob vyzvat'   sochustvie okruzhajushchix

Me-DAT was purposefully sad   to call-INF compassion others-GEN

I was sad on purpose to make other people feel sorry for me

c. # Mne   bylo special'no   smeshno / veselo chtoby razvesilit' bol'nogo

Me-DAT was purposefully funny / happy to make-happy sick-ACC

I was happy in order to make the sick man happy

Second, the verbal experiencer entails the corresponding adverbial construction. This is seen from the impossibility of negating the verbal experiencer while affirming the adverbial one:

(5) a. # Ja iskrenne grustil, no mne   ne bylo grustno

I sincerely sadded, but me-DAT not was   sad

I was sincerely sad but I was not feeling sad

b. # Dima iskrenne veselilsja, no emu   ne   bylo veselo

Dima sincerely happied, but him-DAT not was happy

Dima was sincerely happy, but he was not feeling happy

In the above example, (5a), the ill-formedness results from the fact that we have an adverb 'sincerely' modifying the events. However, in a situation where Dima is not actually happy but is only acting (pretending) to be that way, there is no entailment *at all* between the two experiencer constructions:

(6)   Dima veselilsja special'no chtob razveselit'   detej,   no emu   ne bylo veselo

Dima happied purposefully to   make-happy children-ACC, but him-DAT not was

happy

Dima was making merry on purpose to make the children happy, but he didn't feel happy

In the above construction, Dima is only pretending to be happy, but does not actually experience the emotion. The agentive interpretation of verbal experiencer allows for this option. Since in (6)

the individual is only faking happiness, negating the corresponding adverbial construction is possible.

The adverbial experiencer, on the other hand, never entails its verbal counterpart. Negating the verbal experiencer while affirming the adverbial one does not lead to a contradiction:

(7) a. Dime   bylo iskrenne grustno, no on ne grustil

   Dima-DAT was sincerely sad,   but he not sadded

   Dima was sincerely sad, but he was not being/acting sad

   b. Dime   bylo skuchno, no on ne skuchal

   Dima-DAT was boring, but he not bored

   Dima was bored, but he was not being/acting bored

The natural interpretation of the sentence like (7a) is that Dima feels sad but he does not act sad. He can distract himself by doing something. Had the two theta-roles been identical, we would have a contradiction in both cases. Yet, we don't. This means that the experiencer theta-role in the dative-construction and the experiencer in the nominative one are not the same. (Pesetsky 1995: Ch.3 uses this kind of reasoning in his discussion of Caus vs. Subject Matter theta-roles).

Third, the agentive reading of the nominative-experiencer can be brought out by the following question-answer pairs:

(8) a. Chto Dima delajet?   b. On skuchaet / grustit / boitsja

   What is Dima doing?   He   bores   /   sads   / fears

   What is Dima doing?   He is being bored / sad / scared

The answer in (b) is natural if one sees Dima sitting in the corner, not doing anything in particular and just staring into space. In (c), the answer is natural if one sees Dima acting sad/ crying. Simiarly, for (d), the answer is fine if one sees Dima huddled in the corner, shaking. Both (b) and (c) answer the question in (a) because the emotions Dima experiences are indicated through his actions. However, the dative-experiencer is significantly worse in these constructions:

(9)   Chto Dima delated?   #/? Emu   strashno / skuchno / grustno

        What is Dima doing?   Him-DAT scared / bored / sad

        What is Dima doing?   He is scared / bored / sad

The use of the adverbial construction to answer the question in (9a) leads to infelicity. The adverbial experiencer does not express any action, but only describes a state that Dima is currently in. Since the question specifically refers to acting (e.g. what is he doing?) and the answer does not have an interpretation on which Dima is acting in any way at all, the answer is odd.

Finally, the event expressed in the adverbial dative-experiencer can be a cause of the event in the corresponding nominative-experiencer, but not the other way around:

(10) a. Misha skucheat potomu chto emu   skuchno

        Misha bores   because that him-DAT   boring

        Misha is acting bored because he is bored

     b.#/ ? Mishe   skuchno potomu   chto on   skuchaet

           Misha-DAT boring   because that   he   bores

           Misha-DAT is bored because he is acting bored

The sentence in (10) can be understood as follows: Dima's actions are those of a bored person. The reason he is acting that way is because he feels bored. The opposite is strange because it states that Misha feels bored because he acts like a person who is bored, which is backwards.

Turning now to the non-agentive interpretation, or 'holder' reading of the verbal experiencer, there is evidence that even on this reading the construction is not identical to the adverbial experiencer despite the fact that the two are very similar. On the holder reading, a sentence such as (2) repeated below in (11) does not involve any action on the part of the individual. The individual merely 'holds' a particular emotion.

(11)   Dima grustil / skuchal / radovalsja

         Dima sadded / bored / happied

         Dima was sad / bored / happy

However, even on the 'holder' reading, the construction does not have an identical interpretation to the adverbial experiencer construction. This is again seen from the possibility of negating the verbal experiencer construction while affirming the adverbial one:

(12)   Dime   bylo grustno no   on   reshil   ne grustit',   a   rasvlech'sja

         Dima-DAT was sad   but   he   decided not sad-INF, but distract-INF-sja

         Dima felt sad, but he decided not to be sad, but distract himself instead

In the sentence above the verb 'grustit' ' = 'to be sad' has an interpretation on which there is no action at all on the part of Dima. Instead, it refers to 'holding' sad thoughts, without acting in any way. As we can see, even on the non-agentive reading it is possible to affirm the dative construction while negating the nominative one. Consequently, 'holder' and 'recipient' are not

one and the same theta-role. A somewhat different example may be useful to illustrate the non-identity of the two theta-roles. Consider the following:

(13)   John received a letter from his friend, but he does not have it now.

In the above construction, John is a recipient of the letter (literally), but he is not a holder of it: he does not currently have it. This example, though somewhat different, indicates once again that being a recipient does not entail being a holder. Interestingly, the opposite is not true: being a holder *does* entail being a recipient. As we saw above, negating the adverbial experiencer construction while affirming the nominative one does lead to a contradiction:

(14)   # Dima grustil, no emu   ne bylo grustno. On razvlakal sebja igroj   na pianino

         Dima sadded, but him-DAT not was   sad.   He distracted self playing-INSTR on piano

         Dima was sad, but he did not feel sad. He distracted himself by playing the piano

Note that the same holds in the related example (15):

(15)   # John has the letter, but he never received it.

Even if Dima wrote the letter to himself he must have also somehow received it from himself in order to be a holder of the letter. Receiving something – be it an emotion or a thing is required in order to possess / hold it. Similarly, in order to hold a particular mental state one must acquire it first, even if it is internally caused. (We may be getting a bit far-out in the land of philosophy here).

Thus, being a recipient does not entail being a holder, while being a holder does entail being a recipient. The holder and the recipient theta-roles appear in constructions that are not *mutually* entailing. This means (as pointed out in Pesetsky 1995: Ch.3) that the two theta-roles are distinct. One important note needs to be made here. Since holders and recipients are very similar in meaning, it is possible that a given language would only have one or the other, not necessarily both. To sum up, the above data indicates that the two constructions – the dative and the nominative experiencers -- are not identical; they have different theta-role options:

Verbal (nominative) Experiencer: agentive reading = do-er theta role;

non-agentive reading = holder theta-role

Adverbial (dative) Experiencer: non-agentive reading only = recipient theta role

The recipient theta-role is, thus, distinct from both the 'doer' and the 'holder' theta-roles.

In section 3 we will see how the above distinctions are captured in the syntax. In section 4 I will show that different configurations involved in these constructions are responsible for the case-agreement distinctions between them. At this point, I will still refer to both as 'experiencers', but this is done for convenience only[6]. However, before I proceed with the discussion of the syntactic configurations that generate the theta- distinctions between the dative and the nominative-experiencers, I would like to review some evidence that the dative-experiencers are in fact subjects. This is necessary to set up the discussion in section 4.

2.2.2 Why do we think that dative subjects are subjects?

The evidence for the subject-status of the dative-NP comes from (a) subject-oriented - anaphor binding; (b) control of PRO; (c) facts about conjunction reduction. These tests are a subset of subjecthood tests first presented in Zaenen, Maling and Thrainsson 1985, Sigurdsson

---

[6] While the dative adverbial constructions also exist in Icelandic Sigurdsson 1989, inter alia, and Hindi (Mohannan 1994), I do not give the Icelandic and Hindi examples here because as of yet I do not have the data on the relevant contrasts between the adverbial and the verbal experiencers

1989: Ch.5, 6, also Maling and Sprouse 1985, Harley 1995 for Icelandic, and Perlmutter and Moore 2000 for Icelandic and Russian. While there may be many issues surrounding the term 'subject' (cf. Harley 1995), I will treat the 'subject' position as 'spec TP'. Crucially, the arguments presented below do not indicate that dative and nominative subjects originate in identical configurations. On the contrary, I will argue that they do not. However, both the dative and the nominative NPs wind up in spec TP.

I. Binding subject-oriented anaphors

While the facts surrounding subject-oriented anaphors in Russian are murky, it is clear that they do not tolerate being bound by internal arguments at all. Consider the following contrast:

NOMINATIVE SUBJECTS:

(16) a. Dima(i) boitsja   zhit'   odin v svoej(i) kvartire

        Dima   scares-sja live-INF alone in self's aparment

        Dima is afraid to live alone is his own aparment

      b. Dima(i) smejetsja   nad   svoimi(i)   oshibkami

        Dima   laughs-sja   at   self's   mistakes

        Dima is laughing at his own mistakes

INTERNAL ARGUMENTS:

(17) a. Dima(i) videl   Mishu(j) v   svoej (i/*j) kvartire   / svojem(i/*j) foto

        Dima   saw   Misha   in   self's   aparment / self's   picture

        Dima saw Misha in his own (Dima's) apartment / picture

      b. Dima(i) vernul   Mishe   svoe(i/*j) foto

Dima   returned Misha   self's   picture

Dima returned to Misha his (Dima's) picture

c. Mishe(j),   Dima(i) vernul   knigu v svoej(i/*j) kvrartire

Misha-DAT Dima   returned book in self's   apartment

To Misha, Dima returned the book in his own (Dima's) apartment

While the anaphor can be construed with the subject (in this case the agent) it cannot be construed with the theme, even when the c-command is respected due to topicalization as in (17c). In contrast to the dative-marked indirect objects, dative-experiencers in the adverbial construction pattern with the nominative agents in (16):

DAT SUBJECTS

(18)   Mne(i) / Dime   strashno / skuchno   v svoej(i) kvartire

Me-DAT / Dima-DAT   scary /   boring   in self's apartment

I am / Dima is scared/ bored in my /his own apartment

The same facts hold for Icelandic (Sigurdsson 1989, Zaenen, Maling , and Thrainsson 1985, Harley 1995) and Hindi (Mohanan 1994). The fact that the dative-NP patterns with the nominative one indicates that the two wind up in the same position – spec TP.

II. Control of PRO

Like the nominative subjects, dative subjects can control PRO in infinitival constructions:

NOM SUBJECTS:

(19) a. Dima(i) xochet / nadejetsja [PRO(i) kupit'   mashinu]

Dima   wants / hopes   [PRO   buy-INF car]

Dima wants/ hopes to buy a car.

b. Dima boitsja [PRO zhit'   odin]

Dima fears   [PRO live-INF alone]

Dima is afraid to live alone

DAT SUBJECTS:

(20) a. Dime(i)   strashno [PRO(i) zhit'   odnomu]

Dima-DAT scary   [PRO   live-INF alone-DAT]

Dima is afraid to live alone

b. Dime(i)   skuchno [PRO(i) sidet'   v klasse]

Dima-DAT boring [PRO   sit-INF in class]

Dima is bored to sit in class

The above facts further indicate that the dative and nominative NPs are equally suitable

controllers of PRO and anaphor binders, which suggests that they appear in the subject (spec TP)

position.

Finally, the nominative NP can be dropped under conjunction reduction:

(21)   My byli   golodnyje   i   xoteli   kupit'   edu

We were-3rd PL hungry   and   wanted-3rdPL buy-INF   food-ACC

We were hungry and wanted to buy food.

While the dative-NP does not induce agreement, it can also be dropped under identity:

(22) a. Mne   bylo   strashno   i   xotelos'   kushat'

Me-DAT was3rd-neut scary   and   wanted-3rd-neut-sja   eat-INF

I was scared and I wanted to eat

Furthermore, the dative-NP can be dropped under identity with the nominative NP. In the

construction below, the same people who are hungry are the people that were bored:

(22')   My byli   golodnyje i   (nam)   bylo   skuchno

We were-3rdPL hungry   and (us-DAT) was-3rdSg-neut bored

We were hungry and bored

In contrast, the internal argument cannot be so dropped:

(23)   Oni byli   golodnyje i   (im)   bylo   skazano uiti

They were-3rdPL hungry   and (them-DAT) was-3rdSg-neut said   leave-INF

They were hungry and were told to leave [NOT … and (they) told (someone) to leave]

In (23), it is not possible to construe the dropped internal argument as referring to the people who

told someone to leave. The people who were hungry are the people who *were told* to leave by

someone. However, the dative-NPs in the adverbial experiencer constructions behave like the

nominative subject NPs with respect to conjunction reduction (22').

2.3   Adverbial vs. verbal experiencers

2.3.1 The syntax of adverbial experiencers

        The adverbial experiencer construction involves an NP embedded under a null

preposition P that assigns it a 'recipient' theta-role. (Similar proposals are made in Harley 1995,

Baker 1997, Landau 2003a). The resulting PP is subsequently merged into the spec of EvP:

(24)   Dime xorosho

Dima well

Dima feels well

EvP
PP   Ev'
P   NP
TO   Dima
        Ev   AdvP
        HOLD |
                    Adv
                    well
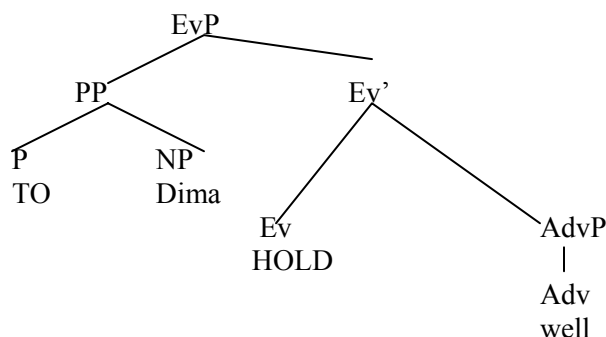
The nature of the Ev and why it appears separately from v will be discussed later. For now, I will

only say that this head introduces a Davidsonian event argument, but no theta-role (in the spirit

of Pylkkanen 2002). In the above representation, the individual is a recipient of an event, much

like in the double-complement construction the goal argument is a recipient of a thing (see

example below). The support for the claim that the adverbial experiencer involves a PP in the

spec of EvP comes from three sources.

First, positing the P accounts for the impossibility of the volitional reading in the dative-

experiencer construction. Since the P assigns a recipient theta-role to the NP (Baker 1997, Landau

2003a), the agentive reading is impossible[7]. This is seen in other instances of recipients such as

the ones we see in the double complement construction:

(25)   John gave a book to Bill on purpose

---

[7] A preposition can assign an 'agent' theta-role as we see in 'by-phrases' and as will be argued for ergative
languages in Chapter 5. Thank you to Carson Schutze for pointing this out.

In the construction above, the modifier 'on purpose' cannot modify Bill's receiving the book. Similarly, a purpose clause in (26) cannot mean that Bill received the book in order to impress the judges.

(26)   John gave his recently published book to Bill to impress the judges

Even if the recipient is topicalized, as in the Russian passive construction below, the volitional reading is still not possible:

(27)   Vanje   byla dana kniga special'no   chtob proizvesti   vpechatlenije   na sudej

Vanja-DAT was given book purposefully to   produce-INF impression-ACC on judges

John was given a book purposefully to impress the judges

The sentence cannot mean that John purposefully received the book so that he could impress the judges. Recipients crucially lack any agentive interpretation in principle.

The second kind of evidence indicating that the dative-marked NP is embedded under a theta-marking P and is not an argument of Ev, is that it is an adjunct. As an adjunct, it can be dropped:

(28)   (Mne)   xolodno / skuchno / ploxo / xorosho

Me-DAT cold   / bored / bad / good

I feel cold / bored / bad / good

When the dative argument is dropped, the sentence gets an 'impersonal' interpretation, e.g. "it is cold/ boring," etc. The dative marked NP can also be replaced by a location pronoun such as "here":

(29)   Zdes' xolodno / skuchno / ploxo / xorosho

        Here   cold / bored / bad / good

        It's cold/ bored/ bad / good here

Since Russian is not a pro-drop language (Franks 1995), arguments cannot be generally dropped. (Dropping an argument is only possible in response to a question "how did you/he feel?" or "What did you / he do?" where the subject is easily recoverable.)

(30)   Dima smejalsja / grustil/skuchal/

        Dima laughed / sadded bored

        Dima laughed/ was sad/ was bored

(31)   */? Smejalsja / grustil / skuchal

            laughed / sadded / bored

            (pro) laughed/ was sad/ was bored NOT: it was sad/ boring…

Crucially, if they are dropped, they cannot yield an 'impersonal' reading[8]. Thus, the sentence in (31) can be used to answer a question such as "what did John do? or how did John feel?". However, it cannot mean something like "it was sad" or "it was cold". This is a very important contrast between the two constructions (e.g. (28) vs. (31)) because it suggests that the theta-role in the dative subject construction is not assigned by the verb – otherwise the impersonal reading would be impossible as it is in (31). The construction in (28) does not have a v that assigns a

---

[8] I use this term 'impersonal' in a rather loose sense here. It is beyond the scope of this paper to delve into the properties of impersonals. However, in the absence of the evidence to the contrary, I will assume that the impersonal constructions of the sort used here e.g. 'it is cold' hot' etc. have no agent at all rather than assuming that they have a null agent with arbitrary reference. I do not think this is right for all impersonal constructions, though.

theta-role to its spec, which in turn crucially implies that the 'inherent' dative case also cannot be licensed by a verbal head projected above the AdvP since such a head is not prkected.

Finally, there is a related construction in Russian that actually involves an overt preposition, though with a slightly different meaning. In the construction below, the preposition 'u' = 'at' indicates a location instead of a direction or path which is what 'TO' indicates:

(32) (U menja) xolodno / skuchno / veselo

      At me-GEN cold   / bored / happy

      It is cold / boring / fun (at my place)

(33) Xolodno / teplo / veselo

      Cold   / warm / happy

      It is cold / warm / fun

The construction in (32) means something like "it is cold/ boring/ fun at my place". The NP in the above construction is not an experiencer but rather a possessor of a state in some possibly abstract sense (see Pylkkanen 2002: Ch2, Landau 2003a for extensive discussion on possessive constructions of this sort). The PP in (32) is omitable, just as it is in the adverbial experiencer construction. Omitting the locative NP in (33) also generates the impersonal reading such as "it is cold/ boring, etc".

Turning to the nominative experiencers, I propose that they are introduced by v (Kratzer 1996) similarly to agents. What makes them experiencers is the semantics of the Event head the construction involves. As will be discussed extensively in section 6, the Event head and v, which I have been using interchangeably up until now, can be spelled out by distinct heads in some languages. The Event head introduces the Davidsonian eventuality argument (Davidson 1967) and also determines the aspect of the resulting construction, e.g. whether it is a state, activity, or

accomplishment (cf. Vendler 1957, 1967, Smith 1995, inter alia). The head v introduces a theta-

role (agent, experiencer/holder) which could vary depending on the aspectuality of the predicate.

If the Event head is HOLD and the resulting predicate is stative, we will see a non-agentive

experiencer reading. (See Kratzer 1996 on the possibility of adding an experiencer / holder

argument via v when the predicate is stative). If the Event head is DO, we will have a agentive

reading.   As will be discussed in section 6, some languages involve a single head v/Event that

both introduces an argument and a theta-role. This has important consequences for limiting

certain types of experiencer constructions; other languages use two different heads for this

purpose. I will set aside this question until section 6. For now consider again the Russian verbal

experiencer construction:

(34)   Dima bojalsja / radovalsja / grustil

         Dima scared / happied   /   sadded

         Dima was happy / afraid / sad
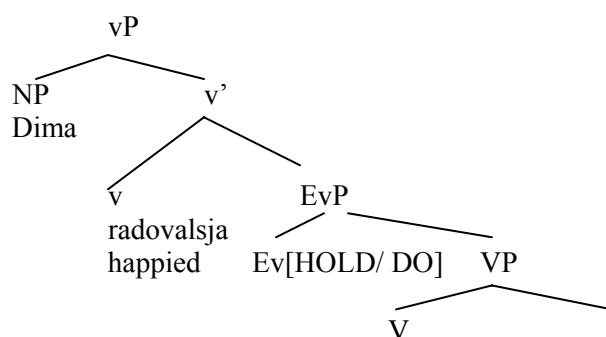
         When the Event head is HOLD, the above construction has a reading on which the

individual does not act in any way, but only experiences the emotion. (The holder reading can be

paraphrased as "John holds happiness/ sadness". This is similar to proposals in Harley 1995).

Since holders are non-volitional, much like recipients are, the interpretation of the verbal

experiencer is similar to that of the adverbial one, but still not identical to it as we saw in the preceding section. However, when the Event head is DO, the verbal experiencer gets the agentive reading, which is quite different from the recipient reading. On this interpretation, the individual acts in a happy/sad way but may or may not actually 'hold' the emotion.

Crucially, the dative-experiencer construction will be unable to have an agentive reading even if the Event head involved is DO or CAUS. This is so because the P assigns a recipient theta-role to the NP and a recipient cannot be volitional regardless of the Event head. In Russian, there is a construction that involves an unergative verb and an experiencer argument. In the construction below, the dative-marked argument is a non-volitional participant of the event, despite the fact that the verb is clearly non-stative – the Event head it involves is not HOLD. The non-volitionality is evidenced by the fact that it is not possible to modify the construction with an agent-oriented adverb or add a purpose clauses in this construction:

(35)   Mne   xorosho igraetsja (*chtoby vyigrat') / (*special'no)

          Me-DAT   well   plays-sja (in order to win-INF) / (purposefully)

          Playing goes well for me (*in order to win) / (*on purpose)

While non-agentive, the construction does involve a sense of causation, possibly due to a presence of some facilitating event. This is seen in (36):

(36) a. Mne   xorosho igraetsja / rabotaetja   (#?samo po sebe)

          Me-DAT well   plays-sja / works-sja   (alone-neut by self)

          Playing/ working goes well for me (#?on its own)

     b. Mne   xorosho   igraetsja / rabotaetsja (izza pogody)

          Me-DAT well   plays-sja / works-sja   (because of the weather)

Working goes well for me because of the weather

However, regardless of whether we accept the claim that the above constructions are causative, it is clear that they are not stative: the Event head they involve is not HOLD. This means that the absence of volitionality in these constructions is not due to the nature of the Event head involved, but rather due to the presence of a P that assigns a recipient theta-role to the NP. The syntax of the unergative experiencer is thus similar to that of the adverbial construction, only instead of an adverb we have a VP in the complement of Ev (see Perlmutter and Moore 2000 for an alternative view of this construction). In the tree below, the Russian example is given in italics. I am omitting the adverb here:

(37)

```
                            EvP
                          /     \
                      PP           EvP
                    /    \        /    \
                  P       NP     Ev      VP
                  TO      Dima   DO/ CAUS-play(k)  |
                  Dime           igratetsja        V
                                                   t(k)
```
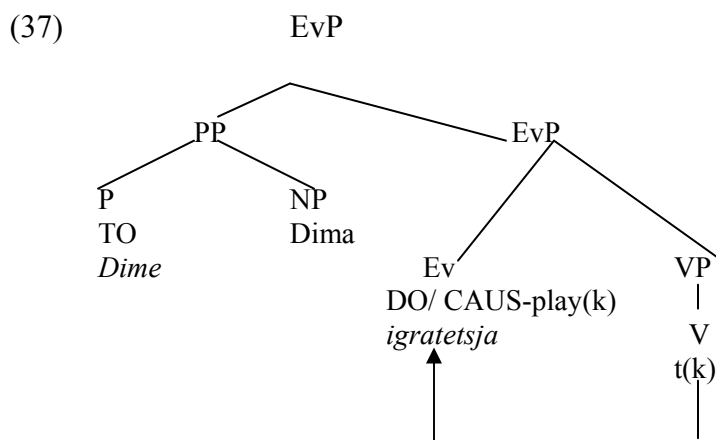
The construction has the interpretation that Dima is a recipient of a running event where TO theta-marks Dima just as we saw in the adverbial construction.

In contrast, the nominative unergative involves an argument introduced by v, parallel to the verbal experiencer construction. Since the Event head is DO, not HOLD, v adds an agent. This is seen from the possibility of adding a purpose clause:
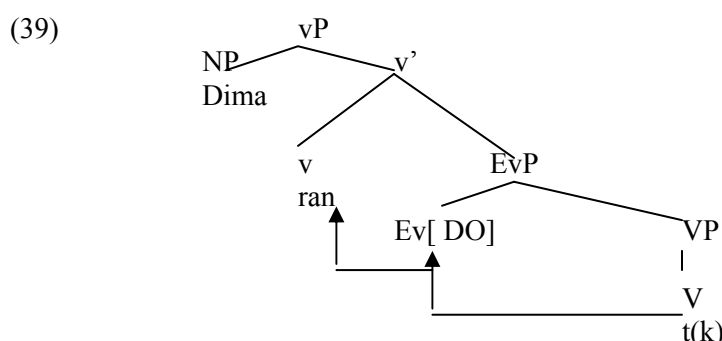
(38)   Ja xorosho igraju (chtoby vyigrat') / (sam po sebe)

        I   well   play   (in order win-INF) / (alone by self)

        I play well in order to win / on my own

The difference between the agentive unergative and the verbal nominative experiencer lies in the nature of the Event head as illustrated below by a representation of (38b):

(39)

```
              vP
         NP        v'
        Dima
                 v        EvP
                ran
                    Ev[ DO]      VP
                                 |
                                 V
                                 t(k)
```

To sum up so far, I have argued that the adverbial experiencers involve a PP merged into the spec of EvP. The NP in the adverbial construction can only be a recipient, while, the NP in the verbal construction can have either a holder and a do-er theta-role depending on the Event head. The 'holder' theta-role is similar to the recipient theta-role, both yield non-agentive reading, but it is still not identical to it.

Before concluding the section I would like to briefly address the question concerning misplaced features and theta-relation records. In Chapter 1 I proposed that misplaced features preserve PF records of thematic relations, but my focus was primarily on the vP. Here, I would like to extend this claim to not only the vP but also EvP where the relevant generalization concerns theta-assigners such as v, V and P and their arguments.   In the dative subject

construction that involves a theta-marking P a misplaced P feature on the NP preserves a PF

reflex of a 'recipient' theta-role assigned by the P.

Also, foreshadowing the discussion in section 6, I would like to note that in languages

where Ev is distinct from v, (as will be argued for Russian, Icelandic and Hindi building on a

proposal in Pylkkanen 2002), it is the Ev that marks the first linearization domain and licenses the

accusative case. In other words, what makes v a phase-marking head and allows it to value a

misplaced feature on the NP resulting in accusative case is the very fact that it is realized as a

single head with Ev in some languages. The fact that in languages like Russian and Icelandic Ev

is a separate head from v and is the phase-marking head will become important shortly.

However, for the sake of simplicity I will refer to v as the phase-marking head when talking about

languages that do not have a separate Ev head.

2.3.2 PPs in subject positions

Now, if dative subjects are PPs, one may wonder how come they can bind anaphors and

control PRO, i.e. exhibit the kind of subject behavior that NPs do. How it is possible for a PP to

exhibit the same properties as an NP with respect to binding and control. If the P creates a

blocking configuration for phi-feature valuation on the T, (as will be argued shortly) why does it

not intervene for the purposes of binding and control. Doesn't the P prevent the embedded NP

from c-commanding the anaphor and/or PRO? Apparently, if an NP is embedded under P, it may

not necessarily lose its ability to bind anaphors and control PRO. I will not propose a theory of

why PPs can bind anaphors and control PRO; their ability to do so certainly raises questions for

binding and control theories both of which rely on c-command as a crucial relation between the

binder and the anaphor, the controller and the PRO. These questions while important are beyond

the scope of the current discussion. The sentences below indicate that PPs can bind subject-

oriented anaphors:

(40) a. U Vanji(i)   net   svojej(i) komnaty

      At Vanja-GEN   not-there-is self's   room

      John does not have his own room

    b. U menja(i) est'   uverennost' v svoix(i) silax   / v sebe(i)

      At me-GEN there-is confidence in self's   powers /   in self

      I have confidence in myself / in my own abilities

In addition, it is possible for a PP like the one above to control into a purpose clause:

(41) a. U Dimy(i)   est'   den'gi chtoby [PRO(i) kupit' dom / uexhat' v Ameriku]

      At Dima-GEN there-is   money to   [PRO   buy house / leave   to America]

      Dima has enough money in order to buy a house / leave for America

    b. U vas   bylo mnogo shansov (chtoby) [PRO(i) pojexat' v Argentinu]

      At you-GEN was   many chances (to)   [PRO   go   to Argentina]

      You had many chances to go to Argentina

    c. U nix(i)   est'   zhelanije poprobyvat' [PRO(i) vstretit'sja s   Dimoj]

      At them-GEN there-is   desire   [PRO [try-INF[PRO   meet-INF with Dima-INSTR]]]

      They have a desire to try to meet with Dima

    The possibility of having a PP in a subject position is not limited to dative subjects in

Russian. For example, in Hindi, there is evidence from ergative constructions that supports the

claim that PPs can appear in subject positions. Ergative constructions in Hindi tare argued in

Gair and Wali 1989, Mahajan 1997 to be PPs.   While we will return to Mahajan's argument

again in Chapter 5, I would like to briefly present some of the evidence in favor of treating

ergative subjects in Hindi as adpositional phrases. The evidence comes from the fact that the

post-position 'ne' can be separated from the NP by an intervening emphatic marker 'hii', can

appear after a conjoined NP, and can appear after an NP with a genitive. The examples from

Mahajan 1997 in (42) illustrate that :

(42) a Ram-hii-ne   /   us bacce-hii-ne

         Ram-emph-ERG/ that boy-emph-ERG

         b.Ram or siitaa-ne

         Ram and siitaa-ERG

Also, there is evidence that the post-position actually assigns oblique case to the NP – the

morphological form of the bare NP [in the masculine gender] is distinct from that appearing

under the ergative P. Thus, the bare form of the word child is 'baccaa' while the form appearing

with the ergative marker is 'bace- ' (cf. 42a). Interestingly, the dative marker –ko also causes the

form of the noun to change: 'baccaa' vs. 'bace-ko' (Majajan 1997: ft.note 8). The stem final

vowel aa becomes –e when a postposition 'ne' , 'ko', or another postposition follows it.

However, the fact that ergative phrases are PPs does not prevent them from being

subjects and exhibiting the standard subject-like behavior. As shown in Mohanan 1994, ergative

phrases in Hindi are subjects. They can bind a subject-oriented anaphor, are unable to antecede

pronouns[9] (Mohanan 1994: 126), and can control into participial clauses. The following data

taken from Mohanan 1994: 123 – 126) illustrates this:

---

[9] Mohanan 1994 shows that in Hindi subjects cannot be antecedents for pronouns; i.e. the following is
ungrammatical in Hindi: "Ravi(i) sat on his(i) bike." In a sentence like this, the anaphor 'self's ' must be
used instead. More will be said about this shortly. Russian also has the same restriction, but to a lesser
extent.

I. the ANAPHOR binding facts

(43) a. Ravii-ne(i)   Vilaj-ko(j)   apnii(i/ *j)   saikil-par   bithaayaa

   Ravii-ERG   Vilaj-ACC   self's   bike-L   sit-CAUS-perf

   Ravii caused Vilaj to sit on Ravii's bike.

   b. Ravii-ne(i)   apnii(i) kelaa   khayaa

   Ravii-ERG   self's banana eat-perf

   Ravii ate his own banana

The above examples show that the ergative PP can bind the anaphor 'self' and that no other NP
such as the accusative cause 'Vilaj' can do so.

II. the PRONOUN facts

(44) a. Ravii(i)   Vilaj-se(j)   uskii(*i/j) saikil-par   bithaayaa   gayaa

   Ravi-NOM Vilaj-INSTR   his   bike-L   sit-CAUS-perf go-perf

   Ravi was seated by Vilaj on his(*Ravi's) bike

   b. Ravii-ne(i)   Vilaj-ko(j)   uskii(*i/ j) saikil-par   bithaayaa   gayaa

   Ravi-ERG   Vilaj-ACC   his   bike-L   sit-CAUS-perf go-perf

   Ravii seated Vilaj on his (*Ravi's) bike

Much like nominative subjects, ergative subjects cannot antecede pronouns when an anaphor
could be used:

III. the CONTROL facts

(45) a. Ravii-ne(i)   Vilaj-ko(j) [PRO(i/*j) muskuraate   hue]   bithaayaa

Ravii-ERG   Vilaj-ACC   [PRO   smile-imp   be-INF]sit-CAUS-perf]

Ravi seated Vilay while smiling

b. Raam-ne(i)   Ravii-se(j)   Vilaj-ko(k) [PRO(i/*j/*k)   darvaazaa khol kar] bithaayaa

Ram-ERG   Ravii-INSTR Vilaj-ACC   [PRO   door   open do] sit-CAUS-

perf

Having opened the door, Ram made Ravi seat Vilay.

As the above facts indicate, the ergative subject is the only controller of PRO in the participial

adjunct. As seen from (b), the causee cannot control PRO much like it cannot bind the anaphor

'apnaa'. Thus, the Hindi data regarding ergative subjects together with the facts indicating that

ergative phrases are PPs strongly suggests that PPs can bind anaphors and control PRO despite

the intervening pre/post-position. Furthermore, Mohanan 1994: 148-150 shows that dative and

locative subjects[10] that are also arguably PPs successfully pass all of the above tests for

subjecthood much like ergative phrases and nominative NPs do. The claim that dative subjects

are PPs is thus further supported by the Hindi data, and most importantly, is not countered by the

binding and control facts as seen from the discussion above[11].

2.3.3 Phase-driven movement

---

[10] She also shows that Hindi has genitive, instrumental and accusative subjects in addition to the dative and
locative.

[11] Sadakane and Koizumi 1995 argue that Japanese –ni phrases are ambiguous between PPs and case-
marked NPs where the ambiguity is distinguished by numeral quantifier constructions where a numeral
quantifier can be associated with a case-marked NP but not with a PP. They also present a number of other
tests such as clefting with a particle   However, the data cannot be easily replicated in Russian to test
whether the dative subject is a PP or an NP. While it is not always easy to tell whether a particle is a case-
marker or a preposition the Hindi and Russian data do argue for dative subjects as PPs.

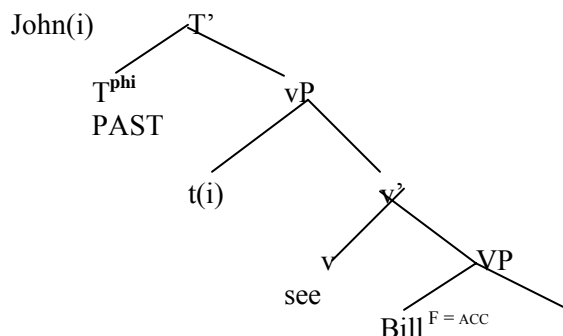So far I have only said that for the phi-features on T to be valued, the NP with the interpretable features must c-command the T. To be true to the spirit of Relativized Uninterpretability I cannot assume the EPP since the EPP is a feature that is uninterpretable in an absolute sense. Instead, I propose that movement is driven by the very need to delete/ value uninterpretable features prior to spell-out. Departing from Chomsky 2000, I argue that movement can be triggered not only if the phi-features on T need to be legitimized, but also if the misplaced feature on the NP does. The latter point will become particularly important in Chapter 3 when we discuss *for-to* infinitives. The heads that drive movement are the phase-marking heads v[12] and Force, where Force[13] the highest head in the layered CP domain in the sense of Rizzi 1997. Phase-marking heads have the power to 'look down' and check whether the uninterpretable features in the derivation up to spec vP (i.e. up to the previous phase) are marked for valuation/ deletion. If a phase-marking head finds features that are uninterpretable, it triggers movement in order to create a configuration in which those features that are still uninterpretable can be legitimized. Let us now see how phase-driven movement actually works starting with a simple transitive sentence now with ForceP added:

(46)   John saw Bill

```
              ForceP
              /    \
         Force      FinP
                   /    \
                 Fin     TP
                        /  \
```

---
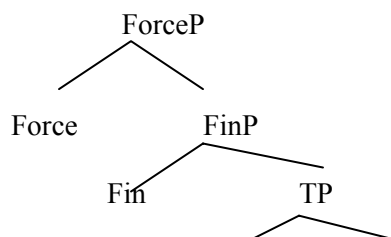
[12] However, v will only trigger movement if there is an embedded clause because in a simplex clause there is no NP that needs to be moved up for case-licensing reasons, nor are there any other misplaced features in the vP(cf the discussion in chapter 1). Hence I will mainly concentrate on Force as the phase-marking head that drives movement. The role of v in this respect will be discussed in Chapter 3 when we talk about infinitives.

[13] Though on occasion I may use C and Force interchangeably, it should be kept in mind that I really mean Force since C is viewed as a layered domain containing Fin0, Force and in some cases also Topic and Focus as in Rizzi 1997.

```
         John(i)           T'
                      Tᵖʰⁱ            vP
                      PAST
                               t(i)            v²
                                       v            VP
                                     see      Bill ᶠ ⁼ ᴬᶜᶜ
```

To reiterate, instead of assuming the EPP as a feature that causes movement, I take movement to be triggered by the phase-marking head. The phase-marking head ensures that all features are legitimized prior to spell-out by triggering movement of those elements whose features have not been valued or deleted yet. In the above derivation when the CP is built, Force detects uninterpretable features on T (phi which are marked in bold for notational convenience) that need to be valued. Force triggers the movement of the NP 'John' into spec TP thereby creating a configuration in which the element with the interpretable features [John] c-commands the element with the uninterpretable features [T with phi]. The Valuation Requirement (cf. Ch1) is satisfied. The ability to trigger movement in order to make sure that all the uninterpretable features are legitimized is an inherent property of Force by definition. Force can only see features within its own phase. Also, Force can see uninterpretable features regardless of whether or not they are marked for valuation/deletion; if the features are already legitimized, Force will simply not trigger any movement. Force is lazy – it performs only those movements that are absolutely necessary to legitimize the uninterpretable features it has detected. If movement can be avoided, it is avoided. Thus, if the phi-features on T are instantiated to the phi-features on an expletive such as 'it' that is merged directly into the spec TP, Force will not trigger any movement because there is no need to do so. Similarly, since the misplaced feature of the object is valued by v, Force will

not trigger the movement of the object into spec TP since the object's case feature will be valued independently[14].

Phase-driven movement is distinct from the EPP-driven movement since the driving force is not a feature and is not a property of T. At this point I would like to take a moment to consider why this is more desirable than assuming the EPP as the driving force behind movement. In *Appendix 2A* I discuss the theories of Boskovic 2001 and Boeckx 2000 who also argue against the EPP and compare the present account to theirs. The EPP has been taken as an irreducible primitive since Chomsky (1981, 1986) much like the Case Filter (Chomsky 1981). Yet, if we could reduce the EPP to the already motivated need to get rid of uninterpretable features, we would ease the computational burden imposed on the grammar significantly. It appears that it is in fact possible to reduce the EPP to the independently motivated condition of well-formedness of phases. This insight is already expressed in the recent work of Sigurdsson 2001, 2002, Boeckx, 2000, Martin 1999 though in a slightly different form. For a phase to be well-formed, it cannot contain any uninterpretable features. This, in turn, means that the misplaced features on NPs (case) and phi-features on T must be legitimized prior to spell-out. Treating phase-marking heads as the driving force behind A-movement utilizes that which we already have in the theory: namely, the important status attributed to heads that mark a phase. We already treat C as crucial in formulating the phase impenetrability condition (Chomsky 1999). It also plays a vital role in defining linearization of hierarchical structures (Richards 2002, Martin 2001, Fox and Pesetsky 2004). Here, we simply put further weight still on the phase-marking head, making its burden

---

[14] A brief note on extension needs to be made here. While the movement of John into spec TP after the CP has been projected may appear to be counter-extensive, this problem can be avoided if we define extension on a phase. In other words, it is ok to pull an NP into a spec TP even if there is structure dominating the TP as long as we are within a single phase. While counter-extensive, the derivation is still cyclic: the movement of the NP from spec vP into spec TP in the above derivation is not followed by a movement of another NP that appears in the structure below vP. Note that we already have counter-extensive movement operations such as for example head movement which is argued to be necessary to derive Incorporation (Baker 1988, 1996, and subsequence work). Crucially, when Force is checking for uninterpretable features it cannot look into another strong phase. It can only perform movements within its own phase – up to the next CP.

even greater – it is now in charge of checking whether the phase it scopes over is free of

illegitimate features and ready to be shipped to spell-out. Positing the EPP as an extra feature on

T is worse because it introduces an extra mechanism whose sole purpose is to drive movement.

Because the EPP is not interpretable on any head, its very existence violates the thesis of

Relativized Uninterpretability. Pesetsky and Torrego 2001 recognize this fact and treat the EPP as

a sub-feature or a property of a feature; however, this merely side-steps the problem. In addition,

it runs us into the trouble of having to explain the status of sub-features /properties of features. To

be true to the most vital aspect of their proposal – the claim that there are no absolutely

uninterpretable features -- one has to do away with the EPP completely.

2.4   Intransitive dative subject constructions

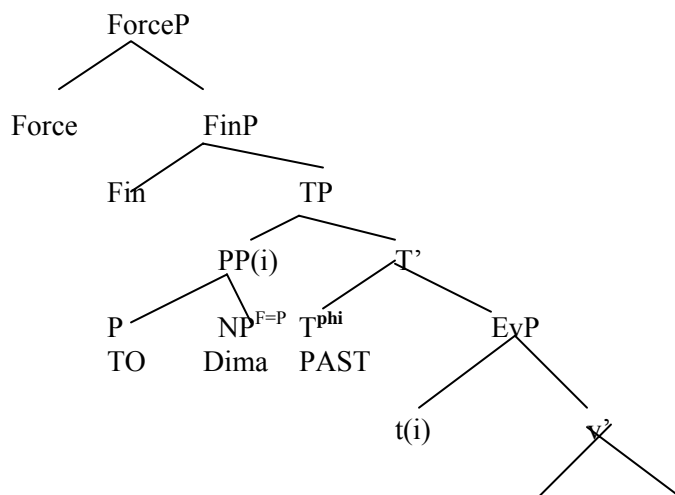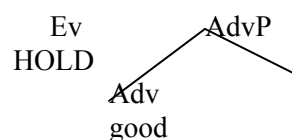### 2.4.1 Default Agreement

Consider the structure proposed for the adverbial experiencer now with the T and Force

added:

(47)   Dime   bylo   xorosho

Dima-DAT was-3rd-neut well

Dima felt well

```
           Ev        AdvP
        HOLD        /\
                 Adv
                 good
```

In the above representation the phase-marking head Force pulls the PP into the spec of T in order

for T to get its phi-features valued. Crucially, Force attracts the closest XP it sees into the spec of

T regardless of whether the XP has phi-features or not. The attraction is 'blind' -- a version of

"no-look ahead[15]".   However, the P does not have any interpretable phi-features and the phi-

features of the NP are trapped under the P. This leads to the question how T's phi-features get

valued. Below I address this important point.

Recall that phi-features on T cannot be deleted unlike misplaced functional head features

on the NP. They can only be valued/licensed. However, as was mentioned in Chapter 1, a

language can designate a set of phi-features (usually 3rd person without a number feature) as

'default[16]' phi-features – i.e. the phi-features that can be legitimized by anything that c-

commands the T carrying them. Recall also that feature valuation is a two-step process: 1) create

a configuration in which the X with the interpretable features locally c-commands the Y with the

uninterpretable ones (i.e. satisfy the Valuation Requirement); 2) establish identity between the

misplaced feature and the corresponding interpretable feature.   Now, if a language has a

designated set of phi-features that will be made legitimate as long as the T is locally c-

commanded by something, no identity needs to be established. As long as step 1) is carried out –

the Valuation Requirement is satisfied – the default features on T will be legitimized.

---

[15] Carson Schutze point out that Force's blind attraction contradicts the claim that Force is able to detect
misplaced features within its scope. One way to deal with the potential contradiction is to claim that Force
can detect only and all misplaced features. It detects misplaced phi-features on T and then takes any XP to
value the T's features. Whether the XP has interpretable phi-features or not is outside of Force's purview

[16] Note that there is an asymmetry in the system: I have referred to nominative case as 'default' case
meaning that it is a result of feature deletion (departing from Marantz 1991, Bittner and Hale 1996).
However, 'default' agreement on T is not a result of deletion. The term 'default' may be a bit misleading
here, but I will use it since it is the standard terminology.

Importantly, if there is no identity between the T and its c-commanding XP, there is also no deletion since deletion is a consequence establishing featural identity (cf. Chapter 1). For this reason, an NP carrying a case feature cannot be merged into the spec of T that carries misplaced 3rd person features. Since no identity will be established between the default features on T and the full set of phi-features on the NP, the case feature on the NP would not be deleted. Default agreement thus does not show up with NPs[17]. In contrast, a PP that lacks a case feature can be merged or moved into the spec of TP without a problem.

To make a clearer distinction between default agreement and normal feature valuation under identity, consider the following analogy. Suppose that in a high security facility there is a door with a special lock that would get unlocked only if it reads off your fingerprint from a key-card you insert and matches it to the one contained in its data-base. To unlock the door you would have to a) approach the door – this is analogous to establishing a local c-command; b) insert the key-card with your fingerprint – establish identity. Furthermore, once you insert the card, the lock will 'eat it' and not return it to you – this is the analogous to case deletion. Suppose further that there is a back door that has a motion sensor such that it would get unlocked without a key-card, provided you stand in a particular spot and are sufficiently close to the door –

---

[17]   This may seem to contradict the Axiom of Probehood which states that a probe – the T with .misplaced phi-features needs to delete in return for agreement. However, if we look at the statement of the Axiom more precisely, the definition would read: a probe must delete in return for getting its phi-features valued under identity between the XP and the T. Absence of deletion in the absence of identity does not contradict the statement of the Axiom.

Yet, the possibility of default agreement does raise a question about the status of the T carrying default phi-features, is it a probe or isn't it? It is by a strict definition – a probe is a T with a set of phi-features misplaced on it. Default phi- are still misplaced, however, since they need not be valued under identity, they do not make a T into a deletor. This is a delicate point concerning the logic of the theory, however it is present in one form or another in accounts that do not rely on feature misplacement (e.g. Chomsky 2000). While the very notion of default agreement seems to deprive the probe of its probehood, even if we view phi-features as variables that get matched to the actual interpretable phi-features and in return delete the case feature on the NP, (cf Chomsky 2000), we would still need a way to explain why agreement does not show up with 'there' sentences and non-nominative subjects without causing ungrammaticality. One way to do it is to posit a designated set of incomplete phi-features that need not be identified by the corresponding interpretable features of the NP but require only that a c-command configuration be established in order to be made legitimate at LF. I hope that future research would allow us to find a more satisfying account of default agreement.

default agreement via 3rd person features. However, if you don't insert your the card into the door you will retain it. If you need to get rid of the key-card (for some reason or other) you will need to use the main entrance. Otherwise, you can enter through the 'default' back door.

Returning to PPs and default agreement, the designated default phi features (if a language allows them) can be legitimized by any category regardless of whether or not it has phi-features; it just has to occupy spec TP[18].   The case feature on the NP embedded under the P gets subsequently valued by the interpretable P-features[19], which gets realized as dative case.

2.4.2 Verbal Experiencers: case and agreement

Turning to the verbal experiencer construction, let us go over the already familiar reasoning why the NP in this construction is nominative. Consider a verbal experiencer construction repeated below:

(48)   Dima bojalsja / radovalsja / grustil

Dima feared / happied   /   sadded

Dima was / afraid / happy   / sad

ForceP
Force   TP
    NP(i)
    Dima^F   T'
        T^{PHI=3rdSg}
                vP

---
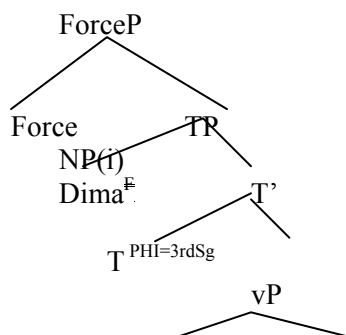
[18] This allows for PRO or pro to value default phi-features on T – a situation which does not seem to arise. At this point I do not have anything in the system to prevent this from happening given the nature of default agreement. However, that pro cannot license default agreement can be due to the properties of pro not of the default phi-features on T. I will leave this point for future research.

[19] I am assuming that the T only deletes the case feature of the *head* of the phrase it attracts. It cannot look further down into the phrase. This assumption accounts for the fact that in constructions involving a plural possessor and a singular nominal (e.g. The boys' book), the T deletes the case feature and agrees with the head of the phrase - the singular NP - not with the possessor.

```
        NP              v'
        t(i)
                 /          \
            v t(k)           EvP
                           /
                      Ev t(k) [HOLD/ DO]
                          radovalsja(k)
                          happied
```
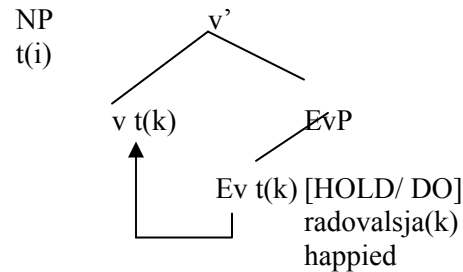
In the above configuration the NP has its case feature deleted by T since the NP is not blocked off

by a preposition. Hence, we get nominative case and subject-verb agreement.

2..5   Transitive dative-subject constructions

2.5.1 Dative subjects, nominative objects

The account given to the adverbial experiencers can be extended to transitive dative

subject constructions. These constructions are well known from the literature on Icelandic

(Sigurdsson 1989, Zaenen, Maeling and Thrainson 1985) In this section I present an account of

these constructions using the data from Russian as well as Icelandic and Hindi:

Consider the following data. Note crucially that in these examples the verb agrees with the

object; it does not have default agreement.   By the end of section 5 we will see why this is so.

RUSSIAN

(49) a. Mne   byla   vazhna   eta rabota / kniga

         Me-DAT was-3rd-fem   important-fem   this work / book-NOM-fem

         This work/ book was important to me

      b. Mne   byl   interesen   /   nuzhen   etot doklad

         Me-DAT was-3rd-masc   interesting-mascSg / needed-mascSg this talk-NOM-masc

         I was interested in/ needed this talk

c. Dime   nadojeli   eti   razgovory

Dima-DAT grown-tiresome-3PL these conversations-Pl-NOM

Dima got tired of/bored with these conversations

ICELANDIC

(50) a. Mer   likuDu   hestarnir

Me-DAT liked-3rdPl horses-NOM

I liked the horses

b. Henni   leiddust   Peir

Her-DAT was-bored-byPL they-NOM

She was bored with them

HINDI (Data from Mohannan 1994: 141)

(51) a. Tushar-ko   caand   dikhaa

Tushar-DAT moon-NOM become-visible-perf-fem

To Tushar the moon appeared (Tushar saw the moon)
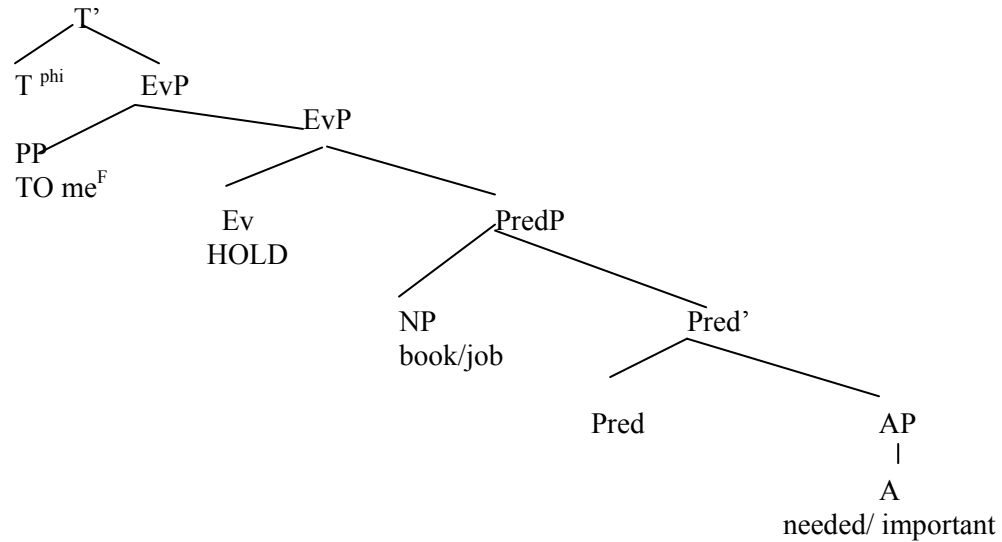
b. Ravii-ko kelaa   khaana thaa

Ravi-DAT banana-NOM eat-INF be-PA-fem

Ravii needed to eat the banana

I propose that the transitive construction, much like the adverbial experiencer, involves an NP theta-marked by a P and the resulting PP is merged into the spec of EvP. However, unlike the

adverbial experiencer, the construction involves a Pred head that introduces the theme argument[20] (Baker 2003, Bowers 1991).

(52)

```
              T'
           /     \
        T phi      EvP
               /      \
             PP        EvP
           TO meF    /      \
                   Ev        PredP
                  HOLD     /        \
                         NP          Pred'
                       book/job    /      \
                                 Pred      AP
                                           |
                                           A
                                    needed/ important
```

That the dative-NP in the transitive construction is a subject (attracted to spec TP) is indicated by the fact that it behaves similarly to nominative subjects. For Hindi this is argued in Mohanan 1994, for Icelandic see Sigurdsson 1991, Zaenen, Maling, and Thrainsson 1985. That dative NPs in the transitive construction in Russian are also subjects is seen from the fact that they can bind a subject-oriented anaphor and control PRO.

(53) a. Dime(i)   zhal'   svoju(i)   mam-u

      Dima-DAT sorry   self's-ACC   mother-ACC

---

[20]   Following Baker 2003c I assume that adjectives/adverbials do not have a specifier and cannot introduce a theme without the functional head Pred. Note that the EvP in the transitive construction is merged above the PredP. The possibility of merging the Event head in different places and the constructions that emerge from it are discussed in *Appendix 2B*

Dima pities his mother/ has pity on his mother

b. Dime (i)   nuzhna svoja(i) komnata

Dima-DAT   needed self's   room-NOM

Dima needs his own room

Interestingly, as pointed out by S. Malamud, pc., while the sentence in (53b) is fine, a very similar sentence where the word 'room' is replaced with the word 'work' is not possible with an anaphoric possessive 'self's'. The pronoun must be used instead: "Dime nuzhna *svoja/ego rabota!!" = "Dima needs self's/ his job". I do not have an explanation for this odd contrast. Dative NPs can also control PRO in infinitival constructions.

NOM:

(54) a. Dima(i) xochet / nadejetsja [PRO(i)   kupit'   mashinu]

Dima   wants / hopes   [PRO   buy-INF car]

Dima wants/ hopes to buy a car.

b. Dima(i) boitsja   [PRO(i)   zhit'   odin]

Dima   fears-sja   [PRO   live-INF   alone]

Dima is afraid to live alone

DAT:

(55) a. Dime   vazhna   eta kniga   chtob [PRO zakonchit' stat'ju]

Dima-DAT important-fem this book-NOM-fem to   [PRO finish-INF article]

This book is important to Dima in order to finish the article

b. Dime   nuzhna   bol'shaja kastrjulja   chtob [PRO svarit' zharkoje]

Dima-DAT needed-fem   big-fem pot-NOM-fem to   [PRO cook-INF   pot-roast]

Dima needs a big pot in order to cook a pot roast

In the transitive sentences above the predicate agrees with the object which gets the nominative case. The possibility of non-default agreement here raises two important questions. Question 1: How does T even get a second chance at feature-valuation, rather than getting the default 3rd person features that need not be identified? Question2: why does feature valuation *not* require movement of the object in this case? In other words, why does the T gets its phi-features valued by those of the object NP long-distance, contra the Valuation Requirement? Below I address each of these questions in turn.

Suppose that default agreement (just 3rd person and no number) is always a last resort option: it is always better to have a full set of phi-features than a default one. One reason is that it would allow us to have phi-feature valuation on T and case deletion on the NP happen in one step as opposed to having two separate feature valuation operations: value phi on T and then value the case feature on the object NP. (However, as we shall see shortly, this is not a universal requirement: languages can have default agreement with the dative subject and accusative case on the object). Now, if the numeration from which the derivation is built contains an NP that gets merged into the object position and can value the T's phi-features, the T can get an additional number feature misplaced on it (recall that features can be misplaced in the course of derivation). The full set of phi-features on T (person and number) will be valued by the interpretable features of the object NP. (Alternatively, in transitive sentences, the T can have a full set of phi-features misplaced on it : 3rd person and number and then have the person feature valued by the PP and the number feature by the object). As we shall see shortly, languages may vary with respect to whether they allow for features only to be added or whether they allow the default 3rd person feature to be replaced entirely by a new set of phi-features on T such as 2nd or 1st person. Importantly, altering misplaced features is subject to economy conditions and will not take place if the first XP that T matches its features with has a full set of phi-features.

In order to answer the second question, namely, why it is possible for T to agree with the object without attracting it into its spec, I invoke the Principle of Minimal Compliance (PMC) proposed in Richards (1998), to which I turn in the next section.

2.5.2 The Principle of Minimal Compliance

Consider the Principle of Minimal Compliance as stated in Richards (1998):

For any dependency D that obeys a constraint C any elements that are relevant for determining whether D obeys C can be ignored for the rest of the derivation for the purposes of determining whether any other dependency D' obeys C.
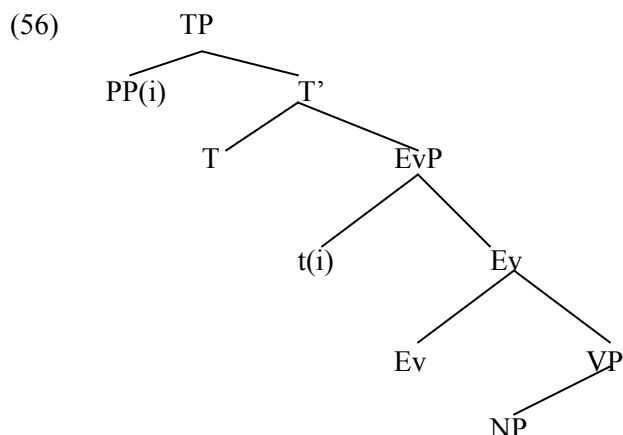
The definition of 'Relevant' is stated as follows:

An element X is relevant to determining whether a dependency D with a head A and tail B obeys C if (a) X is on the path of D (that is, X = A, X = B, or A c-commands X and X c-commands B) and (b) X is a member of the class of elements C makes reference to.
Richards (1998: 601).

Richards (1998) argues that the PMC applies to a host of linguistic phenomena such as Weak Cross-over, multiple wh-movement, and subjecency. Below I show that this independently motivated principle can explain the cases of long-distance agreement as well.

The dependency[21] D we are concerned with here is the configuration that involves the valuator/licenser, which in this case happens to be a PP and the value/licensee, which in this case is the T. The head of the dependency is T and the tail of the dependency is the PP. The constraint C that needs to be obeyed is that the Valuation Requirement which states that the XP/ X with interpretable features has to immediately c-command the XP/ X with the uninterpretable features (cf. the formulation of the Valuation Requirement). Consider the relevant configuration:

---

[21]   When Richards formulated the PMC, the word "dependency" was not given a specific formulation. Consequently, it can be viewed in a broader sense, that is it can be applicable to a relationship between an attractor (T) and the attractee (XP). In a sense, there is a dependency between the T that needs to have its phi-features instantiated, and the XP which is attracted to the spec of TP to facilitate the instantiation.

(56)

```
            TP
        ╱        ╲
    PP(i)         T'
              ╱      ╲
           T          EvP
                   ╱      ╲
                t(i)       Ev
                        ╱      ╲
                     Ev         VP
                              ╱
                            NP
```

In the above derivation the PP, which has no phi-features, is attracted into the spec TP in order to have T's phi-features features valued.   When the PP is attracted into the spec of T, the Valuation Requirement is satisfied: the T with misplaced default (3rd person) features is locally c-commanded by the PP which is enough to make the T's default features legitimate at PF/LF. Now, given that the Valuation Requirement has already been satisfied in the dependency involving the T and the PP, we can now ignore the T for the rest of the derivation (with respect to satisfying the Valuation Requirement) in accordance with the PMC. We can do so because according to the PMC, the T is an element "relevant" to determining whether the dependency D which holds between the T and the PP obeys the Valuation Requirement. The T is *relevant* by definition because the T is one of the elements involved in the dependency D that we are looking at. Since the T's phi-features are incomplete -- there is only a person feature -- the number feature is missing, the number feature can be added and then another attempt at feature valuation/licensing can be performed, now involving establishing identity with the interpretable features of the object NP.

What allows us to add a number feature in the course of the derivation? To answer this question, let us recall how feature misplacement works. Recall from a discussion in Chapter 1 that when the T is selected from the sub-array and merged into the derivation, it has no misplaced

features on it yet. (Features are misplaced right after the element is merged). Once the T is

merged into the tree, phi-features can be misplaced on it resulting in, for example, T^{3rdSG} .

However, it is not necessary for both person and number features to be misplaced on T at once. It

is possible that a person feature is misplaced on T first resulting in T^{3rd} , and then a number

feature is added, resulting also in $T^{3rd\ SG}$. (If the T will have only a 3rd person feature misplaced

on it, the phi-features on T will be default in the sense discussed above). If the number feature is

added, it may be valued/licensed by a different NP since it is a different feature than the person

feature. Crucially, according to the PMC, when we look at another dependency D' that now

holds between the T and the object NP where the T again is the valuee and the NP is the valuator,

the object NP need not be moved to spec TP in order to facilitate the valuation of the number

features on the T. The Valuation Requirement is already fulfilled by the PP, so we can "ignore"

the T for the purposes of checking whether it obeys the Valuation Requirement. Since the spec of

TP is already filled by the PP[22] – the proper configuration for feature valuation is already

established and need not be established again for the T to agree with the NP[23]. We can thus have

long distance object agreement between the T and the NP.   The misplaced feature on the NP

embedded under P is valued to the features of the preposition TO, again, just as we saw with the

adverbial experiencer. In the representation in (57) the italicized and capitalized number feature

indicates that the feature has been added after the person feature in the course of the derivation.

(In other words, the person feature was misplaced onto the T right after the T was merged and

then the number feature was added. The two features were not misplaced simultaneously).

(57)   TP

---

[22] Although the PP does not identify T's phi-features it does satisfy the Valuation Requirement which is a
pre-condition on establishing identity. Once the Valuation Requirement is satisfied it need not be satisfied
again by the object. Identity between the object's phi-features and those of T can be established long-
distance. At this point I cannot propose a way to constrain the PMC such that it does not allow rampant
violations of minimality. Richards 1998, however, points out that the PMC does allow some minimality
violations provided that it is obeyed previously in the derivation. I refer the reader to his work.

[23] I am assuming that the trace of the moved PP does not block the T from long-distance-agreeing with the
object NP. A priori there is no reason for the trace to be an intervener here since it does not have the
relevant features that would make it a possible valuator for the T.
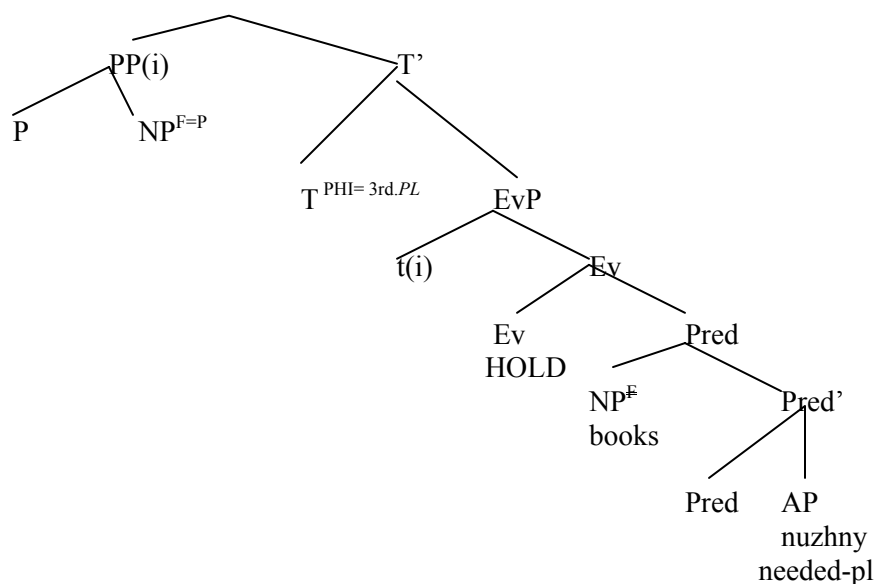
Next, I turn to constructions with dative subjects and accusative objects.

2.5.3 Dative subjects, accusative objects

However, it is also possible to imagine that when the PP is attracted into spec TP, the T would decide to not look any further and match its features to those of the PP causing default agreement (3rd person features) to remain on T. The case feature on the object NP would then get valued to the features of the immediately c-commanding Event head resulting in the accusative case. This is also attested, as seen from the Russian and Faroese examples below[24]:

RUSSIAN

(58) a. Mne   bylo   nuzhno   knigu

         Me-DAT   was-3rd-neut   needed-neut   book-ACC

         I needed a book

       b. Mne   bylo   vidno   dorogu

---

[24]   Why some constructions involve nominative while others accusative is unclear. The constructions with dative subjects and accusative objects are more rare than those with nominative objects. Possibly, this is due to the fact that deletion is preferred to valuation.

Me-DAT was-3rd-neut   visible-neut   road-ACC

I could see the road

FAROESE   (Barnes 1986: 18; quoted from Schutze 1997: 156).

(59) a. Maer   likar   filmin

Me-DAT likes   film-ACC

I like this film

b. Okkum trytur   mat

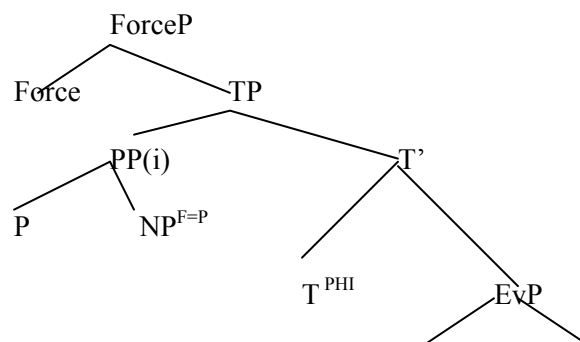Us-DAT lacks   food-ACC

We are lacking food
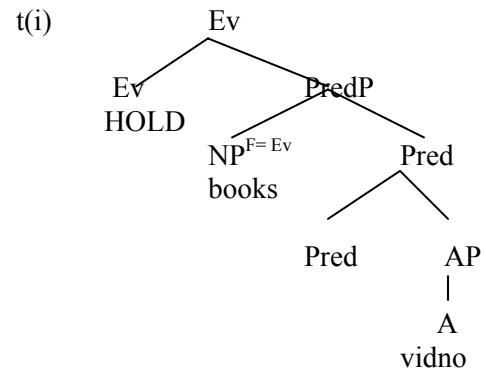

c. Siggu   damar bokina

Sigga-DAT likes   book-ACC

Sigga likes the book

The constructions above are thus minimally different from the dative subject constructions in Icelandic and Hindi where the latter involve nominative case on the object and object agreement on T. The derivation for the dative- accusative constructions is given below:

(60)

```
                                    t(i)        Ev
                                          ╱         ╲
                                       Ev            PredP
                                      HOLD         ╱       ╲
                                           NP^{F= Ev}        Pred
                                           books         ╱      ╲
                                                      Pred       AP
                                                                 │
                                                                 A
                                                               vidno
```

In the above derivation the PP is attracted into spec TP and the T does not look any further down for an NP. Instead, it retains its default phi-features, leaving the case feature of the object NP to be valued by the features of the Event head.

Finally, I would like to briefly discuss the following property of Icelandic dative subject constructions known as the 3rd person constraint (Sigurdsson 2002, 2003, Boeckx 1999, Taraldsen 1995). Icelandic does *not* allow dative subject constructions where the object is 1st or 2nd person (as discussed in Boeck 200x, Sigursson 2002, Taraldsen 1995, inter alia)? Consider the following contrast between the well-formed (a) and the ill-formed (b). Examples taken from Sigurdsson (2002):

(61) a. Henni   leidust   Pessar   athugasemdir *[Object is 3rd person: ok]*

  Her-DAT bored(3rd-Pl)   these   comments-NOM-PL

  She was annoyed by these comments

  b. * Henni   likuDuD   piD   /   *likuDum   viD *[*Obj. is 1st or 2nd]*

   Her-DAT liked-2ndPl   you-nomPL / liked-1stPL we

    *She liked you/ us

The T's default 3rd person feature is legitimized by a c-commanding PP while the number feature is missing. Suppose that some languages allow for misplaced features to be added but not replaced in the course of a derivation. That is, we can add a number feature such as PL or SG to the 3rd person feature and T and then have it valued by an NP with 3rd person PL/SG features. However, if the object is 2nd or 1st person, there is a mismatch – the person feature on T is 3rd person and since we are not taking the option of 'default' agreement there must be an identity relation established between the T's phi-features and the NP's. Identity in turn requires that the NP also have 3rd person feature.

In Russian, as we shall see shortly, the T can replace the 3rd person value on T with an entirely new set of phi-features, say 2nd Person PL and have the new set valued by the features of the object NP. Hence it is possible to have T's phi-features valued by the NP with any person feature – 1st or 2nd not just 3rd. Hindi works similarly to Russian in this respect.

HINDI (thank you to Anubha Kothari for providing the following example):

(62)   Veneeta-ko   tum   /   mai   pasand   aaye / aayi   ho / hun

            Veneeta-DAT you-NOM / I-NOM   pleasing come-2.perf / come-1-fem-perf be-2Sg / be-

1Sg

            Veneeta has liked you/me.

Apparently, whether misplaced phi-features can be replaced entirely in the course of a derivation or only added is subject to crosslinguistic variation.

2.5.4 Defective intervention effects

To conclude the section, I would like to briefly address the question why dative subjects can intervene for the purposes of agreement even though they do not induce agreement.

(63) a. Mer   */? virDast / virDist   [Joni   vera taldir t   lika hestanir]

Me-DAT   seemed-PL / seemed-SG [Jon-DAT be   believed-PL like horses-NOM]

I perceive John to be believed to like horses

b.Joni   visDast / */? virDist [t   vera   taldir   t   lika   hestanir

Jon-DAT seemed-PL / seemed-SG [be   believed   like   horses-NOM]

Jon seems to be believed to like horses

(Schutze 1997: 108-109, Bobaljik 2005)

The dative intervenes and blocks agreement with the nominative even though it does not induce

agreement itself. However, when the dative is moved out, agreement with the nominative object

becomes possible again. Why? At this point, I would like to attribute this to economy. The search

for a 'better match' does not proceed ad infinitum. Since the person feature of T has been given a

default value and made legitimate via movement of the PP into spec TP, the number feature will

not be misplaced on T if an NP with a matching number feature is not found immediately. The

sentence in (b) has agreement with the object because there is no closer spec to block agreement:

the nominative object in the spec of the embedded VP is the next closest XP for T to value its

number feature with. I will return to the discussion of these constructions, particularly with

respect to the nominative case on the object 'horses' in Chapter 3.


2.6   The nature of EvP

2.6.1 Event vs. v

So far I have not said much about the nature of EvP – a projection that plays an important

role in the syntax of the dative subject constructions. Building on work in Pylkkanen 2002, I

argue that the head introducing an event argument need not be the same head as the one

introducing a theta-role. Pylkkanen 2002 presents an extensive discussion of causative

constructions in various languages and argues that a head introducing a causing event may be

bundled together with Voice (v) -a head introducing an external argument, but may also be spelled out separately from it. Generalizing her proposal, I argue that any event-introducing head such as Hold, Do, or Caus (Harley 1995) can come separately from an argument introducing head. If the Event head is realized separately from the argument-introducing head, then it is possible to merge a PP into the specifier of the EvP without generating a theta-criterion violation. This is exactly what we saw with the adverbial experiencer and unergative experiencer constructions repeated below:

(64)   Dime   xolodno

        Dima-DAT   cold

        Dima is cold

(65)   Dime   legko bezhitsja

        Dima-DAT easily run-sja

        Running goes easy for Dima.
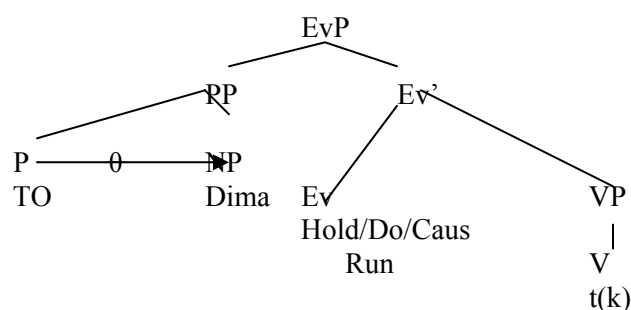
Since in the above constructions there is no theta-role introduced by Ev, the NP can be theta-marked by the P. Furthermore, since the PP is not an argument of Ev it can be dropped without a problem. As mentioned in the previous section, the PP is an adjunct: we can have a 'bare' EvP yielding an impersonal reading repeated below:

(66)   (Zdes') xolodno / skuchno / ploxo / xorosho

        Here   cold   / boring / bad / good

        It's cold/ bored/ bad / good here

Conversely, because the Event head does not have a theta-role to assign, it is not possible to

merge a 'bare' NP into the spec of Ev – the NP will not be theta-marked. Consequently, the

following is impossible[25]:

(67) a. *Dima   byl xolodno   b. *Dima bezhalsja xorosho

          Dima-NOM was cold   Dima-NOM run-sja   well

          Intended: Dima was cold   Intended: Running went well for Dima

Thus, when the Event head comes separately from an argument introducing (theta-marking) head

v, we can have a PP in the spec of EvP . That is, we can have a dative-subject construction.   In

the next section I review additional arguments that in Russian Ev =/ = v. I further show that in

Icelandic – a language that has a good number of dative subject constructions – Ev is distinct

from v as well.

2.6.2 The accidental construction – additional evidence that Ev ≠ v in Russian

        Additional evidence that Ev ≠ v in Russian comes from a construction I call the

Accidental that is discussed in detail in (Markman 2004). It is termed the 'adversity impersonal'

---

[25]   Russian does have an adjectival construction "Dima byl xolodnjy" that means that Dima was cold to
touch, not that he felt cold. However, this construction involves a different structure – Dima is a theme
argument introduced by Pred, not merged into spec of Ev. This is supported by the fact that an inanimate
object can be used in place of 'Dima' in the adjectival construction, but not in the adverbial one.
Experiencers, on the other hand, must be animate.
        There is another important question raised by the ungrammatical (67): the construction could be
possible had the NP been introduced by v, but for some reason it is not. Why can't v be merged above EvP
in an adverbial construction? At this point I will not be suggesting an answer to this question.

construction in Babby 1993, Levin and Freidin 2001. However I chose the term 'Accidental' to distinguish it from other impersonal constructions. The Accidental construction supports the claim that Ev and v are distinct heads in Russian because it involves the accusative case on the theme in the absence of the agent - a violation of Burzio's Generalization (BG). Recall that I take the accusative case to be a spell-out of Ev features on the NP, not v-features per se. When the two heads are spelled out together, the Ev vs. v distinction is not relevant; however, when the two are distinct, it is the Event head that values the misplaced feature on the NP resulting in the accusative case. (In other words, the feature that gets misplaced is Ev which is the same as v when the two heads are the same). In this section I thus connect two different parameters of argument structure: one related to the possibility of having dative-subjects (PP in spec EvP) and another responsible for having accusative case on the object in the absence of the agent (violating BG). Both are linked to the possibility of having an Event head distinct from v. The Accidental construction is presented below:

RUSSIAN

(68)   a. Xizhin-u   sozhglo

          Shack-ACC   burned-3rd-neut

          The shack got burned

       b. Dim-u   udaril-o   molniej

          Dima-ACC hit-3rd-neut   lightning-INSTR

          Dima got hit by a lightning

       c. Berez-u   slomal-o   vetrom

          Birch-ACC broke-3rd-neut wind-INSTR

          The birch got broken by the wind

That the accidental construction involves no implicit agent argument is seen from three facts.

First, it does not allow control into purpose clauses:

(69)   Dimu   ubil-o   (*chtob poluchit'   straxovku)

         Dima-ACC   killed-3rd-neut   to   collect-INF   inshurance-ACC

         Intended: Dima got killed to collect the insurance.

Second, it does not allow an agentive by-phrase, only a non-agentive one.

(70)   a. Dimu   ubil-o   # Mishej   /   (ok) molniej

         Dima-ACC killed-3rd-neut   Misha-INSTR /   lightning-INSTR

         Dima got killed   # by Misha / (ok) by lightning

       b. Lodku   unesl-o   #vragami   / (ok) vetrom

         Boat-ACC carried-away-3rd-neut   enemies-INSTR /   wind-INSTR

          The boat got carried away   # by the enemies/ (ok) by the wind

In the examples above, it is possible to have a by-phrase naming an event such as 'by a

lightening' or 'by the wind.' It is not possible to modify this construction with an agentive by-

phrase e.g. 'by the enemies'. In (70 a) an agentive by-phrase is only possible on the

interpretation that Misha falls on Dima and kills him; he cannot be construed as a volitional agent

of the event.

        Third, the construction is incompatible with an agent-oriented adverbial such as

"purposefully":

(71) a. Dima   ubil-o   # special'no

      Dima-ACC killed-3rd-neut   purposefully

      # Dima got killed on purpose

      b. Lodku   unesl-o   # special'no

      Boat-ACC carried-3rd-neut   purposefully

      # The boat got carried away on purpose

In this respect, the accidental construction is crucially different from the passive, which does have

an implicit agent. This is seen from the fact that the passive can control into purpose clauses, is

possible with an agentive by-phrase and allows agent –oriented adverbs:

(72)   Dom   byl sozhzhen special'no, chtob poluchit' straxovku

          House was burned   purposefully to   get-INF   insurance-ACC

          The house was burned down on purpose in order to get the insurance.

Further, unlike the passive, the accidental construction is only possible with those verbs whose

meaning is compatible with inanimate causation:

(73) a. Kniga   byla   prohitana

         Book-NOM-fem was-fem read-fem

         The book was read

      b. # Knig-u   prochital-o

         Book-ACC-fem read-3rd-neut

         Intended: The book got read

The Event head involved in the Accidental construction is Caus (Markman 2004). This is seen from the fact external causation is obligatory: a modifier like "on its own" is impossible (74).

(74)   Xizhin-u   sozhglo   (*samo po sebe)

         Shack-ACC burned-3rd-neut   (on its own)

         The shack got burned (*on its own)

Second, the presence of a causative head is seen from the fact that it is possible to attach an adverbial that modifies the causing event as long as the modifier is not agentive:

(75)   Dim-u   ubil-o   mgnovenno

         Dima-ACC killed-3rd-neut instantly

         Dima got killed instantly

Furthermore, the modifier "mgnovenno" = "instantly" can modify a causing event but not necessarily the event denoted by the verb root. It is possible to construe (76) with a reading on which in an instant the lightning hits the tree but the tree does not fall instantenously.

(76)   Dub svalilo   mgnovenno

         Oak felled-3rd-neut instantly

         The oak got fallen instantly

In this respect, the accidental construction is crucially different from an unaccusative in which the adverbial "instantly" obligatorily modifies the falling event:

(77)   Dima upal mgnovenno

Dima fell instantly

In addition, the unaccusative construction is possible with "on its own" modifiers – there is no requirement of external causation:

(78)   Dima upal   / prijexal   (sam po sebe)

        Dima fell down / arrived   (on his own)

Thus, from the above data we see that the Accidental construction involves the Event head, (Caus), which is distinct from v, the head introducing the external argument. Interestingly, a similar construction exists in Icelandic (Sigurdsson 1989: p.216). Consider the following:

(79) a. Stormurinn   rak   batinn   a land

         Storm-NOM   drove   boat-ACC to land

         The storm drove the boat to land

      b. Batinn   rak   a land

         Boat-ACC   drove to land

         The boat drifted / got driven to land

Sigurdsson (1989, also pc) reports that the above construction lacks an agentive reading, much like the Accidental construction in Russian does. Note crucially that the Icelandic construction in (79) also involves accusative case on the theme in the absence of the agent – a violation of Burzio's Generalization (Burzio 1986). The possibility of violating BG is accounted for by the

hypothesis that the event-introducing head is not be the same as an argument-introducing head and that it is the Event head that licenses the accusative case[26].

Thus, both the Accidental construction and the dative experiencer constructions involve a configuration in which the Event head is separate from the head introducing a theta-role. In languages where v and Ev are realized as a single head, it would not be possible to have the Accidental construction and it would also not be possible to have dative subjects. Pylkkanen (2002: Ch.3) argues that English is a voice-bundling language - lacks separable Event heads. This means that in English, introducing a causing event entails introducing an agent argument. The accidental construction is impossible in English:


(80)   a. *Him   killed

        b. *It[expletive] killed him

Since the accusative case is the spell-out of the Event head features and the Event head is the same as v, having accusative case on the NP entails having an external argument:

(81)

```
         vP/EvP
          /\
         /  \
       NP    v'/ Ev'
       John    /\
              /  \
```

---
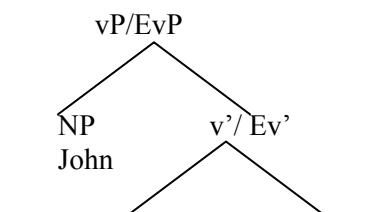
[26]   It would be interesting whether Hindi also has accusative case constructions of this sort. Japanese – a language that is argued in Pylkkanen 2003 to have a v separate from Ev also has a similar construction referred to as adversity causative in Pylkkanen 2003 and also has dative subjects (Pylkkanen 2003, Harley 1995).

```
v /Ev[acc]        VP
kill (k)
                NP        V
                Bill      t(k)
```
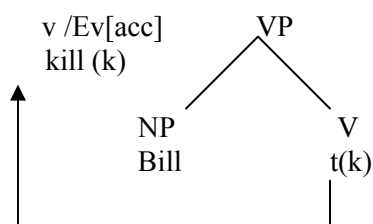
Similarly, it would also be impossible to have a construction in which a PP is merged into the spec of EvP. That is, dative subject constructions such as adverbial experiencers and unergative experiencers could not exist in English:

(82)   a. *Me well / TO me there is wellness

       b. *Me runs well/ easily
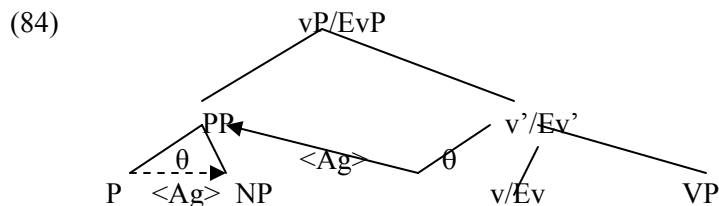
This is again due to the Theta Criterion violation:

(83)

```
      *        vP/EvP

          PP              v'/Ev'
                      θ
       P θ NP      v/Ev        VP
       TO/FOR me
```
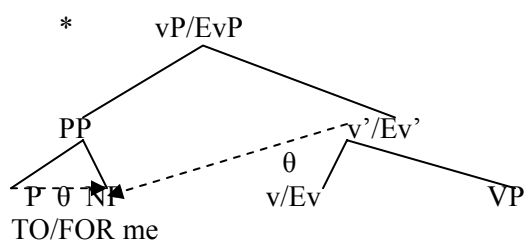
Merging a PP into the spec of V/EvP is impossible in English since v is a theta-marker and so is the P, and crucially the theta-roles they assign are distinct. In Chapter 5, however, when we turn to ergativity, we shall see that things may be a bit more complex than I am letting on now.

One can argue that the v actually assigns a theta-role to the PP, not to the NP, which means that the structure in (83) is not problematic for the Theta-Criterion. (The P assigns a recipient theta-role to the NP while the v assigns the agent theta-role to the PP). However, even

on this scenario there is a Theta-Criterion problem. Consider the following argument. While the v

needs to discharge a theta-role to its spec, not every category can receive the agent theta-role for

reasons of interpretability. In other words, while NPs and CPs can be agents, PPs cannot. The

derivation could be salvaged if the theta-role assigned by the v to the PP can be identified with

that assigned to the NP by the P and thus passed on/re-assigned to the NP.   This kind of theta-

role re-assignment may be viewed as a form of theta-identification [27] (cf. Higginbotham 1985)

where the theta-roles of the P and the v are identified so that the NP receives only one theta-role.

The possibility of theta-re-assignment is present (though in a slightly different form) in

constructions involving DPs such as "every /some/ the two and a half apples fell" where it is the

DP that is theta-marked by the verb but the D passes on the theta-role to its complement NP.

(This situation with a DP is different, however, in that D does not itself theta-mark the NP. The

verb's theta-role in this case is not identified with another theta-role; it is just passed on to the

NP). Theta-role re-assignment via theta-identification is not limited to constructions involving

PPs in spec of vP but can also be invoked in serial verb constructions such as present in a number

of African languages e.g. Edo (cf. Baker and Stewart 1999) and light verb constructions (pointed

out by Mark Baker (pc)).

Theta-role re-assignment is a last resort option, done to save a derivation that is otherwise

bound to crash. Also, the process would only work if the category to which the v assigns a theta-

role cannot itself bear the theta-role. We could not have theta-role re-assignment in a sentence

such as 'John's brother hit Bill' where the agent theta-role would get re-assigned to 'John' from

'John's brother'. Crucially, theta-role reassignment in a configuration involving a PP in the spec

of vP is possible only if the P itself assigns the same theta-role to its complement NP as that

assigned by the v – i.e. if it assigns the agent theta-role, as illustrated below:

---

[27] While I view theta-role re-assignment as a version of theta-identification, I use this term in a different
sense than that used in Higginbotham 1985 who used it in the adjective-noun modification constructions.

(84)

[Tree diagram: vP/EvP with PP and v'/Ev'; PP branches to P, <Ag>, NP with θ; v'/Ev' branches to v/Ev and VP with θ and <Ag>]

Otherwise, the NP would wind up having two different theta-roles – the recipient and the agent --

in violation of the Theta-criterion. As I have shown in section 2, the theta-roles assigned by v

'HOLD' and by P[TO] are distinct; hence a configuration with v[HOLD] and a PP in its spec

would cause a crash at LF. In Chapter 5, however, we will see that it is possible to have a v and a

P assign identical theta-roles, which would make a configuration such as above possible.

2.6.3 Case and agreement properties of the Accidental Construction

Before I close the discussion of the Accidental construction, I would like to address an

important point related to its case-agreement properties. Given the structure of the accidental

construction, it is unclear why the T does not delete the case feature on the NP and value its own

features to those of the NP, leading to the following ungrammatical sentence:

(85)   *Dima   ubil (impossible if Dima is the object)

         Dima-NOM   killed-3rd-masc

         Intended: Dima got killed

The sentence in (85) represented below is strongly ill-formed. But why?

(86)

   *   TP
           /\
          /   T'

NP^F(i)
Dima
T^{Phi = 3rdSgMasc}   EvP

Ev [CAUS]   VP

t(i)
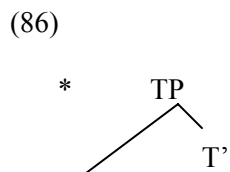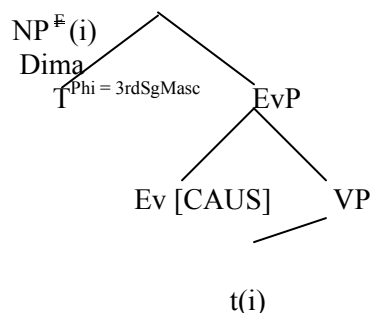
In other words, why can't the object NP move into spec TP thus yielding the nominative

(default) case on the NP and agreement on T – there is no closer XP available? I would like to

propose that the Accidental construction does involves a closer XP – a null expletive 'it' merged

into spec of Ev0 (cf. Levin and Fredin 2001 for a similar proposal). That the expletive is null is

not surprising since expletives are always null in Russian (Franks 1995). The null expletive is

also argued to be present in a related construction (Babby 1994):

(87)   Stemnelo   / svetalo   / poxolodalo

        Darked-neut / dawned-neut/ asp-colded-neut

        It got dark / lighter / cold

The expletive can appear in spec Ev0 because Ev0 does not assign a theta-role to its specifier.

The nature of the expletive is similar to that of the English 'weather-it'. Importantly, the

expletive 'it' has a full set of phi-features which makes phi-feature re-valuation with the object

impossible, unlike what we saw with the dative subjects.

Note that the NP object in the Accidental construction winds up above the verb (e.g.

Dimu ubilo = Dima-ACC killed-neut). I take this movement to be an instance of topicalization[28].

Unlike dative subjects, the accusative object in the Accidental construction is not in spec TP, as

---

[28]   One may wonder how can the object NP wind up in the beginning of the sentence, that is, before the
verb, thereby undoing the established V-O linear order within a smaller phase? There must be a prior EvP
internal scrambling that would involve the movement of the object over Ev0, possibly via forming a second
spec Ev0. (See Fox and Pesetsky 2004 for more discussion on this issue)

seen from the fact that it cannot bind a subject–oriented anaphor and cannot appear in conjunction reduction contexts:

(88) a. Dimu   ubilo   v * svojem/ ego dome

        Dima-ACC killed-neut   in * self's/ his house

        Dima got killed in his own house

     b. #/* Dimu   udarilo   i   nado   bylo uiti (if Dima is leaving)

          Dima-ACC   hit-neut. and   needed-neut.   was leave-INF

          Dima got hit and we had to leave (NOT: Dima got hit and he had to leave)

The contrast between (88) and the dative subject constructions discussed in the previous sections is accounted for if we assume that the NP in the accidental construction is not in the spec TP, but rather in a spec of some higher position such as TopP or is simply adjoined to TP.   I would like to suggest that the movement of the object is pragmatically conditioned – there is a preference in the language for having overt NPs pre-verbally rather than postverbally. This is seen from the fact that constructions such as (87) repeated below that can also have an overt locative PP prefer the PP to appear preverbally. The postverbal PP can only be used with a special focus intonation:

(89)   (Na   ulitse) stemnelo/ poxolodalo (NA ULIITSE)

        On   street   darkened/ coldened   (on street)

        It got dark /cold outside

The accusative NP can also appear postverbally in the Accidental constructions:

(90)   Ubilo   Dimu

Killed   Dima-ACC

Dima got killed.

Thus, the Accidental construction involves an expletive that raises to spec TP and fully values the

phi-features on T. Feature re-valuation is not possible with the object, unlike what we saw with

the dative subject constructions with nominative objects. The object NP undergoes a

pragmatically -conditioned movement (scrambling?) to spec CP.

To sum up, in this section I have presented independent evidence for the claim that in

Russian the head introducing an event is spelled-out separately from the head introducing an

external argument - v. The possibility of having a separable EventP results in the possibility of

having the dative-subject constructions and the Accidental construction. The Accidental

construction involves an object marked with accusative-case in the absence of the agent.

Crucially, in languages where the Event head is the same as v, we can have neither dative

subjects nor the Accidental construction. Both constructions stem from a configuration in which

the Event head is separate from a head that introduces an argument (theta-role).

2.7   Conclusion

Let us now sum up the main ideas of the argument. The goal of the chapter was to show

that the theory of case and agreement presented in Chapter 1 can account for the existence of

dative subject constructions without resorting to an additional case-licensing mechanism such as

inherent case. I have argued that there is a principled reason why the NP in the dative subject

constructions is dative: it is embedded under a theta-marking null preposition P [TO] and the

resulting PP is merged into the spec of EvP.   The preposition blocks the NP's phi-features and

while the PP still gets pulled up into its spec of TP to satisfy the Valuation Requirement, the PP

lacks phi-features cannot value the phi-features on T. The T gets a default 3rd person phi-features

which need not be identified by NP's interpretable features and also cannot delete case features.

They can be valued by any XP merged into spec TP. The case feature on the NP embedded under P is valued by the interpretable features of the P[TO], which is realized as dative case. Dative subjects are thus PPs not NPs.

Looking at transitive constructions with dative subjects and nominative objects, I have argued that these involve similar configurations – a PP in the spec of EvP. However, in addition, they involve an object NP. Since the object is not blocked by a P, the T can delete the NP's case feature at the same time getting its own phi-features valued. Since the configuration for feature valuation has already been created, there is no need to move the NP into spec TP to create it again. This is made possible by invoking the Principle of Minimal Compliance (Richards, 1998). Hence we get object agreement and transitive dative subject constructions. Some language-specific constraints on feature re-valuation do exist, however. In Icelandic, once the PP values T's person feature as 3rd person, this value cannot be changed, only the number feature can be added and then valued. In Russian, and Hindi on the other hand, the entire set of phi-features can be replaced and consequently valued by those of the object.

In section 6 I have discussed the nature of EvP (Harley 1995, Travis 2000). I have argued that the reason we are allowed to merge a PP into spec of Ev is that the Ev does not have a theta-role to assign to the NP (e.g. agent/ holder). It's only job is to introduce an event argument into the structure. Extending a proposal in Pylkkanen (2002: ch3), I have argued that while Ev introduces an eventuality argument, it may come bundled with v– the head that introduces an external argument (Kratzer 1996). When Ev and v are realized as a single head, it is not possible to have dative-experiencers. In contrast, if a language realizes Ev and v as two separate heads, it is possible to merge the PP into spec of EvP. That Russian is a language where Ev and v are distinct heads is further indicated by the existence of the Accidental construction that involves accusative case on the theme and no external argument. In *Appendix 2B* I discuss different kinds of Event heads as well as different places in which the Event head can be merged.

The entire discussion in the chapter can be summed up as follows: dative case and default agreement in dative subject constructions are explained if we take into consideration the argument and event-structure these constructions involve: PP in spec of EvP. The fact that this configuration is not allowed in some languages (due to Voice-Bundling (Pylkkanen 2002)) explains why these languages may lack dative subjects.

Chapter 3   Infinitives

3.0   Outline

In this chapter I address infinitival constructions and show how the theory proposed here accounts for them. Here we will get a first glimpse of partial feature-misplacement and the

consequences it has. In particular I will argue that the infinitival T lacks phi-features and PRO

lacks a misplaced (case) feature. In section 1 I introduce the issues that will be dealt with in this

chapter. In section 2 I discuss the theory of infinitives in Martin 2001 and argue that the view he

adopts from Stowell 1982 who treats the infinitival 'to' as [+tense] in control constructions and [-

tense] in raising/ ECM constructions is incorrect. In section 3 I present the central idea of the

proposal. In section 4 I discuss raising and ECM infinitives. In Section 5 I turn to control

infinitives and the properties of PRO. Section 6 deals with *for-to* infinitives and irrealis

complementation. Section 7 deals with infinitival constructions that involve expletives. In this

section I consider the difference between 'there' and 'it'. Section 8 is the conclusion.

3.1   Introduction: Infinitives: what is at stake?

Virtually any theory of case and agreement faces the challenge of infinitives. In fact, the

very idea of Case Filter (Rouveret and Vergnaud 1980, Chomsky 1981) starts out from the need

to account for the examples such as (1).

(1)   a. John went home

         b. * John to go home

         c. * John tried Bill to go home

         d. * It seems to John go home/ John to go home

An overt NP subject is impossible if the verb is infinitival. The presence of finite Tense is crucial

for case licensing on overt NPs in matrix clauses. As is well known, however, things improve if

the prepositional complementizer 'for' is present (alternatively, case can be licensed by an ECM

verb as in (2d).

(2)   a. For John to leave would be odd

b. It would be odd for John to leave

c. Bill wanted for John to leave

d. Bill considered John to be smart

Thus, as was argued since LGB, overt NPs are possible in infinitival contexts only if there is another case licenser present as in (2). In this chapter I address some of the long-standing questions concerning the place of infinitives within case and agreement theory and show how the current proposal can account for them. In particular, one of the central questions concerns the distribution of NPs in infinitival constructions: why they cannot appear in spec of infinitival TP without an external case-licenser such as the matrix verb or a complementizer 'for'. What are the properties of ECM/raising infinitives that distinguish them from control infinitives? How and why is movement licensed in infinitival constructions? These are the main issues that will be addressed in this chapter.   The data I will review is not new: it has been discussed in much work over the years. Since the data mainly comes from English and other I-E languages that have case features and since my focus will be on addressing this data, I will not be able to venture into the numerous issues raised by infinitives in other languages. However, I will address some of the infinitive-related questions raised by languages without case in Chapter 4.

To address the puzzle concerning case licensing in infinitives, namely the impossibility of overt NPs (cf (1)), I will argue that the infinitival T lacks phi-features (at this point I am setting aside some potential issues raised by Portuguese agreement in infinitival clauses (Raposo 1987)). Moreover, I will argue that the T in infinitives lacks interpretable features as well and consequently cannot value a misplaced feature on NPs. The infinitival T introduces a free temporal variable that needs to be bound in order to be interpretable. In fact, I will propose that the T always lacks interpretable features and that tense distinctions are introduced by Fin0, which in finite clauses carries temporal information in addition to binding the tense variable. In infinitival clauses that lack 'for', Fin0 merely introduces existential closure over the T variable.

What distinguishes finite and infinitival clauses are two properties: a) absence of misplaced phi-features; b) the nature of the Fin0: in finite clauses it is able to determine the temporal location of the event (i.e. past, present, future), while in the infinitival clauses it can only introduce existential closure over the temporal variable (if Fin is present at all). While I assume the latter property to be universal, the former – absence of phi-features -- may be subject to crosslinguistic variation.

In this chapter I will focus on three kinds of infinitival constructions: raising/ ECM, control, and *for-to* infinitives. I show how their (in)ability to license overt NPs follows from the different complements they select: TP vs. CP. In addition, the different complement options in these constructions are also responsible for the different ways of binding the temporal variable introduced by T which in turn results in distinct temporal properties of these infinitival constructions (Martin 2001, Stowell 1982). In particular, I argue that the free variable introduced by the infinitival tense can be bound either via co-indexation with the matrix T or via existential closure introduced by a special head Fin0 which is a part of an extended CP domain in the sense of Rizzi 1997. Co-indexation between the matrix and the embedded tenses yields a simultaneous temporal interpretation of the events in the two clauses. This co-indexation is referred to as 'linking' and is only possible when the embedded clause is a TP, never when it is a CP. When the C layer is present, the temporal variable introduced by the infinitival T is bound by the infinitival Fin0 which introduces existential closure over the temporal variable. The temporal interpretation of the embedded event in this case is determined contextually and may, but need not be simultaneous with that of the matrix event. An analogy with pronoun/anaphor interpretation may be useful here. The temporal interpretation of the embedded infinitive in raising / ECM construction is similar to an anaphor – it must be interpreted with the matrix event. In contrast, the temporal interpretation of the embedded event in control constructions is like that of a pronoun – its interpretation can be recovered from context but may also be co-referential with the matrix event. Finally, the interpretation of the event in finite clauses is like that of an R-

expression (an indefinite) in that it is not strictly determined by context and / or by the temporal location of the matrix event.

As noted above, the presence or absence of the C-layer in infinitives is also crucially responsible for the case and agreement properties of the raising/ECM vs. control infinitives. When the C layer is present, as it is in control infinitives, movement of the embedded NP into the matrix clause is impossible because C is a phase–marking head which creates a linearization domain precluding the possibility of reordering elements within it (cf Fox and Pesetsky 2004). The kind of movement required to get an NP from the embedded clause into the matrix one across a C-head would undo the established linear order within a spell-out chunk which is impossible (cf chapter 1).   Leaving an overt NP in spec of infinitival 'to' is also not possible because nothing would legitimize its case feature. Hence the only option is PRO. In section 5 we will see why it is so in more detail. In contrast, raising/ECM infinitives do not involve a C –layer and consequently allow movement of the embedded NP into a matrix clause as will be discussed in detail in section 4.

3.2   Against the [+/-tense] distinction in infinitives (Stowell 1982, Martin 2001)

Martin 2001 following Stowell 1982 treats infinitives as falling into two different categories: [+tense] and [–tense]. Building on Stowell's idea, Martin treats control infinitivals as [+tense] and claims the tense they involve is future with a modal component similar to 'should' or 'would'. Because they are [+tense], they allow PRO – the tense licenses Null case (Chomsky and Lasnik 1995) on PRO. Furthermore, Martin argues that since these infinitivals are [+tense] they allow eventive complements:

(3)   a. John tried to leave

          b. John remembered to bring the food

          c. John persuaded Bill to leave/ to bring the food/ to come to the party

Martin claims that the tense feature in (3) binds the event argument in 'leave' and 'bring'. Furthermore, the future-like interpretation of the tense in control infinitivals accounts for the 'irrealis' interpretation these constructions have as noted in Stowell 1982. That is, the event of leaving in (3a), as well as the event of bringing the food are un-realized. They may or may not take place. Crucially, if it does take place, it takes place in the future with respect to the event in the matrix clause.

Turning to raising and ECM infinitives (Martin treats the two on a par following the arguments presented in Postal 1974, Lasnik and Saito 1991), he argues that these are [-tense]. Therefore they do not allow PRO. This is so because Null case on PRO would not be checked. Furthermore, Martin argues that the absence of tense in raising / ECM constructions (3) accounts for the lack of irrealis effect in these infinitives. That is, the event in the embedded clause and that in the matrix are obligatorily simultaneous: seeming cannot precede leaving; John's considering Bill to be smart cannot precede Bill's being smart. The two events must take place at the same time.[1]

(4)   a. John seemed to leave

        b. John believed Bill to be a hero

        c. John considered Bill to be smart

Finally, Martin claims that the absence of tense in the raising/ECM infinitives accounts for the fact that these constructions disallow eventive complements:

---

[1] At this point I am setting aside a number of semantic complexities related to the verbs such as 'seem,' 'appear' or 'believe'; in particular, the fact that it is unclear whether seeming or believing can even constitute an independent event from the event expressed in the complement. If it cannot, then one may wonder whether it is meaningful to say that the two events are simultaneous. I will come back to this question later in section 4.

(5)   * John believed Bill to go home / to leave / to run away

Martin attributes the impossibility of (5) to the fact that the event argument in the embedded verb needs to be bound by tense. If tense is absent, an ungrammaticality results. States, Martin claims, do not have the relevant argument and do not require tense. This is why the constructions in (4) that involve stative complements are well-formed.

The above is the essence of Martin's argument. As is already discussed in Hornstein 2003, Martin's claim that raising verbs do not allow eventive complements is not correct for all speakers. Some native speakers of English judge the following sentences to be well-formed:

(6)   John seemed to win/ leave

Second, the claim that control verbs require event-sequencing – i.e. that the event in the embedded clause follow the event in the matrix (cf 3) – is not true of all control verbs. Thus in the following sentence it is perfectly possible to construe the matrix and the embedded events as simultaneous:

(7)   John tried to live here / stay quiet

Context for (7): Last semester John had a horrible room-mate who throws his socks all over the place, leaves dirty dishes in the kitchen and listens to loud music until 3am. *John tried to live there (but it turned out to be impossible.)* In this context, the reading on which trying and living are simultaneous is quite natural. Given Martin's claim that the embedded clause in (7a) involves a future-like tense, this is unexpected. An even better illustration comes from the class of verbs called Implicatives in Kartunnen 1971. These include verbs such as 'manage', 'bother',

'condescend' and require that the complement and the matrix events be evaluated in the same time interval:

(8)   a. John managed to win the race

        b. John condescended to talk to us

        c. John finally bothered to show up to the meeting on time.

        d. * It/there managed to win the race

        e. * The shit managed to hit the fan

        f. * It / there finally condescended / bothered to show up at the meeting

The examples in (8) clearly involve control, as seen from the ungrammatical examples with expletives and idiom chunks in subject position (d-f). Yet, there is no sense in which the event in the embedded clause takes place in the future with respect to the event in the matrix clause. These verbs will be extensively discussed in section 6 when we talk about *for-to* infinitives. At this point, I will not dwell on their properties much, but merely point out that they present a counterexample to the claim that control infinitives obligatorily involve tense, which manifests itself as event sequencing.

Third, with regards to raising constructions, Martin claims that raising verbs allow stative complements because states need not be bound by tense. But why should the state argument not require binding? Martin admits that the state argument he has in mind is not the Davidsonian argument, but he does not provide an alternative. Moreover, if control infinitivals allow eventive complements because the tense binds the event argument, then given Martin's own logic, having a stative complement in a control infinitive should lead to a violation of No Vacuous Quantification constraint (Kratzer 1995). That is, if states lack the relevant argument, then when tense is present, the result should be ungrammatical because the T would not have an argument to

bind. Yet, the possibility of stative complements in control infinitives indicates that it is clearly not the case.

Fourth, the very notion of Null Case which lies at the heart of Martin's proposal is itself problematic. As Hornstein (2003) points out, Null Case is highly theoretically suspect: it is the only case that is restricted to a single element – PRO. Furthermore, PRO is also the only element that is restricted to having Null Case. Hence, there is no independent evidence supporting the existence of Null Case, which deprives this proposal of much explanatory power.

A similar critique of Martin's arguments is also presented in Baltin and Barrett 2002. They argue that Martin's claim that Null Case is checked by 'to' that is [+Tense, -Fin] is not sufficiently precise; the claim that 'to' is a modal 'tense-like' element lacks theoretical content (Baltin and Barrett 2002). They also show that the future-like interpretation of the [+tense] 'to' does not always correlate with control as seen from such sentences as 'John managed to leave' where the embedded event is not interpreted as following the matrix one. Furthermore, Baltin and Barrett point out an even greater problem with Martin's account, namely, the fact that he takes the subject of *for-to* infinitives [e.g. John wanted for Bill to leave] to bear Null case. This claim completely deprives the notion of Null Case of any possible content. If an overt NP can bear Null case then why can't it appear as a subject of any infinitival? Martin attempts to answer this question by claiming that in *for-to* infinitives 'for' has phi-features which enables overt NPs to appear there. The idea is this: phi-features are uninterpretable on both functional heads and NPs and need to be checked. The infinitival 'to' lacks phi-features which means that overt NPs cannot appear as their subjects – their phi-features would not be checked. In contrast, 'for' does have phi-features and can therefore license an overt NP. However, as pointed out in Baltin and Barrett 2002, the claim that phi-feature are uninterpretable is problematic. One of the challenges it faces is having to explain how this feature-checking operation would take place: if both phi on NP and the phi on T are uninterpretable then the idea of feature matching (Chomsky 1995, 2001a,

2000) needs to be rethought. It is no longer possible to view feature matching as a kind of a 'valuation' of the uninterpretable phi- features on T by the interpretable phi-features on NP. Without a detailed alternative proposal of the mechanism for matching, the claim that phi-features on NP are uninterpretable cannot be maintained.

Given these problems, it would be desirable to derive the distinctions between control and raising/ECM infinitives without resorting to the [+/- tense] distinction, especially given that this distinction is not supported empirically: morphologically, both control and raising/ECM infinitives look the same. As will be argued in subsequent sections, the properties of control and raising constructions as well as their distinction from finite clauses and from the *for-to* infinitives can be accounted for by a uniform treatment of the infinitival 'to'. This is the subject of the subsequent sections.

3.3   The proposal

3.3.1 Infinitives and ways of tense-binding

I propose that tense (T) always introduces a free temporal variable (t) in both finite and infinitival clauses and by itself carries no temporal specification. In finite clauses the t is bound by Fin0 which also locates the t in time (cf Enc 1987 for a proposal of this sort). In infinitival clauses, the variable introduced by T is semantically dependant on the matrix tense. In control infinitives it is bound by a special head Fin0; in raising and ECM infinitives, the finiteness head is absent, and the value of the variable is determined via identification with the matrix tense. Below I present the semantics of the infinitival clauses with and without the CP projection as well as the semantics of the finite clauses that always have the CP layer.

(9)   Semantics of Infinitivals without FinP (Raising and ECM):

T ~ > λP ∃(e) [P(e) & at(e, t$_i$)] -- T takes a set of events denoted by the VP and introduces a time 't ' which is a free variable such that e is located at t. The variable is not related to the current moment n ; hence infinitives are 'time-less' in that the event is neither in the past, present or future in the absence of the matrix verb.

TP [embedded] ~ > ∃**e** [Run(e) & at(e, t$_i$)] TP [matrix] ~ > ∃**e** [seem(e) & at(e, t$_j$)]

The matrix and the embedded tense variables get identified, i.e. t$_{j = }$ t$_i$

(10) Semantics of the TP in Infinitival clauses With CP (Control)

T ~ > λP ∃ (e) [P(e) & at(e, *t$_i$)* [the job of T is the same as it is in raising /ECM infinitives]

TP ~ > ∃(e) [Run(e) & at(e, t$_i$)]

Fin0 ~ > ∃t$_i$∃ (e) [Run(e) & at(e, t$_i$)] – Fin0 introduces existential closure over the variable t$_i$ but since the infinitival T does not provide any temporal specification for t, the reference of t is determined by the matrix clause. Fin0 in infinites only asserts the existence of some time-interval t in which the event in the embedded clause is located

(11) Semantics of the TP and FinP in Finite clauses

(Crucially, I assume following Pesetsky 1991 (what attributes this to Kayne) that every finite clause has a Fin0 head that binds the temporal variable introduced by tense.)

VP ~ > λe (Run (e)) – the VP denotes a set of events;

T ~ > λP λt ∃ (e) [P(e) & at(e, t)] -- T takes a set of events denoted by the VP and introduces a time 't ' such that e is located at t. However, it does not locate the interval t with respect to the time of utterance n. this is the job of finiteness

TP ~ > λt ∃e [Run(e) & at(e, t)]

Fin0 ~ > ∃t ∃e) [Run(e) & at(e, t) & t < n] – Fin0 introduces existential closure over the

temporal variable introduced by T and sets the t with respect to the time of utterance n.

As indicated above, semantically, I treat the T as doing two things: introducing a free temporal

variable and providing existential closure over the set of events denoted by the VP. Since the

value of the variable introduced by tense is unspecified, it is effectively un-interpretable[2] unless it

acquires value via binding. In infinitival clauses that lack a Fin0, the infinitival T acquires value

by copying the tense features from the matrix T where the matrix itself gets the value from the

matrix Fin0. The two tenses are thus effectively identified, i.e. linked so that they share a single

temporal specification. Crucially, linking is only possible if there is no intervening head that

binds the temporal variable, e.g. no Fin0. The absence of Fin0 – which is the defining property of

raising and ECM verbs – necessitates identification of the matrix and the embedded tense. This

means that both e1 – the event expressed by the embedded clause and e2 – the event expressed by

the matrix clause are located within the same interval of time. Hence, we derive an important

property of the raising/ ECM infinitives, namely that the embedded and the matrix events must be

interpreted as simultaneous, without assuming a special distinguishing property of the infinitival t

involved in these constructions (contra Martin 2001, Stowell 1982).

　　　The idea of binding the temporal variable via Fin0 is similar to the idea presented in Enc

1987 who claims that Comp is the head responsible for anchoring or setting the value of the tense

---

[2] Note, that while T does not inherently have a temporal specification, this fact alone does not make it a probe. By definition, a probe must have misplaced features e.g. phi- on T. There is a difference between the uninterpretable phi-features that appear on T and the unvalued /unspecified tense features. At this point I would like to set aside this terminologically confusing point, but it must be kept in mind that uninterpretable phi-features on T and the lack of temporal specification T involve different kinds of uninterpretablility. The former should be viewed as a form of null interpretation rather than uninterpretablity where null interpretation does not cause a crash. Thank you to Mark Baker, pc. for bringing this point to my attention.

variable[3]. Enc 1987 argues that tenses denote intervals of time and are similar to pronouns in

that they need to be anchored to some time interval. In other words, they either need an

antecedent to refer to or they will be interpreted deictically. (See Partee 1973, 1984 for the

original proposal on the semantic parallels between pronouns and tenses). Because the infinitival

Fin0 does not specify the location of the time interval with respect to now, the time interval in

which the event in the infinitival clause is located gets determined by or anchored to the matrix

clause. Whether the embedded and the matrix events are interpreted as simultaneous or sequenced

will depend on the lexico-semantic properties of the matrix verb.

In the next section I discuss the properties of raising and ECM infinitives and show how

the fact that they lack a Fin0 can account for their properties. However, before I proceed with the

discussion of raising/ECM infinitives and control infinitives, I would like to review some

important assumptions about the driving force behind movement discussed in Chapter 2.

3.3.2 Reviewing some important assumptions about movement

A-movement is driven by the need to delete/ value uninterpretable features prior to spell-

out. In finite and infinitival clauses, the phase-marking head C, or rather the highest head in the

CP domain – Force – triggers movement of the highest NP in the vP. In infinitival clauses, the v

in the matrix clause can also drive movement of the NP in the embedded clause into the matrix

since this head also marks a phase. (In a finite clause, v will not need to trigger NP movement

because the NP agent is invisible to it – it is higher and the NP theme is already in a proper

configuration for feature valuation). Let us briefly review how phase-driven movement works by

first looking at Force – the highest head in the derivation.

---

[3] The same idea is adopted for independent reasons in Roberts and Roussou 2002 who use it to account for
the EPP and verb second effects in Germanic. Since their proposal is largely orthogonal to the issues we are
concerned with here I will not discuss it, and instead refer the reader to their paper.

If a phase-marking head (Force or v) finds uninterperatble features within its spell-out domain, it triggers movement in order to create a configuration in which those features that are still unvalued / undeleted can be legitimized.   Importantly, neither Force nor v can trigger movement of an NP if the movement would undo the already established order in a previous phase. This effectively means that C /v cannot move NPs out from under another phase-marking head.   (Arguably, a phase-marking head may detect features even in further phases but cannot do anything about making these features legitimate). In the next section we will see how these assumptions about movement can be applied to derive the properties of NP distribution in raising/ ECM and control infinitives.

3.4   Raising and ECM.

Following Postal (1974, Lasnik and Saito (1991) many have adopted the important insight that raising and ECM constructions can and should be treated on a par because both appear to involve movement. Here, I adopt this view as well (in agreement with Martin 2001, Hornstein 2003 inter alia). I further assume that the crucial defining feature of raising and ECM verbs is that they lack a C-layer which includes Fin0 and Force which in turn requires the infinitival and the matrix T to be linked. This has two consequences: first, the embedded and the matrix events have to be interpreted as simultaneous; second, the NP in the embedded clause could be moved up to the matrix clause for case licensing since there is no intervening head to block movement.

3.4.1 Raising

I begin this section by reviewing the basic raising constructions. They are easily accountable under the current assumptions and I add them mainly for the sake of completeness. Consider the following standard raising constructions:

(12)   a. John seemed [to live in this building / to be home]

b. Bill appeared [to stay quiet for hours]

     c. Bill is likely [to eat a donut]

In the derivation below , the arrow connecting the two tenses indicates linking – the temporal

idenfitication between the matrix and the embedded Ts. Note that raising constructions lack v –

raising verbs are unaccusative. This is important because otherwise movement of the embedded

NP to the matrix TP would be blocked since v is a phase-marking head. Moving across v would

cause the elements within the previous phase to be re-ordered which is not possible according to

the proposal in Fox and Pesetsky 2004 which I adopt.

(13)   ForceP
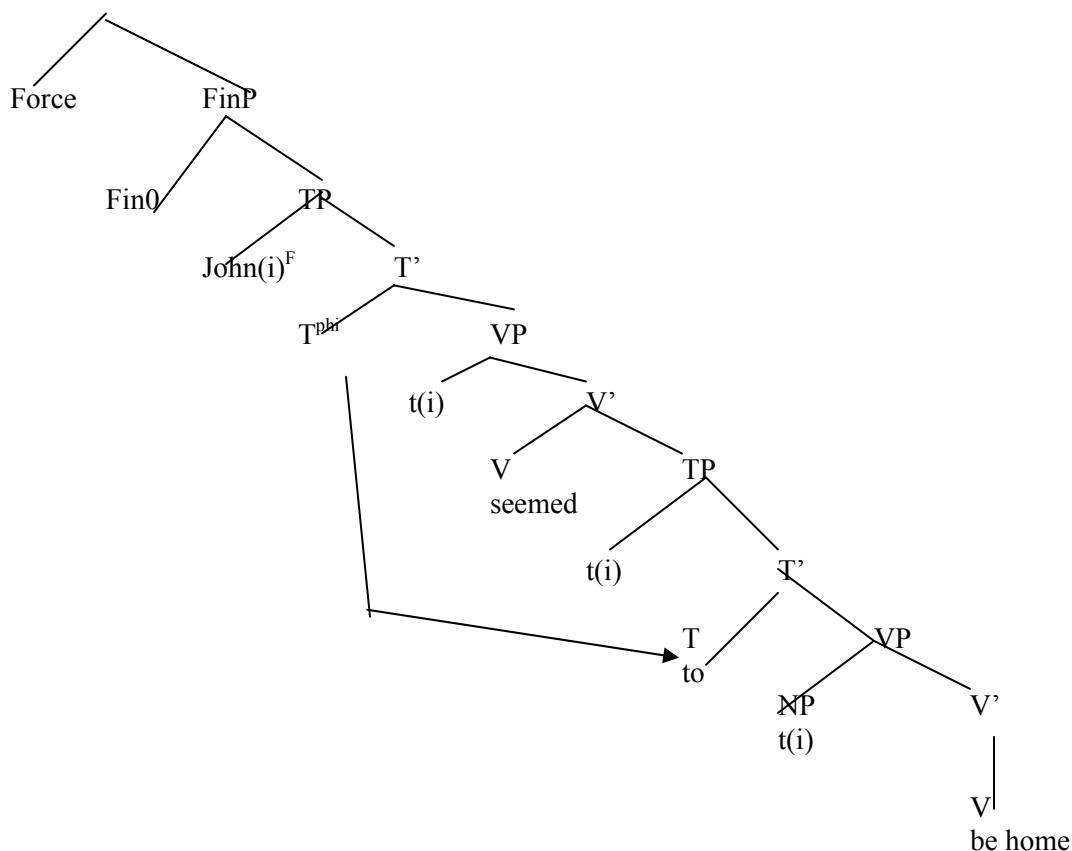
In the above derivation the C layer is missing which means that the NP in the embedded clause

'John' can be moved out into the matrix clause.   Had C been projected in the embedded clause

we would have to spell-out: [C to John [be home]]. Moving 'John' into the spec TP in the

matrix clause would reverse the order between C, 'to' and 'John' which is disallowed. However,

since the embedded C is absent, the matrix C can move the embedded NP all the way up to the

spec of the matrix TP. The embedded NP values the phi-features on the matrix T which results in deletion of the NP's the case feature. The account can be extended to other raising constructions.

While the above answers the question why raising is possible, we still have to answer why PRO is not possible. In other words, why can't we have something like:

(14)   John seemed to PRO be sick.

Crucially, my answer here is different from the one Martin 2001 gives: the impossibility of PRO is not due to the tenseless nature of 'to' in raising construction which cannot check Null Case on PRO. PRO is impossible as the subject of [be sick] because 'seem/ appear ' will not theta-mark 'John'. This is a standard answer (cf Chomsky 1981) for raising constructions which I adopt[4].

Turning to the question of why in raising constructions the embedded and the matrix events are interpreted as taking place within a single interval of time as claimed in Stowell 1982 and Martin 2001, the answer follows as a natural consequence of the way linking works: since the two tenses are co-indexed, they are effectively interpreted as referring to the same interval of time. It is not possible for the embedded and the matrix event not to be simultaneous. The event of leaving and that of seeming take place within a single interval of time[5].

---

[4] There is a question why the following is impossible: '* In France, it seems [PRO to like wine].' This sentence does not mean 'It seems that people in France like wine.' The reason this sentence is impossible is that PRO always needs a controller, implicit or explicit (cf Landau 1999, 2003) and the expletive 'it' is not a suitable controller since it is not a theta-bearing element. In contrast, in a sentence like 'It is difficult [PRO to drink wine]' there is an implicit controller something like 'for people' where the entire sentence should be: 'It is difficult for people to drink wine' The reason there is no implicit controller in the ill-formed sentence has to do with selectional properties of the matrix predicate: while 'difficult' selects a 'for x' complement, 'seems' does not. M. Baker points out that 'seem' can have a 'to' phrase that can be a controller e.g. *It seems to John [PRO to like wine]* meaning *It seems to John that he likes wine.* Arguably, 'to John' is not in a suitable configuration to control PRO – it is an adjoined phrase and does not c-command PRO.

[5] Interestingly, there is another way to explain the simultaneity effect. The alternative explanation can run as follows. A crucial aspect of raising verbs is that they lack a theta-role. This is precisely what enables an expletive or an idiom chunk to appear as subjects of raising predicates:

(i)   a. There seemed [to be people here]
        b. The cat seems [to be out of the bag]

To sum up, the possibility of NP movement in raising constructions as well as the fact that the

embedded and the matrix events in these constructions are interpreted as simultaneous can be

derived from the absence of C layer. Since the embedded clause is not a phase, movement of the

embedded NP into the spec of the matrix T is possible.

Interestingly, in some languages the tense features of the matrix T can be copied onto the

embedded tense in raising constructions together with the phi-features. This would yield identical

feature structure in the matrix and the embedded verbs. Kindande works like that. Consider the

following pair of examples provided by Mark Baker, pc:

Here I will assume that 'seem' and 'appear' different from other verbs not only in that they do not have a theta-role but also in that they do not introduce an eventuality argument. That is, they lack an event head. In fact, they are more like event modifiers - they apply to predicates of events. Semantically, a 'seem' or 'appear' verb is: $\lambda P \, \lambda e(Seem(P(e)))$. They are functions from sets of eventualities to sets of seemed or apparent eventualities. Thus if the embedded predicate denotes a set of living events, after it combines with 'seem' we get the following:

VP [john live here] $\sim> \lambda e(Live(e, john))$
T [inf] $\sim> \lambda P.P$ [identity function on the VP]
TP $\sim> \lambda e(Live(e, john))$
V[seem] $\sim> \lambda P \, \lambda e(Seem(P(e))$
VP [seem john live] $\sim> \lambda e(Seem(Live(e, john))$ [from living to seemed-living]

The resulting matrix VP is then combined with the matrix T, which maps it to a time interval. Clearly, since there is only one eventuality involved here, it is impossible for seem and live to not be simultaneous. This is crucially afforded to us by the semantic properties of seem/appear verbs – they are dependent on the eventuality argument of the embedded predicate. In fact, I would like to make an even stronger claim: because 'seem'/ 'appear' verbs lack an eventuality of their own, they lack a theta-role. While it possible to have a category that introduces an event argument but no theta-role [recall the discussion in ch.2], it is not possible for a category to introduce a theta-role without either itself introducing an event or combining with something that introduces an event. This underlies the impossibility of adding an NP to an adverbial like 'well': *John well. Since the adverbial lacks its own event/state argument it must combine with something that does. Otherwise, it cannot take an NP argument. The intuition behind it is that an individual that gets a theta-role has to be a participant in some event/state. This is a different explanation for why the event in the embedded and the matrix clauses in raising constructions are simultaneous. The former explanation may be more minimal because it also accounts for the simultaneity effect in the ECM constructions. Since ECM verbs do have an event variable (unlike what can be posited for raising verbs) we cannot use the above explanation to account for why the embedded and the matrix events in ECM constructions are simultaneous. Hence, to avoid having two different accounts for what is arguably the same phenomenon, I choose the first view. That is, the eventuality in the embedded and in the matrix in raising constructions are interpreted as simulataneous because there is only one time interval involved. I do leave open the question of whether raising verbs introduce an eventuality argument or not. [I think there is reason to believe that they do not].

However, when we discuss ECM constructions, the strict simultaneity requirement would have to be weakened. The current theory provides a way to do this while still keeping with the general insight (Stowell 1982) that in raising constructions the embedded and the matrix events are interprteted within the same interval of time.

RAISING[6]:

(15)   A-**ba**-kali   **ba**-li-nga   **ba**-ka-seny-a   o-lu-kwi

         PRE-2-woman   2-be-if   2-pres-chop-FV   PRE-11-wood

         The women seem to be chopping wood

         (class 2--animate plural--agreement on both verbs)

CONROL:

(16)   A-**ba**-kali   **ba**-na-sond-ire   e-ri-gul-a   a-ma-tunda

         PRE-2-woman   2-PRT-want-STAT   PRE-5-buy-FV   PRE-6-fruit

         The women want to buy fruits

         (nominal class 5 morphology=infinitive, no agreement with matrix subject)

Not just the tense features but also agreement features are copied from the matrix onto the embedded T in raising constructions. Crucially, this is not possible in control infinitives because the latter involve an intervening phase-marking head C that blocks linking, as we shall see in more detail in section 5.

3.4 2   ECM

       As already mentioned in section 3, the same mechanism that takes care of movement in raising constructions is responsible for movement in ECM constructions. However, in ECM

---

[6] As Mark Baker points out, there is no overt tense marker (and none is possible) on the matrix verb. He further notes that stative verbs in the language can be unmarked for tense, interpreted as present. 'Want' in the second sentence also has no tense marker, although it has the aspect suffix -ire. Also, while 'alinga' is glossed as 'seem' in the raising example, Baker notes that according to Patricia Schneider Zioga and Larry Hyman it could be synchronically the irregular copular verb –li plus the conditional/interrogative complementizer nga 'if'. This combination is similar to English: 'Mary is/seems as if she is tired,' comparable to 'Mary seems to be tired.' As Baker further points out this may be problematic for my proposal because 'is as if + tensed CP' is not a raising construction in English. Yet, he notes that tests for raising in Kinande support a raising analysis.

infinitives, the movement[7] of the NP does not proceed all the way to the top because ECM verbs

do have a v that assigns a theta-role to an argument NP that appears in their spec. As a

consequence, the NP gets pulled up into the spec of the embedded (infinitival) tense but not

further. The nature of the resulting configuration is responsible for the accusative case on the NP.

Consider the following constructions:

(17)   a. John considers Bill to be smart

       b. Homer believes Bart to be crazy

Given the arguments in Chomsky 1981, reviewed in Hornstein 2003, the above constructions are

different from object control. This is seen from the following asymmetries:

(18)   a. John believes Bill to be examined by the doctor = John believes the doctor to have

          examined Bill

       b. John persuaded Bill to be examined by the doctor ≠ John persuaded the doctor to have

          examined Bill

While the meaning in (18a) does not change when the complement of 'believe' is paraphrased,

the meaning of (18b) does. This indicates that 'believe' does not theta-mark its complement while

'persuade' does. In addition, idiom chunks and expletives are possible in subjects of the

embedded clause in ECM infinitives while being precluded from appearing in object control

infinitives:

---

[7] One may argue that in fact the subject of the embedded clause is not moved, but rather generated in spec of the infinitival 'to' or in some functional projection above the infinitival TP (Grohmann et al 2000). However, this claim is rather hard to defend. Grohmann et al do not present any arguments towards this position. I will therefore leave this option and concentrate on the more standard possibility – movement.

(19) a. John considers there to be a riot/ the shit to have hit the fan/ the cat to be out of the bag

b.* John persuaded there to be a riot/ the shit to hit the fan/ the cat to be out of the bag

The above shows that 'Bill' in (18a) is not the object of 'believe' while 'Bill' in (18b) is the object of 'persuade'. The syntax of ECM constructions is thus distinct from that of object control constructions. Let us now see the derivation for ECM:

(20)   John believes Bill to be home
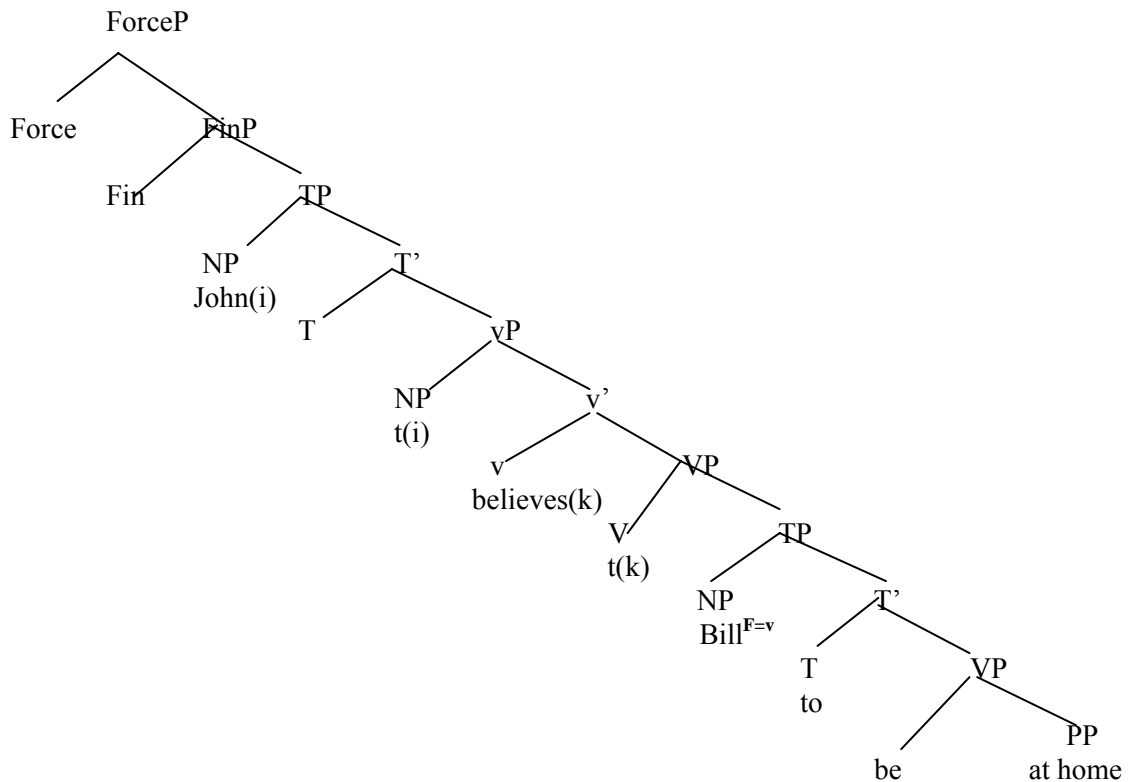
Since there is no intervening C in the embedded clause, the matrix v can move Bill into the spec of the infinitival 'to'. Note that it is the matrix v, not Force which pulls the embedded NP up since it is the closest phase-marking head here. (In raising constructions, there is no v – verbs like 'seem' , 'appear' are unaccusative -- hence Force is the closest phase-marking head). The configuration created in the representation above allows for the case feature on 'Bill' to be

valued/licensed by the interpretable features of v[8]. Had there been a C-layer in the embedded

clause, the embedded C would be able to pull the NP only as far as the spec TP but neither the

infinitival 'to' nor the infinitival Fin would be able to value the case feature on the NP. Crucially,

if an embedded C were present, the matrix v would not be able to pull the embedded NP under

itself because this would undo an established linear order within a lower phase – CP. The order

[C [TP [Bill to be home]]] would become: [Bill(i) [C [t(i) to be home]]] with the position of C

and Bill reversed. However, in the absence of the intervening C, the movement of the embedded

NP into spec of 'to' is not problematic for linearization. The subject 'Bill' and the infinitival

tense belong to the phase which is marked by the matrix V/v: [v to Bill[be home]]. Prior to

spelling out the phase, the matrix v triggers movement of Bill into spec of 'to' where the NP gets

the accusative case. Thus we get: [v Bill(i) to t(i) [be home]]. No linear order is disturbed

because the embedded TP is not spelled out until v is projected[9].

---

[8] Importantly, I treat v and V as a single head for the purposes of features. While they may start out as
distinct at some level of representation (possibly at LCS a la Hale and Keyser 1993, 1997), they undergo
conflation – incorporation prior to lexical insertion (Hale and Keyser 1993, Baker 2003) and have the
status of a single head in transitive and unergative verbs. That is, the V no longer intervenes between the
spec of the infinitival T into which the NP is moved and v. Thus, there cannot be any heads intervening
between the infinitival TP and the matrix v for the case feature on the NP to be legitimized. Not all
languages are that accommodating, which may be a beginning of an explanation why ECM constructions
are cross-linguistically rare. In other words, it is plausible to assume that languages lacking ECM have
other heads between v and the infinitival TP such that the case feature on the moved NP does not get
valued leading to a crash.
[9] There is still a question why PRO is not possible with ECM verbs. I have argued that PRO is not possible
in raising verbs due to the Theta-Criterion. However, this would not explain why PRO cannot appear in
ECM constructions.

John believes to *PRO be sick
John believes Bill to be sick

Why this sentence is impossible in English is unclear. A similar sentence is possible with the predicate
'expect'

John expected to PRO arrive on time
John expected Bill to arrive on time

This is usually attributed to the fact that 'expect' can select two different complements: CP and IP.
However, this is a theory-internal explanation to cover the fact that 'expect' allows both PRO and an overt
NP in the embedded clause. It is possible that 'expect' takes only one complement – the TP and allows for
both PRO and an overt NP. That 'believe' does not allow this could be a quirk of this particular verb and
the verbs of its ilk such as 'consider'.

3.4.3 Icelandic infinitives and nominative objects

Before we proceed with further discussion, I would like to address some issues related to Icelandic infinitives that involve nominative objects. NP distribution in Icelandic infinitival constructions has been much discussed in the literature (Andrews 1990, Taraldsen 1995, Sigurdsson 1989, Jonas 1992, Jonsson 1996, Harley 1995, Schutze 1997, inter alia). These constructions pose a problem for the proposal that nominative case is licensed only under agreement because it appears on the object in the embedded infinitival clause. I begin with raising infinitives that are not particularly troublesome. Consider (21a): the embedded verb is an infinitive, but the object still gets the nominative case. I would like to suggest that what makes this possible is that raising constructions do not involve an intervening v or C head. The lack of C or v in the embedded clause allows the matrix T to value its phi-features by pulling up the dative subject into their spec from the embedded clause. The proper configuration for feature-valuation is established; subsequently, the matrix T values its features long-distance with the object in the embedded clause.

Icelandic Raising Infinitives

(21) a. Henni   potti   leiDast   Haraldur / * Harald

    Her-DAT seemed-3rd-Sg be-bored-by-INF   Harald-NOM / Harald-ACC

    She seemed to be bored by Harald

    b. Hun   potti   elska   Harald   /   * Haraldur

    She-NOM seemed-3rd-Sg love-INF Harald-ACC / * Harald-NOM

    She seemed to love Harald

                            (Taraldsen 1995a: 323; quoted in Schutze 1997: 104)

Nominative case on the object in the embedded clause is not possible in (21b) because unlike

(21a), the matrix clause involves an NP with available phi-features that value those on the matrix

T. This is why we never see two nominative cases in one clause with only one agreement. In fact

the constructions in (21) are parallel to the ones found with expletives in English (to be discussed

in section 7):

(22)   a. * It seems to be a man here

       b. There seems to be a man here.

Once the phi-features on T get fully valued by 'it' they cannot be re-valued by another NP.

However, the expletive 'there' does not have a full set of phi-features (it lacks a number feature

as will be discussed in more detail in section 7) and is like a dative subject in that it allows the T

to acquire an additional number feature and then get fully valued by the phi-feature of the object

(cf the discussion on default vs. non-default agreement in Chapter 2, also cf discussion on 'there'

in Schutze 1999).

However, matters are much more complex with ECM constructions. We see the nominative case

on the object (23a), but never on the subject (23b). Crucially, the phi-features on the matrix T

could not be responsible for the nominative case on the object in (23a) because the phi-features

on T are already valued by those of the NP. (That the normative case on the object does not result

from the matrix T is also argued in Schutze 1997: Ch.4,107):

 Icelandic ECM

(23)   a. Eg   taldi   [henni   leiDist   Haraldur / * Harald]

          I   believed   her-DAT   bore-INF   Harald-NOM / Harald-ACC

          I believed her to be bored by Harald

                                        (Maling and Sprouse 1995: 178; Schutze 1997: 104)

b. ViD   taldum   hana / * hun   elska   Harald / * Haraldur

We   believed-1Pl   her-ACC / her-NOM   love-INF   Harald-ACC / Harald-NOM

We believed her to love Harald

(Taraldsen 1995: 323-4; Schutze 1997: 111).

In (23b), the NP subject of the embedded clause is raised into the spec of the infinitival T where it gets the accusative case from the matrix v while the object gets the accusative from the embedded v. This is much like what we see in the English ECM constructions. Dative subjects do not become accusative under ECM (cf Sigudsson 1991, inter alia), which is expected if they are PPs. (cf the discussion in Chapter 2). Since the case feature of the embedded NP is already valued by P, it will not be valued again by v; hence, we will not see the accusative case. What is of current interest is that the object in the embedded clause becomes nominative when the subject is dative. Suppose we assume that the infinitival T could license nominative case independently of the matrix T, if so, why doesn't it license the nominative on the raised embedded subject in (23b) or even on the object in (23b)? It seems that licensing of nominative case on the object happens only in dative subject constructions regardless of whether they are in an embedded clause or in the matrix. The nominative case on the object also appears when dative subject constructions are embedded under control infinitives or when they appear in the 'defective' intervention constructions repeated from Chapter 2:

Control

(24)   ViD   reyndum   aD   [leiDast   **hun**   ekki]

      We-NOM   tried-1st-Pl   COMP   PRO   be-bored-INF **she-NOM** not

      We tried not to be bored with her

(Schutze 1997: 104).

Defective intervention

(25) a. Mer   */? virDast / virDist   [Jonivera   taldir   t   lika   **hestanir**]

      Me-DAT   seemed-Pl /   seemed-Sg Jon-DAT be   believed-Pl   like   **horses-NOM**

      I perceive John to be believed to like horses

    b. Joni   visDast/ */? virDist   [t   vera   taldir   t   lika   **hestanir**]

      Jon-DAT   seemed-Pl/seemed-Sg   be   believed   like   **horses-NOM**

      Jon seems to be believed to like horses

                                (Schutze 1997: 108-109, Bobaljik 2005)

What is the source of the nominative case on the object of the embedded clause? Why is it not always possible (cf 23b)? The above constructions provide some of the star evidence for the theories that argue for the separation of m-case and NP licensing (Marantz 1991, Harley 1995, Schutze 1997, MacFadden 2004). The central idea behind these proposals is that once an NP is properly licensed, it can have morphological nominative case even if there is no agreement on T overtly such as when the T is infinitival (see Schutze 1997 for a proposal along these lines). Which m-case is available to a licensed NP would depend partly on language specific factors. However, while separation of case and licensing would account for the possibility of nominative case on the objects in embedded clauses with dative subjects, it would not account for why subjects and/or objects do not show up as nominative in ECM constructions with non-dative subjects (cf 23b). To explain this we would still need some extra assumptions such as that the nominative case has to be assigned first, because it takes priority before the accusative. For example, Schutze 1997: 110 argues that while the raised NP in (23b) shows up as accusative, it also has a nominative m-case feature which gets checked but not spelled-out. Because the nominative feature is already used up in the infinitival clause and there is only one available, the

object in the ECM embedded clause must get the accusative case (Schutze 1997: 110, also 160). However, the claim that there is only one nominative m-case per clause is in a way a stipulation given that there is no restriction on the number of accusative m-cases[10]. Furthermore, if the nominative m-case can sometimes show up as accusative as in the subject in (23b), why doesn't the same thing happen to the object in the dative subject construction, i.e. why doesn't it show up as accusative while having its nominative m-case feature checked? Conversely, why don't we see nominative case on the object in cases like (23b), where the object is licensed by v but is spelled out as nominative instead of accusative.

  Note that nominative case in dative subject constructions is not due to the requirement that nominative case be licensed in a clause by default (cf. Marantz 1991; Harley 1995). Dative subjects can appear without there being an NP in the nominative case as seen from the following in dative subject constructions:

(26)   Mer   likar   viD   hann

        Me-DAT   like   PREP   him

        I like him   (Schutze 1997: ch4).

(27) a. Mer   er   kalt

        Me-DAT be-3rd-Sg cold

        I feel cold   (Sigurdsson 2003)

      b. Batnum hvolvdi

---

[10] Another venue would be to argue that dative subject constructions in Icelandic involve a more complex structure with two Ts: the lower one licensing nominative on the object and the higher one that gets default agreement. But this would not explain why we never see two nominative cases in Icelandic clauses.

Boat-DAT capsized

The boat capsized   (Levin and Simpson 1981, quoted in Woolford 2005: 11)

c. Mer var hjalpaD

Me-DAT was helped

I was helped   (Jonsson 1996: 106, quoted in Woolford 2004: 11)

While I cannot provide an account for the above well-known and much discussed facts regarding nominative objects in Icelandic infinitives, I believe that they may be due to a property of the Icelandic (morphology?) that does not tolerate Dat-Acc combination in dative subject constructions with direct objects. I would suggest here that in this instance the accusative case actually gets spelled out as nominative because of a general ban on Dat-Acc combination in the language at the morphological level, though not in the syntax. In finite dative subject constructions, the nominative can actually be licensed in the syntax via deletion of the object's case feature by the T. The same goes for raising constructions in (22) where the matrix verb can still delete the case feature on the embedded object. This leaves ECM and control constructions unexplained. However, given that infinitives in Icelandic do not generally license nominative case in any instances except on the objects in dative subject constructions, the phenomenon may be a peculiarity of dative subject constructions that appear in configurations where only the object must get the accusative case but some property of Icelandic forbids it. In those and only those cases the actual accusative case gets spelled-out as nominative. Languages such as Russian that allow both nominative and accusative objects in dative subject constructions actually require the accusative case when dative subjects appear in infinitival constructions. While Russian does not have ECM constructions, which prevents us from constructing ideal minimal pairs, it can have dative subjects with infinitives. In this case no nominative objects are possible. (This is a special

infinitival construction that involves a dative subject in the spec of infinitive. This is neither a raising nor a control construction. See Pesetsky 1982 for discussion):

(28)   Mne   ne podnjat' etu   korzinu / * eta korzina

        Me-DAT not lift-INF this-ACC basket-ACC / this-NOM basket-NOM

        I cannot lift this basket

The above construction has a modal interpretation: it is not possible for me to lift this basket.

Thus, it appears that the possibility of having nominative case on the object of the embedded dative subject construction is a property limited to the Icelandic. (Boeckx 2004 proposes an account of long distance agreement in infinitival constructions in Hindi but the constructions he discusses are control. Comparable ECM constructions do not exist in Hindi.) While this data is interesting and important, it does not necessarily argue in favor of separation between the syntax of case and agreement and its morphological realization. It is highly likely that there is a deeper explanation for the Icelandic facts than a mere morphological ban on the dative-accusative combinations. Unfortunately, I cannot provide a more satisfying explanation here, but I hope that future research will shed light on this phenomenon without giving up the syntax-morphology connection.

3.4.4 Temporal properties of ECM infinitives

Turning now to the temporal properties of ECM verbs, as we saw in the case of raising infinitives, the embedded and the matrix events in ECM infinitives involve linked Ts, hence the matrix and the embedded events take place in a single time interval.   However, there is wrinkle to this argument. There are ECM constructions that do not involve simultaneity in its strictest form. For example, consider the following repeated from above:

(29)   a. John considered Bill to be sick

       b. John believed Bill to have left

The above constructions allow an interpretation on which Bill is sick now, while John's belief originated in the past. Similarly, in (b), John's belief can concern some prior period of time at which Bill left. That is, it appears that what we need here is not strict simultaneity but rather a requirement that the two events take place within some arbitrary time interval t which itself is located in the past, present or future. (In other words, what is not possible in the ECM and raising constructions is a scenario on which the embedded event takes place in the future while the matrix one is situated in the past with respect to the current moment). How can we account for this, given that the time interval of the embedded and the matrix events has to be identical if linking holds? Recall, that what T does is assign a time interval for the event. Formally, this is treated as an inclusion relation that holds between the interval t and the run-time of the event t(e) both of which are sets of instants (Landmann 1992). The run-time of the event e must be a subset of the set of instants that constitutes the time interval t. For example, assume that we have some interval t1 that comprises of instants i1 – i10. Assume further that the run-time of the matrix event e1 constitutes a set of instants i1 – i6, which is a subset of t. Now, while the time interval of the embedded and the matrix T is the same, the run –time of the embedded and the matrix events need not be. This in turn means that it is possible for the runtime of the embedded event to be a subset of t but a different one than the run-time of the matrix. It is possible that the run-time of the embedded event e2 is the interval i7 – i9. The illustration of the above argument is given below:

(30)   Interval t1 which is identical for the matrix and the embedded T is i1 – i10;

         The run-time of e1 = i1 – i6;

         The run-time of e2 = i7- i9

i1   i6   i7   i9   **i10**

```
|{----e1--------}-{----e2--------------}----|
```

Thus, while included in the same time interval t, the run-times of the events e1 and e2 are not identical. The inclusion of e1 and e2 in the interval t1 is guaranteed by the fact that the interval t1 is the same for both events.   The above treatment of temporal intervals and run-times of events preserves the semantic predictions about the simultaneity of the embedded and the matrix events without becoming unfalsifiable. It is possible to come up with a counter-example:

(31)   # Last Wednesday, Bill considered John to be smart on Tuesday.

When we have two distinct time intervals in which the events take place, the ECM sentence is impossible.

There is still a question concerning non-overlapping time intervals for the embedded and the matrix events as seen in a sentence such as (32) (due to M.Baker, pc)

(32)   On Wednesdays, John considers Bill to be smart on Thursdays.

Given what was said above, this sentence should not be possible because the actual intervals of time within which the embedded and the matrix events are located are distinct. The reason this sentence is well-formed is due to habitual interpretation of the main and embedded clauses. The nature of this interpretation is such that both are true at some indefinitely large time interval of time t that includes the current moment (see Chierchia 1995 for an extended discussion of the semantics of habituality). This in turn means that the matrix and the embedded events do take place within the same, (though very large) interval of time. This sentence therefore does not provide a counterexample to the proposal. Note that entirely non-overlapping time intervals for

the embedded and the matrix clauses do lead to ill-formedness when the aspect is not habitual, as is clearly seen from examples involving a punctual past tense:

(33)   */# Last Wednesday John considered Bill to be sick this/ last Thursday.

Before closing the section I would like make a brief note regarding simultaneity of the embedded and the matrix events in ECM constructions when the matrix verb is intensional (My thanks to M.Baker for pointing this out to me, pc). Namely, assume that in an ECM infinitive such as (34) the embedded event is not borne out at all:

(34)   Homer believes Bart to be smart

In other words, Bart's being smart is a false belief on the part of Homer. In which sense, then can we say that Bart's being smart takes place within the same period of time as Homer's belief ? The answer here comes from the nature of intensional verbs such as 'believe.' Namely, while these verbs introduce a possible world in which the embedded event takes place, this fact does not have any bearing on the temporal evaluation of the embedded event. That is, the time-line on which the run-times of events are placed is an orthogonal dimension to the space (worlds) in which events occur. Thus, while the world in which Bart is smart may be distinct form the actual one, the one in which Homer holds his belief, the time of evaluation of the two events can still be the same. A similar argument can be extended to control verbs such as 'try' where the embedded event may not be borne out in the actual world but is in some other possible world (see Sharvit 2001 for a detailed discussion of the semantics of 'try'). The time-line thus cuts across possible worlds. This claim may turn out to have some non-trivial semantic consequences that would need to be explored further. However, to do so would extend beyond the scope of the current discussion. I leave this to future research and proceed to the discussion of control infinitives.

3.5   Control[11]

Since control verbs, unlike raising and ECM ones, involve a C-layer (this I take to be an inherent property of control verbs), they do not involve linking of the embedded and the matrix tenses. Hence, there is no obligatory simultaneity between the matrix and the embedded events in control infinitives. Furthermore, overt NPs are impossible in these constructions because they cannot be moved into a proper configuration with the matrix T for their case feature to be deleted. Doing so would require crossing a phase-marking head which in turn would violate the previously established linear order in the spelled out portion of the derivation, in particular that between the NP in the embedded clause and the matrix C.

3.5.1 The complement of Control verbs

As was already mentioned in section 3, those infinitives that have a CP layer involve Fin0 that existentially binds the temporal variable introduced by 'to'. However, Fin0 does not provide any temporal specification for t. The temporal specification of the infinitival clause is determined by the matrix verb. This is similar to how pronouns get interpreted, for example, in a sentence such as 'John said that he saw Bill' the pronoun can be either referentially linked to 'John' or to some other person depending on the context of utterance. Importantly, since control infinitives involve an intervening C (Force and Fin), movement of the embedded NP into the matrix clause is blocked. This has important consequences for NP distribution in control infinitives. Consider the following:
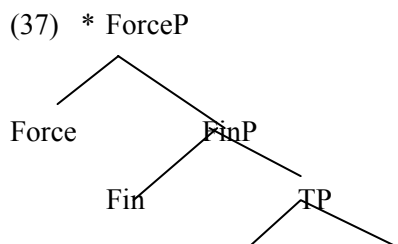
---

[11] In this section I will set aside the questions regarding partial vs. exhaustive control as well as obligatory vs. non-obligatory control. The questions of possible interpretations of PRO while interesting extend beyond the scope of this discussion. Here I will deal with PRO only to the extent that it is relevant for the theory of case and agreement. For the extensive discussion of the interpretation of PRO I refer the interested reader to Landau 1999. I will also not be concerned with the restructuring vs. non-restructuring infinitives (cf Wurmbrandt 2001).
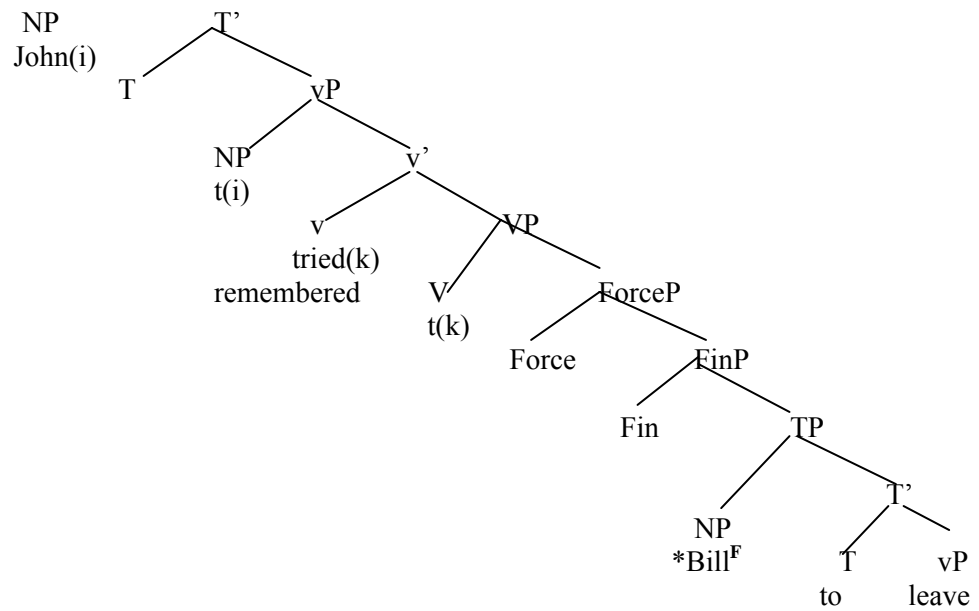
(35)   a. John tried to leave/ bring the cookies

       b. John remembered to bring the books

       c. John persuaded Bill to bring the books

The presence of C blocks co-indexation between the matrix and the embedded T. The phase-marking head (Force) in the embedded clause checks for the closest uninterpretable features, but finds nothing: there are no phi-features on the infinitival T. As will be argued in section.2, PRO does not have an case feature, which means that Force detects no uninterpretable features at all. Consequently, no movement is triggered -- PRO remains in situ (as is independently argued in Baltin 1995). (This is contrary to the argument in Hornstein 2003 who claims that control constructions are to be assimilated to raising constructions such that PRO is treated as a trace of a moved argument).

       Now, if we had an overt NP in the above derivation instead of PRO, the derivation would crash because nothing would be able to delete/ value the case feature on the NP and the NP would not be able to move into the matrix clause. In other words, we can successfully block the following derivation:

(36)   * John tried / remembered Bill to bring the beer

(37) * ForceP

Force   FinP

        Fin   TP

```
      NP              T'
      John(i)
                T              vP
                        NP              v'
                        t(i)
                                v              VP
                                tried(k)
                                remembered      V              ForceP
                                                t(k)
                                                        Force              FinP
                                                                Fin              TP
                                                                        NP              T'
                                                                        *Bill^F      T      vP
                                                                                     to     leave
```

In the above derivation the embedded C can detect the uninterpretable case feature on Bill and

move it into spec TP. However, 'to' lacks phi-features that can delete the case feature, and C

does not have any interpretable features that can value the misplaced feature on Bill either. Since

Fin0 in the above construction merely introduces existential closure over the temporal variable, it

lacks any interpretable features. Another way of saying this is that there is no interpretable

feature FIN that can be misplaced on the NP and then valued/licensed by the infinitival Fin0.

There is a FIN that exists in finite clauses and, as we shall see shortly, in '*for-to*' infinitives. If we

misplace the interpretable FIN feature on the NP and then embed it under the Fin0 projected over

'try' there will not be a match and the misplaced feature on the NP will remain

unvalued/unlicensed. This line of argument implies that there is no one-to-one correspondence

between interpretable features and heads; there may be heads that are semantically trivial; a

featural inventory does not contain an interpretable feature corresponding to a syntactic head that

introduces the existential quantifier. No such feature can consequently be misplaced onto an NP

and then valued by a functional head.

The derivation of sentences with an extraposed infinitival clause is similar. Thus, in a construction such as (34b) what we have is a CP in the spec of the matrix TP :

(38)   a. To PRO / * John leave would be odd

     b. * John to leave would be odd

The Fin in the embedded clause [to PRO leave] involves no uninterpretable features much like what we saw in the case above. Merging an overt NP instead of PRO into spec of 'leave' would once again cause a crash because the case feature on the NP would fail to be deleted. Thus, even if Force detects the uninterpretable feature on John and moves into the spec of TP to get it valued/deleted, valuation or deletion will not take place because 'to' lacks phi-features and Fin0 lacks interpretable features to value the case feature on the NP.

To sum up the discussion so far, the free variable introduced by 'to' is bound by Fin0. The precise temporal location of the event in the embedded clause is determined by the matrix eventuality[12]. Depending on the lexical semantics of the matrix verb we will have either a sequenced interpretation of the two events (e.g. the event in the embedded clause follows that in the matrix) or a simultaneous one. Thus, contra Martin 2001 it is possible to have control constructions with simultaneous interpretation for the embedded and the matrix events. Consider the following sentences repeated from section 2:

(39)   John tried to live with his brother but it turned out to be impossible

---

[12] Interestingly, while the simultaneous and futurate interpretation is available for the embedded event, it is not possible for the embedded event to be interpreted as located in the past with respect to the matrix. In this, infinitives stand in contrast to gerundive complements which are interpreted as preceding the matrix event. Thus, compare the following: *John remembered to bring the food vs. John remembered bringing the food*. While the former allows for a simultaneous interpretation of the embedded and the matrix, the latter requires the embedded event to precede the matrix. At this point I do not have an explanation for why this may be so.

The above sentence is perfectly plausible in a situation where John's trying and living take place at the same time. The irrealis (sequenced) interpretation is not necessary, though it is possible. Other control infinitives actually require a simultaneous interpretation of the embedded and the matrix events due to their semantics. For example, implicative verbs such as 'manage' and 'condescend' which will be discussed further in section 6 do not allow a sequenced interpretation:

(40)   John managed / bothered / condescended to open the door

In (40) it is clear that there is no sequencing between managing /condescending/bothering and opening the door. The current proposal allows for this fact. In contrast, a proposal that treats all control verbs as [+tense] cannot explain why there is no future interpretation of the embedded event in (40).

3.5.2 The properties of PRO

        Contra the proposal in Chomsky and Lasnik 1993, Martin 2001, I argue that there is no such thing as Null case. As already noted by Hornstein 2003, Null case is suspect for two reasons: first, it is the only case that is restricted to a single element [e.g. PRO]. Second, PRO is the only element that is restricted to a single case – the Null case. In the section below I propose that PRO does not have a case feature. This claim can be derived from the following assumptions (a)PRO inherently lacks phi-features[13]; (b) morphological affixes cannot attach to phonologically empty

---

[13] The claim that PRO in fact has phi-features is made in Baltin and Barrett 2002, Landau 1999?. Their argument for PRO having phi-features comes from anaphor binding as seen in an example such as [i]:

[i]   a.To shave myself would be difficult for me
       b.*To shave himself would be difficult for me

However, to account for the unacceptability of this sentence we need not posit that PRO inherently has phi-features. PRO can inherit its phi-features from any NP that controls it. Crucially, however, an F-feature

roots (No stray affix constraint – Lasnik 1981).   Consider how these two assumptions preclude the possibility of PRO having a case feature. Suppose that PRO did have a case feature. If so, then it would need to be deleted or valued/licensed. In order for it to be deleted the probe needs to get its own phi features valued by those of the PRO. (Recall that case feature deletion is a 'reward' for the probe getting its phi-features legitimized by those of the NP). However as we assumed in (a), PRO lacks any phi-features, which means that even if Force were to attract PRO into the spec TP, the case feature on PRO would never get deleted because nothing would enable this deletion to go through – T will only delete a case feature on the NP if it agrees with the NP's phi-features. As a result, PRO will retain its case feature crashing the derivation at LF. Now, assume that the PRO has a case feature that must be obligatorily valued/licensed. In other words, suppose that PRO can never have nominative case for reasons stated above but it can have some morphological case. This is impossible because case feature valuation leads to appearance of morphological marking of the valued case feature, which in turn ruled out because it would lead to the violation of (b) – the presence of a morphological affix on a phonologically empty category. Thus, it is impossible for PRO to have a case feature.

The proposal that PRO inherently lacks a case feature and therefore cannot possibly bear any case is non-standard. Recent Mimimalist proposals treat PRO as either having Null case or as having nominative case or even oblique case (Sigurdsson 1991, Schutze 1997, Baltin and Barrett 2002). While Null case appears to be highly stipulative and was argued against convincingly in Hornstein 2003, the claim that PRO has nominative (and possibly other case) merits a closer look, especially in light of the strong empirical evidence from Icelandic (Sigurdsson 1991). Let's start from the arguments in Baltin and Barrett 2002 who argue following Sigurdsson (1991) that PRO has nominative case. Their proposal is that PRO has a

---

cannot be so inherited; it is a part of the featural content of the NP and is either present initially on the NP or not. Also, if PRO inherits phi-features, it must be too late for agreement with T and too late for a case feature to be misplaced on it.

nominative case feature which is actually an uninterpretable T feature on the NP (following

Pesetsky and Torrego 2001). However, because the infinitival 'to' lacks a corresponding T

feature, it cannot delete this feature on the nominal. To resolve this problem the nominal itself

has to be deleted at PF (a la Lasnik 1995 proposal of pseudo-gapping). The proposal that PRO is

actually a nominal that has been deleted at PF raises an important question: what drives this

deletion? Under the standard assumptions, feature deletion is the job of the probe, and although

PRO is a deleted nominal not a feature, this kind of deletion is still related to case-licensing. To

relegate some types of case-related feature deletion to the PF component makes the theory less

restrictive. That is, if we were to introduce the idea that elements can be deleted at PF because

otherwise their unchecked case-feature would crash the derivation, we would have to provide a

more detailed theory of when and how this deletion takes place and why does it not always take

place. In other words, why can't we always delete elements with 'offending' – (uninterpretable)

features at PF. For example, what would rule out a sentence such as '* It seems PRO to leave'

where PRO is a result of a PF deletion of an NP with a case feature which cannot be matched to

that of infinitival T. Given the possibility of deleting elements with uninterprtetable features at PF

this sentence should be possible.   These questions would need to be addressed before we accept

the PF-deletion view of PRO.

However, while one can remain unconvinced by the PF-deletion theory of PRO, one still

has to address the facts that suggest that PRO can bear case like other NPs. In particular, as

already mentioned, the proposal that PRO lacks a misplaced feature and consequently cannot

have any case is challenged by the Icelandic data presented in Sigurdsson 1991 which seems to

indicate that PRO has the same case options as any overt NP. Let us therefore consider the

challenging Icelandic data. Sigurdsson 1991 argues that PRO in Icelandic can and does bear case

much like any overt NP. Its case options are not restricted to nominative – it is possible for PRO

to bear 'inherent' case. Since PRO is a null element there is no direct evidence for the kind of

case it bears. The evidence for the case options PRO has comes from the subject-predicate

agreement in the embedded clause. That is, PRO in Icelandic patterns with overt nominals in that it induces agreement with the predicate when it appears in the nominative case and triggers default agreement when it bears dative or accusative case. The following examples from Sigurdsson 1991 illustrate the phenomenon. In (41) we see an example of sentences without PRO such that in (a) the predicate agrees with the NP bearing nominative while in (b) the predicate has default agreement because the subject is dative.

(41) a. Strakanir   voru   kosnir / * kisiD

         Boys-NOM   were   elected-NOM-Pl-masc / elected-def

         The boys were elected

    b. Strakunum   var   hjalpaD   / * hjalpDir

         Boys-DAT   was   helped-def / helped-NOM-Pl-masc

         The boys were helped

The above examples illustrate (as was discussed extensively in Ch.2) that nominative case correlates with subject-predicate agreement while dative case (which Sigurdsson attributes to inherent case-marking by a predicate such as 'help') leads to default agreement on the participle and the verb.

In (42) and (43) the same pattern is replicated in the embedded clause. The agreement facts below indicate that PRO must bear the same case as the overt NP in (41) otherwise we have no way to explain why the embedded clauses in (42) and (43) and the matrix in (41) are identical with respect to agreement.

(42)   Strakanir   vonast til   [aD   PRO   verDa   **hjalpaD / * hjalpaDir**]

Boys-NOM   hope   for   to   PRO   be   helped-def / helped-NOM-Pl-masc

Boys hope to be helped

(43)   Strakanum   leiddist   [aD   PRO   verDa   kosnir/   * kosiD]

Boys-DAT   bored-def   to   PRO   be   elected-NOM / elected-def

Boys were annoyed by being elected

Crucially, the agreement we see on the predicate in the embedded clause in (42) and (43) cannot

be agreement with the matrix NP – if it were we would expect the agreeing form of the predicate

in (42) while in (43) where the matrix is dative we would expect the default form, contrary to

fact. Therefore, Sigurdsson concludes, it must be agreement with the PRO which in turn must

have the same case as the overt NP in (37)—that is, dative, in (42) and nominative in (43). One

can take this evidence to be a knock down argument for the fact that PRO in Icelandic indeed can

have case as any other NP. However, this conclusion is too hasty because it leaves completely

unexplained a pervasive and crosslinguistically robust fact that PRO cannot appear in finite

clauses. That is, if PRO can indeed bear case, why is it restricted to infinitives in Icelandic?

(Sigurdsson's explanation of this is based on the distinction between government and lexical

government, but since the Minimalist framework does not make these distinctions anymore we

cannot use his explanation). So we seem to have a conundrum: on the one hand we have strong

evidence in favor of PRO's having case, on the other, we have facts indicating that PRO lacks

case since it is able to appear in infinitival constructions unlike other NPs and cannot appear in

finite clauses also unlike other NPs.

To reconcile the Icelandic data with the facts that point to the absence of a case feature on

PRO, an account along the following lines can be developed. We do not need to assume that PRO

has a case feature or inherent phi-features; all we need is to assume that PRO inherits phi-features
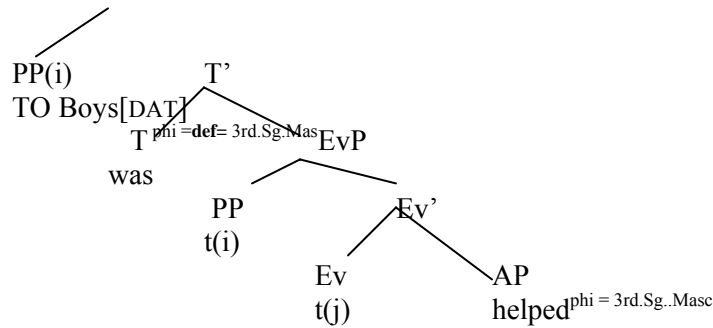
from the matrix NP in Icelandic (possibly true for other languages as well cf ft-note 13). The

evidence that the phi-features on PRO are actually copied from the matrix as opposed to being

inherently there comes from the fact that in sentences such as (43) where PRO shows full

agreement with the participle, the features on the participle are plural and masculine like those of

the matrix NP. In fact, in all cases where the agreement between PRO and the participle is full the

features are the same as those of the matrix NP. If PRO had its own features, we could expect at

least some cases such that the matrix NP is plural while the agreement between PRO and the

participle is singular. Yet, this does not seem to happen, which indicates that PRO does not have

independent phi-features. (There is a way to argue that PRO has its own phi-features but must

have the same ones as its controller much like a pronoun that is co-referential with its antecedent

must be featurally identical to it. Still, if PRO had phi-features of its own, identical or not it

should be able to appear with tensed predicates and value the phi-features on T. This may happen

in some Balkan languages (cf Landau 2003b), but certainly does not happen in Icelandic or

English.)

Assuming that PRO copies the phi-feature of its controller, the data will be accounted for

if we can then show that the phi-features on PRO are available for agreement in (42) but not in

(43). Crucially this sort of explanation is an extension of the account given to the facts in (41)

(which was done extensively in Chapter 2). Let us first look at (41) and recall from the

discussion in Chapter 2 why (a) and (b) have different agreement options. In particular, if we

recall, the mechanism behind 'inherent' case involves a null preposition P [TO] that licenses

dative on the NP in (41b) as well as theta-marks the NP. The resulting PP is merged into the spec

of Ev0, and subsequently attracted into the spec of TP.

(41)   b. Strakunum   var   hjalpaD / * hjalpDir

       Boys-DAT   was   helped-def / helped-NOM-Pl-masc

       The boys were helped

                   TP

```
          PP(i)            T'
        TO Boys[DAT]
                    T phi=def= 3rd.Sg.Mas EvP
                  was
                          PP          Ev'
                          t(i)
                                Ev        AP
                                t(j)      helped^(phi = 3rd.Sg..Masc)
```

(In the above structure I am treating the participial predicate as an AP abstracting away from the differences between participles and adjectives for the moment). The superscripted phi-features indicate feature identity between the participle and the NP – i.e. full agreement.

Crucially, what is responsible for the default agreement on 'be' in (41b) is the fact that the null P blocks the phi-features on the NP from valuing those on T. The T must have default agreement – a set of 3rdperson phi-features that can be valued by any XP. The default agreement is not by itself due to the dative case on the NP; rather both the dative and the default agreement are attributable to the presence of an intervening P. This point is vital to the conception of inherent case developed in this thesis and is also central in explaining the Icelandic 'case-marked' PRO as we shall see shortly. Coming back to the above structure, the entire PP is attracted into the spec of T where it legitimizes the default phi-features on T.

Turning to the agreement on the participle, while the mechanism of adjectival and participial agreement is distinct from verbal agreement and is not the topic of this thesis as I state at the beginning of the dissertation, both require (by hypothesis) the relevant phi-features to be available on the NP. Let us hypothesize that for the NP to agree with a participle or an adjective the two must be in a configuration where the NP c-commands the predicate so that the phi-features from the NP can be copied onto the participle/AP. When the subject is actually a PP, as it is in the above structure, participial agreement with the phi-features of the NP embedded under P is not possible; hence what we see is the default 3rd person masculine and not plural agreement in (41b).

Again, recall from the discussion in Chapter 2 that the agreement between the subject and the T as we see in (41a) is due to the fact that there is no P that blocks off the phi-features of the NP. The NP originates in the spec VP and when it moves into the spec of TP its phi-features can fully value those of T. The auxiliary shows full agreement. The agreement between the NP and the participle is also full -- the entire set of phi-features -- number and gender are copied onto the participle[14]

(41)   a. Strakanir   voru   kosnir / * kisiD

          Boys-NOM   were   elected-NOM-Pl-masc / elected-def

          The boys were elected
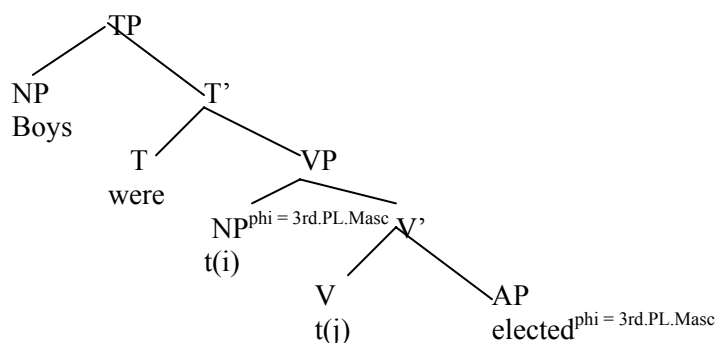
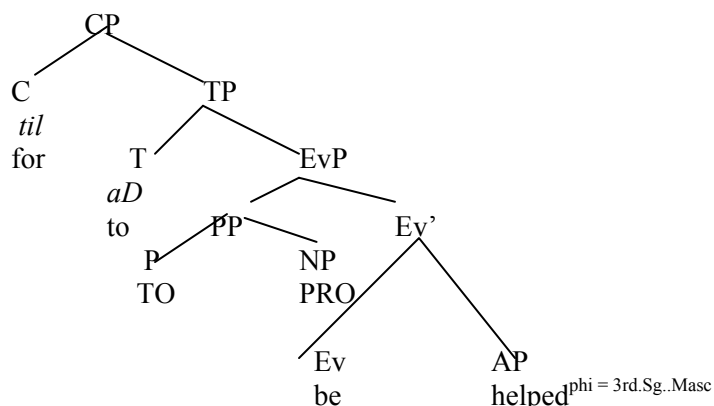Now, let us see how we can use the above argument to explain the facts about PRO. Assume that while PRO inherently lacks phi-features, it may acquire them via control. Importantly, when PRO appears in the embedded clause where the predicate is 'help' it comes under a null P [TO] that theta-marks it. Much like we saw with overt NPs, the P blocks the possibility of copying phi-features from the controller onto PRO. (Alternatively, we may say that the features are copied onto PRO but then they are blocked off by the P). This results in default agreement between the participial predicate and PRO. However, since PRO does not have a case

---

[14] Also, note that there is case agreement between the nominative NP and the nominative predicate. There is no case agreement when the subject is dative; instead the agreement on the predicate is default. I will not explore the source of case-agreement on predicates but rather attribute it to copying features (both valued misplaced features and interpretable features) from the NP to the predicate. This happens in adjectival and participial agreement.

feature, the interpretable P-features do not value anything; there is no overt dative on PRO. In the

structure below I am only representing the embedded infinitival clause.
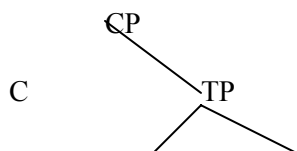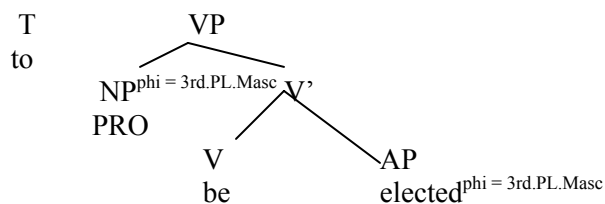

(44)   PRO has default agreement:

```
                    CP
                 ／    ＼
              C          TP
             til       ／   ＼
             for     T        EvP
                    aD      ／   ＼
                    to   PP       Ev'
                       ／  ＼    ／   ＼
                      P     NP
                      TO   PRO
                         ／       ＼
                        Ev          AP
                        be      helped^{phi = 3rd.Sg..Masc}
```

        Turning to (43), the reasoning is also similar to what we saw with the overt NP. PRO in

this construction does not appear under a P – the predicate 'elect' theta-marks its specifier and

unlike 'help' does not involve a theta-marking preposition. Consequently the phi-features of

PRO which were inherited from the matrix NP are free to be copied fully onto the participial

predicate.

(There is a question of why phi-feature copying by control is early enough for agreement, but too

late for case-checking by finite T? I do not have an answer to this question here).

(45)   PRO has full agreement:

```
             CP
          ／    ＼
        C         TP
               ／  ＼
```

T   VP
to   ╱   ╲
   NP^phi = 3rd.PL.Masc V'
   PRO   ╱   ╲
          V   AP
          be   elected^phi = 3rd.PL.Masc

The phi-features which PRO has inherited from the matrix NP get copied onto the embedded

participial predicate, but since the infinitival T is not a probe, there is no agreement on T. Unlike

what we saw with the overt NP in (43a), PRO does not undergo movement to spec TP. This is an

important difference between (43) and (41). The infinitival T lacks phi-features; hence no

movement of PRO will be triggered. The agreement between the participle and the NP involves

only feature copying between the predicate and the NP [PRO].

Before concluding this discussion I would like to mention a set of Icelandic facts

concerning PRO and floated quantifier case-agreement. Sigurdsson 1991:331 presents the

following data:

(46)   a. **Strakarnir** komust **allir**   i skola

       Boys-NOM got   **all-NOM-Pl**   to school

       The boys all managed to get to school

       b. **Strakunum** leiddist   **oellum**   i   skola

       Boys-DAT   bored   **all-DAT-Pl**   in school

       The boys were all bored in school

The same kind of case-agreement obtains in infinitival constructions with PRO:

(47)   a. **Strakanir** vonast til [aD PRO komast   allir   i skola]

Boys-NOM hope for to PRO get   **all-NOM-Pl**   to school
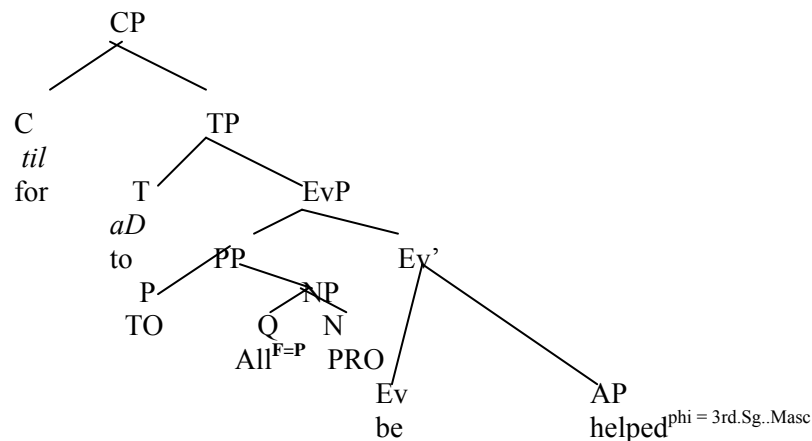
The boys hope to get to school

b.**Strakanir** vonast til [aD PRO leiDast ekki **oellum**   i skola]

Boys-NOM hope fot to PRO bore   not **all-DAT-Pl**   in school

The boys hope to not get bored in school

The above data shows that in Icelandic the quantifier 'all' appears to agree in case with PRO, not with the matrix subject. The facts can be accounted for as follows. Let us suppose that the modifier is adjoined to the NP and thus itself appears under a preposition which licenses dative or genitive (quirky) case. If in Icelandic, the quantifier 'all' has a case feature, then when the quantifier appears under a preposition, its case feature will be valued/licensed, resulting in the overt dative/genitive case. Hence, the principle stating that Icelandic has obligatory agreement in case between the modifier and the NP/XP (Sigurdsson 1991: 33) is obeyed.   Since PRO lacks a case feature, we don't see any evidence of case on PRO. In the construction (47) represented below in (48), PRO is embedded under P [TO] and so is its modifier 'all':

(48)

```
                        CP
                       /  \
                      /    \
                   C        TP
                  til      /  \
                  for    T     EvP
                        aD    /    \
                        to  PP      Ev'
                           /  \    /  \
                         P    NP  Ev   \
                        TO   /  \  be   AP
                           Q    N      helped^(phi = 3rd.Sg..Masc)
                          All^(F=P) PRO
```

Thus, the reason we see quirky case on the quantifier is not because PRO also has case, but because PRO and 'all' appear in the same configuration that results in case-licensing and appearance of overt case if the element embedded under P has a case feature.

To sum up, the Icelandic facts can be accounted for without assuming that PRO has case-features. All we need is for PRO to inherit phi-features from the controlling NP. What makes agreement full in (43) but default in (42) is the presence of a theta-marking P [TO] in (42) but not in (43). Because the phi-features of PRO are fully available, we can have full participial agreement between PRO and the participle in (43) much like what we saw with overt NP in (41a). However, in (42) PRO appears embedded under a theta-marking null preposition. The resulting PP can only induce default agreement on the participle because PPs lack a person feature. In sentences such as (41) with overt dative subjects and in sentences involving PRO (42 and 43) participial agreement is not due to case, but is rather attributed to the availability of phi-features on the NP/ PRO. We do not need to resort to stipulating case features on PRO – a stipulation which would then require us to explain why PRO is blocked from finite clauses, e.g. why we cannot have the analogue of (41) only with PRO instead of an overt NP[15].

Note that treating PRO as an NP that has been deleted at PF as in Baltin and Barrett 2002 would not account for the cases of the 'dative' PRO that induces default agreement in (42). Since the NP in this construction has its case feature licensed by an element other than T (e.g. P [TO] in the theory proposed here or the predicate if we take the traditional view of inherent case), the NP should appear overtly. This would result in a construction such as (49) which is impossible:

---

[15] The proposed account still leaves a question why PRO cannot appear in finite clauses where presumably the finite T would match with the phi on PRO leading to agreement. If PRO can inherit phi-features from the matrix NP, why don't we get '*John thinks that PRO will be sick'?
Strikingly, this does not happen. PRO can induce adjectival / participial and quantifier agreement of the same sort as an overt NP can but it cannot trigger agreement on the verb. Note crucially that in (38) and (39) the verb [be] does not bear agreement. One possibility is that the finite complementizer, unlike the infinitival one, blocks feature copying between the matrix NP and PRO such that in finite clauses it would be impossible for PRO to have phi-features.

(49)   * Strakanir   vonast til   [aD   **okkur** verDa   **hjalpaD / * hjalpaDir**]

   Boys-NOM hope   for   to   us-DAT be   helped-def / helped-NOM-Pl-

masc

   Boys hope for us to be helped

As Sigurdsson 1991 argues, subjects of infinitives cannot be lexicalized. The PF-deletion theory

of PRO thus incorrectly predicts the occurrence of overt NPs in infinitival constructions to be

possible.

3.5.3 PRO under a preposition?

  The proposal that PRO is embedded under a theta-marking P raises an important

question: why is PRO never allowed under any other prepositions, i.e. why is the following

sentence out:

(50)   * John depends on PRO to solve the problem.

PRO cannot appear embedded under an overt P. There seems to be a restriction on having an

overt P projected over a null category (not a trace, though – we will see why not shortly). For

example, small pro is also not allowed under an overt P. For example, the following sentence in

Spanish is impossible:

SPANISH

(51)   (Yo) llego   con *(el) al aeropuerto

   I   arrived with   him to airport

   I arrived with him to the airport

While it is possible and even preferable to pro-drop the subject in the above construction, it is not possible to pro-drop the NP embedded under a preposition. The above example in Spanish can be attributed to the requirement that pro be licensed by agreement which does not obtain under a P. However, this would not account for the fact that pro-drop is not possible from under an overt P even in languages where pro-drop is not licensed by agreement. In Chinese, a language that freely allows pro-drop, still disallows it from under a preposition:

CHINESE (thank you to Xiao Li for providing that data, (pc)

(52) a. John wei wo xie-le   yi ben shu

      John for me write-asp one CL book

      John wrote a book for me

      b.* John wei pro   xie-le   yi ben shu

      John   for   write-asp one CL book

      Intended: John wrote a book for me

The fact that PRO cannot appear under an overt P seems to be an instance of a more general phenomenon, the one that precludes merging null elements under P. Traces, are possible under prepositions in some languages, e.g. in English: 'who did you see me with t'. The distinction is that traces are instances of movement while pro and PRO in the above constructions are instances of merge. Apparently, the relevant generalization seems to be that overt prepositions cannot involve a null element merged under them, but they do allow NPs to be moved out from under them. Why should null prepositions behave differently in this respect? Apparently this restriction is a property of PF, not narrow syntax. Clearly, the nature of this restriction and the consequences it has remain to be explored. I cannot provide a theory why null prepositions can embed null elements while overt ones cannot. My goal is to point out that PRO is not unique in

its inability to appear under an overt preposition and hence the illformedness of sentences like

(50) in itself does not argue against viewing PRO as embedded under a null prepositions such as

TO[16]. That null elements can have certain restrictions imposed on them that are not imposed on

overt elements is manifest in other areas of grammar. For example, Meyrs's Generalization

(Meyrs 1984, Fabb 1984, Pesetsky 1995) that holds 'zero derived words disallow the affixation of

further derivational morphemes' (Pesetsky 1995: 75) prohibits null morphemes from being

followed by overt morphemes. However, multiple overt derivational morphemes are possible.

Thus, null elements either free-standing or bound may be subject to tighter restrictions than the

overt ones. Exploring these restrictions would be beyond the scope of this thesis.

Before closing this section, I would like to return to the question why PRO appears in

control contexts. I believe that the way to approach this issue is not to ask what enables PRO to

appear there, but rather to show that it is the only element that can appear there because an overt

NP cannot. This is contra Martin 2001 who claims that PRO can appear in control infinitives

because it gets its Null Case checked by the [+tense]. PRO must appear as the subject of the

embedded clause because the embedded verb must assign a theta-role to some NP. An overt NP

cannot appear there because its case feature would not be deleted or valued. Thus, the appearance

of an overt NP in the spec of the embedded TP in a control infinitive would lead to ill-

formedness. Leaving the spec of the embedded vP unfilled is also impossible because the Theta-

Criterion violation would result. Thus, having PRO in the spec of embedded VP/vP is the only

option left that would not crash the derivation[17].

---

[16] Another possible explanation for the illformedness of sentences like (47) comes from the following
(suggested by Mark Baker, pc). Recall that I am assuming following Landau 1999 that PRO always must
be controlled either implicitly (a controller must be recoverable from context) or explicitly – via an overt
controller. If PRO is embedded too deeply, it will not be controlled. Furthermore, while the null P 'to'
together with its complement can be merged either high or low in the derivation, other PPs are merged too
low and consequently prevent PRO from being controlled.

[17] I would like to point out hat the view of default agreement presented in Chapter 2 raises the following
question: why doesn't PRO license it? Since default agreement does not require feature identification
between the phi on T and those on the NP, the fact that PRO lacks phi-features should not be problematic.

Crucially, if we had an NP that already had its feature valued by some other head, then it could also appear in spec of infinitival TP. For example, in Russian, dative subjects can appear in infinitival constructions (Cf section 4.3). These constructions have an interesting modal reading which suggests that they may have a concealed modal verb that binds the infinitival T. What is important for our purposes, however, is that a dative subject can appear with an infinitive because the case feature on the embedded NP is already licensed by another head – P.

(53) a. Mne   / * Ja   pora uxodit'

       Me-DAT / I-NOM time   leave-INF

       It is time for me to leave

      b. Dime   / * Dima   / nam   ne ubezhat'

       Dima-DAT / Dima-NOM / us-DAT   not run-away-INF

       It is not possible for Dima/ us to run away

In the above examples, a PP (dative subjects) appears in spec of the infinitival T without causing ungrammaticality because the case feature on the NP embedded under P is licensed. Crucially, replacing the dative subject with a nominative NP is not possible. (C. Schutze points out an interesting question of why the above example is not possible in Icelandic. I cannot offer an answer here. Possibly, there is parametric variation in this respect within languages that have dative subjects.)

Yet, it is not possible to merge PRO into the spec of T carrying default phi-features. Why not? At this point I would have to attribute it to the properties intrinsic to PRO and its need to appear in infinitival constructions. In other words, while PRO is the only NP allowed in infinitives that come with a C-layer, PRO may be blocked from appearing in finite constructions not only because of the properties of T but also because of its own properties. For example, it is possible that the kind of Fin0 involved in infinitives allows PRO to be controlled from a matrix clause while the Fin0 in finite clauses would not. I leave this for further research.

3.6   What 'for'? (On the nature of *for-to* infinitives)

3.6.1 What is for?

In this section I turn to *for-to* infinitives (Chomsky 1981, Pesetsky 1991, Martin 2001, references therein) and address the following questions. First, what is 'for' – what projection does it occupy? Second, why is it possible to 'omit' 'for' in some cases without causing ungrammaticality? In other words, what is the difference between 'John wanted Bill to leave' and '* John tried Bill to leave'. Third, why do *for-to* infinitives share the properties of raising/ ECM constructions in that they allow movement of the embedded NP? I address each of the questions in turn.

Following Rizzi 1997 I will treat 'for' as a kind of Fin0. Rizzi 1997 views 'For' as a different head than the finite complementizer 'that' which he takes to be Force.   Rizzi (1997: 301) argues that 'for' in English occupies the lowest position in the CP domain – that is it heads FinP, not ForceP. The evidence for that comes from the impossibility of adverbial intervention in infinitival clauses:

(54)   a. For John to leave tomorrow …

b. * For tomorrow John to leave ...

Rizzi claims that in order for 'for' to license case on John it has to be in a local configuration with the spec TP which in turn means that it is the head immediately dominating the TP. No other heads in the CP domain such as Top0 or Foc0 can intervene between Fin0 [e.g. 'for'] and the TP (IP in Rizzi's terms). Rizzi presents further evidence from West Flemmish, Portuguese and Italian [p.302] that supports the claim that the heads corresponding to 'for' in these languages also occupy Fin0 and not Force. (For reasons of space I will not re-present these arguments here and refer the reader to Rizzi 1997: 302 – 303).

Building on Rizzi's claim that 'for' is a head of Finiteness and also on the proposal in

Pesetsky 1991 regarding the semantics of 'for', I argue that 'for' has certain special properties

that distinguish it from the null Fin0 involved in control infinitives as well as from that involved

in finite clause. The distinction is that Fin0'for' not only binds the temporal variable introduced

by T but also introduces a world in which the event denoted by the embedded VP is located. As

we shall see shortly, this is crucial for deriving the irrealis interpretation of the complement of

for-to infinitives. The semantics of 'for' is also what enables an overt NP to appear in these

constructions. The semantics of 'for' are given below:

(55)   Semantics of Fin[for]

Fin0 ~ > $\lambda w \, \exists t_i \, \exists(e)$ [Run(e) & at(e, t_i) & *at(e, w) & ti < n*] – *Fin0 introduces a possible world w such that the event e is located in w.*

Force ~ > $\exists w \, \exists t_i \, \exists(e)$ [Run(e) & at(e, t_i) & *at(e,w)*] -- *Force provides existential closure over the world variable introduced by Fin0.*

A similar view of the semantics of 'for' is advanced in Pesetsky 1991 who treats 'for' as having a

meaning similar to an if-then clause in that it also involves modality.   Following a definition in

Pesetsky 1991 and previously Stowell 1982, 'irrealis' is defined as 'an event that has not been

realized yet with respect to the matrix event and may or may not take place in the future'

(Pesetsky 1991). Here I would like to argue that what is central to irrealis is not whether or not

the event obtains in the future but rather whether or not it obtains at all in the actual world in

which the matrix event obtains. The fact that the event in the embedded clause takes place in

some world w which may be distinct from the world of evaluation of the matrix event is

responsible for the irrealis interpretation[18]. To illustrate the point, consider some examples of *for-to* infinitives:

(56) a. John preferred for Bill to live in NY

b. Homer desired / hated/ asked / yearned / loved / hoped for Bart to leave him alone

c. Lisa wished / needed / intended for Homer to pay attention to her

Contra Martin 2001, I attribute the irrealis interpretation in *for-to* infinitives not to the futurate interpretation of the embedded clause, but to the intensional nature of 'for'. For this reason, the current proposal does not predict that the embedded and the matrix events must be interpreted as sequenced. A simultaneous interpretation of the matrix and the embedded events is possible. Thus, while the following sentences may have a somewhat odd flavor if uttered in the context where it is clear that the embedded event is borne out, the simultaneous interpretation is still available. For example, if Bill already lives in NY and John knows about it, the sentence in (56a) is odd because it is not informative. However, it is possible in the context where one wants to stress that John prefers for Bill to live in NY despite the fact that Bill already lives there. The following is completely acceptable

(57) John strongly preferred for Bill (to continue) to live in NY because he believed that moving to another city would adversely affect his career.

In this sentence the salient interpretation is the one on which Bill's living in NY must coincide temporally with John's desires.

---

[18] This is not a very significant departure from the original definition since modality and futurity have benn argued to be closely related (Enc 1991, 1996; Werner 2002).

3.6.2 Implicatives, 'for', and irrealis.

An important argument for the modal nature of 'for' comes from a class of verbs referred

to as Implicatives (Kiparsky and Kiparsky 1970, Kartunnen 1971, Pesetsky 1991) which assert

the truth/ falsity of their complement. Interestingly, as Pesetsky 1991 notes, these predicates are

not possible with *for-to*:

(58) a. * Homer condescended for Marge to talk to Bart

b. * Homer declined for Bart to eat a donut

c. * Homer managed / neglected / dared for Bart to speak his mind

Let's see why this should be so. Pesetsky (1991: 116) following the insight of Kartunnen 1971

argues that implicative verbs when combined with their complement entail the complement. In

other words, if John managed to open the door, then it is necessarily true that John opened the

door. This means that in every world in which v(S) is true, S is true where v is an implicative verb

such as 'manage' and S is its complement such as 'open the door'. One can take Kartunnen's

insight and make an even stronger claim that the proposition expressed by the combination of

v+S must be evaluated for truth-falsity in the same world as the proposition expressed by S. But

this is exactly what the insertion of 'for' precludes because 'for' introduces a world in which the

event in embedded clause S takes place. Once this happens, there is no way to guarantee that the

world introduced by 'for' is the same as the actual world in which v+S takes place. This leads to

uninterpretabilty / infelicity. (This is like saying: '# I am not sure if I can come tomorrow, but I

guarantee that I will come tomorrow.' The sentence is odd because the first part of the sentence

contradicts the second part). Crucially, not all verbs impose the requirement that Implicatives

impose. In other words, verbs such as 'want' , 'prefer', 'need', 'desire' when combined with a

complement do not entail the complement. Thus 'wanted'+ [J to leave] does not entail that John

left. This means that it is perfectly possible for v+S to take place in some world w1 while the

actual leaving expressed in S takes place in some other world. These verbs themselves are

intensional: they introduce a world in which the event in the embedded clause takes place.

Importantly, the world they introduce need not be the same as that in which the matrix event takes

place. Consequently, they are compatible with 'for[19]'.

Interestingly, as pointed out by Pesetsky 1991, there are no verbs that require 'for' and

cannot exist without it. This may be attributed to the fact that the role of 'for' is largely

semantically redundant – it acts as introducing a possible world in which the event denoted by the

embedded VP takes place but so can the matrix verb due to its lexical semantics. 'For' merely

replicates this function. This is why these verbs also cause an irrealis interpretation of the

embedded event when they appear in control constructions such as 'John wanted to leave.' The

modality is already inherent in the lexical semantics of verbs such as want, desire, prefer, etc.

which is why the control 'want' and the *for-to* 'want' are the same with respect to the irrealis

effect on the embedded TP. (Alternatively, one can treat these verbs as having incorporated a

null 'for'; this option will be explored shortly.) Crucially, however, implicative verbs which

appear in control constructions (e.g. manage, dare, remember, etc.) require a realis interpretation

of the embedded event. It is the contrast between the control Implicatives such as 'manage' and

for-to infinitives that supports the claim that the Fin0 involved in these two types of constructions

is indeed different. Non-implicative control verbs cannot illustrate this difference for the reason

mentioned above.

To sum up, Implicatives that appear in sentences such as 'Homer declined / dared /

managed to eat a donut' when combined with their complement entail their complement. That

Homer ate a donut must be true in every world in which the matrix event obtains. Using a Fin0

---

[19] There is a question why 'for' is not redundant. Actually, it may be redundant, given that 'for' often does
not overtly appear with these verbs (cf discussion immediately below). Languages do seem to tolerate
redundancy quite well, though as seen from such unrelated examples as the appearance of tense morphemes
on predicates that are modified with temporal adverbs, e.g. 'john walked the dog last night'. Why not make
tense-marking obligatory only when the time of event is not otherwise specified?

that obligatorily introduces a distinct world for the embedded event makes it impossible to

guarantee that the complement is true in the same world in which the matrix event obtains.

However, verbs such as 'want' or 'intend' do not require that their complements be true in every

world in which the events denoted by these verbs obtain: that 'Homer wanted / intended/ desired/

wished for Bart to eat a donut' does not entail Bart's eating a donut. These verbs allow 'for'

because nothing in their semantics is incompatible with the modal interpretation of 'for'. It is the

inherent modality of 'for' – its ability to introduce a possible world in which the embedded event

takes place -- and not the [+tense] value of the T that leads to the irrealis interpretation of *for-to*

clauses. Control verbs whose such as 'want,' 'desire,' 'need' etc. have similar semantics to 'for'

in that they are also modal; consequently, their complements have an irrealis interpretation.

3.6.3 'For-to' infinitives and overt NPs

Now I would like to turn to the third question raised in this section, namely, why do *for-*

to infinitives allow raising of overt NPs into the spec of the embedded T unlike control infinitives

such as 'try'. The answer here comes from the nature of the FinFor involved in these infinitives.

Because FinFor or the NullFinFor introduces a possible world not just existential closure, it is

not semantically trivial and has interpretable features which can value the case feature on the

NP[20]. In other words, there is an interpretable feature corresponding to 'for' and NullFinFor that

can be misplaced onto an NP and then valued by the corresponding functional head. This is what

makes overt NPs possible in *for-to* constructions :

---

[20] The NullFor involved in constructions such as 'John wanted Bill to go' is to be distinguished from the
null Fin0 involved in control constructions e.g. John wanted to go. The latter lacks interpretable features
[provides only the existential closure] while the former has interpretable features since it introduces a
world in which the embedded event takes place. However, because the matrix verb is intensional – want –
and has similar semantics to 'for' and NullFor, the complement of control 'want' also has the irrealis
interpretation. A minimal pair between a control 'want' and 'for-to' 'want' with respect to the
interpretation of the embedded clause thus cannot be constructed. As already mentioned, the only control
verbs whose interpretation can be contrasted with that of 'for-to' are the Implicatives discussed above.
Verbs that allow 'for' are also intensional and as a result are semantically indistinguishable from 'for-to'.

(59) a. John wanted / intended / preferred / desired for Bill to leave

b. John hoped / intended / desired / wished / preferred / hated / loved for Bill to leave

c. It is important for Bill to leave / stay / remember the past

d. For Bill to leave would be nice / ?is crucial

e. John wanted / intended/ preferred / desired for there to be a riot / for the shit to hit the fan

(60)
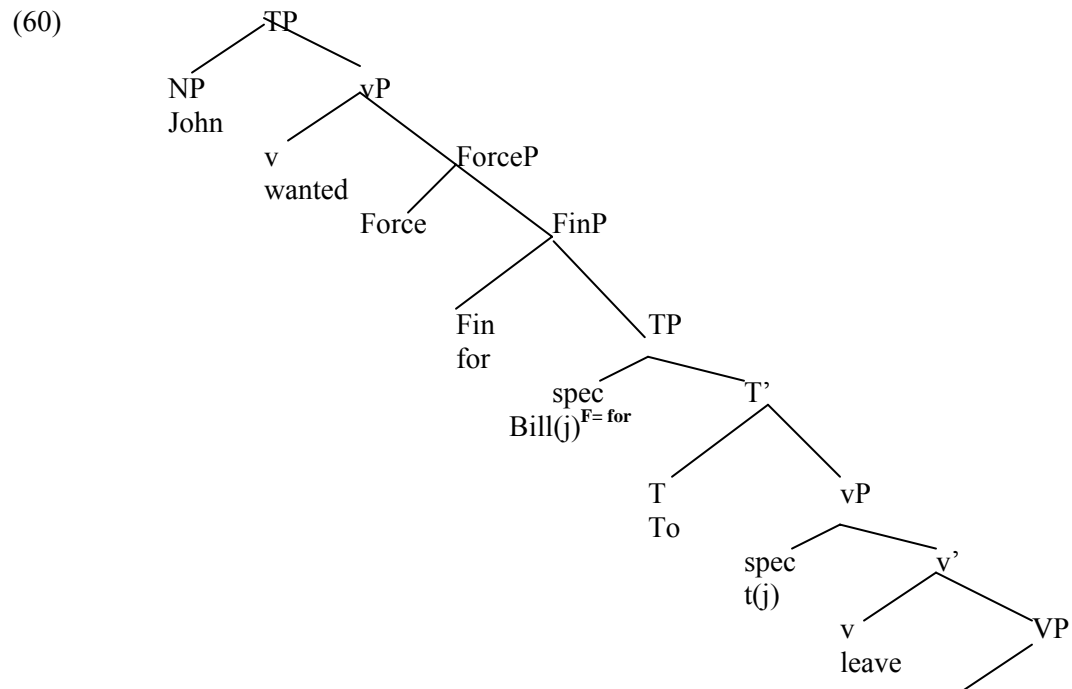
In the above derivation the embedded Force checks for uninterpretable features within its phase. It detects the case feature on the NP [Bill] and triggers movement of Bill into spec TP, embedding it under FinFor which has an interpretable feature that can value the F on NP. As a result, we see overt morphological case on the NP.   Crucially, *for* is able to value the case feature on the NP because it does not have 'trivial' semantics – it is not just a head introducing existential closure over the temporal variable. In contrast, Fin0 involved in control infinitives cannot accomplish this task, hence the ill-formedness of constructions such as '* John tried Bill to leave'

3.6.4 'For' vs 'NullFor'

      To account for those infinitives which have the properties of *for-to* but lack the overt 'for', I will build on the idea presented in Pesetsky 1991, and also much previous work dating back to Chomsky 1981 and claim that Fin0[for] has a null counterpart NullFor which has the same semantics as 'for' but is phonetically null. Usually, those verbs that allow NullFor are verbs that encode desire e.g. *want, need*, etc.(Pesetsky 1991). This in turn may be related to the fact that verbs with the meaning similar to 'want' are inherently modal. One may look at these verbs as having incorporated the NullFor. Interestingly, the claim that NullFor actually incorporates into the verb is supported by the fact that NullFor is not possible when there is no verb into which it can incorporate:

(61)   a.* **NullFor** John to leave would be important / * it would be important **NullFor** John to leave

      b. For John to leave would be important / It would be important for John to leave

      c.* Bill to leave is what John wanted

      d.For Bill to leave is what John wanted

In (61a) NullFor is left 'stranded' since there is no verb for it to incorporate into. Similarly, when the *for-to* clause is extraposed as in (61c), the sentence becomes significantly worse as seen from the contrast between (c) and (d) above.

 3.6.5 Summary and some residual issues

      Thus, I have argued that *for-to* infinitives have an 'irrealis' interpretation which is due to the semantics of 'for'. The future-like interpretation of the embedded event with respect to the matrix is a by-product of the inherent modality of 'for'. It is not due to the nature of infinitival tense involved in *for-to* infinitives. Otherwise we would expect *for-to* constructions to be

incompatible with a simultaneous interpretation of the matrix and the embedded events contrary

to fact. While the futurate interpretation of the complement in the *for-to* infinitive is preferred, it

is not required. The preference can be attributed to the extra-linguistic factors such as the fact that

uttering a sentence 'I want you to leave' conversationally implicates that the addressee is not yet

in the process of leaving, or else the utterance would be usuallly infelicitous. However, this is not

a requirement imposed by the syntax or the semantics of *for-to* infinitives. Viewing 'for' as

introducing a possible world as opposed to future tense does not commit us to the obligatory

futurate interpretation of the embedded event. Recall that while the two events can take place in

different worlds it need not have any influence their respective temporal location – they may be

simultaneous or sequenced. Time and space [worlds] are orthogonal dimensions. Finally, the

semantic nature of 'for' is also responsible for allowing an overt NP in the spec of a *for-to'*

infinitive.

I would like to end this section with some speculations on one of the many remaining

issues regarding *for-to*[21] such as the question why *for* is impossible in control infinitives whose

semantics should not a priori block 'for' e.g. 'try', 'hope', 'claim'. Nothing in the entailment

requirements of these verbs should preclude 'for' from appearing in their complement, yet they

do not allow it:

(62)   * Homer tried / hoped / claimed / for to PRO eat a donut

A possible explanation can be given along the following lines. Since the matrix verb in these

constructions already has a possibility of a modal interpretation, there is no need to select a

special FinFor given that there is no NP that needs to have its case feature licensed. Since PRO

---

[21] There is a question why not all verbs take 'for'. Setting aside implicative verbs whose semantics is
incompatible with the semantics of for- , there are verbs such as 'try' that do not take *for* even with an overt
subject: * *John tried/ remembered for Bill to leave* At this point, I would like to attribute this to the matter
of c-selection. Not all verbs that can be potentially compatible with an irrealis complement select 'for'. I
have nothing more interesting to say regarding this question.

does not have an case feature, there is no need to select FinFor thereby proliferating the structure.

Instead, only one head can be selected. This would not affect the interpretation of the clause but

will be more desirable with respect to economy of derivation. (Recall that if we select a Fin0 that

only existentially binds the variable introduced by T, there is no need to represent Fin0 as a

separate head from Force). The use of 'for' in the above constructions can be blocked by

economy. However, this requirement is not very strong: there are dialects of English that do

allow *for-to* infinitives with PRO (McCloskey 1997):

(63) a. Bill tried for to go home

      b. Homer wanted for to leave early

The above brief discussion clearly does not present a definitive proposal; its goal is merely to

point to a possible venue of further exploration of *for-to* infinitives and their incompatibility with

PRO in Standard English.

3.7   Expletives, long distance agreement and the Principle of Minimal Compliance

In this section I turn to the discussion of expletives. In particular my focus will be on the

following question: what is difference between *there* and *it* such that *ther*e allows for long-

distance agreement, while *it* does not. In this section I will also show that the existence of

expletives need not be related to the EPP at all, but is rather attributable to the more general

economy condition that merge is cheaper than move (Castillo, Drury, and Grohmann, 1999,

Grohmann et al. 2000). Further, I argue that the possibility of long distance agreement is due to

the Principle of Minimal Compliance (Richards 1997) – an economy condition on derivations,

which states that once a certain constraint/principle has been obeyed by a certain dependency it

need not be obeyed by the members of the same dependency again in the same derivation. We

saw this principle at work in Chapter 2 already and will see how it can be used to explain long distance agreement in infinitival constructions.

Consider the following constructions involving 'it' and 'there' in raising infinitives. For theta-theoretic reasons expletives are blocked from control infinitives. In other words, since both the matrix and the embedded verbs assign a theta-role in control constructions, it is not possible to have an expletive there.

Raising

(64)   a. There seemed to be men in the garden

        b. * It seemed to be men in the garden

        c. * It seemed men to be in the garden

Before we address the question why 'there' is allowed in the above constructions while 'it' is not, I would like to state some assumptions about why expletives exist at all. First, I assume that merge is cheaper than move, (the assumption that is used in arguing against the EPP in Grohmann et al. 2000) which means that if it is possible to merge something in the spec of TP that would value phi-features on T, then languages that have expletives will certainly have the option of doing so[22]. Second, I assume that expletives are base-generated and never move to spec TP. (This assumption is closely related to the first).

Turning to the question why some expletives are allowed in infinitival clauses while others are not, it is necessary to point out that expletives are not all the same. If the expletive has a full set of phi-features, then the phi-features of the expletive would fully value the phi-features of the matrix T making the T incapable of also deleting the case feature on the lower NP. While

---

[22] There is a question why expletives are not always used. One way to look at it is that using an expletive affects the meaning of the sentence. In other words, sentences with 'there' and those without 'there' are not semantically/ pragmatically identical. 'There' carries an extra-linguistic function such as facilitatating presentation etc.

the expletive 'it' is much like a pronoun 'it' – it has full set of phi-features and a case feature –

the expletive 'there' lacks a number feature. 'There' can only value/license default phi-features

on T. However, since 'there' constructions also involve an NP, the matrix T can get a full set of

phi-features and have them valued by the lower NP in the infinitival clause. Let us start by

looking at the raising constructions with expletives and see why 'there' is possible while 'it' is

not. To illustrate, consider the derivation of a sentence containing the expletive. What is of

import in these examples is that when the phi-features of the matrix are valued by those of the

moved NP, then the lower NP must get the accusative case; otherwise, the derivation would crash

because nothing would legitimize the case feature on the lower NP. However, if the expletive

cannot value the phi-features on the matrix T, as in the 'there'-sentences, the NP in the embedded

clause can be nominative.

(65)   Numeration containing an expletive: {John, believe, there, to, be, men, in, the, garden}
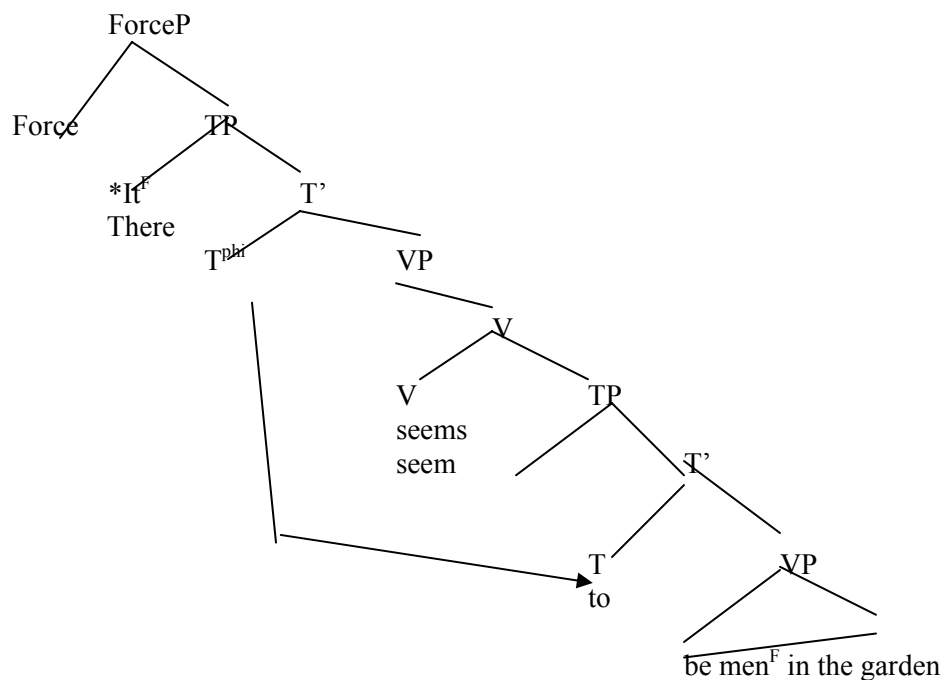
The expletive 'it' has a full set of phi-features and fully values the phi- on the matrix T. This makes the matrix T unable to delete the case feature on 'men'. In contrast, 'there' lacks phi-features and is similar to a dative subject (PP) in that it cannot value a full set of phi-features on T. (Cf discussion of default agreement in Chapter 2). If the T gets a full set of phi-features misplaced on it, then the phi-features can only get fully valued by the phi-features of the embedded NP. Crucially, no movement of the embedded NP is triggered by Force because the configuration needed to facilitate agreement is already satisfied. By the Principle of Minimal Compliance (Richards 1997), since 'there' is merged into the spec TP, and the Valuation Requirement is satisfied, there is no need to perform another movement to facilitate agreement between the T and another NP. The mechanism behind long distance agreement is thus the same as we saw in transitive dative subject constructions. Importantly, however, the proper configuration has to already exist for long distance agreement to take place. A central aspect of the PMC (Richards 1997) is that a constraint can be violated by a certain dependency only if it was first obeyed by the same kind of a dependency. Hence, we cannot expect the T to agree with an NP long distance if there is no other element filling its spec. This rules out a sentence such as '* Seem to be men here' without invoking the EPP. Crucially, long distance agreement is possible only if the expletive is 'there' and not 'it'. Since 'it' has a full set of phi-features, it fully values the phi-features on T, which means that re-valuation will be blocked and the case feature on the NP will be left undeleted. This explains the different behavior of 'it' and 'there' in raising constructions[23].

---

[23] Some ECM and *for-to* infinitives allow 'there', but disallow 'it'. The phi features of the expletives are irrelevant here because there is no feature matching between the features of the expletive and that of the matrix T. The answer here may come from the distinct semantics of expletives. While both 'it' and 'there' are non-theta-bearing elements they are not semantically equivalent. One may appear in some constructions where the other one may not.

ECM
(i)   a. John believes there to be men in the garden
       b. *John believes it to be men in the garden
       c. *John considers it to be men in the garden

3.8   Concluding remarks

3.8.1 Infinitives: summing up

In this chapter I discussed some issues related to temporal properties of infinitival

constructions and to NP distribution in infinitives. Here we got a first glimpse of what happens

when features are not misplaced on certain heads. Thus I have argued that the T in infinitival

constructions lacks misplaced phi-features (though this may be subject to parametric variation, cf

Portuguese, Raposo 1987); similarly, PRO is an NP that lacks a misplaced case feature. I have

further argued that different types of infinitival constructions arise from different complement

options the matrix verb has: TP vs. CP. In those infinitival clauses that involve a C-layer, the T

gets bound by Fin0 which immediately dominates the TP and introduces existential closure over

the free temporal variable. The specific time interval of the embedded event gets determined by

the lexico-semantic properties of the matrix verb- it can be either simultaneous or future with

respect to the matrix event. In those non-finite clauses where the CP layer is missing, e.g. raising

and ECM, the variable introduced by T gets bound by being identified with the matrix T under

co-indexation. As a result, the infinitival T shares the temporal interpretation with the matrix T.

For-to
(ii)   a. John wanted/ desired/ intended/ needed / preferred for there to be men in the garden
        b. *John intended / needed/ preferred for it to be men in the garden
        c. * John intended/ needed/ preferred for it men to be in the garden.

(iii) a.John believes there/ *it to be men in the garden
        b.John wants for there/ *it to be riot

Case will be licensed in both constructions by the small v much like it is if there were a thematic NP there
in ECM and for-to infinitives. Furthermore, the phi-features on the matrix T are valued by the phi- of the
matrix NP 'John' – so there is no problem there either. What could cause the ungrammaticality then? My
tentative answer here is that the two expletives have different semantic/ pragmatic/ discourse functions and
are not mutually interchangeable. Yet, there are ECM and *for-to* infinitives that do allow 'it' e.g.

(i)   For it to rain would be unfortunate
(ii)   I consider it to have rained.
              (examples due to M. Baker pc).

Arguably, this type of 'it' is allowed again due to semantic considerations: this expletive is the 'weather
it' and may have different interpretive requirements than other instances of 'it.'

Furthermore, since raising and EMC constructions do not involve a C layer, it is possible to move an NP from the embedded clause into the matrix without changing the established linear order within a spelled-out phase. This makes it possible to have overt NPs in raising and ECM constructions. In contrast, the presence of Fin0 in control infinitives is crucial in explaining the possibility of PRO and the impossibility of NP movement in these constructions. The presence of C blocks movement of the embedded NP into the matrix clause because such movement would change the established order in a spelled-out portion of the derivation. PRO is possible in these constructions because it carries no uninterpretable features and consequently nothing needs to be deleted. An overt NP appearing in control infinitives would crash the derivation because the case feature on the NP will not be deleted – the embedded T is not a probe. It also cannot be valued by the features of the infinitival Fin0 because the Fin0 has only the trivial features – it only introduces existential closure over the temporal variable T.

The properties of *for-to* infinitives which seem to be similar to both raising/ECM and control constructions were attributed to the nature of 'for'. I have argued that 'for' is a Fin0, however it is different from the one involved in control constructions in that it introduces a possible world in which the embedded event is located. This is responsible for the irrealis interpretation of the embedded clause in these infinitives. Because 'for' introduces a possible world and does not just existentially bind the temporal variable, it has interpretable features which can value the case feature on an NP. Thus, if an overt NP appears in an infinitival clause it can be moved under 'for' and have its case feature licensed. I have also argued that 'for' has a null counterpart that has the same properties as 'for' with respect to the semantics but is incorporated into the verb.

Finally, in the section dedicated to expletives I have argued that the existence of expletives does not support the EPP, but is rather attributable to the fact that merge is cheaper than move. I have further claimed that 'it' is different from 'there' in that the former has a full set of phi-features while the latter lacks a number feature. This is in turn what makes it possible for

the phi- on T to be re-valued to those on the embedded NP when the expletive is 'there', but not when the expletive is 'it'. Crucially, no movement is triggered because the configuration necessary for feature-valuation is already satisfied by the merger of the expletive. This is made possible by the Principle of Minimal Compliance proposed in Richards 1997, 1998 which states that once a particular constraint has been obeyed by a dependency it need not be obeyed again in the same derivation by the elements involved in the original dependency (in this case it is the T). This is the mechanism behind long distance agreement. Once again, no recourse to the EPP is needed here.

3.8.2 Infinitives and theta-relations

Let us briefly reconsider raising, ECM, control and *for-to* infinitives with respect to the preservation of thematic relations at PF. I have argued that features are misplaced in order to preserve records of thematic relations at PF (via morphological spell-out of valued features). If features are not misplaced, thematic relations are preserved via rigid word order (cf discussion in Chapter 1). How do theta-roles in the embedded clause get recorded in raising, ECM, control, and *for-to* infinitives? Reconsider the following infinitival constructions:

(66) a. John seems to be smart

   b. Homer believed him to be rich

   c. Homer tried to[PRO eat a donut]

   d. Lisa(i) persuaded Homer(j) to [PRO(j) quit drinking]

   e. Bart hoped for Homer to arrive on time

Given that infinitives contain no theta-preserving records on case/agreement morphemes, what preserves theta-roles in these constructions in the embedded clause? Starting with raising infinitives, I would like to propose that the embedded event and the matrix form a single thematic complex (cf ft.note 5) where the records of theta-roles are preserved on the matrix verb via

agreement: 'John seem-s to be smart.' To account for control infinitives, I would have to refine

the initial claim about theta-preservation so that it states that overt reflexes of thematic relations

are required only if elements carrying them are themselves overt[24]. This would account for theta-

role preservation in the infinitives that involve PRO as well as for instances of pro-drop in

languages that do not have agreement such as Chinese and Japanese (to be discussed in Chapter

4). In other words, when the theta-bearing element is null, the PF record of the theta-role it has

may also be null/ trivial.

Matters are a bit more complex with ECM because a misplaced feature on the NP cannot

be deleted by the infinitival T leading to subject agreement, the theta-role of the embedded NP is

recorded via case-valuation of the misplaced feature by v which gets spelled out as accusative

case. A similar phenomenon happens with NPs in *for-to* infinitive. The case feature on the NP

subject valued by FinFor records the NP's theta-role. But if the subject has overt case, why

doesn't it get interpreted as the thematic object? This is an instance of imperfection of the design.

Since the language chooses to misplace case features on all the arguments, it has to do something

to value them such as embedding the NP under a FinFor. Theta-role preservation via case and

agreement morphology in infinitives remains to be explored further.

3.8.3 A note on infinitives in Portuguese

As a final note, I would like to briefly address the question of inflected infinitives in

Portuguese which I have not dealt with in the body of this chapter. As argued in Raposo (1987),

Portuguese allows inflected infinitives in complements of declarative, epistemic, and factive

predicates e.g. 'claim', 'regret' (though not in volitional ones, e.g. 'wish', 'desire').

(67)	Nos lamentamos / * desejamos [eles	terem	recebido puoco dinheir]

---

[24] An alternative argument would be to say that thematic relations in embedded clauses need not be preserved – once the thematic relations in the matrix are recorded at PF, it is sufficient for the entire complex clause: matrix + embedded Infinitive.   Since untensed clauses are dependant on the matrix for temporal interpretation and cannot exist on their own, recording theta-relation in the matrix clause is enough.

      We   regret   /   desire   they   have-INF-Agr received little money

      We regret / desire that they received little money

Inflected infinitives raise a number of complex syntactic questions, (i.e. why they are allowed only in complements of a restricted class of verbs, why they are so rare crosslinguistically, etc), however the discussion of them would extend beyond the scope of the current work. I would like to point out, nonetheless, that their existence is not excluded by the proposal presented here: while I have argued that the infinitival T lacks phi-features, this property may be subject to parametric variation. The possibility of having overt NPs in the spec of infinitives in Portuguese could then be attributed to the presence of phi-features on T. (This is similar to the proposal Raposo 1987 makes. His argument is that inflected infinitives are possible in null subject languages where a T node that is not specified for tense has Agr features and a Case feature). If the infinitival T has phi-features, it is a probe and consequently can delete the case feature on an NP licensing nominative case and overt agreement. This would enable overt NPs to appear in spec of infinitival T. Importantly, even the inflected infinitives cannot stand on their own – they can only be in the scope of the matrix verb (Raposo 1987: 86). This suggests that while the infinitival T in Portuguese may have phi-features, it lacks the specification for tense, and consequently needs to acquire the temporal features from the matrix T.

Clearly, the discussion in this chapter leaves a number of important issues related to infinitives unaddressed (e.g. the different kinds of control infinitives (Landau 1999), the question of why some verbs allow raising but disallow ECM (Pesetsky (1991), to name only a few). However, the main goal of the exploration here was to show that the theory proposed in the previous chapters can account for the case and agreement properties of infinitives and their distinction from the case and agreement properties of finite clauses. Other important issues related to infinitival constructions, while interesting, extend beyond the scope of the current discussion and have to be left for future research.

Chapter 4   Ways of feature misplacement: case, agreement and (non)-configurationality

4.0   Outline

In this chapter I will consider a typology of case and agreement systems including

languages that have only overt agreement and no overt case, languages that have only case-

marking and no overt agreement, languages that have some mixture of the two and languages that

have neither. The structure of the chapter is as follows. Section 1 is the introduction. Section 2 is

concerned with Mohawk, a non-configurational Polysynthetic language discussed in Baker 1996

that shows no case morphology on NPs but has obligatory agreement for both the subject and the

object. I argue that the non-configurationality Mohawk exhibits is due to the lack of case features

on the NPs in the language and the requirement that both arguments of the verb be agreed-with.

In Section 3 I discuss Bantu languages focusing on Kinande, discussed in Baker 2003a which are

different from Mohawk in that they lack obligatory object agreement. In this section I will argue

following Baker 2003a that Bantu agreed-with subjects are obligatorily dislocated.   In Section 4 I

discuss a number of issues raised by I-E languages that misplace both case and agreement

features. In Section 5 I discuss Japanese – a language without agreement. Section 6 discusses

languages that lack both agreement and case and have a strict SVO word order. Section7 is the

conclusion.

4.1   Introduction

4.1.1 Overview

In this chapter I will consider a typology of case and agreement systems with a particular

focus on the interaction between caselessness and presence of agreement. Since in this thesis I

argue against the Universal Approach to case and agreement, and instead claim that languages

lacking case and/or agreement morphology may indeed be caseless and agreementless in the

syntax, it is fair to ask what happens if a language has no case features, when it has no agreement
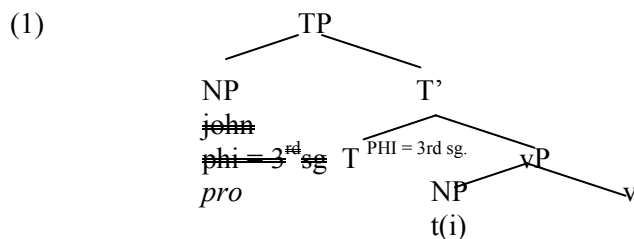
features, and what happens when it has some combination of these. In this chapter I will mainly

focus on the question of how the presence or absence of case interacts with presence of

agreement. In particular, I will argue that absence of case in the presence of agreement leads to

non-configurationality.   This is so because probes are deletors, and in the absence of case

features they will delete the entire lexico-semantic content of the NP in return for agreement. In

contrast, languages that lack both case and agreement features are predicted to have rigid word

order since there is no other way to preserve thematic relations at PF. Syntactically caseless

languages that lack agreement will thus be on the opposite end of the word-order spectrum than

languages that are caseless but have agreement. In this chapter I will also address languages that

lack agreement but have case, though in less detail.

4.1.2 Indiscriminate Deletion

Before we proceed with the discussion I would like to say a few words on the feature-

structure of the NP. This is necessary in order to understand the nature of indiscriminate deletion,

i.e. the process of deleting of the entire NP in return for agreement. Recall, that I take probes to

be deletors that will delete the entire NP in return for agreement when the NP lacks a misplaced

feature (cf Chapter 1). But what does it mean for a probe to delete the NP in return for

agreement? What exactly gets deleted? I take the feature structure of the NP to involve phi-

features – person, number, and gender and some semantic content that would distinguish a word

such as 'cat' from a word such as 'dog' although their phi-features are the same – 3rd person

singular neuter. Phi-features constitute the skeletal structure of the NP that may be further

specified by the actual lexico-semantic content of the NP. In the absence of any semantic content,

the phi-features will be spelled-out at PF as a pronoun. However, if present, the semantic content

of the noun is inseparable from the phi-features.

Recall further that if an NP has a misplaced feature, it is a not an inherent part of the

lexical item, but is placed on the node N0. (cf Appendix 1A, Chapter 1). In the absence of a case

feature, the probe will delete the entire lexico-semantic content of the NP, including the phi-features. The phi-features will be reflected in/recorded by agreement on the probe. In the representation below, the NP lacks a case feature while the T is a probe. The probe deletes the content of the NP 'John' in return for getting its own phi-features valued/licensed, leaving a featureless small pro behind.

(1)

$$
\begin{array}{c}
\text{TP} \\
\text{NP} \qquad \text{T'} \\
\text{john} \\
\text{phi = 3}^{\text{rd}}\text{ sg} \quad \text{T}^{\text{PHI = 3rd sg.}} \qquad \text{vP} \\
\textit{pro} \qquad\qquad \text{NP} \qquad \text{v} \\
\text{t(i)}
\end{array}
$$

The pro which remains after indiscriminate deletion can be specified by an adjoined phrase as long as the phi-features of the adjunct do not conflict with those recorded on agreement. Agreement on T preserves only the bare minimum of the lexico-semantic content of the NP, just the phi-features.

4.1.3 A note on caselessness and linearization domains

Before I move on with the discussion of caseless languages, I would like to highlight another important point that was introduced briefly in Chapter 1 but has not been particularly prominent up until now. Recall that I have assumed following Fox and Pesetsky 2004 that linearization applies cyclically and once a spell-out domain has been created, the order within it cannot be undone. I have also assumed that the smallest linearization domain is v+VP for a transitive clause. However, while a spell-out domain need not include the spec of vP for languages that misplace a case feature on the theme, it must include it when the theme lacks a case feature. Otherwise, the linear order within the vP will not determine the theta-role of even one argument. The spec of vP in languages without a case feature on the theme thus gets

'trapped' in the first spell-out domain in order to make sure that if there is no agreement later on, there will be at least one unambiguous record of thematic relations within the vP.[1] This cannot be guaranteed if the relative order between spec vP and the theme is not established right away. Let us see why not. If you only mark for linearization the v+VP part, the result will be [v+ V NP<theme>]. Suppose further that in a higher spell-out domain the verb undergoes movement to T/ C and winds up higher than the thematic subject, resulting in VSO order: [T+v+V ..NP<ag> [.. NP<th>]]. Now, the v locally c-commands the agent, and although it is still to the left of the theme, in the absence of case and agreement there is no longer a way to determine at PF which of the two NPs is the theme and which is the agent since both are c-commanded by the verb. If there is no agreement on T later on or no case on the agent NP, there is not going to be even a single unambiguous record of thematic relations at PF. Since the v doesn't "know" whether later on there will be agreement on T and is unable to check whether there is a case feature on the agent NP, (the v can only detect misplaced features in its own phase, i.e. it can only 'look down', not up), it includes the thematic subject into the linearization domain right away. Thus, when the theme lacks a case feature, the vP must be linearized together with its specifier. This has important consequences which will be discussed in detail section 4. (In short, if the thematic subject in spec vP does have a case feature while the theme does not, the subject will be trapped in the linearization domain – the vP -- and sent to spell-out with an unvalued/undeleted case feature. This will cause an immediate crash. I will come back to this important restriction on feature misplacement in section 4).

The above argument does not imply that languages without case and agreement features where the only PF record of thematic relations is overt word order must be SVO. Recall that I have assumed in Chapter 1 that linearization is sensitive to headedness (I assume contra Kayne

---

[1] In languages that have a separate event head and lack a case feature on the theme, the external argument introduced by v would also have to be spelled-out in the first spell-out domain. However, for now I will abstract away from the v vs. Ev distinction since it is only relevant for non-voice-bundling languages (Pylkkanen 2002) that involve an Ev head separate from v. In languages where the two are spelled-out together, this distinction is not crucial. I will use v as the phase marking head in the subsequent discussion.

1994 that languages may be initially right-headed). In a right-headed language represented below,

the vP is linearized as follows. If the verb (v+V) asymmetrically c-commands the NP, the first

terminal dominated by the verb follows the last terminal dominated by the NP. (This is the

reverse of head-initial languages). If the NP asymmetrically c-commands the verb (v+V), the last

terminal dominated by the NP precedes the first terminal dominated by the verb (same as in head-

intial languages). This is represented below:

(2)

The above tree would be linearized as follows: since the verb (v+V) asymmetrically c-commands

the NP object, 'see' follows 'Bill'. Since the NP subject asymmetrically c-commands the verb,

'John' precedes 'see'. The result would be: *John Bill see.*

In a caseless and agreementless SOV language, we would be able to get at least one

record of thematic relations within the vP provided that the subject is included in the linearization

domain. The linear order between the subject and the verb will preserve the record of the 'agent'

theta-role borne by the subject NP, since the NP precedes the verb, both in head-final and head-

initial languages. Thus, caseless languages will have to have a full vP as the smallest linearization

domain, but they may be SVO or SOV. The configuration in which thematic roles are assigned

would have to be 'frozen' in place and preserve PF records of thematic relations in the vP.

4.2   Caselessness + obligatory agreement = non-configurationality: Mohawk vs. Nahuatl

4.2.0 Overview

In this section I discuss languages that lack case and have obligatory subject and object agreement. Given that probes are deletors, a language that has agreement with both arguments but has no case features on either argument will be non-configurational. This is so because in the absence of case features, the probe will delete the actual NP arguments in return for agreement. What will appear in argument positions as a result of agreement are featureless null pros. Any overt NPs we would see in such languages will be adjuncts which are optionally present and can be merged in a rather free order. Conversely, if we were to have a language that has case features and also has obligatory subject and object agreement, we will see no morphological case on NPs, but they will not be dislocated. There would be no sign of non-configurationality because case features not NPs that would get deleted in return for agreement. In this section I will argue that Mohawk, a Polysynthetic language discussed extensively in Baker 1996 is an example of the former – no case features on NPs, obligatory subject and object agreement; in contrast, Southeast Puebla Nahuatl discussed in MacSwan 1998 is an example of the latter – a configurational Polysynthetic language that like Mohawk has obligatory subject and object agreement but unlike Mohawk has case features on NPs. While there are two ways for NPs to be morphologically unmarked for case, deletion and lack of a misplaced feature, these two possibilities are crucially distinguished by agreement.

4.2.1 Mohawk: No case features on the subject and the object; obligatory S and O agreement

Mohawk is one of the Polysynthetic languages discussed extensively in Baker 1996. Along with other Polysynthetic languages it presents a particular challenge to the case and agreement theory for several reasons. Not only does it lack any overt case morphology, there is also no fixed syntactic positions in which the overt NPs must appear. Polysynthetic languages in general are non-configurational in the sense of Hale 1983, Baker, 1996, Jelinek 1984 – they involve NPs appearing in dislocated positions. This makes it difficult to argue along the lines of Marantz 1991, Harley 1995, that these languages have Abstract Case which manifests itself in the

need of the NPs to appear in particular syntactic configurations, i.e to be licensed. The discussion

here will be limited to Mohawk, although many arguments can be generalized to other

Polysynthetic languages that lack case morphology. In this discussion I will set aside those

Polysynthetic languages that have ergative case marking such as Chukchee, for example. The

issues raised for case and agreement theory by these languages are left for further research.

4.2.2 Background on Polysynthesis: Baker 1996

Before proceeding with a discussion of the Mohawk facts I would like to present some

background on Polysynthesis as discussed extensively in Baker 1996. Baker 1996 argues that

Polysynthetic languages have obligatory subject and object agreement and free word order. He

proposes that these languages have a unifying feature – the Polysynthesis Parameter, also referred

to as Morphological Visibility Condition (MVC). Many properties shared by these languages are

due to the MVC, which states the following:

(3)   MVC (Baker 1996: p.17)

A phrase X is visible for theta-assignment from a head Y only if it is co-indexed with a

morpheme in the word containing Y via: (i) an agreement relationship; (ii) a movement

relationship.

By definition, a polysynthetic language has obligatory subject and object agreement. Another

important feature of polysynthetic languages in general and of Mohawk in particular, is non-

configurationality. Below I review some of the evidence from Baker 1996 that Mohawk is indeed

a non-configurational language. Baker 1996 : 87-89 presents a number of arguments showing that

NPs in Mohawk appear in dislocated positions. First, as the data below indicates, overt NPs are

freely ordered in Mohawk and can also be dropped. Note also that there is no case morphology

on the overt NPs:

(4)   a. Wa'-   ke -   tshvri

      Fact-   1sS-   find-PUNC

      I found it

      b. Wa'-   ke-   tshvri'-   kikv   kahure

      Fact-   1sS-find-PUNC   this   gun

      I found this gun

      c. Kikv   kahure wa'-   ke-   tshvri

      this   gun   Fact   1sS-   find-PUNC

      I found this gun

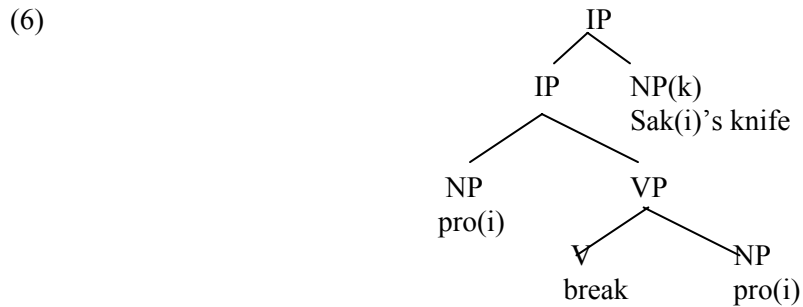   (Baker 1996)

However, while the above data indicates that overt NPs in Mohawk may be freely ordered or

dropped, there is evidence showing that they are always adjoined. I now present a brief review of

Baker's arguments that overt NPs in Mohawk are indeed adjuncts. The first evidence comes from

the fact that Mohawk seems to violate condition C in the environments where English and other

configurational languages obey it. This is what Baker refers to as 'disjoint reference' effects,

which are as follows. In English, it is not possible to get coreference between the pronoun and

the NP in a sentence:

(5)   a. *He(i) took John's(i) hat

However, the Mohawk counterpart of this sentence is possible:

(5)   b. Wa'- t-ha- ya'k-e'   Sak   rao-[a]-'share'

       Fact-DUP-1sS-break-punct   Sak   MsP-knife

       He(i) broke Sak's(i) knife   [co-reference is ok]   (Baker 1996: 45)

This is explained if the NP 'Sak's knife' is actually outside of the c-command domain of the

subject, adjoined to the IP (Baker 1996: p.47)

(6)

The second kind of evidence comes from the absence of anaphors. Mohawk lacks words such as

"himself" or "each other" (Baker 1996):

(7)   a. # Sak   ro-   nuhwe'-s   ra-uha

          Sak   MsS/MsO-like-Hab   MsO-self

        # Sak likes himself [ok as 'Sak(i) likes him(j)   (Baker 1996: 49)

In order to indicate reflexivity or reciprocity Mohawk must use special verb forms:

(7)   b. Sak   ra-[a]-tate-nuhwe'-s

          Sak   MsS-REFL-like-Hab

          Sak   likes himself

The absence of NP anaphors is explained if all NPs in argument positions are pros and overt NPs are adjuncts because the adjunct NP and pro are co-indexed. Now suppose there was an object NP that is an anaphor. It would appear in an adjoined position, and therefore co-indexed with the object pro. Since it is an anaphor it must be bound by the subject pro, which in turn would entail that the subject pro and the object pro are co-indexed. This violates condition B. Hence the hypothesis that overt NPs are adjoined and co-indexed with pro explains the absence of NP anaphors in Mohawk.

A third argument that NPs in Mohawk appear in adjunct positions comes from the fact that these languages lack non-referential quantified NPs. Mohawk lacks quantified expressions such as 'everyone', 'no one'. Quantified NPs cannot be dislocated and if we assume that all NPs in Mohawk are obligatorily dislocated nonreferential quantifiers are absent. Baker 1996 quotes Rizzi 1986: 395 – 397 who also argues for the impossibility of dislocating quantified NPs in Italian (Baker 1996: 53). Quantified expression cannot be dislocated because pronouns cannot be locally A' bound by a quantifier Rizzi 1986, Baker 1996.

Baker presents a number of other arguments in favor of dislocation in Mohawk that I will omit for the reasons of space. In short, given that all overt NPs are dislocated Baker proposes that the relationship between the pro and the overt NP is similar to that observed in CLLD structures in Italian Cinque 1990: ch.2). The similarities are the following Baker (1996: 98):

(8)   •   The dislocated NP is in an adjoined position

         •   The dislocated NP is co-indexed with a null pronominal argument

         •   The dislocated NP must have inherent referential properties

         •   The dislocated NP forms an A' chain with the null pronoun

         •   The NP-pronoun relationship does not have other properties of movement

For reasons of space I will not go over the arguments that the dislocated NP and pro do have the properties of CLLD. For arguments see Baker (1996: 98 -113).

Building on the work in Jelinek 1984, Baker 1996 argues that argument positions are occupied by null pro that are co-indexed with overt NPs in adjunct positions. All of the overt NPs in Mohawk and other Polysynthetic languages are adjuncts.[2] Baker argues that overt NPs in Mohawk cannot appear in argument positions and *must* be adjoined; only null pro and traces of movement can be arguments. Baker's reasoning is as follows. First he takes the MVC to be the central feature of Mohawk – agreement with both the subject and the object is obligatory. He further argues that in Mohawk agreement morphemes absorb case and that all case-assigning heads must have agreement morphemes. He then adopts a version of the Case Filter (Chomsky 1981) which states that overt NPs in argument positions must have case. From the above it follows that if an overt NP were to appear in Mohawk, it would have to be in an adjunct [dislocated] position because otherwise it would crash the derivation since it would not have case.

### 4.2.3 An account of non-configurationality in Mohawk: caselessness and indiscriminate deletion

While Baker's argument explains the facts, it requires an assumption that agreement in Mohawk absorbs case. This argument is often made for clitics that are argued to absorb case of the heads they attach to (Baker 1996: 87, Borer 1984). However, while the argument may work for clitics, it does not explain why agreement morphemes do not absorb case in non-polysynthetic languages such as I-E languages like Russian or English where obligatory subject agreement does not result in non-configurationality. Below I present an alternative proposal that derives non-configurationality of Mohawk from the MVC and the fact that Mohawk lacks case features by utilizing the fact that probes are deletors. Here is the gist of the argument:

---

[2] This argument is different from the one in Jelinek 1984 who argues that agreements we see in Polysynthetic languages are actually incorporated arguments while overt NPs are adjuncts. See Baker 1996 for arguments why Jelinek's proposal does not account for the facts as well as positing pro in argument positions.

- Take the MVC to be the central feature of Mohawk

- Mohawk lacks case-features on NPs but has phi-features on T

- Probes are deletors: if an NP lacks a case feature, the probe will delete the NP including its phi-features, leaving only a pro behind

- Any overt NPs we will see in such a language will be adjoined

In the derivation below I am using English to represent a Mohawk sentence repeated from above:

(9)   Kikv   kahure wa'-   **ke**-   tshAri

       this   gun   Fact   **1sS**-   find-PUNC

       I found this gun
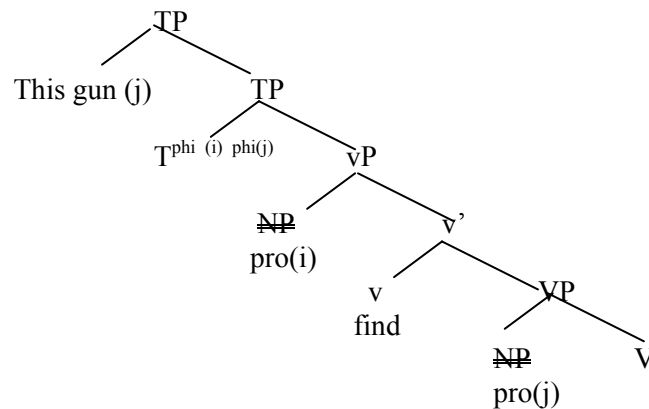
In the derivation above I make a departure from Baker's proposal that arguments in Mohawk do not move at all. In fact, I argue that overt NPs can and do appear in argument positions in Mohawk but when they value/license the phi-features on T, they cannot be spelled out because their phonological content has been deleted by the phi-features on T in return for agreement. (The above derivation is however similar to the one proposed in Baker 2003a for Kinande subject-agreement to be discussed in some detail in the next section.)

Recall that it was argued in Chapter 1 that object agreement is a result of having two sets of phi-features on T.[3] If so, there is a question of how this second set of phi-features gets valued, when the object does not move to spec TP. The possibility of object agreement in the absence of object movement is accounted for by the Principle of Minimal Compliance (Richards 1997) which we have invoked explaining long distance agreement in Dative subject constructions and in expletive constructions (Chapters 2 and 3, the exact definition is given in Chapter 2). The PMC applies here because we have a dependency between T, NP[subj], NP[obj] where the subject values one set of phi-features on T and the object values the second. Given that the second set of phi-features is also on T, the PMC allows us to value it long distance. This is so because the Valuation Requirement which states that a head with misplaced (uninterpretable) features can have the features valued by the corresponding interpretable features iff the XP/ X carrying the interpretable features locally c-commands it, is already satisfied by the subject NP. The configuration for feature-valuation is already created and need not be created again. Thus, while movement is required in order to value the first set of phi-features on T, it is not necessary to perform object movement to value the second set of phi-features. Crucially, it is the subject that has to move because it is closer to T than the object. (Recall, the object and the subject are not treated as equidistant form T). Having moved the subject into spec TP and deleted its PF-content there is no need to move the object. The second set of phi-features on T gets valued by the phi-features of the object long distance.[4]

---

[3] The proposal raises the following question: if both subject and object agreement result from two sets of phi-features on T getting valued, how does the agreement disambiguate the subject and the object? Are the two ever ambiguous?   One approach is to claim that the order in which the phi-features on T are valued – first the subject then the object – acts as a disambiguating factor. It is also possible that in Mohawk where the subject and object agreement morphemes are spelled-out as one portmanteau morpheme (cf Chapter 1), there is ambiguity as to which NP is interpreted as the agent and which NP is the theme. The ambiguity may be resolved via word order or via focus on one of the arguments. Another possibility is resolving ambiguity animacy hierarchy; in some instances, the ambiguity may not be resolved at all (M. Baker, pc).

[4] The claim that object agreement in Mohawk takes place long distance which is allowed by the PMC raises the following question: why doesn't the PMC prevent the object's content from being deleted in return for agreement? Once the need for deletion in return for agreement is satisfied, why perform another PF deletion a second time? Answer: the PMC is a principle/ condition that is intimately related to economy of

To sum up, what we have is the following. Mohawk NPs lack case features. Agreement is obligatory due to the MVC. Probes are indiscriminate deletors such that they delete the lexico-semantic-content of the NP (including the phi-features) and leave only pro's behind where pros are elements devoid of any featural content. Adjuncts can then double the agreements, and can be overt because they are not agreed with and their featural content remains intact. Importantly, since adjoined NPs are not theta-marked by the verb and are not a part of the thematic complex (vP) their hierarchical relation to the verb and to each other is not recorded (per se) in the overt morphology or in the word order.

Note that inherently caseless NPs look like nominative NPs – this is not surprising. Nominative case is a result of case-feature deletion which leaves the NP without any morphological marking much like what we see with inherently caseless NPs. The distinction between nominative NPs and caseless NPs is detected when an NP is agreed-with – a caseless NP is predicted to be deleted in return for agreement, while an NP with a case feature will retain its PF content. As a result, overt NPs we see in a language like this would not necessarily be adjoined; they could be arguments with their case features deleted. In the next section I will discuss a language – Southeast Puebla Nahuatl (MacSwan 1998) -- that presents a minimal contrast to Mohawk in this respect: while subject and object agreement is obligatory in this language and overt NPs bear no morphological case, there is no evidence for obligatory NP dislocation. Unlike Mohawk, S.P. Nahuatl does not have the same kind of freedom of word order and it has non-referential quantifiers.

---

derivation, in particular as it relates to movement. The PMC applies in order to enable the derivation to perform fewer operations, thus decreasing derivational complexity and/or cost. Movement is a costly operation, so it is more economical to not perform another movement then to perform it. However, deletion is cost-free: spelling out more PF-material is more expensive then spelling-out less (though see Nunes 2004 for a different view). Hence, applying the PMC would be counter-productive in this case. In other words, since deletion is cost-free and the result of deletion is favored by the considerations of economy, the PMC will not apply. This line of reasoning presupposes that the PMC does not apply automatically – it applies if and only if its application is favored by considerations of economy. (Richards 1997 does not explicitly state whether the PMC applies automatically or not) . The claim that deletion is costless is controversial, however. I would maintain that spelling out less is better than spelling out more, so even if we say that deletion costs something it costs less than spelling out the material that could have been deleted. But see Nunes 2004 for discussion. Thank you to Ken Safir to pointing this out.

4.2.4 Nahuatl – case on both NPs , subject and object agreement – a foil to Mohawk

In a language that has obligatory subject and object agreement and case features, we would not see overt case on arguments because it would be deleted by the probe. All argument NPs would look as if they had nominative case, much like what we see in Mohawk, but the NPs would not be adjuncts. Evidence from MacSwan 1998 that comes from a modern variety of Nahuatl called the Southeast Puebla Nahuatl suggests that it is a Polysynthetic language with case features on NPs. (Baker 1996 also notes that classical Nahuatl had a propensity for VSO word orders). As reported in MacSwan 1998 , Southeast Puebla Nahuatl is an SVO language and while scrambling of the object is allowed, non-SVO orders usually involve contrastive focus and/or topicalization. Moreover, in some cases non-SVO orders are not accepted by speakers. The following data from MacSwan 1998 illustrates this fact:

(10)　a.　Ne　　　ni-k- tlasoitla　in　　　Maria

　　　　　　I　　　1S-3O-love　　IN　　　Maria

　　　　　　I love Maria

　　　　b.　Ni-k- tlasoitla ne　　　in Maria

　　　　　　1S-3O-love　　I　　　IN Maria

　　　　　　I love Maria

　　　　c.　* In　　Maria　ni-k- tlasoitla ne

　　　　　　　IN Maria　　　1S-3O-love I

　　　　　　　Intended: I love Maria

Even more significant is the fact that S. P.Nahuatl unlike Mohawk has non-referential quantifiers. While the quantifier 'kada' is probably a borrowing from Spanish 'cada', the fact that it is possible in the language is significant. After all, Mohawk has had a significant contact with the super-stratal languages but it did not 'inherit' their non-referential quantifiers, whereas Nahuatl did. Consider the following examples from S.P. Nahuatl:

(11)   Kada tlakatl o-ki-pipitzo   in   i-siwa

        Each   man   Past-3S-3S-kiss IN   3Pos-wife

        Each man kissed his wife

Furthermore, S.P. Nahuatl also exhibits weak cross-over effects, as would be expected :

(12) a. * N-i-kni   ki- tlasojtla   kada ichpochtle

          IN-3Pos-brother   3S3O-love   each girl

          Intended: Her brother(i) loves each girl(i)

        b.Kada ichpochtle   ki- tlasojtla   n-i-kni

          Each girl   3S3O-love   IN-3Pos-brother

          Each girl(i) loves her brother(i)

Much like in English, non-referential quantifiers exhibit weak cross-over effects in S.P Nahuatl.[5] If the NPs are in argument positions, then the presence of non-referential quantifiers is expected. It is also expected that they would show weak-crossover effects. Recall that the original motivation for Baker's claim that non-referential quantifiers are absent in Polysynthetic

---

[5] MacSwan 1998 does not provide an example of weak-cross-over construction with a proper name to contrast it with the quantifier with respect to weak-cross-over effects. Whether such a contrast exists remains to be verified. He also does not mention whether S.P. Nahuatl have anaphors. This fact remains to be verified.

languages is a consequence of the fact that overt NPs in these languages are in dislocated position and cannot bind the quantified-over variables (Baker 1996). However, if the NPs are in argument positions as they are in Nahuatl, then we can expect non-referential quantifiers such as "each" or "every" to be possible. If a language has case features and obligatory subject and object agreement then the agreement will delete case and leave the NPs intact. As a result, the overt NPs will appear in argument positions much like they would in a language like English. They would exhibit weak-cross-over effects, have NP anaphors and non-referential quantifiers.

However, unlike English and other I-E languages that have case, all overt NPs in Nahuatl would look like they have nominative case. This is so because object agreement would delete the case feature on the object much like subject agreement deletes case on the subject, resulting in the absence of overt case morphology on the NP. There would be no direct evidence of case in these languages. However, the evidence from the 'configurational' behavior of this language could provide evidence for the presence of case. The tree below represents a TP with a subject and an object both of which have uninterpretable case features. Since subject and object agreement is obligatory, the T has two sets of phi-features. When they get valued by the interpretable features of the NP they delete the case features of the NPs leaving their lexico-semantic content intact:

(13)   I love Maria [Nahuatl]
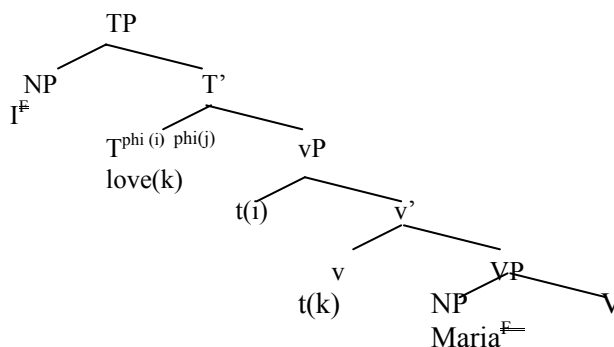
Thus, Nahuatl is a language that has polysynthesis yet is configurational, in contrast to Mohawk. MacSwan 1998 argues that the word-oder facts in Nahuatl argue against the existence of the Polysynthesis Parameter (Baker 1996). However, I would argue that the conclusion we should draw from Nahuatl is not that the Polysynthesis parameter is wrong or does not exist, but rather that the factor responsible for non-configurationality and the consequent absence/presence of nonreferential quantifiers may be absent in some polysynthetic languages. Namely, those languages that have case and are polysynthetic will have a higher degree of configurationality than those that do not. It is important to mention that scrambling may still be possible in languages such as Nahuatl, much like it is possible in non-polysynthetic languages such as Russian, Japanese or even English to some extent. It is not obligatory, however, as dislocation is in Mohawk. Overt NPs may appear and most often do appear in argument positions in Nahuatl unlike Mohawk and other case-less polysynthetic languages.

4.3   Bantu (Chichewa, Kinande). No case on NPs, obligatory subject agreement

4.3.0 Overview

In this section, I discuss Bantu languages with a particular focus on Kinande discussed in Baker 2003a. However, Chichewa discussed in Bresnan and Mchombo 1987 will also provide supporting arguments for the proposal that Bantu languages are caseless and involve obligatory NP dislocation in presence of agreement. Kirundi discussed in Ndiyaradije 1996 will come into play as well in the discussion of the subject-object reversal constriction. The relevant properties of Bantu languages are as follows: obligatory agreement with the subject, optional /restricted agreement with the object, and no overt case-marking. Following Bresnan and Mchombo 1987 I will treat object agreement as an instance of object-pronoun incorporation. Also, I would like to note from the outset that when we say that Bantu languages have obligatory subject agreement, the subject agreement is taken to be in a more loose sense than what we saw in Mohawk; it is viewed as agreement with any XP that is closest to T. Thus, as will be discussed shortly, in addition to having agreement with thematic subjects, Bantu has agreement with a PP (in locative

inversion construction) where the PP is not an argument of the verb. Unlike Mohawk, the MVC

does not hold in Bantu.

4.3.1 Caselessness and the Agreement Parameter (Baker 2003a) – evidence from Kinande

In this section I discuss an account of Kinande agreement presented in Baker 2003a who

argues that a range of languages agree with NPs only if the NP is in a dislocated position. Baker

calls it the 'Agreement Parameter'. The parameter Baker proposes works for both Polysynthetic

and non-Polysynthetic languages. Here I would like to review some of Baker's arguments for

why in Bantu languages agreement is only possible with the dislocated NPs and then take it a step

further making the following claim: the range of languages which obey the Agreement Parameter

are precisely the ones that lack case features on NPs – where lacking case features is a property

which is indeed orthogonal to the Polysynthesis parameter, as we saw from the Nahuatl evidence

in the previous section.

Let us now consider some of Baker (2003a) evidence for why in Bantu agreed-with NPs

appear in dislocated positions. In my discussion I will focus primarily on subject agreement.[6]

Supporting arguments for treating the subject as dislocated in presence of agreement come from

non-referential quantified NPs and wh- phrases. In short, when the overt subject is agreed-with,

the overt NP cannot be a non-referentially quantified phrase or an in-situ wh-phrase. This is so

because dislocated NPs cannot be quantified (cf the discussion on Mohawk). The first kind of

evidence Baker offers comes from the presence vs. absence of augment vowels on object nouns.

Kinande has augment vowels that match the class prefix of the NP. The augment vowel can be

omitted, but if it is, the resulting noun gets a non-specific narrow-scope indefinite interpretation.

Crucially, dislocated NPs must always be definite or specific, but can never be non-specific

---

[6] From Baker's discussion it appears that he takes object agreement in Kinande to be an instance of actual grammatical agreement as opposed to pronoun incorporation. For the purposes of the current discussion, it is not a crucial distinction especially in light of the fact that object agreement in Kinande also involves dislocation as will be show shortly.

(Rizzi 1986, Cinque 1990, Baker 2003a). Consequently, if the subject is dislocated, it has a specific reading and therefore must appear with the augment vowel. Dropping the augment vowel is not possible when the NP is agreed with:

(14) a. * Mu-kali   mo-a-teta-gul-a   eritunda

          CL1-woman AFF-1.-S/T-Neg/Past-buy-FV   fruit

          No woman brought a fruit

      b. Si- ha- li   n'-omukali   n'-omuyima   oyo   u-a-gula eritunda

          *n*eg-there‑be   by-woman   by-one   that   1Swh-T-buy-FV fruit

          There is not a single woman who bought a fruit

Agreed-with NPs must have an augment vowel, while thematic subjects that appear postverbally as in the subject-object reversal construction and the locative inversion construction (are not agreed-with) and can appear without the augment vowel.

Subject-object reversal construction:

(15)   Olukwi   si-   lu-li-seny-a   ba-kali

          Wood.11   Neg-   11S-Pres-chop-Fv   Cl2-women

          Women[focused] do not chop wood

Locative Inversion:

(16)   Omo-mulongo   mw-   a-   hik-   a   mu-kali

          Loc.18-village   18S.-T-   arrive-Fv   Cl1-woman

          At the village arrived a woman

Similar evidence comes from the fact that preverbal agreed-with thematic subjects must have obligatory wide scope in Kinande as illustrated by the following example (Baker 2003a: 120):

(17)   Omukali   a-gul-a   obuli   ritunda

        Woman 1   1.S/T-buy-FV   every   fruit

        A single woman bought every fruit

The above sentence must be interpreted as involving a specific woman who bought every fruit.

        Finally, Baker 2003a shows that wh-in situ is impossible with agreed-with subjects. Clefting of the interrogative subject is obligatory.

(18)   a. * (Iyo)ndi   a-gul-a   eritunda

        Who   1S/T-buy-Fv   fruit

        Who bought a fruit?

    b.Iyondi yo   u-a-gul-a   eritunda

        Who   Foc.1   1Swh-T-buy-Fv   fruit

        Who is it that bought fruit?

It is possible with VP-internal subjects that are not agreed with as in the locative inversion construction:

(19)   Omo-mulongo   mw-a-hik-a   ndi?

        Loc-18.village   18S-T-arrive-Fv   who

        Who arrived at the village?

The above examples indicate that in Kinande much like in Mohawk the agreed-with NP is obligatorily dislocated. Importantly, when the thematic subject is not agreed-with, as in the locative inversion construction, it must be VP-internal.   This point is made particularly strongly in Bresnan and Kanerva 1989 (see also Ura 2000) for locative inversion in Chichewa. This is significant for the following reason: since agreement in locative inversion is not with a thematic argument and consequently cannot be a PF record of theta-relations, a record should be kept via some other means. Since there is no case on the NP, word order is the alternative way to keep the PF record. (The subject-object reversal construction presents an interesting problem here, which I will address in section 3.6).

4.3.2 The relationship between caselessness and the Agreement Parameter

To explain obligatory NP dislocation in Bantu in the presence of agreement Baker argues that in Bantu languages the agreement features on T are parasitic on the EPP feature while in I-E languages the agreement features on T are parasitic on the case feature. Baker further argues that if phi-features are packaged with one feature, it checks the head's other feature (p.124). In other words, if phi-features are packaged with the EPP feature, then checking agreement with the EPP implies checking the case feature of T. Hence, if an overt NP is attracted into spec TP, it will crash the derivation because there is no matching case feature for it. Only null pro which does not need case can be attracted to spec TP. Overt NPs which occur in dislocated positions, in contrast, do not need case (Baker 2003a:125, Baker 1996).

While I adopt Baker's arguments in favor of treating the overt NP as dislocated when agreement is present, I differ from him with respect to what causes the dislocation. Primarily, the reasons for my departure are theory-internal: since I adopt Relativized Uninterpretability, I cannot assume the EPP. Instead, I argue that the 'Agreement parameter' is related to case-lessness: languages that obey the Agreement Parameter are languages without case and may or may not

also be Polysynthetic. In contrast, languages such as English, Russian, German that have case do not obey the Agreement Parameter – dislocation and NP deletion are not obligatory in the presence of agreement. This is seen from the fact that NPs and pronouns do not change their morphological shape depending on whether they appear in the subject or object position, or when embedded under a preposition. Importantly, when an NP appears in the object position (spec VP) and is not agreed-with, it still does not show overt accusative case. Since Bantu languages are the same with respect to lacking case morphology I use the following Swahili data to illustrate this point:

SWAHILI   (data from Vitale 1989: 32, 44)

(20)   a. **Halima** a-na-pika   **chakula**

         Halima she-pres-cook   food

         Halima cooked food

       b. **Chakula**   ki-li-pik-ik-a

          food   it-past-cook-DIT

          the food (was) cooked

       c. Juma   a-li-mw-andik-i-a   **Halima** barua

          Juma he-pst-to-her-write   Halima letter

          Juma wrote a letter to Halima

       d. **Jiwe**   li-li-piga   mzee

          Rock   it-past-hit   old man

          The rock hit the old man   (Vitale 1989: 39)

e. Juma a-li-m-piga   mzee   kwa   **jiwe**

   Juma he-past-him-hit   old man with   rock

   Juma hit the old man with a rock   (Vitale 1989: 38)

In the above examples, the morphological shape of the NPs with respect to case morphology does not change regardless of whether they appear in as subjects, direct objects, indirect objects, or objects of a preposition. Kinande and Chichewa also behave this way.
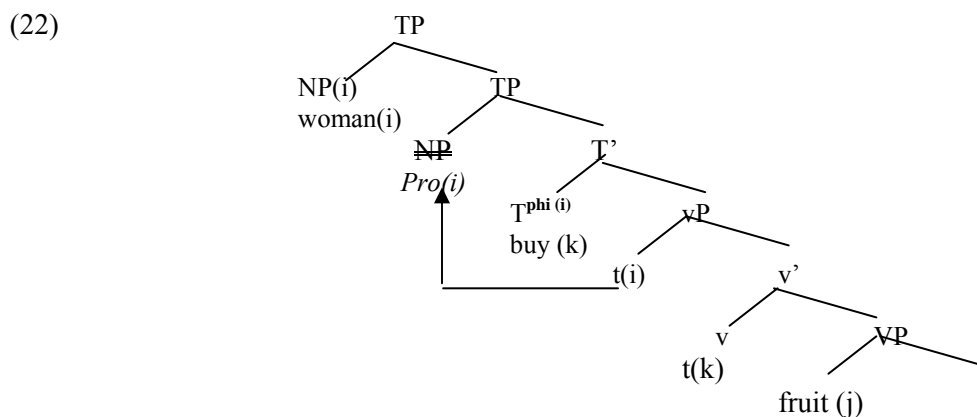
Returning to the NP dislocation facts, my proposal attributes the obligatory NP dislocation to two factors: that Bantu languages and Mohawk are caseless and that probes are indiscriminate deletors. The tree below illustrates this:

KINANDE   (Baker 2003a)

(21)   Omukali   a-gul-a   ritunda

        Woman 1   1.S/T-buy-FV   fruit

        A single woman bought fruit

(22)

The proposal thus explains the partial non-configurationality of Bantu: it lacks case, which leads the probe to delete the phi-featural content of the NP in return for subject agreement. In Bantu, like in Mohawk, the A-position (spec TP) is filled with small pro which is co-indexed

with the overt NP in an adjunct position.   Crucially, the order between the object and the verb in

sentences without object agreement such as above must be VO since this is the initial ordering

within the previously linearized vP given that Bantu languages are head-initial.

Thematic relations in Bantu are preserved via a combination of linear mapping and

agreement.

Briefly turning to object agreement, which I treat as object incorporation following

Bresnan and Mchombo 1987, Kinande data taken from Baker 2003a also indicates that the

presence of object markers cannot be combined with a VP-internal object:

(23)   N-a-   gul-a   eritunda

         1sg.S.-T-buy-Fv   fruit

         I bought fruit

(24)   Eritunda   n-a-ri-gul-a

         fruit-5   1sgS-T-OM5-buy-FV

         The fruit, I bought it.

The object can be dropped altogether when object agreement is present, but it is obligatory when

object agreement is absent. In addition, when there is no object agreement, the object must follow

the verb.

(25)   * Eritunda   n-a- gul- a

           fruit-5   1sgS-buy-FV

           The fruit, I bought.

This is similar to the Chichewa facts discussed in Bresnan and Mchombo 1987. When object

agreement is present, the object can appear at the beginning or at the end of the clause as in (26a).

Without agreement, the object must be VP-internal as in (23b) (Bresnan and Mchombo 1987)

(26) a. zi-   na-   wa-   lum-   a   alenje   njuchi /njuchi   alenje

        SM   past   OM   bite-   INDIC   hunters bees   bees   hunters

        Bees bit the hunters

      b. * Njuchi   alenje   zi-   na-   lum-   a

        Bees   hunters SM   past   bite-   INDIC

        Bees bit the hunters

Regardless of whether we take object agreement in Kinande as an instance of object pronoun

incorporation or an instance of actual agreement, the crucial fact is that when it is absent, the

word order in the VP is strictly VO. In other words, when neither case nor agreement[7] records a

hierarchical relationship between the object NP and the V, it must be preserved via rigid word

order. Non-incorporated objects must be vP-internal.

        In the next section I turn to the discussion of locative inversion and subject-object

inversion constructions that exhibit agreement with the inverted subject, and show that the fact

that they are possible in Bantu but not in I-E languages indicates that Bantu languages are case-

less. In the subsequent section I will discuss a problem these constructions pose for the cyclic

linearization account that I adopt from Fox and Pesetsky 2004.

4.3.3 Locative Inversion, Subject-Object reversal and caselessness

---

[7] Thematic relations can also be recorded via object incorporation (see Baker 1988 for more discussion).
This is plausible since the verb and the incorporated element actually form a single word. In a way, object
incorporation serves the same purpose as linearization.

In addition to explaining NP dislocation in the presence of agreement, the claim that NPs in Bantu are caseless can help account for the locative inversion construction discussed in Bresnan and Kanerva 1989, also Ura 2000, references therein) as well as for the subject-object reversal construction (Ura, 2000, references therein). These constructions are problematic from the standpoint of standard case theory which assumes that case features are universal, but are easily accounted under a current approach. In particular, we can explain why only a caseless language should allow such a construction. In this section I discuss locative inversion first and then the subject-object reversal construction (also referred to as Inverse Voice (Ura 2000), and OVS in Ndiyaradije 1996).

Locative inversion is possible in a number of Bantu languages including Chichewa (Bresnan and Kanerva 1989), Kinande (Baker 2003a), Kinyarwanda (Polinsky 1993, Ura 2000).

CHICHEWA   (Bresnan and Kanerva 1989:2, Ura 2000: 156)

(27) a. Ku-   mu-dzi   ku-li   chi-tsime

        17- 3 –village 17-be   7-well

        In the village is a well

      b. Chi-tsime   chi-li   uu- mu-dzi

        7-well   7-be   17-3-village

        A well is in the village

KINANDE   (Baker 2003a) cf. above

(28)   Omu-mulongo   mw-a-hik-a   omukali

        Loc.18-village   18S.-T-arrive-FV   woman

        At the village arrived a woman.

As we see in the example above, agreement is with the preposed PP not with the NP theme. While locative inversion involves a number of interesting issues, such as the fact that it is possible only with unaccusative verbs (Bresnan and Kanerva 1989), I would like to focus on the case and agreement properties of these constructions. Given that the locative phrase (LocP) induces agreement, it is plausible to treat it as appearing in spec TP. The LocP is preposed and is able to check the phi-features on T. A locative particle belongs to a gender class in Bantu: note that the locative phrases above carry two agreement markers (cf the Chichewa data) – one for the noun class of the NP and one indicating the class of the locative particle. The same goes for Kinande:

(29)   a. oko-mu-longo   b. omo-mu-longo

          loc.17-cl.3-village   loc.18-c.3-village

          At the village   In the village

                                                                        (examples provided by

M.Baker, pc)

While the locative particle in (29b) has gender class '18', 'village' belongs to class 3. That locative particles /prepositions can induce agreement is a special property of Bantu languages that is not shared by I-E languages.[8] In I-E languages the analogue of locative inversion never induces agreement between the preposed PP and the verb, as seen from the following English example:

---

[8] However, modifiers agree with the noun phrase inside the locative particle in Kinande:
(i) omo-ki-buga ky-age
    in.18-cl.7-playground cl.7-my 'in my playground'
(ii) omo-bi-buga bi-satu
    in.18-cl.8-playground cl.8-three 'in three playgrounds'   (M.Baker, pc)
I will not present an account for why locative particles do not agree with the modifiers in Kinande but do agree with verbs.

(30)   In the yard were/ * was 5 children

While for locative inversion with PP agreement to be possible in a language the language must also be able to agree in phi-features with a LocP/ PP, this property alone will not suffice – a language must lack case. Otherwise, the derivation involving locative inversion would always lead to a crash. This is so because once the phi-feature on T are valued by those of the locative phrase, they can no longer delete the case feature on the lower NP.[9] [10]   Since locative phrases in Bantu are like NPs in that they induce agreement but lack case features, they must also be deleted as a result. Hence the overt locative phrase we see is actually an adjunct doubling the deleted LocP. The evidence supporting dislocation of locative phrases comes from the fact that agreed with locative PPs can be pro-dropped, and that special indefinite/polarity forms are ruled out when there is agreement (Mark Baker, pc).

Importantly, since neither NP has a case feature, the movement of the LocP into spec TP does not leave the theme with an undeleted case feature – there was no case feature to begin with. Second, as argued in Bresnan and Kanerva 1989, the theme argument receives obligatory presentational focus when agreement is with the locative phrase (see Bresnan and Kanerva 1989

---

[9] The PMC cannot help here because the features on T have been matched to those of a locative phrase. They cannot be re-valued. This is not the same as what we see with the dative subject constructions where there is agreement and case-deletion between the theme NP and T. This is so because the T does not agree with the PP (dative subject) and consequently has available phi-features to delete the case on the theme NP.   I will not address the question why agreement with a PP is not possible in I-E languages but is allowed with locative phrases in Bantu.

[10] To address the case problem, Ura 2000 argues that the lower NP has a weak case feature that gets checked at LF. However, the idea that case can be checked at LF in general is problematic. Despite the fact that earlier Minimalist accounts made a distinction between weak and strong features (Chomsky 1995) such a distinction is undesirable because we do not have any independent definition of feature strength and weakness. Saying that a weak feature is the one that needs to be checked covertly [at LF] turns into circular reasoning when used as an answer to the question why a particular feature can be checked at LF and not prior. Also, preserving case features up until LF should cause a derivation to crash since unchecked case features are by hypothesis free variables that are uninterpretable at LF. Therefore, they should be checked prior to LF, in the narrow syntax.

for extensive discussion on the topic). This can be taken as evidence that the theme moves into a focus position in the vP and consequently cannot be attracted into spec TP for agreement since focus is an A' position. This allows for the movement of the locative phrase into spec TP over the theme without incurring a minimality violation. A similar argument is presented in Ndayaradije 1996 for the OVS construction in Kirundi to which I will turn below. (I am also assuming that the locative phrase is projected lower than the theme argument in the underlying structure).

Subject-object reversal constructions, also referred to as the inverse voice, pose even greater problems than locative for standard case theory that assumes that all NPs have case-features universally. Consider the following facts:

DZAMBA   (Givon 1979: 1989; Ura 2000: 41)

(31)   Active voice:

a. oPoso   a-tom-aki   mukanda

   Poso   he-send-Past   letter

   Poso sent a letter

     Inverse voice:

b. I-mukanda   mu-tom-aki   Poso

   the letter   it-send-post   Poso

   The letter was sent by Poso

KILEGA Inverse Voice: (Kinyalolo 1991:28, Ura 2000: 41)

(32)   Maku   ta-ma-ku-sol-ag-a   mutu   weneene

         6Beer   Neg-6-Prog-drink-Hav-FV   1person   alone

         Beer is not usually drunk by a person alone

KIRUNDI Inverse Voice: (Ndayiragije 1996: 267, Ura 2000: 41)

(33)   Ivyo   bitabo bi-a-somoje   Yohanni

          Those books   3PL-Past-read   John

          Those books were read by John

The above constructions raise the following question: how does the agent NP get its case checked

if the agreement and case-checking takes place between the preposed theme and the T? The free

case feature on the agent should crash the derivation. Ura deals with this by manipulating strong

and weak case features and the EPP feature. However, as already mentioned such an argument

loses much of its force without an independent definition of strength and weakness of features.

         I argue that inverse voice much like locative inversion is possible in Bantu because these

languages are caseless. Since NPs in these languages lack case features, the inability of the theme

NP to appear in a case-licensing position will not be a problem.   Given that all languages that

have inverse voice also allow locative inversion (Ura 2000) it would be desirable to reduce these

two constructions to a single property. The current proposal traces the two to the fact that Bantu

languages are caseless. (It does not explain, however, why languages that have locative inversion

do not necessarily have inverse voice (Ura 2000). I leave this question open here.) Since the

theme NP in a locative construction and the agent NP in the inverse voice construction are

caseless, not attracting them to spec TP will not crash the derivation.

         Finally, I would like to address the minimality problems posed by the inverse voice. How

is it possible to attract the thematic object into the spec TP over the subject? After all, similar

minimality violations are explicitly ruled out in other languages. The answer here will also come

from the fact that the subject in subject-object reversal constructions is obligatorily focused like

the subject in locative inversion. Ndayiradije 1996 (referred to as ND from now on) presents an

account of the inverse voice in Kirundi and shows that this construction actually does not involve

a minimality violation because subject in the inverse voice construction (also referred to as OVS) moves to spec of FocP , an A' position within the TP above the vP. The thematic object is then allowed to move to spec TP to check the phi-features on T.   The evidence for this proposal comes from the fact that in the OVS construction the subject is obligatorily focused, while in the SVO construction neither the subject nor the object receive obligatory focus interpretation. Furthermore, ND shows that OVS is incompatible with a focus marker –ra that obligatorily focuses the verb. He also presents a number of arguments from weak cross-over, negation placement, and agreement that show that the thematic object is in an A-position – spec TP. In short, the syntax of the OVS constructions in Kirundi (which may plausibly be extended to OVS constructions in other Bantu languages) is that the thematic object is in spec TP while the subject is in spec of a TP-internal focus position FocP. I make a departure from ND's proposal in treating the agreed-with thematic object as dislocated. (I will abstract away from the question of whether the subject is moved to a right or left specifier of FocP). Recall that an overt caseless NP agreeing with T is predicted to not be possible: it should be deleted by the probe. Hence departing from ND's syntax, I argue following Baker 2003a that the overt NP that doubles the thematic object is actually in a position adjoined to TP while spec TP is occupied by pro- which remains after the probe has deleted the PF-content of the moved thematic object. The pro and the adjoined NP are related via co-indexation which may plausibly account for the apparent A properties of the overt thematic object. Crucially, because the subject is moved to a TP internal FocP position, which is an A' position, it cannot be further moved to spec TP (even if it will be subsequently deleted in return for agreement) since spec TP is an A –position. Since the subject is now in the A' position, it does not block the movement of the thematic object into spec TP by Relativized Minimality (Rizzi 1990). Consequently, in OVS, the subject moves to spec FocP and remains there, while the thematic object is moved to spec TP where its PF-content gets deleted. The overt NP appears in a dislocated position, doubling the deleted thematic object. Incidentally, the fact that inverse voice is not possible in all Bantu languages could be attributed to the lack of the TP-

internal focus position above the vP into which the subject should be moved. If such a position is not available then OVS would also not be possible because the subject would block the thematic object from moving into spec TP.

Regardless of whether the overt thematic object is in the spec TP as ND argues, or whether it is in an adjoined position, the subject in OSV still remains without case, thereby posing a serious challenge to a standard minimalist case theory. ND also views this as a problem for case theory but proposes that case features on NPs will not crash the derivation at LF even if they remain unchecked. He argues that what is important, is to check the uninterpretable features of functional heads. These are the EPP on T which is checked by the thematic object NP and the Focus feature of Foc which is checked by the subject.[11] My argument is distinct – the subject in OVS is allowed to not move into spec TP or any other case licensing position because it lacks a case feature.

That being said, the subject-object reversal construction and the locative inversion construction pose a serious challenge for the proposal presented here as well: the resulting ordering of arguments in these constructions is not the same as it was in the vP, e.g. SVO becomes OVS (subject-object reversal) and NP v LocP becomes LocP v NP (locative inversion) . This is a problem since I take linearization established in the initial spell-out domain to be fixed throughout the derivation. Below I address the question of how we can reconcile the locative inversion and subject-object reversal constructions with cyclic linearization.
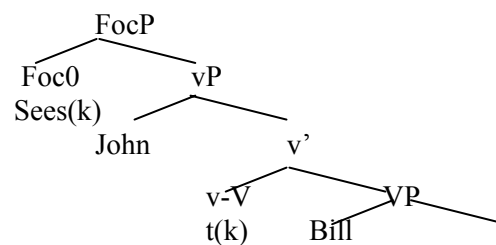
4.3.4 Subject-object reversal, locative inversion: a problem for vP linearization approach

Let us start with the subject-object inversion construction since it poses an obvious problem for linearization. Recall that in caseless languages, the vP gets linearized including the

---

[11] Incidentally, Baker 2003a also shows that S-O reversal also involves focus on the post-verbal subject. While Baker 2003a does not explicitly propose that the subject is in a spec of FocP, the focus on the post-verbal object is consistent with the claim that the subject is moved to FocP position, which is an A' position, where no case is licensed. Baker 2003a allows this because he argues that dislocated NPs do not need case. I argue that this is possible for another reason – the NPs in Bantu simply lack case.

subject, resulting in the SVO order. So, how do we get the surface order to be OVS given that the word order established in the first linearization domain must be preserved until the end? A crucial fact that can help us shed some light on the OVS conundrum is that the subject is obligatorily focused (cf the discussion above from ND's evidence from Kirundi). While I have argued so far that when the theme lacks a case feature the subject must be included in the linearization domain - the vP – it does not mean that the linearization domain cannot be greater than the vP. It cannot be smaller, i.e. it cannot be a VP or v+VP, but it can in principle be extended to include some structure above the vP. I would like to suggest here that the projection of a TP-internal FocP forces the linearization domain to be extended from the vP to Foc0, so as to include the Foc0. Furthermore, let us assume that Foc0 cannot be spelled-out without any content, hence verb movement into Foc0 is required prior to the spell-out of FocP. In fact, ND 1996 proposal for subject-object reversal construction also involves movement of the verb into a TP-internal Focus position followed by the movement into T and a subsequent (rightward) movement of the subject NP to FocP. Thus, what we have for the OVS construction is this: the vP such as [John saw Bill] is projected. If it is spelled-out right away and Foc0 is merged later, the derivation would crash. Hence if Foc0 is selected from the array of elements and is merged into the derivation, the first spell-out domain cannot be shipped to spell-out without also including the Foc0 together with the verb moved into it. When Foc0 is merged, the first spell-out domain is FocP, represented below:

(34)

```
                    FocP
              ┌──────┴──────┐
           Foc0            vP
          Sees(k)      ┌────┴────┐
                     John        v'
                              ┌───┴─────┐
                            v-V          VP
                            t(k)    ┌────┴────┐
                                   Bill
```

When FocP is linearized, the order is VSO -- [Sees John Bill]. The subject subsequently moves into spec FocP position and the verb moves into T, re-establishing the VS order for the final spell-

out domain CP (see Fox and Pesetsky 2004 for more arguments on reversing the established order in a spell-out domain). Since the subject is now in an A' position, it cannot be further moved into spec TP (independently of destroying the linearization established in the initial spell-out domain). The thematic object is attracted into spec TP creating the OVS order. However, the offending argument (the object) is deleted in return for agreement. This is an instance of 'salvation by deletion' discussed in Fox and Pesetsky 2004 for elided arguments. Fox and Pesetsky 2004 argue that if the initial order established in the vP is changed but then the offending elements are deleted (for independent reasons as in VP ellipsis, for example), the ordering contradiction does not arise. Returning to the subject-object reversal construction, what is spelled-out at the CP level is [O[pro VS]]where O is an adjoined element doubling the deleted thematic object. Since, the adjoined element is not the thematic object which was present initially in the first spell-out domain, the fact that it is on the right of the VS does not contradict the linear order established in the first spell-out domain.

Let us now turn to the locative inversion construction. Much like the subject in the subject-object reversal construction (i.e. the OVS), the theme argument receives obligatory presentation focus when agreement is with the locative phrase (see Bresnan and Kanerva 1989 for extensive discussion on the topic). Let us assume that the locative phrase is projected lower than the theme, in a configuration like : [VP [visitor arrived [in the village]]]. Once again, much like in the OVS construction, the TP-internal Foc0 causes the verb to move into Foc0. This establishes the order in FocP as [FocP arrived visitor in the village] – V S LocP. The subject is subsequently attracted into spec FocP and the verb is moved into T. Since spec FocP is an A' position, movement of the LocP into spec TP is possible. Furthermore, since LocP agrees with the verb and carries no uninterpretable features, it gets deleted in return for agreement much like the object in the OVS construction. What we get at the CP level is: [LocP [pro V S]] where the overt LocP is an adjoined phrase doubling the deleted one. Once again, this poses no ordering contradiction since the adjunct appearing on the left of the VS was not initially present in the first

spell-out domain. Thus, the OVS and locative inversion constructions do not pose fatal problems for linearization accounts of the vP. Both are accounted for if we take into consideration the obligatory presence of focus which increases the linearization domain to FocP with the initial ordering established as VSO.

Summing up, in this section I have argued that the Agreement Parameter (Baker 2003a) and the possibility of locative inversion and inverse voice in Bantu are crucially due to the fact that these languages lack case. Importantly, caselessness is not the only factor that makes locative inversion and inverse voice possible – the language would also need to have a TP-internal FocP and locative particles able to induce agreement. However, a language that has case on NPs could not have such constructions in principle because the NP with an undeleted /unvalued case feature would crash the derivation. Further, I have argued that OVS and locative inversion constructions do not pose ordering contradictions because obligatory focus present in both locative inversion constructions and subject-object reversal construction increases the spell-out domain to FocP which causes the verb to move over the subject. The initial spell-out domain that is marked for linearization is not vP with the SVO order but FocP with the VSO order. Since the object is later deleted by agreement, and the initial overt NP in OVS is adjoined, the spell-out domain CP does not undo the word order established in the initial spell-out domain- FocP.

4.4   Indo-European languages: misplacing both case and agreement features

4.4.0 Overview

In this section I turn to languages that have a mixture of case and agreement features. The following issues are addressed here. First, I discuss some differences with respect to feature mis-placement that exist in languages that have case: that is, languages such as Russian and other Slavic languages that have overt case on NPs while languages like Greek, Romance, English and German that mark case on D (determiners , pronouns, and clitics). This issue is relevant because looking at languages such as English that mark case only on pronouns, one may wonder whether

it is valid to say that the language has case features. If so, how does it compare with a language

such as Russian that marks case on all the NPs and pronouns. I will argue that languages that

misplace features can choose where to misplace them: on D or on NP or possibly on both. I will

also argue that the spirit of an older version of the Case Filter Chomsky 1981and the more recent

claim in Baker 1996, 2003, Schutze 1997 that case is only needed for arguments, not adjuncts is

correct. Languages that generally misplace case-features on NPs will not do so on adjoined

phrases. In some languages, the adjoined NP will be spelled out with default morphology which

may vary from language to language: in English it appears to be accusative (Schutelse 1997 and

prior work) while in Russian it appears to be the nominative, though see Pesetsky 1982 for the

argument that it is dative. In this section I will also argue that some I-E languages (Spanish and

Greek) misplace features just on the theme argument and not on the agent. (A better way to say it

: in a vP/ VP these languages do not misplace an Case feature on the highest argument in the

VP/vP. The highest argument is the one that c-commands every other argument in the vP. In

unaccusative and unergative constructions the unique argument is the highest automatically.

Hence, no feature is misplaced on it. This may be in a way reminiscent of Marantz's 1991

dependent case algorithm). As a consequence of misplacing features just on the theme,

Greek/Spanish illustrate partial NP dislocation: the subject is dislocated while the object is not; it

has accusative case instead. The evidence for this claim is drawn from Alexiadou and

Anagnastopolou 1998 who argue extensively that Spanish and Greek involve subject left

dislocation in SVO orders. I will then contrast Greek/Spanish to Russian and English, which

misplace case features on all arguments and consequently show no sign of dislocation in return

for agreement.   Importantly, the reverse situation from that found in Greek/Spanish does not

arise: namely, it is not possible for a language to misplace a case feature on the agent, (the higher

argument within the vP) without also misplacing it on the lower. This is an important restriction

on feature misplacement that constrains case and agreement systems.

4.4.1 Where can case-features be misplaced?

While all I-E languages have case some languages show it more than others. Slavic languages have case on all NPs but languages like Greek and Spanish show it only on D-categories determiners and clitics respectively:

GREEK   (Alexiadou and Anagnastopolou 1998: 504)

(35)   I   Maria **ton** Petro kthes   meta apopoles prospathies **ton**   sinandise sto parko

        The Mary ACC-Peter yesterday after many   efforts   CL-ACC met   in park

        Yesterday, after many efforts Maria met Peter in the park

 SPANISH

(36)   Le   dio   el   libro   a Juan

        Him   gave   the   book   to Juan

        He gave the book to Juan

(In the above Spanish example the morpheme 'a' is also viewed as a case-marker. If so, then we can say that Spanish marks case on clitics and on animate nouns.)

English expresses case only on pronouns:

ENGLISH

(37)   She saw them/ him

I will assume that if a language has any case distinctions on pronouns or determiners/clitics it also has them on nouns that appear in the same position, despite the fact that the morphology may not be overtly expressed on the noun. In other words, in a language like English, the learner and linguist will posit a case-morpheme on the NP in the object position even though it has a null

realization. If the paradigm contains at least one instance of accusative morphology, it is posited

for all members of the paradigm. This idea is expressed in Comrie (1986: 91-92) and Libert

(1989). (Pronouns, clitics and nouns can be grouped into a single paradigm because they all can

bear theta-roles and appear in argument positions).

　　　　While all of the above languages misplace features of non-nominal functional-heads on

nominal categories – NPs and D, some choose to place them only on the D. Since D heads the

DP projection, if present in a language, then misplacing features of v and P on D would record the

hierarchical relation that holds between the argument DP and the c-commanding functional

heads. Morphologically, the spell-out of the valued case feature can appear on the DP or just on

D. Given the recent arguments in Longobardi 1994 and Borer 2005 that D is required for an NP

to be an argument, the fact that case is marked only on D in the above languages is not surprising

(though see Baker 2003c and Chierchia 1995 for the view that D is not necessary for an NP to be

an argument).

Languages where case features are misplaced on D's would have the following configuration for

feature-valuation:

(38)
```
              vP
            /    \
          v       VP
              DP^{F = v = acc}
          /        \
        D^F          NP
```
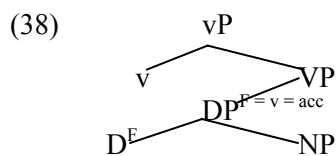
In languages where uninterpretable features are misplaced on D, overt NPs may appear to be

caseless. However, there are still case features placed on D. As a result these languages would

pattern differently with respect to configurationality than languages such as Mohawk and Bantu

that lack case features entirely.

　　　　The second important issue related to feature-misplacement concerns arguments vs.

adjuncts. Baker 1996, 2003 argues, adopting a version of Case Filter from Chomsky 1981, that

only arguments need case; NPs appearing in adjoined positions do not need case. Building on

this idea, I argue that even in those languages where there are case features on NPs there cannot

be any case on NPs in adjoined positions. The morphological form of these NPs is determined

more or less idiosyncratically: some languages choose the accusative form – English (Schutze

1997) while others appear to chose the nominative. This morphological form is often referred in

the literature as 'default case' (Schutze 1997, references therein).

English default case   (Schutze 1997: 38 – 39)

(39) a. What? Me tell a lie?! Never!

   b. Him, I think he is crazy.

In (39a), Schutze argues "me" is not case-marked by anything and appears in its default form. It

has no case-features on it at all. This is to be contrasted with a construction in which the NP

appears with a verb in a sentence:

(40) *Him/ he cries.   (Schutze 1997: 41)

Default case also exists in Russian, though the morphological form of a default NP is nominative,

not accusative:

Russian default case

(41) Dima, Ja dumaju on polnyj idiot / ego ubili   davno

   Dima, I   think he complete idiot / him killed-3rdPl long-ago

   Dima, I think he is a total idiot / he was killed a long time ago

In this work, I will not present a hypothesis as to why languages choose different morphological forms to spell-out default case. However, I do offer a proposal on why languages that have case on argument NPs leave some NPs caseless. Recall, that if languages misplace functional head features they do so as a strategy for recording c-command relations that hold between argument NPs and the verb. Since adjuncts are attached to the vP or TP they are not a part of a thematic complex and their relative ordering with respect to the verb and to each other is not relevant.

Furthermore, misplacing case features on adjuncts is not just unnecessary, it may cause ungrammaticality because there may not be appropriate functional structure above the adjoined NPs to value/license the case features or delete them. The appearance of case features on adjoined phrases would thus crash the derivation. (They can in principle have case features if they appear embedded under a case licensing P).

The fact that languages that generally misplace case features on NPs do not do so on adjuncts is theoretically significant for yet another reason. It indicates that even those languages that have case features on NPs do not have them as a part of lexical items in the lexical array. Otherwise, the inability to delete/value a feature on an adjunct would always lead to a crash. If misplaced features were a part of lexical items in the numeration, then any construction involving an adjoined NP would be ill-formed because the feature on the adjunct would never get legitimized. Given that it is clearly not so, misplaced features should not be either present or absent on NPs that get selected and merged into the tree. Rather, they should get misplaced there in the course of a derivation. (M. Baker(pc) points out that there is another option: case-features can be base-generated on NPs subject to various conditions. However, in the absence of a statement as to what these conditions are, it is not clear that this option is theoretically or empirically more advantageous.)

4.4.2 Partial feature-misplacement: Greek and Spanish

So far we have looked at languages that have no case features on any NPs and have agreement (Mohawk, Bantu) vs. languages that have case features on both NPs and agreement with both arguments (Nahuatl). However, in Chapter 1 I have claimed that it is also possible for a language to misplace case features on only the lower NP argument in the vP. In this section I will argue that the evidence from Greek and Spanish discussed in Alexiadou and Anagnastopolou 1998 (referred to as A&A 1998 from now on) suggests that these languages do not misplace a case feature on the highest NP in the vP. This in fact can be viewed as a kind of economy condition operant within a language: since the language has agreement with the subject, misplacing a case feature on it is redundant since it would get deleted anyway. However, if a language does not misplace a case feature on the argument that is agreed-with, we would expect the argument to be dislocated. Thus, we would expect the agreed-with external argument in Greek and Spanish to be dislocated.

A&A 1998 argue that in Spanish and other pro-drop languages the basic word order is VSO where the verb moves to T and the SVO order always involves left dislocation of the subject. They further argue that all pro-drop languages involve V- raising where the V carries strong t [+D] agreement that has its own lexical entry and consequently can satisfy the EPP feature of AGRP. (They assume that EPP is on Agr not on T. Having spec of Agr relates to EPP while having spec of TP relates to having a strong case feature. This distinction is not relevant for the current discussion and I will not refer to it.) While I will not adopt their theory of why subject left dislocation happens in Greek and Spanish, I agree with their claim that subject left dislocation does take place in these languages. Let us take a closer look at their evidence.

A&A 1998 present a number of arguments that the SVO order in Spanish and Greek involves subject left dislocation. Their evidence comes from distribution, scope, interpretation of indefinites, and binding. In short, they argue that the verb raises to Infl in Greek/Spanish while the subject in SVO is dislocated. The first piece of evidence comes from the possibility of having adverbs intervene between the preverbal subject and the verb:

(42)　O　　Petros　xtes　　meta　aop　　poles　prospathies　　sinandise ti　Maria

　　　The　Peter yesterday after from　many　efforts　　　**met**　　　Mary

　　　After many efforts, Peter met Mary yesterday

A&A assume that adverbs cannot be adjoined to an X' position. They further note that the relative position of the adverbs, the verb and the pre-verbal subject indicates that the subject and the verb are not within the same maximal projection. They are not in spec-head relation, which means that the subject is left-dislocated to some higher A' position. In other verb raising languages such as French, an adverb cannot intervene between the preverbal subject and the verb. A&A 1998 argue that this is because in French the subject is in an A position not an A' position.

　　　Their other important argument comes from scope and interpretation of indefinites. Indefinites in pre-verbal positions have obligatory wide scope as indicated in the examples below:

(43)　a. # Enas　oreos　　andras　pandreftike　kathe　sinadelfo mu　persi

　　　　A　handsome man　married　　　every　colleague mine last-year

　　　　A handsome man married every colleague of mine last year

　　　b. Persi　　pandreftike enas oreos　　andras　　kathe sinadelfo mu

　　　　Last-year　married　　a　handsome man　　every colleague mine

　　　　Last year a handsome man married every colleague of mine

The infelicity in (43a) is due to the fact that the indefinite has obligatory wide-scope. A&A 1998 attribute this to the fact that the subject is an A' position from which it cannot undergo reconstruction. Similarly, indefinites get a strong or partitive interpretation when they appear in preverbal positions.

(44)   Ena pedhi diavase to 'Paramithi horis   Onoma'

        A   child   read   the 'Fairy-tale without title'

        A certain child/ one of the children read a 'Fairy tale without a Title'

This is consistent with the preverbal subject being left-dislocated since dislocated phrases get a

specific interpretation arguably attributable to obligatory wide scope as was shown for Kindande

in Baker 2003a and also argued by Rizzi 1986 for Italian CLLD-ed subjects.

        Finally, there is evidence from binding indicating that overt pronouns cannot be

interpreted as bound variables if they are pre-verbal. Co-reference is possible if they are post-

verbal, however. A&A 1998 attribute this to the fact that preverbal subjects are in A' position and

hence cannot be interpreted as bound variables. The following Catalan example from Sola 1992,

Barbosa 1994 indicates that:

(45) a. * Tots els   estudiantes(i)   es   pensan que   ells(i)   aproveran

          All   the   students   think   that   they   pass

          All the students think they will pass

      b. Tots elsjugadores(i)   estan   convencus   que guanyaran ells(i)
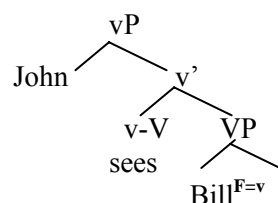
          All the players are convinced that will win they

          All the players are convinced that they will win

Based on the above facts, A& A 1998 conclude that the SVO orders in Greek and Spanish

involve subject left-dislocation. They conclude that overt NPs in subject positions behave as if

they were in an A' position, not an A position. As previously mentioned, they attribute this to the

fact that Greek and Spanish have AGR features that satisfy the EPP feature via verb raising,

which makes it possible for the subject to remain inside the VP. Any SVO orders thus involve

subject left dislocation.[12] While I accept their arguments for subject dislocation, I would like to

propose a different reason for the dislocation. I will argue that subject dislocation in Greek and

Spanish is attributable to the fact that the subject in these languages lacks a case feature and as a

consequence, the entire content of the NP gets deleted in return for agreement. Spanish /Greek

are thus one step removed from Bantu – they have obligatory agreement with the subject, no case

feature on the subject, but they do have a case feature on the object. These languages thus value

the following scenario of feature misplacement on NPs:

(46) case-feature on the theme, without case feature on the agent

$$
\begin{array}{c}
\text{vP} \\
\diagup\diagdown \\
\text{John} \quad \text{v'} \\
\diagup\diagdown \\
\text{v-V} \quad \text{VP} \\
\text{sees} \quad \diagup\diagdown \\
\text{Bill}^{F=v}
\end{array}
$$

When the subject gets attracted into spec TP for agreement, it gets deleted, hence the overt

subject we see is actually an adjunct. Importantly, since the lower NP has a case feature, the vP

gets linearized without the subject. This means that the subject can be adjoined not only on the

---

[12] A&A 's arguments for subject dislocation which I adopt raises the following question: why is it possible to have non-referential quantifiers in Greek/Spanish if all preverbal subjects are dislocated?   Giannakidou 2001 argues following A&A 1998 that preverbal NP s are indeed dislocated. However, they may be topic or Focus-moved. Apparently, while topic movement a la CLLD is not available for quantified expressions such as 'everyone' and 'no one', focus movement is allowed. As we saw, not all dislocated positions are created equal – topicalization to the left blocks the appearance of non-referential quantifiers while right-adjunction does not. Similarly, movement to a focus position can make a quantifier such as 'every' or 'no one' possible. Rizzi 1997:290 argues that while CLLD disallows bare quantificational elements, they are possible in focused positions. (This point may actually be relevant to the discussion in the next section). If SVO orders in Greek/Spanish are actually topicalization constructions such as CLLD as A&A 1998 argue, then the impossibility of scope variation follows. However, it is possible to move a quantified NP to a focus position where it would not be ill-formed. Thus, it is possible to maintain the claim for NP dislocation even in light of the fact that quantifiers exist in Greek/Spanish if we assume that FocP is also a possible dislocation position in these languages not just TopP. Why this is a possible landing site of the dislocated quantifier in Spanish/Greek but not in Mohawk is unclear at this point and is left for future research.

left but also on the right of the verb, yielding a VSO order. This point will become important

shortly.   For now, consider a derivation of an SVO order in Spanish/Greek:

(47)   Spanish/ Greek

The tree diagram shows:
- TP
  - NP(i) / Bill (i)
  - TP
    - NP (crossed out) / *Pro(i)*
    - T'
      - $T^{phi\,(i)}$ / comio (k) / ate
      - vP
        - t(i)
        - v'
          - v / t(k)
          - VP
            - $NP^{C = acc}(j)$ / Una manzana / An apple
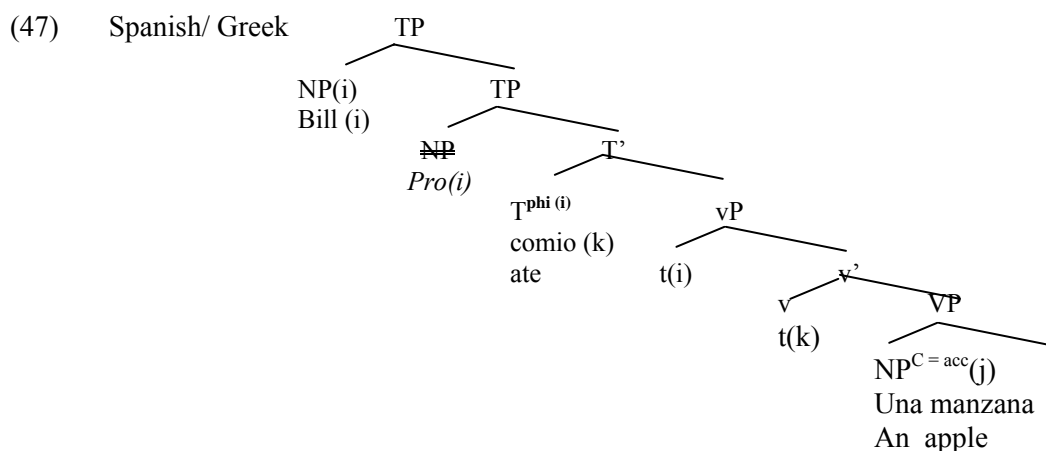
The above derivation illustrates obligatory subject agreement that results in obligatory deletion of

the subject NP that has no case, so that any overt NP we see is an adjunct. This is similar to what

we saw in Bantu, the difference is that the object has a case feature in Greek/Spanish.   Thematic

relations within the vP in Greek/Spanish are preserved via combination of linear order, subject

agreement and accusative case on the theme.[13]

4.4.3 VSO orders as subject right dislocation in Greek and Spanish

Even if we take SVO to be subject left dislocation, given my explanation for dislocation

which is different from that of A&A, in my theory, VSO orders must also be instances of subject

---

[13] The claim that linearization of the v+VP always applies raises an important question of what makes
object scrambling possible if VO order is always created in head-initial languages. One way to explain the
possibility of object scrambling is to adopt a suggestion by Richards and also Pesetsky (pc) that there is
object movement within the vP before spell-out. Since scrambling is usually associated with topic or focus
interpretation of the scrambled NP, it is possible that the object moves over the verb into a vP-internal topic
or focus position. Another alternative is to argue that a Foc or Top head is projected above the vP,
increasing the linearization domain (cf the discussion on Locative Inversion and Subject Object reversal in
section 3 making it possible for the object to move over the verb. Here I adopt the second alternative.

dislocation, contrary to what A&A 1998 argue. If a case feature is not misplaced on the subject, then any overt NP that looks like the subject is actually a dislocated NP adjoined to the right. A&A 1998 argue that VSO orders involve the subject in situ – in the VP.   The main data comes from adverbial and participial placement facts. As shown in the example below, the order of constituents in Greek is auxiliary, aspectual adverb, participle, light manner adverb, and subject. A &A 1998 following Alexiadou 1997 argues that the order between the light manner adverb and the participle is evidence that the participle has moved out of the VP into AspP. Since the subject follows both the participle and the light manner adverb, A&A 1998 conclude that the subject is in the VP. If the subject appears between the aux and the participle, the result is ungrammatical (A&A 1998: 497).

(48)   a. An   ehi   idhi   diavasi   [VP   kala   [VP o   Petros to mathima]]

            If   has   already **read**   well   **the Peter**   the lesson

            If Peter has already read the lesson well

       b.* An   ehi   idhi   o Petros   diavasi [kala   to   mathima]

            If   has   already **the Peter**   read   well   the lesson

            Intended: If Peter has already read the lesson well

The arguments that the subject is in the VP in Greek and Spanish are convincing. However, treating the subject as remaining in situ is not the only way to explain the facts. It is also possible to take the arguments to mean that the subject is right-adjoined to the VP. This is essentially the argument in Platzack 2003, who also views all overt NPs in pro-drop languages with agreement as dislocated and either left or right adjoined(see also Belletti 1998). The scope distinctions discussed above then would be attributable to the fact that elements that are (right) adjoined to the VP have the ability to have both the wide and the narrow scope interpretation while the left

adjoined elements do not. This hypothesis is corroborated by the following contrast observed in

Russian and English:

(49)   Odin   mal'chik, posle dolgix usilij, v konce koncov, vstretilsja s kazhdym

professorom

          One/some boy,   after long efforts in end   of-ends, met-sja with every

professor

          Some boy after long efforts, finally met up with every professor

Only wide scope of the indefinite is possible in the above example where the quantified phrase

'one boy' is left-dislocated.   In contrast, when a quantified NP appears embedded in a VP

adjoined phrase such as by-phrase adjunct in the passive, for example, both scope possibilities are

allowed.

PASSIVE

(50)   Kazhdyi professor byl vstrechen odnim   studentom

          Every   professor was met   one-INSTR student-INSTR

          Every professor was met by a student

The above example allows for two readings: where every professor was met by a different student

and where every professor was met by a single student. Topicalized quantified phrases adjoined

at the CP level thus have rigid scope while those appearing in a by-phrase adjunct in the vP/VP

can scope out. The reason for this distinction is unclear and exploring it would be beyond the

scope of the current discussion. However, it remains as an observation which could be used to

explain why VSO[14] orders in Greek/Spanish differ with respect to scope from SVO clauses.

---

[14] A note on Irish – I have argued (contra A&A 1998) that VSO in Greek/Spanish is a result of the right-
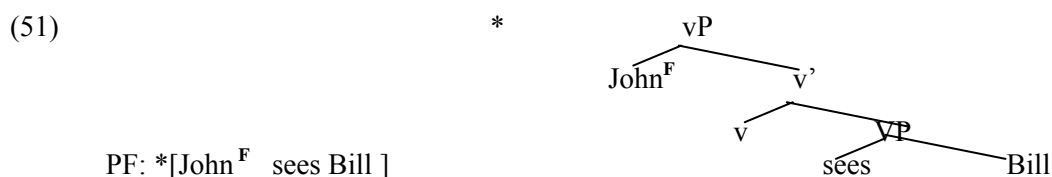adjunction of the NP that doubles a deleted subject. However, not all VSO orders are necessarily derived

4.4.4 Cyclic Linearization and a restriction on feature misplacement

In this section I address the following question: if a language can choose to misplace a case feature on only one of the arguments in the vP, as I have claimed for Greek and Spanish, can there be languages that misplace a case features on the agent without misplacing one on the theme along with languages that misplace features on the theme but not on the agent? In this section I will argue that the answer to this question is 'no'. This is an important restriction on partial feature misplacement. In order to see why not, we have to take a closer look at how cyclic linearization proceeds when a language lacks a case feature on the theme.

Recall that I have argued that when the lowest argument in the vP – the theme- lacks a case feature, the linearized domain must be increased to include spec vP as well (see section 1.3). It is not possible to check whether or not the spec of vP has an argument with a case feature because Force, the head that can detect whether or not case features are present on the agent argument (in Spec vP) is not yet projected. The phase-marking head v or Ev cannot check for misplaced features in a higher phase. Hence, once the phase-marking head v/Ev does not detect a misplaced feature on the theme, spec vP gets included into the linearization domain automatically in order to make sure that at least one PF record of thematic relations is preserved. Now, if the agent NP in spec vP does contain a case feature, the NP's case feature gets sent to spell-out without being valued/deleted. Although the derivation in the narrow syntax can still continue and

---

that way. While given the theory I am adopting, it is not possible to have 'downward' agreement between the subject and the verb, the NP need not be adjoined in order to generate a VSO order. In Greek/Spanish I had to argue for right-adjunction because I took A&A 1998 arguments for subject left-dislocation as indication of the fact that the subject is caseless in Greek. However, VSO orders can easily result from the movement of the subject to spec TP and a subsequent movement of the verb over the subject. This is what is proposed for Irish for example in McCloskey 1996a, 1996b, Bobaljik and Carnie 1993, 1996. Essentially adopting their proposals (with some modifications) I would argue that the Irish VSO involves movement of the subject to spec TP followed by the movement of the verb into Fin0. This would yield a VSO order. There may be other issues related to VSO, but for the purposes of the current discussion the treatment of VSO orders in Irish as involving movement of the verb over the subject which is in spec TP is sufficient. A&A 1998 also adopt this view of Irish. Crucially, under the current proposal neither Spanish/Greek nor Irish involves downward agreement with the subject but for different reasons, since in my proposal there is no EPP that would drive movement and subject agreement is spec-head.

at a later stage the case feature on the agent may be valued or deleted, an unvalued case feature at PF and LF will crash the derivation immediately. PF/ LF levels must be well-formed at every intermediate spell-out, not just at the end. Hence, in a language that does not misplace a case feature on the theme in a vP, a case feature cannot be misplaced on the agent either:

(51)   *   vP
                                              John^F v'
                                                        v   VP
        PF: *[John^F sees Bill]   sees   Bill

However, if there is something inside the vP valuing the case feature on the NP, for example, if the NP is embedded under a P, then there is not going to be a problem. We have already seen an instance of this in our discussion of dative subjects which involve an NP embedded under a P and merged into the spec of EvP. The case feature on the embedded NP is not problematic because it gets valued by P. This point will become important again in Chapter 5 when we discuss ergative languages.

If neither the theme nor the agent has a misplaced feature, there is also not going to be a problem because the agent NP in a vP marked for linearization will not cause the derivation to crash- there is no case feature(Mohawk, Bantu, Haitian Creole). Similarly, it is also possible to have a misplaced feature on the theme but not on the agent (Greek/Spanish) because the case feature on the theme will be valued by the interpretable features of v and the agent NP will not cause any problems at PF/LF since it is lacking a case feature. If a language misplaces case features on both NPs, (e.g. English, Russian) the agent is not included in the linearization domain and its case feature will not cause problems.

The above restriction on case feature misplacement has important consequences for the Case Universal stated in Chapter 1 and repeated below:
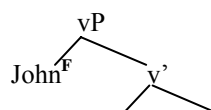
(52)   **The Case Universal:** If a language overtly case-marks the subject, it overtly case-marks
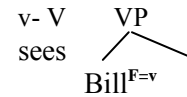
the object

I have argued that unmarked NPs can result from either deletion of a case feature or from the lack

of one. I have argued in Chapter 1 that if there is at least one set of phi-features on T, it will

delete the case feature on the highest NP leading to the unmarked case on the subject. The case

feature on the object cannot be deleted without the one on the subject getting deleted as well

because of a) Minimality; b) the fact that v lacks phi-features. However, previous discussion left

open the possibility of the object *lacking* a case feature while a case feature is misplaced on the

thematic subject. If such a situation were to ever arise we could have a scenario where the

subject's case feature gets valued (when the T lacks phi-features) while the object is

morphologically unmarked due to the absence of a case feature on it – a violation of the Case

Universal. In the above discussion I have argued that this scenario is impossible given how

linearization works. We cannot have a case feature on the thematic subject without one on the

thematic object unless the case feature on the thematic subject gets valued by some other means

prior to spell-out of the vP. Graphically, the typology of possible case feature misplacements is

represented as follows:

(a)   a case feature on the theme, without a case feature on the agent:

(Greek/ Spanish)

Linearized vP includes: [v+V Bill$^{f=v}$]

vP, John, v', v-V, sees, VP, Bill$^{F=v}$
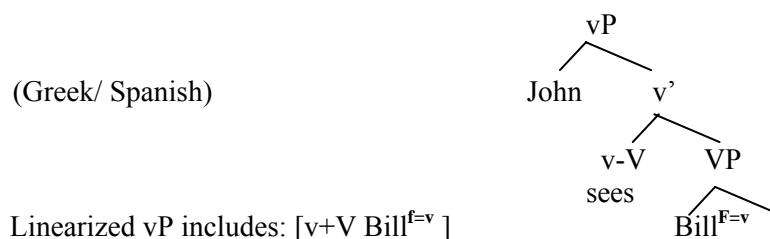
(b)   case features on both:
        (English, Russian)

vP, John^{F}, v'

v- V   VP
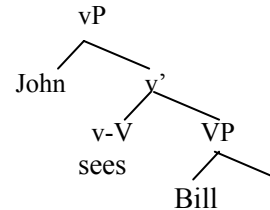sees
Bill**F=v**

Linearized vP includes: [v+V Bill**f=v**] – same as above since the theme has an F-feature

(c)   No case features on either NP: vP

(Mohawk, Bantu, Haitian Creole)   John   v'

v-V   VP
sees
Bill

Linearized vP includes: [John v+V Bill]

(d)   The impossible option: Case feature on the agent not embedded under a P without a case

feature on the theme: *   vP

John**F**   v'

v- V   VP
sees
Bill
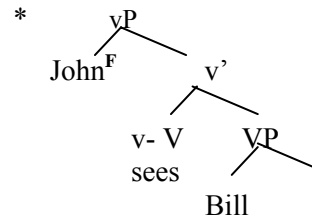
In Chapter 5 we shall see that ergative languages may allow the option in (d) precisely because

they involve a PP in the spec of vP, not an NP.

4.4.5 Russian, English: case features on both NPs and subject agreement

In this section I present a brief comparison between the Spanish and Greek facts

discussed above and those of Russian and English. Unlike Greek and Spanish, Russian and

English (and also German, Icelandic, etc) have case features on both NPs . As a consequence,

SVO orders in Russian do not involve dislocated NPs, as evidenced by the fact that preverbal

subjects can have both scope options:

(53)   Kakoj-to student   vstretil kazhduju   devochku

        Some   student   met   every-ACC   girl-ACC

        Some student met every girl   *Every >> Some; Some >>*

Every

Overt pronouns can have a bound variable reading in Russian:

(54)   Vse(i) studenty   domajut   chto   oni(i) vyigrajut

        All   students   think   that   they   win-fut

        All the students think that they will win

In addition, indefinites need not have a specific interpretation in preverbal position in Russian and

English unlike Greek and Spanish:

(55)   Kakoj-to / odin mal'chik znaet trex devochek

        Some/ one   boy   knows three girls

        Some boy knows three girls   *Three >> Some; Some >>*

Three

The above sentence allows a reading on which there is a different boy for every one of the three

girls such that he knows them. The same extends to English that has subject agreement and case

features on both NPs. Unlike Greek and Spanish and like Russian, there is no evidence for right

or left dislocation of the subject in English:

(56)   Some professor met every student   *Every >> Some; Some >>*

Every

(57)   Some student left/ read a short story

There is no obligatory wide scope interpretation of indefinites in English; reconstruction is possible because the NP is not in a dislocated A' position.

If the case feature is present on both NPs then subject agreement will delete the case on the subject NP, leaving the lexico-semantic content of the NP intact. Consequently, the NP we see overtly in Russian and English is in an argument position, unlike Greek. Thematic relations are preserved via accusative case on the NP much like in Greek/Spanish. English, German, and Icelandic are other languages that are like Russian with respect to misplacing case features on NPs. Although these languages have less case morphology on the nouns than Russian, they have evidence for the presence of case features on NPs (pronouns and determiners) and importantly they do not show any evidence for subject dislocation in presence of agreement.

To sum up, I have argued in this section that features can be misplaced on D or on N depending on a language. In addition, they may not be misplaced on adjuncts. If they are not misplaced on adjuncts, the adjoined phrases will be spelled-out with default morphology which may differ from language to language – nominative in Russian, accusative in English. I have also argued that languages may misplace features only on the theme argument. Greek and Spanish discussed in A&A 1998 exemplify such languages. As a result of obligatory subject agreement, the NP subject gets deleted; an overt NP we see is in a dislocated position as evidenced from scope facts and interpretation of indefinites (A&A 1998). Greek and Spanish are thus minimally different from Bantu: while they lack case on the subject and have obligatory subject agreement, they do have a misplaced feature on the theme resulting in accusative case. In contrast, languages that have case features misplaced on both NPs will not exhibit obligatory NP dislocation. Russian and English stand in contrast to Greek and Spanish in that they do have case features on both NPs. Hence we observe contrasts between Greek/Spanish and Russian /English with respect to scope and interpretation of indefinites.

4.5   **Languages without agreement features (Japanese)**

4.5.0 Overview

    The above discussion concentrated on languages that lack misplaced functional head features – the caseless languages. In this section I would like to look at languages that lack misplaced nominal features on T – that is, agreementless languages. Japanese presents a clear example of such a language. For reasons of space and availability of data I will not be able to address agreementless languages to the extent that caseless languages were addressed. The purpose of this section is to show that Japanese does not have misplaced phi-features on T and as a result the nature of the nominative case in Japanese is significantly different than that in languages that have agreement where the phi-features on T delete case on the subject. (For a discussion on subjects and subject case in Japanese cf Saito 1994, Takezawa 1994, Tateshi 1991). As a result, subject-marking in Japanese is not restricted to the alleged nominative morpheme 'ga' but can be also valued by a Top0 'wa'. Conversely, the nominative marker 'ga' is not restricted to subjects but may also appear on adjuncts and possessive phrases (Takahashi 1994, Vermeulen 2002, references there in).

    Preliminary evidence for the claim that Japanese is an agreementless language comes from the very simple fact that there are no overt agreement markers on verbs in Japanese. Moreover, Baker 2003b argues that Japanese lacks attributive adjectives because adjectives in Japanese lack phi-features and subsequently cannot agree with the nouns they modify. Finally, the absence of agreement in Japanese explains the fact that the language has anaphors in subject position. Following Woolford 1999b, anaphors are possible only if they are either not agreed-with at all or a language has a special form for anaphor-agreement(Woolford 1999b). In languages such as English, Russian, etc, where there is no agreement with the object, anaphors are possible in the object position. However, they are excluded from the subject position because there is subject agreement. While exploring the causes of the anaphor agreement effect is beyond the scope of this discussion, the fact that Japanese and other languages without agreement (e.g. Korean, Chinese) do

have anaphors in subject position indicates that the absence of agreement in these languages is not a mere surface phenomenon.

In the absence of agreement, case features are not deleted – they are valued by c-commanding functional heads. Thus, I will argue that overt nominative case in Japanese is akin to accusative case in that it is a result of feature valuation, not feature deletion. It is important to keep in mind that while I call the 'ga' particle nominative, following the traditional generative terminology, it is a different sense of 'nominative' than used when referring to Indo-European languages.

4.5.1 The 'nominative' subject in Japanese

I begin this section by raising the question of what 'ga' marking in Japanese is and how similar it is to the nominative case in languages with agreement. Consider the following examples:

(58) a. Taroo-ga   sinda / kita

Taro-NOM   die-past / came

Taro died / came in

   b. Taro-ga   hono-o   yonda

Taro-NOM   book-ACC   read-past

Taro read the book

Takezawa 1987 argues that it is the tensed predicate that licenses nominative case in Japanese much like it does in English. In fact, most accounts of Japanese subject case marking (Ura 2000, 1994, 1996 references therein) assume that the mechanism for nominative case licensing in Japanese and in languages where the nominative case is not morphologically marked is pretty

much the same; the difference lies only in the way in which the nominative case is spelled out: zero marking in Indo-European languages vs. overt marking in Japanese (the same can be argued for Korean). However, if we suppose that the difference in nominative marking in Japanese and I-E languages is just a difference in morphology and is of no syntactic significance, the fact that Japanese and other languages without overt agreement have subject anaphors while I-E languages do not would appear co-incidental.

Departing from previous theories I will argue that Japanese lacks agreement, (i.e. phi-features on T) completely – it is a probe-less language. Hence the kind of nominative case we see in Japanese is different in principle from what we see in I-E languages; it is a result of a distinct syntactic process of legitimizing uninterpretable features. The absence of subject agreement is directly responsible for the possibility of subject anaphors in Japanese as I will argue shortly. Throughout the discussion it should be kept in mind that the focus of this section is not to derive the anaphor agreement effect (Woolford 1999b) but rather to show that subject anaphors are allowed because Japanese is an agreementless language where overt nominative is a result of agreementlessness.

4.5.2 Subject anaphors in Japanese

Consider the following data from Woolford 1999b indicating that anaphors are possible in subject position in Japanese. Similar evidence comes from Korean and Thai:

JAPANESE   (Woolford 1999b: 263)

(59)   John-ga   kare-ga zibun-ga tensai da to   omotte iru   to   itta (koto)

John-NOM   he-NOM   self-NOM   genius cop COMP think   prog COMP said (fact)

John said that he thinks that self is a genius

KOREAN   (Yang 1983:4)

(60) Kitil-in   selo-ka   kyengcaengha-nin-kes-il calangh-n-ta

They-TOP each.other-NOM compete-asp-COMP-ACC boast-asp-dec

They(i) boast that each other(i) are competing.

THAI   (Woolford 1999b: 263; Grima 1978:120)

(61) Sommaay(i)   khit   waa   tua?eeng(i) ca   day pay

Somai   think   that   self   FUT get go

Somai thinks that he(self) will get to go

Woolford 1999b argues that anaphors are possible only if they are not agreed with or there is a special agreement form in the language for them. While I will remain neutral with respect to the details of the explanation of the anaphor-agreement effect, I present her arguments below. Wooldford 1999 follows one of the accounts in Rizzi 1990 who argues that there cannot be a non-argument in the chain which is higher in the referential autonomy hierarchy than the argument. (Rizzi 1990: 279; Woolford 1999b). He further argues that an agreeing element is an argument while the agreement is a non-argument. The referential autonomy hierarchy is defined as: R expressions > pronouns > anaphors. If agreement is treated as a pronoun on the referential hierarchy, and consequently outranks the anaphor, it follows that anaphors cannot appear when agreed with. However, if agreement is absent as in Japanese then Rizzi's principle is not violated. Similarly, if a language has a special agreeing form for the anaphor, the anaphor and the agreement are equally referential. In contrast, in languages such as Russian and English an anaphor is impossible in the subject position because these languages have agreement on the verb:

(62)   * John thinks himself is smart

Interestingly, an anaphor is possible as the subject of an infinitive where there is no agreement:

(63)   John considers himself to be smart

The same facts hold for the Russian long distance anaphor 'sebja':

RUSSIAN

(64)   a. * Dima dumaet chto sebja umnyj

Dima thinks   that self   smart

Intended: Dima considers himself to be smart

b. Dima(i) dumaet chto on(i) umnyj

Dima(i) thinks   that   he(i) smart

Dima considers himself to be smart

In fact there does not even exist a nominative form of the anaphor in Russian.   The accusative

anaphor in object position is fine, as it is in English. Anaphors are possible in these languages

when they appear in object position without agreement but with accusative case.[15]

ENGLISH

---

[15] Interestingly, anaphors are not possible in object position in languages that have object agreement unless there is a special agreement form reserved for anaphors. Mohawk is a clear example of the former; Swahili exemplifies the latter. As Woolford 1999b shows, regular agreement morphemes are not possible with anaphors in Swahili; a special anaphoric agreement form must be used:
SWAHILI
(i)   Ahmed a-na-ji-penda   mwenyewe
         Ahmed 3Subj-Pres-REFL-love   himself[emphatic reflexive, but could be an adverb, M.Baker, pc]
         Ahmed loves himself
In the above Swahili example, the anaphor can be used only with the special agreement marker 'ji'; the regular object marker '–m' is not possible.

(65)   John loves himself

RUSSIAN

(66)   Dima ljubit sebja

        Dima loves self

        Dima loves himself

Clearly, more needs to be said about the nature of the anaphor agreement effect as well as on the nature of anaphors and their feature-structure. The purpose of this brief discussion is to show that Japanese is an agreementless language in the syntax. For further discussion on anaphor agreement effect see Woolford 1999b.

4.5.3 'Nominative' case in a language that lacks agreement features

        Given the evidence from the anaphor agreement effect, I view nominative case in Japanese and other agreementless languages with case-features as having a different source than the nominative in languages with agreement. I depart from Takezawa's proposal (and others) in that I take the nominative case in Japanese to be licensed by Finiteness, not Tense. Since the T in Japanese is not a probe, it cannot license nominative by deletion.[16] Rather, the case feature on the subject NP is valued by Fin0 – the fininteness head that is located above the T in the CP domain and locally c-commands the NP in spec TP. (I am representing the structure of the Japanese clause as left-headed, for presentational purposes only. The same would happen in right-headed structures).

(67)   ForceP

_____

[16]   Recall that without a Fin0, T is semantically vacuous and does not have the interpretable features (cf discussion in Chapter 3). If T is not a probe, it will not be able to value the misplaced feature on the NP; the NP would have to be embedded under Fin0 or some other head with interpretable features.

Force   FinP

        Fin   TP
              Taro$^{F = Fin = ga}$
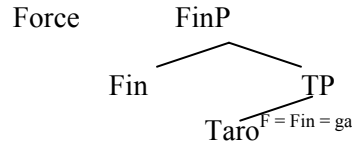
The subject 'Taro' is moved into the spec TP because Force detects an uninterpretable Case feature on the NP. Since the T carries no phi-features it cannot delete the case feature on the NP resulting in the zero nominative marking of the kind we see in I-E languages. The 'ga' marking we see in Japanese is a result of the misplaced feature being valued, much like what we see with accusative marking in Japanese and other languages.

However, it is also possible to embed the NP under a higher head – Top resulting in the 'wa' marking on the NP. Consider the following topic construction from Miyagawa 2003:

(68)   a. Taro-wa   hono-o   katta

        Taro-TOP book-ACC   bought

        Taro bought a book

In the above construction, the NP moves through the spec of TP into the spec of Fin0, which is projected under TopP:

(68)   b.   TopP
          Top   TopP

              Top   FinP
                    Taro$^{F = Fin = ga}$
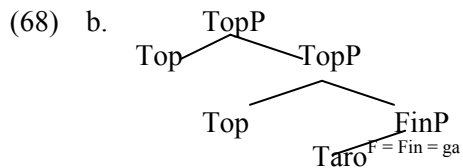
That Top is a part of the CP domain is also argued in Miyagawa 2003 and Whitman 1991.

Whether the subject is embedded under Fin or Top is determined by pragmatic factors – hence

there is an option in the language of marking the subject with '–wa' or with' –ga', where the two

would have different interpretive properties (Miagawa 2003).

4.5.4 Accusative case and linearization as means of theta-role preservation at PF

Next, I look at theta-role preservation at PF in Japanese. Since the language misplaces

case features on the object as well as on the subject, the vP gets linearized without the subject

(but see Ko 2004 for a different view, also reviewed in Fox and Pesetsky 2004).

(69)   Case features on both:

$$\begin{array}{c}
vP \\
John^F \diagdown \\
\quad v' \\
VP \quad v\text{-} V(k) \\
Bill^{F=v} \quad t(k)
\end{array}$$
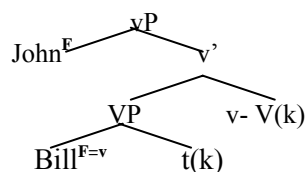
Linearized vP includes: [Bill$^{F=v}$ v+V], since the theme has a misplaced feature.

In addition to the linear ordering between the verb and the object, accusative case on the theme

provides a PF record of theta-relations between the verb and the object. Importantly, the case

feature on the subject, while not deleted, is not necessary to preserve a record of thematic

relations between the verb and the agent NP. Hence it can be valued by Fin or Top – as shown

above resulting in '–ga' or '–wa' marking. Thematic relations are already indicated by the theme

argument and also recorded via linearization of the object and the verb: OV. (There is a

redundancy in the system, which is a common phenomenon in natural languages). Hence, the

case feature on the subject can be valued by any head under which the subject is embedded.

Thus, Japanese lacks agreement as indicated by the absence of any agreement

morphology on verbs and absence of attributive adjectives (Baker 2003b). Absence of agreement

explains the existence of subject anaphors in Japanese (Woolford 1999b) which are precluded

from appearing in agreeing positions. The nominative case in Japanese thus results from a

different process than the nominative in English (and other languages with agreement). It is a

result of feature valuation, not deletion – hence overt morphology appears on the subject.

Furthermore, since thematic relations in the vP are already preserved via linearization in the VP

of the object and the verb and are also indicated by the accusative marking on the theme, the case

feature on the subject can be valued by any (local) head under which the NP gets embedded, such

as Top0, for example. There may be further interesting consequences of the agreementless nature

of Japanese. To explore them would extend beyond the scope of the current discussion, however

and I leave them for further research.

4. 6   Caseless and agreementless languages (Haitian Creole, Chinese)

4.6.1 Haitian Creole

Haitian Creole (HC), discussed in Deprez 1991 and Massam 1989 lacks both case and

agreement marking. Morphological marking in the language is impoverished in general. For

example, in addition to the absence of case and agreement morphology, HC lacks much of the

overt tense marking (Deprez 1991: 194). There is also no passive marker, although there are

middle and causative/inchoative constructions (Massam 1989). There are aspectual markers that

indicate perfectivity and may also serve to indicate tense. In this section I will limit my discussion

to the absence of case and agreement morphology in the language. Let us begin by considering

the following examples taken from Massam 1989, and Deprez 1991:

HAITIAN CREOLE

(70)   a. Li /Jan   ap   sote /estenene

          He/John asp   jump / sneeze

          He / John is jumping / sneezing

       b. Li   rive

          He   arrive

He arrived

c. Ve   a   ap   kase

Glass   Det   Asp   break

The glass broke

(71) a. Timoun   yo   ap   kase   ve   a

Children   Det-Pl asp   break   glass   Det

The children will break the glass

b. Jan   ap   chaje   kamyon   an   ak   mayi   a

John   asp   load   truck   det   with   corn   det

John is loading the truck with corn

Verbs that do not assign an external theta-role allow the expletive to be pro-dropped, though pro-drop is not otherwise allowed in the language Deprez 1994:

(72) a. Rete   twa   ze

Remain   two   hours

Three hours remain

b. Manke yon   ploum

lack   a   pen

A pen is lacking

Since HC is a caseless and agreementless language, the only way to preserve records of thematic relations at PF is via overt word order. Word order in HC is indeed rigid:

(73) a. Li renmen Mari / Mari renmen li

      He love   Mary / Mary love him

      He loves Mary / Mary loves him

      a. *Li Mari renmen / * renmen Mari li

         He Mary love   / * love Mary he

         Intended: He loves Mary / Mary loves him

Since local c-command is crucially used in determining thematic relations at PF, the subject is included in the first spell-out domain which 'freezes' the relative order in the vP as is:

(74)   no case feature on the theme, no case feature on the agent; no phi on T

         Haitian Creole

```
              TP
             /  \
            T    vP
                /  \
              he    v'
                   /  \
                 v-V   VP
                 love  / \
                    Mary
```
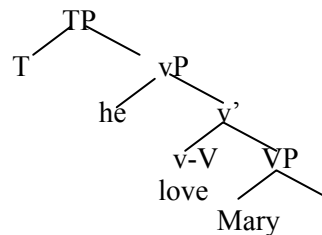
Linearization applies to the vP and includes the subject, leading to SVO word order [He love Mary]

4.6.2 Chinese

Chinese provides another example of a language that lacks case and agreement morphology and has a strict SVO word order. Below are some examples indicating the absence of case and agreement marking on nouns and verbs:

CHINESE: (thank you to Li Xiao for providing the data)

(75)   a. wo kan dianiying

      I   watch movie

      I watch a/the movie

    b. wo xiwang ta xihuan zhe ge liwu

      I   hope   he like   this CL gift

      I hope he will like this gift

    c. wo wang-le   ta taoyan mao

      I   forget-asp he dislike cat

      I forgot he resents cats

Nouns are ummarked for case; verbs are unmarked for agreement. Much like HC, there is also
impoverished tense morphology. Adverbs are used to locate events in time (76a,b), though there
are also perfective markers that may indicate past tense and separate tense morphemes indicating
the future tense (76c). Without an aspect marker, a sentence may be ambiguous (76d).

(76)   a. wo jingchang kan   dianying

      I   often   watch movie

      I often watch movies

    b. wo mingtian qu kan   dianying

      I tomorrow go watch movie

      I will go to see a movie tomorrow

    c. wo wang-le   Bill jintian hui qu New York

      I   forget-asp Bill today will go New York

I forgot that Bill would go to New York today

     d.?? wo wang-le   Bill jintian qu NewYork

        I forget-asp Bill   today   go NewYork

        I forgot that Bill went/would go to NY

The sentence in (76b), is hard to interpret: it is unclear whether Bill would go or he has gone

already (Xiao Li, pc). While word order is rigid SVO in Chinese, some word order variation is

possible, when there is focus on the dislocated constituent:

(77)   Focus (SOV)

        ta LIAN zhe jian shiqing DOU bu hui   zuo

        he Foc   this CL   thing   Foc   not able do

        He can't even do this!

I would attribute this to the increasing of the first linearization domain mandated by the

projection of a TP-internal Focus/Topic heads, similarly to what we saw in the Bantu OVS

construction in section 4.3. Without focus-marking, dislocation is impossible. Also, OVS orders

are impossible in Chinese even with focus marking (Xiao Li, pc). Since Chinese lacks case and

agreement features and cannot preserve thematic records via morphology, the relative word order

established in the first linearization domain between the thematic subject, the object and the verb

preserves a PF record of thematic relations.[17]

---

[17] I will not address the question why pro-drop is possible in a caseless, agreementless language such as
Chinese. I would argue that the source of pro-drop in Chinese is different than that in Mohawk. Also, the
possibility of pro-drop in an agreementless language raises the question what preserves thematic relations
at PF if the NPs are dropped? Here I would say that overt records of thematic relations must be preserved
only on overt theta-bearing elements. The principle does not apply to elements that are invisible at PF.

I would like to note here that given my assumptions about linearization and preservation of thematic records, caseless and agreementless languages must have a rigid word order, but as mentioned in section 1, it need not be SVO. There does seem to be a tendency for languages without case and agreement marking to be SVO as opposed to SOV. However, there are exceptions. Kalabari (Niger-Congo) is a language that has no case and agreement morphology and a fixed SOV word order (M. Hiller, pc). There are also reports that constructions involving negation in a Chinese-Russian Creole have an SOV word order (Thomason and Kaufman 1988, quoted in Peter L. Patrick, University of Essex, Pidgins and Creoles class notes). I have no explanation why languages without case and agreement and SOV word order are rare. One possibility is that because so many of the morphologically impoverished languages are creoles, their word order is inherited from the super-stratal languages that are SVO (e.g. English, French). Another possibility is that SVO is in some sense a more basic word order than SOV, although this claim would be difficult to maintain without an independent definition of 'basic' which I cannot provide here. I will leave this question for further investigation.

4.6.3 Movement in Caseless, Agreementless languages

An important question related to the syntax of caseless and agreementless languages is what drives movement (if anything?) in the absence of uninterpretable features? Recall that I have no independent EPP feature. A-movement is driven by phase-marking heads Force and v in order to create the configurations in which uninterpretable features can be valued or deleted prior to spell-out (cf Chapters 2 and 3). However, if a language does not contain any misplaced features – no phi-features on T and no case features on the NP, as I argue for Haitian Creole and Chinese, then by hypothesis there would be nothing to force movement of the thematic subject

---

Another way of saying this is that null elements satisfy it vacuously. This point has already come up in the discussion of PRO in Chapter 3 where I provided an answer of the same sort.

out of the vP. Yet, the following raising constructions indicate that there is movement from the

VP/ vP to spec of TP in

Haitian Creole (Data from Deprez 1991):

(78)   a. Mari   rete   pove

         Mary   remains poor

         b. Jon   rete   sot

         Jon   remains stupid

That the above verbs are indeed raising predicates is seen from the fact that the verb 'rete' does

not assign a theta-role and can appear without an overt subject:

(79)   a. Rete   youn   neg   nan   kay   la

         Remain three poor   man house   the

         There remain three poor men in the house

         b. Rete   sinkant   goud

         Remain fifty   dollars

         There remain fifty dollars

Given the above data, it is plausible to treat the subject NP in simplex and complex clauses in HC

as having moved to T, not as remaining in the vP.

(80)

```
_____
                                                    v²
              t(i)                           /      \
                                         v  /        \ VP
                                   renmen (k)  \      /
                                   love         \    /
                                            Mari
```
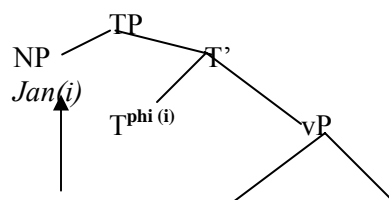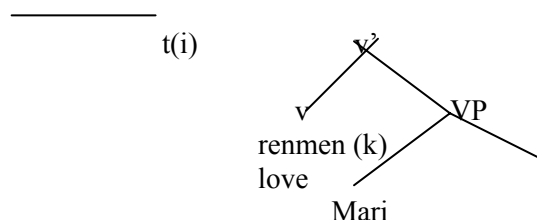
In the above construction, the thematic subject moves out of the vP into spec TP. But what drives this movement? It cannot be the need to value case or agreement features. (M.Baker points out that just because movement takes place in raising constructions, it does not mean that there is movement in every construction. There is additional evidence for movement, however, that comes from the ordering of auxiliaries, aspect particles and verbs in Haitian Creole (V. Deprez, pc.)

To account for the possibility of movement in caseless and ageementless languages I would like to adopt an idea from Bobaljik 1995, 2002 who argues that the v and T must be adjacent at PF in order to facilitate PF merger of the tense morpheme with the verb. In other words, the subject must vacate the vP not only if it has uninterpretabe features or if T has them, but also as a PF requirement: the verb and the tense must be strictly local with no PF material intervening between the the VP/vP and the T. (There may be many reasons for A-movement: legitimizing uninterpretable features is only one of them). Adopting Bobaljik's proposal, I argue that languages without case and agreement features may still have NP movement into spec TP (out of the VP) because an NP within a vP /VP will block PF merger of the verb and the tense. Importantly, as Bobaljik 2002 argues, VP/vP adjoined adverbs do not count as interveners for the purposes of PF-merger. Let us look at some essential aspects of his proposal.

Bobaljik 2002 argues that PF-merge is essentially a lowering operation – the V+T complex is pronounced in the position of the verb, not T (Bobaljik 2002: 213). He further argues that adverbs that seem to intervene on the surface between the verb and the T are not interveners for the purposes of PF-merge, unlike the subject in the spec vP. Let us see why not.

Bobaljik's 2002 view of linearization at PF is essentially the same as that in Fox and Pesetsky 2004 which I have been assuming so far. (It is slightly different in a way that will be clear in a moment.) Each node is mapped onto an ordered pair of elements [X → Y] or [Y → X] where ' → ' is a precedence relation. So if we take a pair such as [T vP] we will get: [T NP v VP]. Importantly, adverbs are segments of the VP/vP(Bobaljik 2002:218). While the T must precede the vP, it is not specified what 'string of terminal nodes instantiates the vP'(218). Elements adjoined to the vP need not be preceded by T. (This is a difference between Fox and Pesetsky 2004 and Bobaljik 2002 because the former authors seem to adopt a stricter notion of precedence that does not exclude adverbs.) According to Bobaljik, if we have an adverb adjoined to vP it can float leftwards and consequently not intervene between the T and the v. Adverbs cannot float to the right because an adverb must precede elements properly dominated by the VP/vP (Bobaljik 2002: 218). For further extensive discussion of adverbs as non-interveners for the purposes of PF-merge I refer the reader to Bobaljik 2002: 215- 219.

In languages with either case or agreement features the NP in the spec vP/ VP which intervenes between the verb and T is forced to move out anyway because the phi-features on T and/or the case feature on the NP needs to be valued. Hence the NP is moved to spec TP and the PF adjacency requirement is independently satisfied. However, in languages where neither the T nor the NP carries misplaced features the movement of the subject NP is driven by the need to vacate the vP and ensure locality between the verb and the T.[18]

---

[18] In Haitian Creole and Chinese there is no overt tense morphology for a number of tenses, which raises the question why would we need the PF merge in this case. There are two ways to deal with this problem. First would be to argue that null tense morphology also needs to be PF-merged with the verb, thereby requiring the subject NP to vacate the vP. In this thesis I do not have much to say about null tense morphemes and the laws governing their appearance on verbs. It is possible that null tense morphology has the same requirements as the overt morphology does with respect to being merged with the hosting verb.

The second way to deal with the problem is to extend Bobaljik's proposal and argue that NP movement out of the vP is required not only in order to facilitate PF merge of the T and the verb, but also in order to facilitate the binding of the verb's eventuality argument by the T. Thus, even in those cases where there is no overt inflection in T that needs to be merged with the verb, as in Chinese and HC present tense, for example, the NP would have to be moved out of the vP anyway. For now I would adopt the first option.

Note that while HC does not have verb movement to T in the syntax (V. Deprez, pc), unlike French (cf Pollock 1989), one can imagine a language without case and agreement that would have it. If so, the subject must certainly move out of the vP/VP in order to re-establish the initial SVO order that was created in the spell-out of the vP. If the v+V must raise, then the subject must definitely vacate the vP – otherwise, the resulting order would be [Force [T+v+V(k) [NP(i) t(k)   NP(j)]]] , i.e. VSO, which would contradict the initial ordering established in the vP at the first round of spell-out.

In summary, in Haitian Creole and other languages that lack case and agreement, the movement of the subject to spec TP is motivated by the adjacency requirement on PF merger. This requirement is independently satisfied in languages that have uninterpretable features because the process of legitimizing these features would induce movement anyway. In a caseless and agreementless language that has verb raising in the syntax (as French does, for example, Pollock 1989), and as a consequence does not need PF merge of T and the verb (the two are already made into a complex head in the syntax), the subject NP would still have to vacate the vP/ VP because the initial ordering SVO or SV which is undone by verb movement must be restored in the final spell-out domain by the movement of the subject over the T+v+V.

4.6.4 Infinitives in caseless languages

Here I address the question of infinitival constructions in caseless languages. If we take seriously the claim that languages such as Chinese and Haitian Creole, Bantu, Mohawk, and partly Greek and Spanish lack case in the syntax, not just in the morphology, overt NPs should be able to appear in infinitival constructions. The question is: do they? The answer is: maybe.

One of the problems that arises when answering this question is that some of the languages I argue to lack case also lack infinitives. Mohawk, for example, along with most other Polysynthetic languages does not have infinitival constructions (Baker 1996). Greek – a language that I argue has a case feature only on the lower NP in the vP -- has also lost its infinitives and

replaced them with subjunctives. Spanish has no ECM and no for-to infinitives (the subjunctive

form is used instead), though it does have control and raising infinitives. Languages such as HC

and Chinese also do not have morphological markers that would distinguish infinitives from finite

verbs. Verbs in the present tense in Chinese and HC carry no inflection and are indistinguishable

from those that appear as complements of raising and/or control verbs (i.e. verbs such as 'seem'

or 'try'). However, there are tense markers that may appear to indicate past tense. What is crucial

is that their appearance seems to be optional. Consider first Haitian Creole:

HAITIAN CREOLE   (De Graff 1991; quoted in Deprez 1991)

(81)   Jak genle   li (te) damou

         Jack appears he (past) in-love

         Jack appears to have been in love

The perfective marker 'te' which his used to indicate past tense (Lefebvre and Koopman 1982) is

optional; without it, the form of the embedded verb is indistinguishable from the untensed

infinitival form.   What is also significant is that even when 'te' does not appear, the pronominal

copy 'li' = 'he' is still possible. Whether we take 'li' to be an overtly spelled-out trace of

movement or an element that acts like a predicate variable that transforms the embedded

predicate into a small-clause and subsequently assigns the external theta-role to the subject NP as

argued in Deprez 1991: 212-213, the fact that 'li' is an overt pronoun remains the same. As such,

it should be precluded from appearing in untensed clauses, but it is possible in clauses that lack

'te'.

(82)   Jan samble li renmen Mari

         John seems he love Mari

         John seems to love Mari

Deprez 1991 argues that it is so because the complement of 'seem' in HC is always tensed even though there is no morphological marking on the verb distinguishing the tensed verbs from infinitives (Deprez 1991: 194). I would argue that 'te' is a perfective marker which may be interpreted as past tense, but in fact it does not head a T projection; the above verbs could be infinitival, but may also appear with aspect-marking which is distinct from tense.[19]

The fact that an overt pronoun can appear in spec 'renmen' in (82) therefore offers initial support to the claim that overt NPs/ pronouns such as 'li' can appear in spec of infinitival TP in Haitian Creole.

Looking at the construction in (82) again, there is a question of why raising is required in 'seem'. Actually, it is not required: (83) is also possible.

(83)   Sanble Jan   pati

        Seems John leave

        It seems that John left   (Deprez 1991: 192)

Also, it is possible to have overt NPs with other raising predicates such as 'remain', which Deprez1991 argues to always take untensed complements:

(84)   a. Rete   youn nan kay   la

          Remain three man house the

          There remain 3 men in this house

        b. Rete sinkant goud

---

[19] The same is found in Russian, where infinitives can be perfective or imperfective; incidentally, perfective markers in Russian are also used to indicate tense-marking.

Remain fifty dollars

There remain 50 dollars   (Deprez 1991: 198)

The above data also support the claim that NPs in Haitian Creole are caseless and therefore are

not required to raise. One could argue here that the above constructions involve a null expletive

that prevents the NP from raising. If so, then the raising verbs 'rete' and 'samble' do not present

evidence for my argument. However, there is another, more intriguing possibility, which is that

there is no null expletive in Haitian Creole. Recall from Chapter 3 that expletives are merged into

spec TP to value phi-features on T since merge is cheaper than move. However, if a language

does not have phi-features on T, then it may also lack expletives whose sole purpose is to value

phi-features on T (assuming that there is no EPP). Thus, since there is no overt evidence for the

existence of expletive in Haitian Creole, it is plausible to assume that they do not actually exist in

the language[20]. Such a hypothesis would be in line with the claim that this language is both

caseless and agreeementless. It would also be consistent with the claim that the sentences in (84)

do not involve raising.

Turning to Chinese, a language that I argue to also lack case features, the issues

concerning infinitival constructions are once again murky. Since tense-markers are optional in

many cases and the morphological form of infinitives is the same as that of the verb without

aspectual markers, it is unclear whether the verbs in the constructions below are infinitives or

subjunctives. If we assume that they are indeed infinitives, we can still show that overt NPs are

possible at least in some of them.

CHINESE   (data provided by Xiao Li, pc)

---

[20] While I do not have the data with regards to definiteness effect in H.C., even if the above constructions
do exhibit it, it does not necessarily argue in favor of the 'null expletive' approach to the above examples.
Definiteness effect can be a result of the "presentational" effect these sentences have where the lower NP is
new to the hearer and is incompatible with being definite, i.e. previously introduced into context. On the
pragmatics of the definiteness effect see Prince 2003.

(85) a. John likai zheli

        John leave here

        John leaves

    b. John shitu / xiwang likai zheli

        John tried / hoped leave here

        John tried / hope to leave here

    c. John xiwang   Bill likai zheli

        John   hope Bill   leave here

        John hoped for Bill to leave here

    However, some constructions are impossible. For example, we cannot have the analogue of 'John tried Bill to leave', meaning that John made attempts to get Bill to leave. The only way to say it is to use the verb 'make' (Xiao Li, pc):

(86)   John   shitu rang Bill likai zheli

         John   try   make Bill leave here

         John tried to make Bill leave

This may be due to a semantic restriction imposed by the verb 'try', since an overt NP is possible with 'hope' (cf 85c).

    Bantu languages may present a problem because while I claim that they are also caseless they do not allow overt NPs in spec of infinitival TPs. However, the impossibility of the following constructions need not be due to the inability of overt NPs to get their case features licensed

SWAHILI (Data from Vitale 1989: 68)

(87) a. Juma a-li-jaribu   ku-fungua   mlango

         Juma he-past-try   INF-open   door

         Juma tried to open the door

      b. Juma a-me-choka   ku-simama   pembe-ni

         Juma he-past-tired INF-stand   corner-loc

         Juma is tired of standing in the cornder

(88) a. * Juma a-li-jaribu   Hamisi ku-fungua   mlango

         Juma he-past-try   Hamisi INF-open   door

         Juma tried to get Himisi to open the door

      b. * Juma a-me-choka   Hamisi ku-simama pembe-ni

         Juma he-past-tired   Hamisi INF-stand corner-loc

         Juma is tired of Hamisi standing in the cornder

One way to account for the impossibility of overt NPs in infinitival constructions in Bantu is as

follows. Assume that subject agreement – agreement with spec TP -- is a central property of

Bantu (a la Baker 2003a). In other words, if an XP is merged into the spec of TP, the XP must

agree with T, otherwise, the derivation will crash. Although unlike Polysynthetic languages Bantu

does not require agreement with a thematic subject, there must be agreement between the verb

and the XP in the spec of TP. In other words, there is no default agreement on T in Bantu as there

is in I-E languages. In I-E languages, the requirement on subject agreement is laxer- agreement is

obligatory if there is a suitable element to be agreed-with and if the T has phi-features. In Bantu,

on the other hand, agreement is a must regardless of the properties of T. Once we have

something in the spec of TP, T better agree with it. Now, assume that the infinitival T in Bantu does not carry phi-features, similarly to English. (The infinitival prefix 'ku' is not an agreement marker, but an infinitival tense-marker. Infinitives lack agreement markers in Bantu). If agreement is obligatory in Bantu and if all NPs in Bantu (except PRO) belong to a gender class, having an overt NP in a spec of T that lacks phi-features violates the requirement that all T's must agree with their specs. The only way for infinitives to satisfy this requirement is to have a PRO in its spec that also lacks phi-features. Agreement then is satisfied vacuously: absence of phi-features on T 'agrees' with the absence of phi-features of PRO.

This concludes my brief discussion of NPs in infinitival constructions in caseless languages. In Chapter 3, I discussed infinitives focusing on languages that have case features, and clearly, if a language has case features on NPs while the infinitival T is unable to either delete or value them, the derivation involving an NP in the spec of the infinitival T would crash. While a preliminary investigation indicates that overt NPs may appear in some infinitival constructions in languages without case features, other infinitival constructions in these languages may disallow them. Why? There may be other reasons why overt NPs may be impossible in infinitival constructions. For example, there may be semantic reasons that have to do with the interpretation of infinitives that would disallow overt NPs as their subjects. While I will not provide an answer as to what these semantic factors may be, I would like to stress that unlicensed case features may not be the only reason why overt NPs may be ruled out in infinitival constructions. I hope that future research would be able to provide a better answer to this question.

4.7   Conclusion.

To sum up, in this chapter I have explored the consequences of the claim that case and agreement features may not be present in all languages. I have shown that the ways in which languages choose to misplace features, i.e. whether they misplace case, agreement features, some combination of them or neither has important syntactic consequences, in particular when it comes

to word order. Focusing on the interaction of caselessness and agreement, I have argued that if a language lacks case features but has obligatory agreement, it will be non-configurational. This is so because the agreed-with NP will be deleted by the probe. While ordinarily a probe deletes the case feature of the NP it agrees with, in the absence of case, the probe will delete the entire NP, since the need to delete is a basic property of probe-hood. Languages like these include Mohawk, Bantu languages, and Spanish/Greek (for the subject only). In contrast, languages that have case features on NPs and have agreement with the NPs will not require overt NPs to appear in adjoined positions. Nahuatl is an example of a language that has obligatory subject and object agreement much like Mohawk, but is configurational because only the case features are deleted by agreement; the argument NPs remain intact. Nahuatl is thus a 'foil' to Mohawk. Russian and English are a 'foil' to Bantu, Greek, and Spanish because these languages have subject agreement and case features on both NPs, showing no subject dislocation in return for agreement. Turning to languages without agreement, I have argued that phi-features on T are not universal either. Japanese is a language that lacks overt agreement entirely – no phi-features are misplaced on T. However, case features are misplaced on NPs and must be valued since they cannot be deleted. This is what yields the overt nominative case on the NP and explains the possibility of nominative anaphors in the language. Finally, some languages may not misplace any features at all. However, if so, they must have rigid word order since it is the only other way to preserve thematic relations at PF. Haitian Creole and Chinese are examples of such a languages.

The following typology of possible feature misplacement and the resulting languages emerges from the proposal:

1) No case features on any NPs, 2 sets of agreement features on T (Mohawk):

      NP   NP $T^{\text{phi phi}}$ (obligatory dislocation of both NPs)

2) No case features on any NPs, only one set of phi-features on T (Bantu)

      NP   NP T^{phi} (obligatory dislocation of the subject NPs; fixed order in

the

VP between the object and the verb)

3) No case features on any NPs, no phi-features on T (Haitian Creole)

     NP   NP   T   (Rigid word order)

4) Case features on both NPs, 2 sets of phi-features on T (Nahuatl)

     NP^F NP^F $T^{phi\ phi}$ (no obligatory dislocation of NPs)

5) Case features on both NPs, 1 set of phi-features on T (Russian, English)

     NP^F NP^F T^{phi} (no dislocation of NPs, accusative case on the object)

6) Case features on both NPs, no agreement on T (Japanese, Korean)

     NP^F NP^F T   (overt case on the subject and object)

7) A case feature on the theme, one set of phi-features on T (Greek/Spanish)

     NP NP^F T^{phi} (obligatory dislocation of the subject NPs; accusative

case

on the object)

8) A case feature on the theme, two sets of phi-features on T (?)

     NP NP^F $T^{phi\ phi}$

9) A case feature on the theme, no phi-features on T (?)

     NP NP^F T

10) A case feature on the agent NP, no case feature on the theme (impossible, unless the NP is embedded under a P where the P values/licenses a case feature on the NP)

  (a) *NP^F NP $T^{phi\ phi}$

  (b) *NP^F NP T^{phi}

  (c) *NP^F NP   T

Whether the possibilities (8) and (9) offered by the above typology are indeed attested or not remains to be seen. For example, does there exist a language that lacks a case-feature on the agent but has both subject and object agreement in a minimal contrast to Spanish and Greek? If

yes, does it have dislocation of the subject but not of the object, as I would predict? Are there languages that have a case feature on the theme, lack a case feature on the agent but have no subject agreement at all? More research needs to be done to verify these predictions. Importantly, the above typology predicts that we cannot have languages with a misplaced feature on the agent NP but not on the theme regardless of whether there is agreement on T or not. Unless there is something valuing the case feature on the agent, the scenario in (10) will always lead to a crash given how linearization proceeds (cf section 4).   Thus, we could not have a language that would have object agreement and a dislocated object without a dislocated subject, i.e. a language that would have two sets of phi-features on T, no case feature on the theme and a case feature on the agent (10a). We also could not have a language that would have subject agreement, no subject dislocation and no case-morphology on the object (10b). Finally, we could not have a language that would have overt case on the subject, no subject agreement, and no overt case on the object (10c) – a violation of the Case Universal. However, as we shall see in Chapter 5, ergative languages that involve an NP embedded under a P can lack a misplaced feature on the theme but have one on the agent. This is also responsible for the fact that some constructions in ergative languages seem to violate the Case Universal.

Ways in which languages misplace features, the interaction of misplaced features as well as restrictions on feature misplacement derive a typology of possible case and agreement systems and rule out the impossible ones. I hope that future research would show whether all of the languages that I predict to be possible are attested and whether the three types of languages I predict to be impossible are non-existent.

Chapter 5   Remarks on Ergativity

5.0   Outline

In this chapter I discuss several questions raised by ergative languages. The plan of the

chapter is as follows. In section 1 I introduce the issues that will be dealt with in this chapter. In

section 2 I sketch out a theory of ergativity that I will assume.   In section 3 I discuss languages

that have agreement only with the absolutive object such as Hindi. In section 4 I discuss

languages that have agreement with both the ergative subject and the object such as Greenlandic

Eskimo (among others). In section 5 I discuss ergative languages that have no agreement at all

such as Dyirbal. In section 6 I come back to the universals of case and agreement and show why

transitive constructions in ergative languages appear to disobey them. In this section I will also

discuss a proposal in Bobaljik 2005 concerning the nature of the relationship between case,

agreement and their morphological realization. Section 7 is the conclusion

5.1   Introduction

The topic of ergativity that has been set aside up until now is relevant to a theory of case

and agreement presented in this thesis for two reasons. First, about a quarter of world's languages

are ergative (Dixon 1994) and a theory of case and agreement that has crosslinguistic ambitions

should have something to say about them. Second, transitive constructions in ergative languages

appear to disobey the Case and Agreement universals stated at the outset of the dissertation.

Ergative case on the subject in a transitive clause is overtly marked, while the case on the object

is unmarked (absolutive). In addition, in some ergative languages (e.g. Hindi) agreement with the

object is possible without there also being agreement with the subject. While I take the two

universals to apply to languages, not constructions, it is still interesting why ergative languages

have these violations in transitive clauses. (This is essentially the same question as was raised for dative subjects in Chapter 2).

In this chapter I will argue that the counterexamples are only apparent, much like those we saw with dative subjects in Chapter 2. In fact, I will show that ergative subjects are similar to dative subjects – both involve an intervening theta-assigning P that blocks the phi-features of the NP, thereby precluding the NP from agreeing with T. This is another example of a blocking configuration created by a theta-marking preposition. However, as we shall see, it is also possible to have the NP's phi-features copied onto the ergative P, making agreement with the ergative subject possible. The same is shown to be possible for dative subjects in some languages (Georgian and Basque) discussed in section 4. It should be kept in mind that the goal of this chapter is to show how a theory of ergativity fits into the overall proposal advanced in this thesis. Issues related to ergativity that are not immediately connected to questions of case and agreement will be set aside for future research.[1]

5.2   Ergativity: a proposal.

5.2.1 What is an ergative subject?

Over the years there have been many accounts of ergativity, including Marantz 1984, Kiparsky 1987, Dixon 1994, Bittner and Hale 1996, Manning 1996, Bobaljik 1992, and Woolford 2005 to name a few. I cannot discuss all their merits and shortcomings for reasons of space.

---

[1] In my discussion of ergativity I will not address the issues related to ergative agreement in languages without any overt case marking such as Jacaltec and Seyelarese discussed extensively in Woolford 1999a, 2004. What is crucial is that no language with an unambiguously nominative-accusative case system has an ergative-agreement paradigm (Woolford 1999a). Furthermore, I will follow arguments in Woolford 1999a, 2004 that there is no covert ergative case-system and that languages that have no case-marking but agree on the ergative pattern such as Jacaltec actually involve subject clitics. I refer the reader to her paper since I would essentially adopt her arguments. I will also largely set aside here questions related to split-ergativity, especially as it relates to languages that have an ergtive-absolutive case systems for nouns and a nom-accusative system for pronouns such as Walpiri (Legate 2003, Woolford 2004). Finally, I will not discuss other questions related to ergativity such as control, and co-reference of elided arguments under conjunction (i.e John hit Bill and _ ran away), etc. These questions are beyond the scope of the current discussion whose main goal is to show how the proposed theory of case and agreement can be extended to account for ergative languages

Instead I will concentrate on the accounts whose central ideas are closest to the one I will argue

for in this rather brief discussion. In particular, recent work in Nevins and Anand 2002, Woolford

2005 have argued that ergative case is actually an inherent case associated with the agent theta-

role. Assuming that this view is essentially correct, I supplement it with an idea proposed earlier

(Chapter 2) that inherent case is licensed/valued by an adposition. Thus, I would like to advance a

proposal along the lines of Mahajan 1997 and argue that ergative subjects are actually

adpositional phrases, much like what I have argued for dative subjects in Russian, Icelandic, and

Hindi. Building on a proposal in Mahajan 1997, I will argue that an ergative subject involves an

NP embedded under an adposition which licenses ergative case and assigns the agent theta-role to

the embedded NP. From now on I will refer to this adposition as 'the ergative P'. The P may be

null (similarly to the P in dative subject constructions) or it may be overt. If it is overt, then in

addition to the oblique[2] (ergative) case morpheme licensed by the ergative P we will see the

actual adjoined P. This is so in Hindi, as we shall see shortly.

To account for the fact that in many ergative languages there is agreement between the T

and the ergative subject, I propose that the phi-features of the embedded NP can get copied onto

the P and trigger agreement. Otherwise, no agreement will obtain. This parameter of difference

is responsible for the fact that some ergative languages lack agreement with the ergative phrase

(Hindi) while others have it (Greenlandic Eskimo). Importantly, dative subject constructions in a

number of languages can also trigger agreement. For example, as I show later in the chapter, in

Georgian there is agreement with dative subjects in addition to there being agreement with the

ergative ones. In Hindi, Russian, and Icelandic, on the other hand, agreement with dative subjects

is not possible.

---

[2] The actual case-morpheme licensed by the ergative P is 'oblique'. However, I will refer to the case-marker on the NP as 'ergative' case for convenience. It should be kept in mind that the ergative phrase is a PP, not an NP where the ergative P (overt or null) licenses oblique/ergative case on the NP. I treat absolutive case as nominative – result of feature deletion. In section 5, we will see that absolutive case can also be due the absence of a case feature on the NP.

I take the configuration below to represent the vP in ergative languages. (I am

abstracting away from the headedness issues):

(1)

```
            vP
           /  \
        PP      v’
              /   \
           VP       v
          /  \
       NP     V
             see
```
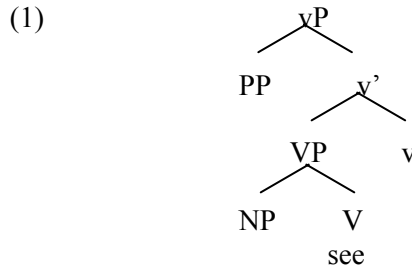
The structure of the ergative PP (again, abstracting away from the headedness issues) is:

(2)

```
            PP
           /  \
        NP      P
        |
        N^{F = P = erg}
```
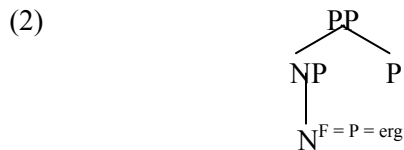
The above structure is proposed for all ergative languages, those that have agreement with the

ergative PP, those that have agreement only with the absolute object, and those that have no

agreement at all.[3]   Note that merging the ergative PP into the spec of vP is not problematic for

the Theta-Criterion because the ergative P assigns the agent theta-role to its complement. Hence,

when the v would assign the agent theta-role to the PP and the P would subsequently re-assign it

to the NP via identification (cf the discussion in Chapter 2), the NP would not wind up having

two distinct theta-roles. The Theta-Criterion is thus not violated.

In some languages, the ergative P can be null, while in others it may be overt. In

languages with an overt P we would see the ergative P in addition to the ergative case morpheme.

---

[3] Extending the arguments in Chapter 2 regarding theta-preservation in dative subject constructions, I argue
that in ergative languages the P values the case feature on the embedded NP and thereby preserves the
thematic relation of 'agent-hood' at PF. This is similar to what happens in dative subject constructions.

Hindi is a language that has an overt ergative P that licenses oblique case on the NP as argued in

Mahajan 1997. Consider the following example showing the oblique case on the NP in the

ergative subject (repeated from Chapter 2):

HINDI   (Mahajan 1997: ft.note 8)

(3)   bace-ne   vs.   baccaa

         Child-ERG   vs. child-NOM

In (3) the stem-final vowel changes to '-e' from '-aa' when the ergative marker –ne is present. I

now repeat some additional evidence offered in Mahajan 1997 for the existence of a P in ergative

constructions in Hindi. First, the post-position 'ne' can be separated from the NP by an

intervening emphatic marker 'hii (4). Second, it can appear after a conjoined NP, and can appear

after an NP with a genitive (5):

(4)   a. Ram-hii-ne   / us bacce-hii-ne   (Mahajan 1997)

            Ram-emph-ERG / that boy-emph-ERG

        b. Ram or siitaa-ne

           Ram and siitaa-ERG

(5)   Uske   piita-ke   bhaaii-ne

         Her/his father-GEN brother-ERG

         His father's brother

The fact that the ergative marker –ne can appear after intervening material, not just immediately

following the noun, indicates that it is a post-position, not a case-marker. Here I would like to

generalize Mahajan's idea to other ergative languages and argue that the P is always present, though it may be null.

5.2.2 Ergativity and UTAH

The above proposal raises non-trivial questions for UTAH (Baker 1988, 1997). If the theta-roles assigned by the ergative P and by v are identical we have a direct conflict with the UTAH, which states that identical theta-roles must be assigned in identical configurations. If the theta-roles assigned by the P and the v are distinct, then what is the evidence for their distinction? Below I will address the UTAH-related problem raised by the proposal. (As M. Baker (pc) points out, this problem is also a problem for the Theta Criterion, not just for UTAH. However, here I will concentrate on the UTAH problem. The Theta-Criterion problem could be avoided by saying that as long as a single argument receives one and only one theta-role from a given theta-assigner, the Theta-Criterion is observed.)

While in some split-ergative languages, ergative constructions are distinct from non-ergative ones in requiring an intentional agent (cf the Urdu example in (11) below), it is not readily apparent whether this claim can be extended to all ergative languages. Without explicit evidence to the contrary, it is unclear how one can argue that ergative subjects are any more or less agentive than the non-ergative ones when both appear with verbs such as 'kill', 'hit', 'eat', etc. Therefore, I will not treat the ergative P as introducing a DISTINCT theta-role than that introduced by v. Instead, I will claim that we may need to relax UTAH a bit to allow for some theta-roles to be licensed in more than one configuration. That a P can assign the agent theta-role is already seen in a passive construction. In English and in many other non-ergative languages, the passive may involve a by-phrase where the agent is introduced via the preposition 'by' . Consider the following:

(6)   a. The donut was eaten by Homer

b.Homer ate the donut

In both cases Homer is an agent of eating. While proposals such as the one in Baker, Johnson and Roberts 1989 would treat a by-phrase as doubling the small pro agent appearing in spec vP, it does not change the fact that the NP embedded under the 'by' also gets a theta-role and the theta-role it gets is 'agent'. One may argue that the by-phrase is an adjunct that does not have a theta-role because it is related to the argument carrying one in a manner similar to Clitic Doubling. (Thank you to M. Baker for pointing this out to me). However, this argument may be true for the by-phrase as a whole, but not for the NP within the by-phrase. The NP embedded under a preposition in the adjunct PP does carry a theta-role because the interpretation of the resulting PP and of a sentence in which the PP appears varies depending on the preposition. For example, if we were to replace the by-phrase in (6) with an instrumental phrase such as 'with a fork' we would get a different interpretation. Furthermore, if we embed an animate NP under 'with' the result may be a bit odd: '?/#The donut was eaten with Homer.' The contrast becomes even more clear in the following passive constructions:

(7)   a.The window was broken by Homer

        b.The window was broken ?with Homer/ with a rock

The sentence in (b) has a funny reading where Homer is thrown into the window resulting in the window getting broken. (There is another reading on which Homer is an accomplice to whoever broke the window. I set this reading aside). Thus, different PPs lead to different interpretations of the resulting passive constructions. This is explained if the P 'with' and the P 'by' assign different theta-roles to their complements: agent vs. instrument.

Now if we accept that a preposition such as 'by' can assign the agent theta-role to its complement we may want to weaken UTAH a bit. Assuming that identical theta-roles can be

assigned by distinct theta-assigners as illustrated by the passive construction, a language can have a redundancy within it— the same theta-role is assigned by two different theta-assigners: P and v. Weakening UTAH, however, may have important consequences. For example, should the fact that 'by' assigns the agent theta-role to its complement mean that we have to abandon UTAH completely and allow for the agent theta-role to be assigned by V in the same configuration that the theme is assigned? I would say that the answer to this question is 'no'. While there is empirical motivation to allow for Ps and v's to assign the agent theta-role, it does not mean that any theta-role can be assigned by any head in any configuration. Unfortunately, a theory of UTAH is outside the scope of the present discussion and I would not be able to provide a theory of how to constrain the set of heads that can assign a given theta-role. I leave this important topic for future research.

5.2.3 Ergative subjects vs. dative subjects

Now, I would like to briefly compare the proposal I make for the syntax of ergative subjects with that I made for dative subjects in Chapter 2. Recall, I have argued that dative subjects involve a configuration where the PP is merged into the spec of EvP, not vP. This is required because the theta-role assigned by the P[TO], – (recipient), is distinct from that assigned by v, – (holder), despite the fact that both may be similar and hence are grouped under the general label 'experiencers'. Why not assume the same for ergative subjects? A crucial difference between dative subjects and the ergative ones is that the Ev does not license a theta-role unlike v. Consequently, when a dative subject is pro-dropped, the resulting interpretation is 'impersonal'.

(8)   (Mne)   bylo   xolodno

       Me-DAT was-3rd-Neut   cold

       I felt cold   [without the 'mne' the sentence is interpreted as 'it is cold']

This is not so for a pro-dropped ergative subject. While an ergative subject may be dropped in Hindi, Greenlandic and many other ergative languages (cf Manning 1996, Dixon 1994), dropping it does not result in the impersonal interpretation of the sentence:

HINDI

(9)   (Siitaa-ne)   kelaa   dekhaa

        Siita-fem-ERG   banana-masc   see-perf-3rd-masc

        Siita saw a banana.

The above sentence would mean something like "someone" saw a banana, not something. (Anubha Kothari, (pc)). This is so because in ergative subject constructions, a theta-role is assigned to the PP by v, and even if the PP is omitted an impersonal reading still cannot emerge.

Finally, I would like to note that while v can assign a variety of different theta-roles, including agent, instrument, and experiencer (holder) depending on the V that it selects, the same is true of the ergative P. The ergative P is not limited to assigning the agent theta-role in many languages but may express an experiencer as in the following example from Georgian:

GEORGIAN   (examples from Thomas Weir, pc)

(10)   Ivane-m   Mariam-i   nax-a

        Ivan-ERG   Mary-NOM   see-3SG

        John saw Mary

In Urdu, on the other hand, ergative agents must be 'intentional', indicating conscious choice on the part of the agent (Manning 1996: 71, Butt and King 1991). It is not possible to have an ergative construction in Urdu with a non-intentional interpretation:

URDU

(11) a. Anjum   royii

         Anjum-NOM   cry-3rd-SG-perf

         Anjum cried

      b. Anjum-ne   royaa

         Anjum-ERG   cried-Def

         Anjum cried on purpose

While the example with a nominative subject allows for the lack of volition on the part of the

agent, the ergative subject must be interpreted as a volitional agent. Whether the ergative P is

obligatorily agentive or not may be a language particular quirk, similar to the phenomenon that in

some languages instruments cannot be used in the same position as agents. For example, Irish and

Japanese are languages that disallow instruments in external argument positions (Woolford 2005:

9, Ritter and Rosen 2000, Watai 1996: 38). Consider the following data:

IRISH   (Woolford 2005: 9)

(12)   D'oscail Sean / * an eochair   an dorais

        Opened Sean /   the key   the door

        Sean opented the door / * The key opened the door

JAPANESE:

(13)   Tom-ga   / * kagi-ga doa-o   aketa

        Tom –NOM /   key-NOM door-ACC   opened

        Tom opened the door / * The key opened the door

This evidence suggests that in some languages, there may be specific semantic requirements on what NPs may appear in the spec of vP. In other languages, the restrictions may be much laxer; there may be different kinds of v heads and different kinds of ergative Ps in a given language that place subtly different selectional restrictions on the elements to which they can assign theta-roles. Some would allow both volitional and non-volitional arguments in spec vP; others would choose only the volitional one.

5.2.4 Intransitive clauses in ergative languages

Intransitive unergative constructions in ergative languages can have ergative subjects but they can also have absolutive/nominative subjects. For example, in Georgian there is ergative case on the single subject of an intransitive unergative clause (I will be abstracting away from the fact that ergativity is sometimes conditioned by aspect as it is in Hindi and Georgian below):

GEORGIAN   (data from Holmer 2001)

(14)   Nino-m   daamtknara

           Nino-ERG   yawn-aorist

           Nino yawned

However, there are also ergative languages such as Burushaski (Pakistan) and West Greenlandic that have absolutive case on a single subject of an intransitive unergative clause and ergative case on the subject of a transitive clause as seen from the following examples:

WEST GREENLANDIC   (data from Manning 1996: 3)

(15)   a. Oli   sinippoq

           Oli-ABS sleep-ind-intr-3rd-SG

           Oli sleeps

b.Oli-p   neqi   neri-vaa

   Oli-ERG   meat-ABS   eat-ind-tr-3rd-SG-3rd-SG

   Oli eats meat

BURUSHASKI   (Manning 1996: 3)

(16)   a. Ne   hir   yalt-i

   The-masc   man-ABS   yawn-pret-3rd-SG-masc-S

   The man yawned.

b. Ne   hir-e   phalo   bok-i

   The-masc   man-ERG   seed-PL-ABS   sow-pret-3rd-SG-masc-S

   The man planted the seeds

Assuming that languages may have different kinds of v-heads for transitive and unergative constructions, the absence of ergative marking in intransitives can be due to the fact that the unergative v is incompatible with a PP in its spec in some languages. In languages such as Greenlandic and Burushaski, for example, only an NP can be merged into the spec[4] of an intransitive v and then receive the agent theta-role from v. The question why some languages have different v's in transitive and intransitive clauses is related to a much more general question, namely, why not every language is ergative. In other words, we can ask what prevents English from having a construction such as *By Homer killed Lenny and Carl.* In an ergative language such a construction would be perfectly possible and would mean something like Homer killed Lenny and Carl. However, this is not allowed in a nominative-accusative language. Possibly, the

---

[4] While heads usually do not select their specifiers, it is possible that there may be restrictions placed on the kind of categories that can be merged into their spec. Furthermore, unergatives and transtives may also differ in aspect: intransitive verbs are activities while transitive verbs are accomplishments (cf Smith 1997). The distinction in aspect may be responsible for the requirement to have an NP in the spec of vP, not a PP since ergativity is often conditioned by aspect (e.g. Hindi, Georgian).

kind of theta-role re-assignment that takes place in ergative subject constructions is not allowed in nominative-accusative languages at all. In other words, the possibility of theta re-assignment could be one of the defining characteristics of ergative languages.

Crucially, even those languages that have ergative subjects with verbs such as 'run' and 'play' never have ergative subjects with verbs such as 'die' and 'fall'. To illustrate, consider the following contrasts from Basque. While Basque uses ergative case on the subject of the transitive and unergatives verbs, the subject of the unaccusative is nominative/absolutive:

BASQUE   (data from Woolford 2005: 9, Austin and Lopes 1995, Levin 1989)

(17)   a. Makina hon-ek funtzionatu du

        Mashine this-ERG   function   aux

        This machine works

       b. Gizona-k   kurritu du

        Man-ERG   ran   aux

        The man ran

       c. Ni   etorri   naiz

        I-NOM   come   aux

        I came

The prohibition on ergative subjects in unaccusative verbs is due to the Theta-Criterion. Since the V assigns a theme theta-role to its spec, merging a PP into the spec of VP would cause the NP embedded under the P to get two different theta-roles (cf the discussion of dative subjects in voice-bundling languages in Chapter 2). The fact that ergative subjects are disallowed with

unaccusative verbs also supports the claim that overt nominative case we see in languages like Japanese is crucially different from ergative case. Since overt nominative case appears both with transitive and unaccusative verbs, it cannot be licensed by a theta-marking (ergative) preposition. Overt nominative subjects are NPs, not PPs (cf Chapter 4).

To sum up so far, I have proposed that ergative subjects are PPs merged into the spec of vP where the ergative P assigns the agent theta-role to the NP and values the NP's misplaced case feature resulting in oblique case.   Next, I turn to the agreement properties of ergative subject construction.

5.3   Agreement with the absolutive object only (Hindi)

Hindi, a split-ergative language where ergativity depends on the perfective aspect of the verb, shows agreement only with absolutive NPs . If a transitive sentence contains an ergative NP, then agreement must be with the object. Consider the following examples from Mahajan (1990: 47) quoted in Woolford 1999a:

(18)   a. Siitaa   aayii

Siita-**fem**   arrived-**fem**

Siita arrived

b. Siitaa-ne   kelaa   dekhaa

Siita-fem-ERG   banana-**masc**   see-perf-3rd-**masc**

Siita saw a banana

c. Siitaa   kelaa   khaatii   thii

Sita-**fem** banana   eat-imp-**fem** be-past-**fem**

Sita ate a banana

When the subject is unmarked for case, i.e. is nominative/absolute, the verb agrees with the subject. However, if the subject has ergative case, then we see agreement with the object (18c). This is very much similar to the Hindi dative subject constructions discussed in Chapter 2. In fact, the Hindi dative subjects behave exactly like the ergative subjects in that they do not show agreement; agreement is with the object in sentences containing dative subjects:

(19)   Siitaa-ko   larke   pasand   the

        Siita-DAT   boys   like   be-past-PL-masc

        Sita   likes boys

Following a proposal in Mahajan 1997, I would like to adopt the following structure for the ergative clauses in Hindi:

(20)

Importantly, the ergative P blocks off the phi-features on the NP, so that they are not visible to T for agreement. In addition, the P values the uninterpretable case feature on the NP with its interpretable prepositional features, as we saw in the dative subject construction. The P in Hindi does not copy features of the embedded NP – no agreement is possible with the PP. When the T is projected, the PP in the spec of v is attracted into the spec of TP – it is closer than the object. However, since the phi-features on T cannot get valued by those of the PP, and the configuration

for feature valuation is already satisfied, the phi-features on T are valued 'long-distance' by those of the NP object (Cf the discussion of default agreement in Chapter 2). As a result, we see object agreement. The object's case feature gets deleted by T resulting in nominative/absolutive case on the object.

(21)

```
                          TP
                  PP(t)        T'
                 Siitaa-ne
                          EvP        T^phi = 3rdMasc
                      PP      Ev'
                          VP      t(i)
                                  Ev
                    NP        V
              kellaa-3rd-masc   see
              banana
```
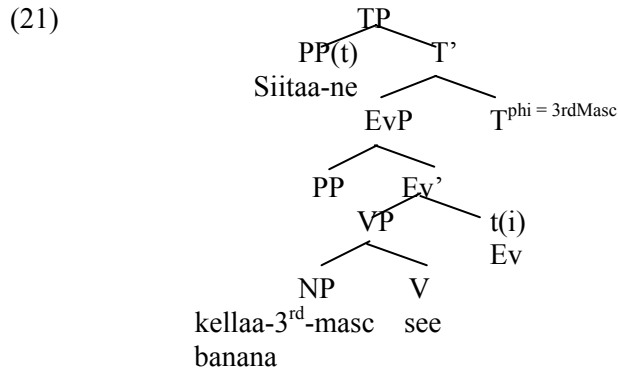
Agreement in ergative clauses in Hindi thus involves attraction of the PP into the spec TP and the subsequent long-distance case-deletion and agreement with the object.

5.4   Agreement with both subject and object (Greenlandic Eskimo, Basque)

         While Hindi shows agreement only with the object in a transitive ergative clause, not all ergative languages behave this way. For example, Greenlandic Eskimo discussed in Bittner 1994, Bittner and Hale 1996, Manning 1996 inter alia has agreement with both the ergative subject and the nominative object, as does Basque:

WEST GREENLANDIC   (Manning 1996: 159)

(22)   a. Jaani-up   niqi   tamua   -jaa

         Jaani-ERG   meat-ABS   chew-part -3rd-SG-3rd-SG

         Jaani chews the meat

b.Jaani tamua -juq

Jaani-ABS chew-part -3rd-SG

Jaani chews

BASQUE (data from Holmer 2001: 7)

c.Zu -k hura hil zenuen

2nd-SG-ERG 3rd-SG-ABS die/kill-2nd-SG-3rd-SG-A-Pret

You killed him

d.Hura hil zen

3rd-SG-ABS die/kill-3rd-SG-Pret

He died

In the examples above we see that in transitive clauses the verb agrees with both the ergative subject and the absolutive object. The facts concerning agreement with the ergative NP can be accounted for as follows. While the case feature on the NP gets valued by the P, the phi-features of the NP get copied onto P. Since the PP now has phi-features it can be agreed-with. Crucially, since the phi-features are uninterpretable on P, they can be deleted in return for agreement, causing no obligatory dislocation of the subject. The structure of the ergative PP in these languages is represented below:

(23) PP^{PHI}

P^{PHI} NP

N$^{F = P = erg}$

The nature of this feature copying process can be viewed as a form of adjectival concord where the phi-features on the NP are copied onto the adjective. (Alternatively, it can be viewed as resulting from N incorporating into the ergative P. The complex head P-N will have the phi-features of the N which will then percolate to the PP. At this point I do not have deciding arguments for either alternative and will leave this question open).

In a language where ergative prepositions inherit phi-features from the embedded NP, we will see agreement with the ergative subject. In languages such as Greenlandic that also have object agreement, the agreement with the object would result from a second set of phi-features getting valued long-distance by the object. Below I give a tree for Greenlandic with English used for convenience:

TREE for GREENLANDIC

(24)

```
                        TP
              PP^phi (i)    T'
              John-ERG
                         EvP         T^phi = 3rdMasc ; phi(j) = 3rdFEM
                    PP        Ev'
                    t(i)
                         VP      Ev
                     NP      V
                    Mary    see
```
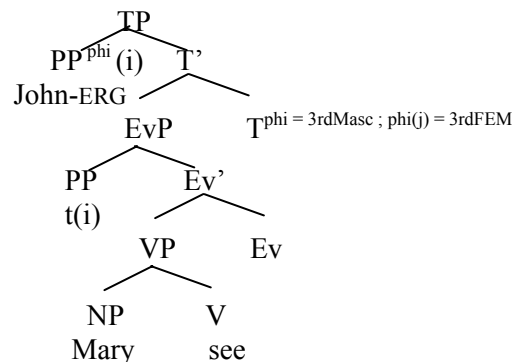
It is also possible to have a language that would have agreement with the ergative subject but not with the absolutive object in a transitive sentence. Nepali is an example of such a language. Crucially, as will be discussed shortly, there is no language that has agreement only with the ergative subject in both transitive and intransitive constructions. In other words, there is no language that would agree with the ergative subject in transitive and intransitive sentences, but will not agree with an absolutive subject of an intransitive sentence (Woolford 1999a).

NEPALI (Data from Bickel and Yadava 2000: 347, quoted in Bobaljik 2005)

(25)   Maile   yas   pasal-ma   patrika   kin-e   / (* kin-yo)

1st-SG-ERG DEM-OBL store-LOC newspaper-NOM buy-PT-1st-SG / buy-PT-3rd-SG-M

I bought the newspaper in this store

Languages like Nepali would only have a single set of phi-features on T, valued by the ergative

PP, resulting in agreement only with the ergative subject.[5]

As mentioned briefly above, ergative Ps are not the only kind of Ps that can copy features

from the embedded NP. In some languages such as Georgian, for example, there is agreement

with a dative subject:

GEORGIAN

(26)   Ivane-s   Mariam-i   u-   -qvar-s

John-DAT Mary-NOM   3rd-SG-DAT-love-3rd-SG

John loves Mary

That some languages may copy phi-features on the ergative and dative adpositions while others

do not, is an interesting question that I will not explore further in this dissertation.

5.5   Ergative languages without agreement (Dyirbal)

In this section I address the case and agreement properties of languages that have ergative

case marking on the subject, unmarked (absolutive) case on the object and no agreement. I will

argue that the unmarked (absolutive) case on the object in languages like that is due to the

---

[5] Nepali has absolutive/unmarked case on the object which is unexpected given that there is no object agreement. Given that I do not have any more data on Nepali, I would have to hypothesize that there are two possible sources of the nominative case: either there is no case feature on the theme or the nominative is actually null accusative. To assume the latter option I would have to have evidence of accusative case elsewhere in the language. That the former option is allowed in ergative languages though not in the nominative-accusative ones (cf Chapter 4) will become clear in the next section.

absence of a case feature on the NP, not feature deletion. It is possible that some languages with ergative-absolutive case pattern are actually ergative-accusative where the accusative case is unmarked. This is argued to be true for Warlpiri (Legate 2003). However, as I have already mentioned, this argument would require evidence that there is accusative marking at least on some objects. In the absence of such evidence, I would take null marking on objects in the absence of agreement as an indication of the absence of misplaced case features. Consider some examples from Dyirbal and Yidin

DYIRBAL   (Dixon 1994: 161)

(27) a. Nguma   miyanda-nu

          Father-ABS   laugh-nonfut

          Father laughed

      b. Nguma   yabu-ngu   bura-n

          Father-ABS   mother-ERG   see-nonfut

          Mother saw father

YIDIN^y

(28)   Waguja-ngu   jugi-0   gunda-l

          Man-ERG   tree-ABS   cut-pres

          The man is cutting a tree   (Dixon 1994: 59)

While there is no agreement on the verb with either the subject or the object, the object has absolutive – i.e. unmarked – case. Setting aside for the moment the possibility of a null accusative morpheme, let us consider why ergative languages are allowed to not misplace a case feature on the theme while misplacing one on the embedded argument of the P. The option of

placing a case feature on the higher argument (i.e. the agent) without placing one on the lower

argument, (i.e. the theme) is disallowed in languages where the higher argument is not embedded

under a head such as a preposition that would value the case feature. This is so because the vP

without a case on the theme must be shipped to PF to be linearized together with its spec, and the

NP with an unvalued case feature would crash the derivation (cf the discussion in Chapter 4).

However, if the case feature appears on an NP that is embedded under a P, then it is possible to

have a caseless theme. [6] Since the case feature on the agent NP will be valued by the P, it will not

crash the derivation when shipped to spell-out. In other words, when a PP gets trapped in a spell-

out domain, vP, the NP embedded under the P will not cause problems. The configuration for

agreementless ergative languages is:

(29)

```
                              TP
                           ╱     ╲
                         vP        T
                       ╱    ╲
                     PP       v
                   ╱   ╲     ╱  ╲
            NP^{F=P}   P   VP     v
             John         ╱  ╲   see(k)
                        NP     V
                       Mary   t(k)
```
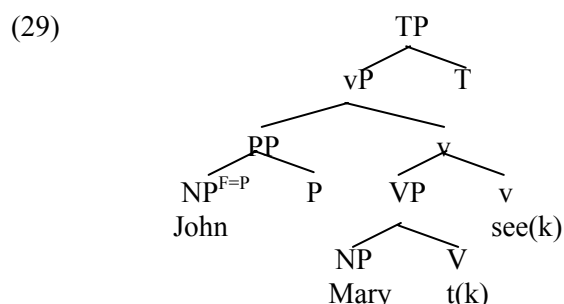
The T lacks phi-features, a case feature is not placed on the theme, while the NP embedded under

the P does have a case feature.   As a result, we see no agreement on the T and the unmarked

(absolute) case on the theme which here is a result of the absence of a case feature.[7]

---

[6] I predict rigidity of word order in Dyirbal (SOV) and other similar languages, but this does not seem to be so. For example, the order can be OSV as seen from the example above. There are two possible ways to deal with the problem: the first would be to posit a Focus projection that increases the linearization domain to FocP. Another possibility is that the v in ergtive languages does not trap a PP subject into a linearization domain, only an NP.

[7] The possibility of having a caseless theme in ergative languages is also related to the fact that transitive constructions in these languages appear to violate the Case Universal since we see overt case on the subject without there being overt case on the object. In nominative-accusative languages, where the thematic subject in a vP is an NP, the scenario on which the theme lacks a case feature while the agent has one is blocked (cf Chapter 4). However, in ergative-absolutive languages the problem does not arise because we

5.6   Ergativity and the universals of Case and Agreement.

5.6.1 Universals of Case and Agreement – revisited

      In this section I turn to the question why universals of case and agreement (repeated

below) appear to be disobeyed by the transitive constructions in some ergative languages.

(30)   **The Case Universal**: If a language overtly case-marks the subject, it overtly case-marks

the object

(31)   **The Agreement Universal**: If a language has overt object agreement, it has overt subject

agreement

While no ergative language has agreement only with ergative subjects in <u>all</u> sentences (Woolford

1999a, Bobaljik 2005), it is still interesting to ask why transitive clauses in ergative languages

such as Hindi do not obey the two universals. (Nepali may seem like a counter-example to this

statement, but it is not because there is agreement with both ergative and absolutive subjects).

Starting with the Agreement Universal, the explanation should be rather clear at this point: since

the subject (agent) is actually a PP, agreement with the subject will be barred unless the P copies

the phi-features of the embedded NP. Instead, we will see agreement with the object whose phi-

feature are available. In situations where the phi-features of the agent are blocked off, even a

single set of phi-features on T will result in object agreement. (This is the same reasoning as that

used to explain why dative subject constructions are language-internal violations of the

Agreement Universal). The Agreement Universal is thus derived from two more basic principles

governing agreement in natural language: a) locality – the closer NP will be attracted in order to

perform feature valuation; b) in order for phi-features on T to be valued by the attracted category

the attracted category has to have phi-features. If one of these two conditions is not borne out,

---

have a P that would value a case feature on the embedded NP.   We will come back to this question in
more detail in the next section.

agreement will not arise. We can thus revise the agreement universal so as to exclude reference to blocked-off NPs.

(32)   **The Agreement Universal (Revised)**: if the verb agrees with the lower argument -- the theme, it agrees with the higher argument – the agent (or experiencer for dative –subject constructions) provided that the higher argument has available phi-features. If the agent is not an NP but a PP where the P does not copy phi-features form the NP, then it will not induce agreement.

Turning to the Case Universal, ergative languages appear to violate it in transitive constructions for the same reason they appear to violate the Agreement Universal. Because the ergative subject is a PP , the NP embedded under it receives overt case-marking, in apparent violation of the universal. However, if the Case Universal is restated so that it does not refer to PPs such as dative experiencers and ergative subjects, then transitive clauses in ergative languages will no longer pose a counter-example. Consider the following:

(33)   **The Case Universal (Revised):** If the highest argument in a transitive clause – the agent / experiencer – has overt case and is unobstructed by P, then the lowest NP – the theme – has overt case as well.

Ergative languages obey this universal vacuously since the highest argument in a vP in these languages is not an NP but a PP.

5.6.2 Case and Agreement as post-syntactic operations?

Before closing this section, I would like to discuss a recent account of the relationship between agreement and case (especially as it relates to ergative languages) presented in Bobaljik

2005. Bobaljik 2005 argues that agreement is a post-syntactic operation. His central claim is that

the finite verb agrees with the highest accessible NP in its domain (Bobaljik 2005: 2) where

accessibility is defined in terms of morphological case (Marantz 1991, McFadden 2004), not in

terms of grammatical function. Importantly, morphological case (m-case) is also assigned post-

syntactically. The domain of the verb is a clause plus the edge of the next clause following a

proposal in Polinsky 2003, Bobaljik and Wurmbrand in press). Bobaljik 2005 revises the

Agreement Universal (Moravcik 1974) in terms of m-case and argues that the universal should be

stated in terms of morphological case hierarchy suggested by Marantz 1991, also McFadden

2004, where Nom/Abs, --the default cases, are ranked highest, and Acc/Erg – (the dependant

cases) are lower on the hierarchy and Dative (lexical) cases are ranked lowest. The verb agrees

with the highest ranked m-case while grammatical functions are orthogonal to agreement. Thus,

according to Bobaljik, the Agreement Universal should state that if the verb agrees with anything

it agrees with the nominative/absolutive NP, (unless ergative case is also accessible for agreement

in the language).   Syntactic licensing of NPs does not regulate agreement –absolutive objects in

Hindi and nominative objects in Icelandic trigger agreement on the verb while nominative

subjects do so in other constructions. Bobaljik 2005 further assumes that languages may select

different subsets of the m-case hierarchy for the purposes of agreement: some may agree only

with the default case while others may also agree with the ergative and the dative, etc. Both case

and agreement belong to the morphological-component of grammar (MF) and are not driven by

the syntactic mechanisms of feature checking.

   While Bobaljik 2005 correctly states the generalization that agreement obtains with an

NP that has unmarked case, he does not offer a principled reason why it must be so. One of the

problems with treating agreement and case as post-syntactic is that we cannot explain why

agreement should correlate with a default/unmarked nominative/absolutive case and not with a

marked accusative one. Re-stating the Agreement Universal in terms of m-case does not present

a reason why the absence of morphological marking on the noun goes hand-in-hand with

agreement in so many languages. One may argue that all morphological phenomena belong to MF and are to be divorced from the syntax proper, but then we must have a rigorous theory of how the MF-component regulates and constrains such processes as case and agreement. Moreover, even if we were to provide such a theory, we would still have to explain a number of syntactic phenomena that are sensitive to the presence or absence of the morphological case and agreement. For example, dative subjects are cross-linguistically non-agentive, while nominative subjects may have a variety of theta-roles. Given that theta-assignment is syntactically regulated, it is unclear why dative case is assigned to experiencers and goals but never to agents if it is assigned post-syntactically. Another example comes from the possibility of subject anaphors in agreementless languages such as Japanese and Korean (also Chinese) and their impossibility in languages with agreement. Why should m-case and agreement be able to distinguish anaphors from referential NPs? If case and agreement are entirely post-syntactic operations, the sensitivity of the above syntactic phenomena to case and agreement is unexplained.

Case and agreement conspicuously correlate with well-defined syntactic configurations in language after language. If we were to ignore those we would have to have a proposal about case and agreement licensing at MF that would have to account for the syntactic facts just as well. Since Bobaljik 2005 does not provide such a proposal we cannot accept the claim that all case and agreement phenomena are to be viewed as MF-proper. Moreover, in his definition of verb agreement he does rely on a very syntactic notion – that of locality – verbs do not agree with NPs that are outside of their agreement domain. Hence, in his proposal Bobaljik 2005 already admits that case and agreement depend on syntactic configurations. Furthermore, his claim that the verb agrees with the highest accessible NP in its domain assumes that the NP first gets an m-case and then the verb agrees or doesn't agree with it. This is so because accessibility is defined in terms of m-case which he takes to be post-syntactic while an agreement domain is defined in strictly syntactic terms. Hence, the verb cannot know what NP is accessible unless the NP already has

some case. If NPs already come with m-case 'pre-assigned', why must the case be the default and not some other case?

That being said, I do agree with Bobaljik 2005 that the Agreement and Case universals should be restated. However, they should be restated in terms theta-roles not m-case: if the verb agrees with the theme – the lower NP in a transitive sentence -- it agrees with the agent, where the agent is the highest NP in a transitive sentence which gets attracted to spec TP for agreement with T. Object agreement arises when the T has another set of phi-features. Since phi-features cause the T to delete the NP's case feature, we will not see overt case on the NP. This explains why agreement is with the object entails agreement with the subject as well as why overt subject case arises only if we have overt object case. Transitive clauses in such ergative languages as Hindi disobey the two universals because they involve a blocking configuration where the ergative P blocks the NP's phi-features. However in the absence of a blocking configuration, the universals of Case and Agreement will be obeyed.

5.7   Conclusion.

To sum up the discussion, I have argued that all ergative languages involve a subject NP embedded under a P; the difference with respect to presence or absence of agreement with the ergative subject has to do with whether or not the phi-features of the N get copied onto P. I have also argued that with minor modifications the Case and Agreement universals are not disobeyed by transitive constructions in ergative languages. Transitive clauses in ergative languages appear to violate them because they involve blocking configurations induced by the ergative P. However, we already see an example of a similar blocking configuration in dative subject constructions in nominative-accusative languages. If stated properly, the two universals will be satisfied vacuously by ergative languages.

The above discussion leaves many aspects related to ergativity unaddressed. For example, I have not discussed various factors that may condition ergativity such as verbal aspect

(Hindi, Georgian) and person features of the NP. The relationship between ergativity and aspect as well as between ergativity and person-marking is left for future research. I have also left out some important questions related to word order in ergative languages, such as the fact that no ergative language is SVO (cf Mahajan 1997 for a possible proposal). The above discussion was meant to present a sketch of a possible theory of ergativity embedded within a larger theory of case and agreement. I leave its consequences to be explored in future research.

Conclusion

<u>Summing up</u>

In this thesis I have argued that the syntax of case and agreement and its morphological realization are tightly linked. Their close connection is reflected in the existence of the Case and Agreement Universals stated in Chapter 1 and repeated below:

The Case Universal: If a language overtly case-marks the subject, it overtly case-marks the object

The Agreement Universal: If a language has overt object agreement, it has overt subject agreement

Departing from the Universal Approach to case and agreement (Chomsky 1981 through Chomsky 1995, 2000, 2001, also Watanabe 1993, Ura 1994, 2000, Harley 1995 Sigurdsson 2003 inter alia) that takes case and agreement to be universal properties of language and only their spell-out to be language specific, I have argued that the connection between the syntactic properties governing case and agreement and the overt realization of case and agreement features is far from arbitrary. If syntactic licensing were divorced from morphology we would expect to have languages that mark the subject with an overt case without overtly marking the object. Conversely, we would expect to have languages with overt object agreement without overt subject agreement. We would

also expect there to be languages that have both object agreement and accusative case on the object – a scenario that is virtually unattested (Woolford 1999a).

The above crosslinguistic generalizations concerning the relationship between case, agreement and their morphological spell-out strongly argue for a tighter connection between syntactic positions in which NPs and verbs appear and the morphological marking they carry. The aim of this thesis has been to explore the nature of this connection, why it exists and what consequences and implications it has for syntactic theory, UG, and the possible parametric variation within case and agreement systems in languages of the world.

Taking the connection between morphology and syntax to be non-arbitrary, I have argued that the absence or presence of case and agreement marking in languages of the world is linguistically significant. Languages that look caseless or agreementless may actually lack the case/agreement features in the syntax. Building on a proposal in Pesetsky and Torrego 2001 that features become uninterpretable by virtue of being misplaced (Relativized Uninterpretability) I have argued that case and agreement features are a strategy languages choose to preserve records of thematic relations at PF. However, it is not a universal strategy; in the absence of case and agreement features thematic relations between the theta-assigner and the argument can be kept via rigid word order. Consequently, languages may choose to misplace case features, agreement features, some mixture of the two or none at all.

I have further argued that inherent properties of misplaced features (e.g. the fact that phi-features cause the heads that they are misplaced onto to become probes, while case features do not do so) together with restrictions on feature misplacement and the configurations in which misplaced features are valued derive the universals of Case and Agreement, account for the possible case and agreement typologies, and rule out the impossible ones. The proposal regarding feature misplacement and the interaction of misplaced features also has consequences for the freedom of word order within a language. Focusing on the interaction between caselessness and presence of agreement, I have argued that because probes are deletors, languages that misplace no

case features on NPs but have agreement will have obligatory dislocation of agreed-with noun phrases, i.e. will be non-configurational (Mohawk and Bantu). Languages that have case features on NPs and also have agreement features may allow but will not require NP dislocation. This is so because agreement features on T will delete only the case feature on the agreed-with NP, not its lexico-semantic content. Finally, languages that misplace no case and no agreement features will have rigid word order (SVO or SOV).

In my discussion of the issues related to case and agreement I have addressed a number of topics such as dative subjects, infinitives, ways feature misplacement and its consequences for word order, and finally, ergativity. Below I present a brief summary of the issues discussed in chapters 2 through 5.

Summary of the chapters

In Chapter 2 I discussed dative subjects. These constructions pose a problem for a theory of case and agreement for several reasons. First, while the existence of dative subjects has been attributed to 'inherent' case (cf Chomsky 1981), we do not have a theory of inherent case and what is more, the very notion is not statable in the framework that assumes Relativized Uninterpretabilty. Second, dative subject construction often involve object agreement without subject agreement and have overt subject case without overt object case. While they do not present real counter-examples to the Case and Agreement universals because the universals apply to languages not constructions, it is still interesting to know why such constructions even arise. I have argued that dative subject constructions can be accounted for without resorting to an additional case-licensing mechanism such as inherent case. I have proposed that the NP in dative subject constructions comes embedded under a theta-marking null preposition P [TO] where the resulting PP is merged in the spec of EvP. Dative subjects are PPs, not NPs. The preposition blocks the phi-features on the NP, and while the PP still gets pulled up into its spec of TP to satisfy the Valuation Requirement, it cannot value a full set of phi-features on T. The T must get

a default (3rd person) phi-features that can be valued by any XP merged into spec TP. The case

feature on the NP embedded under P is valued by the interpretable features of the P, which gets

realized as dative case.

Turning to the transitive constructions with dative subjects, I have argued that these

involve a PP moved to the spec of TP. However, since they also involve an object which is not

blocked by a preposition, the T can value its phi-features with those of the object NP and delete

the object NP's case feature. Since the configuration for feature valuation has already been

created by the movement of the PP into the spec of TP, there is no need to move the NP into spec

TP to create it again. This is made possible by invoking the Principle of Minimal Compliance

(Richards, 1998). Hence we get object agreement, nominative case on the object, and dative case

on the subject NP. Some language-specific constraints on feature re-valuation do exist, however.

In Icelandic, once the PP values T's person feature as 3rd person, this value cannot be changed,

only the number feature can be added and then valued by the object. In Russian, and Hindi on the

other hand, the entire set of phi-features can be replaced and consequently valued by those of the

object. In this chapter I have also discussed the nature of EvP (Harley 1995, Travis 2000) and

argued that the reason a PP can be merged into the spec of Ev is that the Ev does not have a theta-

role to assign to the NP (e.g. agent/ holder). Extending a proposal in Pylkkanen (2002: ch3), I

have argued that while Ev introduces an eventuality argument, it may come bundled with v– the

head that introduces an external argument (Kratzer 1996). When Ev and v are realized as a single

head, it is not possible to have dative subjects because it would induce a Theta-Criterion

violation. In contrast, if a language realizes Ev and v as two separate heads, then it is possible to

merge the PP into spec of EvP because Ev does not theta-mark its spec.

In Chapter 3 I addressed a number of issues related to infinitives, focusing on languages

that have case and agreement features. In this chapter we also got a first glimpse of what happens

when features are not misplaced on certain heads. I have argued that the T in infinitival

constructions lacks misplaced phi-features and that PRO is an NP that lacks a misplaced case

feature. The fact that the infinitival T lacks phi-features has important consequences for NP distribution in infinitival construction. Namely, an overt NP that has a case feature would not be able to appear in the spec of the infinitival T, except when embedded under 'for'. I have further argued that different types of infinitival constructions arise from different complements the matrix verb selects: TP vs. CP. In those infinitival clauses that involve a C-layer the T gets bound by Fin0, a head that introduces existential closure over the free temporal variable introduced by T. The specific time interval of the embedded event gets determined by the lexico-semantic properties of the matrix verb- it can be either simultaneous or future with respect to the matrix event. In those non-finite clauses that have a TP complement, e.g. raising and ECM, the variable introduced by the infinitival T gets bound via identification with the matrix T under co-indexation. As a result, the infinitival T shares the temporal interpretation with the matrix T.

Furthermore, since raising and EMC constructions do not involve a C layer, it is possible to move an NP from the embedded clause into the matrix without changing the established linear order within a spelled-out phase. This makes it possible to have overt NPs in raising and ECM constructions. In contrast, control infinitive that do involve a C layer, disallow the movement of the embedded NP into the matrix clause because it would change the established order in a spelled-out portion of the derivation. An overt NP appearing in control infinitives would crash the derivation because the case feature on the NP will no be deleted – the embedded T is not a probe. It also cannot be valued by the features of the infinitival Fin0 because the features of Fin0 are trivial features – it only introduces existential closure over the temporal variable T. PRO is possible in these constructions because it carries no uninterpretable features and consequently nothing needs to be deleted.

The properties of *for-to* infinitives which seem to be similar to both raising/ECM and control structures were attributed to the semantic nature of 'for'. I have argued that 'for' is a special kind of a Fin0 head that it is different from the one involved in control constructions in that it introduces a possible world in which the embedded event is located. The semantics of

FinFor is responsible for the irrealis interpretation of the embedded clause in these infinitives. Because 'for' introduces a possible world and not just existentially binds the temporal variable, it has interpretable features which can value the case feature on an NP. Thus, if an overt NP appears in an infinitival clause it can be moved under 'for' and have its case feature licensed.

In Chapter 4 I have shown how ways of feature misplacement derives a typology of case and agreement systems. In this chapter I have explored the consequences of the claim that case and agreement features may not be present in all languages. I have shown that whether languages misplace case features, agreement features, some combination of them or neither has important syntactic consequences, in particular when it comes to word order. Focusing on the interaction of caselessness and agreement, I have argued that if a language lacks case-features but has obligatory agreement, it will be non-configurational. This is so because the agreed-with NP will be deleted by the probe in return for agreement. Languages like these include Mohawk, Bantu languages, and Spanish/Greek (for the subject only). In contrast, languages that have case features on NPs and agreement with the NPs will not require overt NPs to appear in adjoined positions. Nahuatl is an example of a language that has obligatory subject and object agreement much like Mohawk but is configurational because only the case features are deleted by agreement; the argument NPs remain intact. Nahuatl is thus a 'foil' to Mohawk. Russian and English are a 'foil' to Bantu, Greek, and Spanish because these languages have subject agreement and case features on both NPs, showing no dislocation in return for agreement. Turning to languages without agreement, I have argued that phi-features on T are not universal either. Japanese is a language that lacks overt agreement entirely – no phi-features are misplaced on T. However, case features are misplaced on NPs and must be valued since they cannot be deleted. This is what yields overt nominative case on the subject NP and explains the possibility of nominative anaphors in the language. Finally, some languages may not misplace any features at all. Haitian Creole and Chinese were argued to be examples of such languages. They preserve thematic relations at PF via rigid word order.

In Chapter 5 I discussed some issues related to ergativity. I have argued that all ergative languages involve a subject NP embedded under a P; the difference with respect to presence or absence of ergative agreement has to do with whether or not the phi-features of the N get copied onto the P. I have also argued that if stated precisely, the Case and Agreement universals are not disobeyed by transitive constructions in ergative languages. Transitive clauses in ergative languages only appear to violate the universals because they involve blocking configurations induced by the ergative P (much like dative subjects do). However, if stated properly (with reference to NPs), the two universals will be satisfied by default by ergative languages.

Consequences, open questions and directions for further research

The proposal advanced in this thesis offers a rather different perspective on case and agreement theory than that embodied in the previous and current work on the topic (i.e. Chomsky 1995, 2000, Sigurdsson 2003, inter alia). Instead of viewing case and agreement features as universal and their morphological realization as language specific, I propose to parametrize the syntactic case and agreement features and explore the morphological and syntactic consequences of the parametrization. I have taken morphology to be an important factor in revealing the syntactic properties of case and agreement systems, the extent to which they can vary, and the extent to which the crosslinguistic variation is constrained. Unfortunately, given the constraints of space and time, a number of questions raised by the proposal were left unaddressed or addressed only in a very tentative form. The claim that languages can be caseless and /or agreementless in the syntax has a number of important consequences ranging from the nature of NP movement to the distribution of overt NPs in infinitival constructions. For example, we can ask what would drive A-movement in a caseless and agreementless SOV language? PF-merge cannot be invoked here because the subject does not intervene between the tense and the verb and there are no misplaced features that need to be valued in the appropriate syntactic configurations. One way to approach this question is to argue that there may be multiple reasons for movement –

feature-deletion is one, creating legitimate configurations for PF-merge is another, and there may be more. Another venue would to be ask whether there is movement in SOV languages that lack case and agreement. Because these languages are crosslinguistically very rare it is difficult to argue whether or not they have movement at all. Similarly, when investigating infinitival constructions in languages without case and agreement we are faced with a challenge of first having to show that there are infinitives in these languages. This is not clear since many of the caseless and agreementless languages also have impoverished tense morphology and may not have distinct infinitival forms.

Next, the discussion of feature misplacement in Chapter 4 was mainly focused on the interaction of caselessness and agreement, I have said relatively little about the properties of languages that have case but lack agreement features such as Japanese and Korean. While some languages with rich agreement systems such as Mohawk and other Polysynthetic languages have a very high degree of word order freedom – a fact which I attribute to the deletion of NP arguments, languages with rich case marking also allow for the word order to be free (Jakobson 1936, Blake 2001:15, McFadden 2004: 159). Rigidity of word order seems to correlate inversely with the presence of morphological agreement-marking and with the presence of case-marking. Given my assumptions about linearization I predict that languages that misplace case features on all NPs may be able to freely scramble the subject since its position is not fixed in the first linearization domain. Object scrambling, on the other hand, presents a problem since the object is always linearized with respect to the verb, regardless of whether or not a language has case features. Hence, even in languages that have rich case marking such as Japanese and Korean we would expect object scrambling to be possible only if it is an instance of topicalization or focusing. (This is the opposite from what is argued for Japanese. At this point, I do not have an explanation for this divergence. It is likely that some of my assumptions about linearization would have to be rethought and / or better adjusted to particular languages.) Importantly, this argument also presupposes that the presence of TP-internal focus or topic heads would cause the

first linearization domain to be increased from the vP to the FocP or TopP and allow the object to move prior to spell-out.

While the claim that the linear ordering between the object and the verb is always fixed seems to deprive the proposal of much of its force since it predicts the ordering between the object and the verb to be rigid regardless of the presence or absence of case-features, it may actually be desirable to 'confine' object movement only to those cases where there is topicalization or focusing. For example, languages such as Russian that have case marking and allow objects to scramble, scrambling always associated with some pragmatic function. It is never unmotivated: the object in the sentences below must be marked by an intonational break, otherwise the sentence is ill-formed:

RUSSIAN

(1)   Mishu, Dima udaril

       Misha-ACC Dima hit

       Dima hit Misha

Whether or not the object has to undergo movement while it is still in the vP is a debatable issue. Theories that assume some version of cyclic linearization have to say 'yes' (Fox and Pesetsky 2004). Clearly, if we allow for a linearization domain to be increased and/or allow for movement to happen within a vP in languages with and without case we bring into question the claim that word order must be rigid in caseless/agreementless languages. What would prevent a language such as Chinese and Haitian Creole from having a TP/vP internal Focus position and consequently having object scrambling? In principle, nothing would prevent it. Chinese actually does have some scrambling given that there is a focus on the moved NP (cf Chapter 4). To explain this I would have to say that the full generalization is that languages without case and agreement features will have a rigid word order in the absence of any focusing/topicalization. In

contrast, languages without case features but with agreement features (such as Mohawk) will have free word order regardless of the presence of special focus/topic intonation. Languages that have case features may allow their thematic subjects to be freely ordered with respect to the verb and the object (Japanese?, Russian, etc), but would have stricter requirements on object scrambling. Finally, languages without case and agreement features will not allow any NP scrambling unless conditioned by focusing or topicalization. While I argue that in caseless, agreementless languages word order preserves thematic relations at PF, it is plausible to assume that intonational or morphological focus/topic marking can do the same job. Although in this thesis really have not explored the role of focus and topic in theta-preservation, it may be a viable option.

To conclude, I would like to say a few words on adjectival agreement. In this thesis I was concerned with agreement only as it relates to nouns, verbs and case licensing (deletion). I have set aside the issues related to adjectival agreement and participial agreement (which I treat as a version of adjectival agreement). While there may be some interesting connections between the two types of agreement, I believe that adjective-noun agreement is a distinct phenomenon than object-verb agreement. In many languages (modulo Bantu) adjectival involves distinct agreement features (number, gender, not person). Most importantly, adjectival agreement does not involve case-deletion on the agreed-with noun. I would like to view adjective-noun agreement as involving phi-feature copying from the noun to the adjective. Importantly, the gender and number phi-features copied onto the adjective do not make it into a probe, despite being misplaced. One can ask: why don't they? One possibility is that only certain kinds of misplaced phi-features can cause the heads to become probes: person plus number can do it but gender plus number cannot. A more articulated and thorough theory of features would be necessary to explain why not.

Further interesting questions arise with respect to case agreement between adjectives and nouns that exists in a number of Slavic languages. In Russian, for example, the adjective has to agree both in phi-features and in case with the noun it modifies.

(2)   Krasivyi   dom   / V krasivom   dome

Pretty-3rd-masc-NOM house-3rd-masc-NOM / In pretty-3rd-masc-PREP house-3rd-masc-

PREP

A pretty house / In a pretty house

Arguably, case agreement could also be attributed to feature-copying. Valued case-features and phi-features are copied form the noun onto the adjective modifying it. Adjectives, unlike verbs and nouns appear to be able to have both case and agreement marking. The answer to this question may have to do with the very nature of the lexical category 'adjective' as opposed to the lexical categories 'noun' and 'verb'. In light of the recent work in Baker 2003c on the status of lexical categories in UG there may be a possibility to connect the fact that case and agreement features can appear only on nouns or only on verbs while adjectives can support both. According to Baker 2003c, the adjective is a kind of a 'default' category. It lacks a referential index, which is the defining feature of a noun, and a specifier, which is the defining characteristic of a verb. If we can tie in having a specifier with the ability to support certain kind of agreement features (M.Baker class lectures) and having a referential index with the ability to support a misplaced case feature, we could potentially explain why adjectives that have neither a specifier nor a referential index can have both case and agreement features but only if the features have already been valued by the appropriate heads. If feature-valuation involves local c-command (spec-head agreement for phi-features), then an adjective which lacks a specifier by definition, cannot have unvalued misplaced phi-features. They will not be legitimized by those of an NP. This line of reasoning may also explain why adjectives can never be probes – they cannot delete anything

because they cannot support a configuration required for case-feature deletion and phi-feature valuation. It does not, however, answer the question why gender and number features can be misplaced on adjectives and what status these misplaced features have. If misplaced features are a way of preserving thematic relations, what would it mean for a language to copy the already valued misplaced features on an adjective from a noun? My theory would eventually need to provide some answer to this question.

Finally, turning to case-marking, there are interesting questions raised by the possibility of case-marking in predicate nominals (see Pereltsvaig 2001 for a proposal.) While I have argued that languages misplace case features on arguments in order to preserve records of thematic relations at PF, I have left open the question of why languages sometimes also misplace case features on predicate nominals as in the following constructions in Russian:

(3)   Dima   byl   lingvistom

        Dima-masc-NOM was   linguist-masc-INSTR

        Dima was a linguist

Russian also allows predicate nominal constructions that have nominative case instead of the instrumental one (or arguably, they are caseless), though with a difference in meaning:

(4)   Dima   byl   lingvist

        Dima-masc-NOM was   linguist-masc-NOM

        Dima was a linguist by nature / Dima was a great linguist

These constructions raise a number of questions such as what licenses case features on predicate nominals, what is their status with respect to crosslingusitic variation: clearly, not all languages that have case features also have case on predicate nominals, etc.

All of these issues (and many more) are important and interesting. However, they extend beyond the scope of this thesis. The goal of this dissertation was to explore the syntax of case and agreement and its relationship to morphology and argument structure. I hope that future research would deepen our understanding of the crosslinguistic and universal properties of case and agreement systems of the world's languages and allow us to gain a better insight into the consequences and implications that these properties have for the syntaxes of individual languages as well as for the nature of UG.

Appendix 1A (Chapter 1)

Feature misplacement: how, where, and when do misplaced features appear on the wrong heads?

Here I will address the question of feature misplacement as it relates to NPs/DPs, but the same line of reasoning can be extended to feature misplacement on T. I assume that there is an array of interpretable features that are selected and placed on nodes. Lexical items have their lexico-semantic content bundled together with the phi-features, e.g. {cat} exists as a lexical item in the array and is inseparable from its phi-features; however, phi-features can also exist independently in the feature array. If selected they will be realized as pronouns. For example, if we select phi = 3rdSgMsc, it will project a D node and will get spelled out as 'he' Once the node is projected we may also select a T or v feature and place it on the D node, resulting in D^F. (Here I abstract away from the late vs. early insertion model of morphology-syntax interface.)

Importantly, a misplaced feature cannot be selected together with phi-features and project the D node because it is not interpretable on D, unlike the phi-features themselves. Features are misplaced onto nodes in the course of a derivation. They are not part of the lexical items in the array: we do not have {cat^F} in the lexicon from which we draw elements to project nodes. A language may chose to select a non-nominal feature from the feature array and misplace it on all the D/N nodes, on no D/N nodes or only on some of the nodes as long as the above restrictions on feature misplacement are respected. Here is the algorithm of feature selection. We start out with some sub-array that has {cats, SEE, 3rdSgMas, v-features} (I am representing 'see' as made up of the abstract V SEE and a light v which is just v-features.) Importantly, the v has to be selected before the argument merged into its spec so that there is a place for an argument to be merged into. The order of selection of V and the theme argument is irrelevant, on the other hand.

Step 1: Select { SEE}; Project a V –node.:

V0

SEE

Step 2: (a) select {cat}; (b) project an N node;

　　　　　N0

　　　　　cat

(While these steps are not distinct in bare phrase structure, I will treat them as separate.)

Step 3: select v-features; (b) place v-features on the N0 node. I represent them as 'F' to indicate that they need not be v-features, but could be v, P, or Fin features, etc. The misplaced features are uninterpretable:

　　　　　$N^F(0)$

　　　　　cats

Step 4: (a) Project NP; (b) merge NP into spec V:

Step 5: select {v-features}; project v; merge v and VP

Step 6: select {3rdSgMasc}; project D; project DP

Step 7: merge DP 'he' into spec vP.

Result:

```
              vP
            /    \
          NP      v'
          he     /  \
              v-V    VP
              see   /  \
                 cats^(f=v)
```
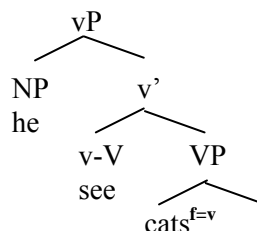
Note that here we have omitted the step of selecting a misplaced feature from the array and placing it on the D node. Since features are misplaced in the course of building the derivation, there is a choice a language can make as to whether it will misplace all some or no features. However, once the choice is made, it is observed throughout the language.[1] This is a stipulation I

---

[1] Note that for languages that misplace features only on the lower NP argument in the vP, the right generalization is that features do not get misplaced on the highest NP in the vP/ VP where the highest argument within the clause is an NPi such that for every other NPj in the VP NPi c-commands NPj.

invoke, but it is no less of a stipulation than saying that case features exist on all NPs in the lexical array, for example as was assumed in previous minimalist frameworks.

Viviane Deprez (pc) raises the following question: if a language does not simply have an inventory of NPs with case features, how do we know whether to misplace a case feature only on the theme? What prevents a language that is supposed to have case features only on the lower argument in the vP from placing a case feature on the higher argument as well? The answer to this question is stated above: this is a parameter fixed per language. This is much like the answer to the question what prevents a language that has only subject agreement from also having object agreement, i.e. from misplacing 2 sets of phi-features on T instead of just one? The answer is rather simple: this is a basic property of the language. Moreover, we cannot have an inventory of NPs with misplaced features in the lexicon because even in a language such as English or Russian some NPs do not have case features. For example, adjoined phrases are caseless even in languages that have case (Chomsky 1981, Baker 1996, 2003, Schutze 1997 inter alia). If NPs were already with case features as they were merged into the structure, then all adjuncts must have case in English/Russian which would be problematic because it is unclear how case will get licensed on an adjoined phrase. Alternatively, we have to say that adjuncts do not exist in English/ Russian because all NPs come with case features in these languages and adjuncts cannot have case features, hence adjuncts cannot exist – this is also a clearly false prediction. Finally, the third option is that there is a separate lexicon in languages that have case on NPs that is specially reserved for adjuncts. This is also a counter-intuitive and highly non-economical assumption. Hence, regardless of whether we believe case to be universal or not, it cannot be a part of the lexical items prior to their being merged into the structure. Case is placed or misplaced on the NPs as the derivation is built.

Appendix 1B (Chapter 1)   Algorithm for feature valuation

The configuration in which features are valued is referred to as the Valuation/ Licensing Requirement – the principle operant on both functional heads and NP which requires local c-command without interveners between the valuator and the valuee. To put it in more formal terms, the Valuation Requirement is stated as follows:

(1)   **The Valuation / Licensing Requirement**: X can value/ license the features of Y only if X locally c-commands Y `X "locally" c-commands Y iff there is no intervening phrase or head that appears between X and Y.

Once the Valuation/ Licensing Requirement is satisfied – the necessary configuration is established, the misplaced features can be identified by the interpretable features of the valuator. So, we have two steps for feature valuation:

Step 1: establish c-command between the valuator and the value/license –satisfy the Valuation/Licensing Requirement;
Step 2: establish identity between the misplaced feature and the interpretable feature

When we talk about valuing phi-features on T, the second step is the crucial step in triggering deletion of the case feature on the NP by T. Default agreement which involves only a partial set of phi-features (3rd person, no num) can be valued by any XP if only the first step is satisfied. No identity is needed and hence no deletion is possible.

Now, if the valuator X is a head and the valuee Y is an NP/ DP with a misplaced feature, then immediate c-command allows only the following configurations:

(2)   The valuator is a sister of the valuee

$$
\begin{array}{c}
\text{XP} \\
\diagup\diagdown \\
\text{X} \qquad \text{NP}^{F=X}
\end{array}
$$
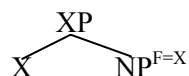
(3)   The valuator is a sister of the phrase in whose spec the valuee is located

$$
\begin{array}{c}
\text{XP} \\
\diagup\diagdown \\
\text{X} \qquad \text{ZP} \\
\diagup\diagdown \\
\text{NP}^{F=X} \quad \text{Z}
\end{array}
$$
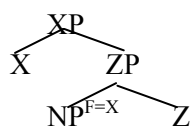
If X is a phrase and Y is T(the probe) where T needs to get its phi-features valued by those of the XP, then the XP (the valuator/licenser) must be in the spec of T (If the T has more than one spec, the valuator must be in the spec that immediately c-commands the T, i.e. in the lowest spec of TP):

For phi-features on T to be valued, the NP must c-command the T locally, which means that it must be attracted into spec TP. (Alternatively, if the initial numeration involves an expletive, it is merged into the spec directly).

(4)

$$
\begin{array}{c}
\text{TP} \\
\diagup\diagdown \\
\text{NP} \qquad \text{T} \\
\text{They(i)} \quad \diagup\diagdown \\
\text{T}^{phi = 3rdPl} \quad \text{VP} \\
\diagup\diagdown \\
\text{t(i)} \quad \text{V} \\
\text{run}
\end{array}
$$
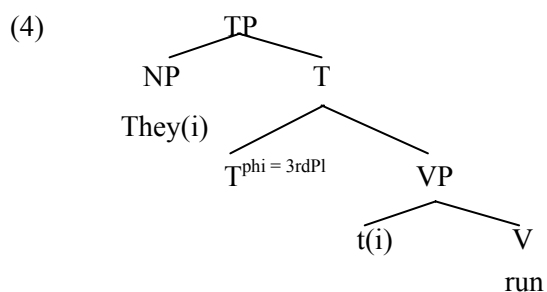
Appendix 2A (Chapter 2)   Why we want to be EPP-free ?

The movement to eliminate the EPP has a number of supporters, including Grohmann et al 2000, Boeckx 2000, Boskovic 2002, Martin 1999, etc. Below I present a review of some of two of these proposals: Boskovic 2002 and Boeck 2000 because they are the most detailed ones.

Boskovic 2002

I start with the account presented in Boskovic 2000 who argues that the EPP can be reduced to independently motivated properties of grammar such as the Case Filter and successive cyclicity. Boscovic considers two 'kinds' of EPP – what he calls the 'final' EPP and the 'intermediate' EPP. The 'final' EPP refers to the requirement that clauses have a subject, e.g. '*Is likely John here'. The 'intermediate' EPP refers to the requirement that intermendiate specs be filled as in:

(1)   The students(i) seem [t(i) to have t(i) liked French]

He argues that these two kinds of EPP can be reduced to the two different independently motivated properties of grammar stated above. The final EPP is attributable to the Case Filter and to the 'Inverse' Case Filter – the need of the T to check its uninterpretable Case feature. Boscovic argues that if we assume that both accusative and nominative case are checked overtly such that the elements carrying the case features appear in the spec-head relation. In constructions such as (2)(a,b) there is no spec-head relation established between the NP with the uninterpretable case feature and the functional head that has the corresponding feature: resulting in ungrammaticality (Boskovic 2002: p.6).

(2)   a. * Was told Mary that Peter left

       b. * John believes to have been told Mary that Peter left

In (a) the nominative is not checked on the T and the NP because there is no spec-head relation between 'Mary' and the T. In (b), the accusative is not checked on the v and the NP for the same reason. Sentences such as the ones in (3) are ruled out by the Inverse Case Filter – the accusative case feature on 'believe' is unchecked (Boskovic 2002: p.7).

(3)   a. * John believes to have seemed Peter was ill

    A problem with this claim is that if we merge the expletive 'it' into the spec of 'to' which would take care of the case feature on T, the sentence would not imporove:

(3)   b. */? John believes it to have seemed that Peter was ill

Boskovic also presents a rather elaborate discussion on the BELIEVE type verbs in Boscovic 1997. These are the verbs that are just like 'believe' only they do not assign accusative case. In English, the verbs 'remark' and 'conjecture' are like that. Yet, they are not possible in a construction such as (3) – that is, replacing 'believe' with 'conjecture' will not improve the sentence. Bosvovic 1997 discusses BELIEVE –type verbs extensively, and argues that they do not provide an argument for the EPP contrary to appearances. I will refer the reader to Boskocvic 1997, 2002 for details and leave the issue here.

    Turning now to the intermediate EPP, Bosckovic argues that we can account for the movement in (2a) without appealing to the EPP and instead by invoking successive cyclicity – an independently motivated condition on movement.   The 'Inverse' Case-filter cannot account for the intermediate EPP. For example, the infinitival [to] in (2a) above does not have a Case feature to check, yet movement does take place. Something else is going on. To account for the intermediate movement, Boscovic argues that sentences such as (2a) should be treated in the

same way as sentences such as (4) where the wh moves successively through the spec of CP to the highest position:

(4)   What(i) do you think [t(i) that Mary bought t(i)]

He argues that the same holds for the movement of the NP 'the students' in (a) where the NP passes through the embedded spec IP on its way to the final landing site(p.16). He argues that the embedded clause in (a) qualifies as a phase because of its complete propositional content and is therefore subject to the phase impenetrability condition. The phase impenetrability condition states that only the head and the spec of a phase are accessible for movement to a position outside the phase (p.16). That is, if the embedded IP and the CP in (4) are equivalent with respect to phase-hood, then the movement in both cases is explained. Clearly, there are further details to this argument which I will forgo for the reasons of space and time. I refer the reader to the original paper for detailed arguments.

While interesting, Bosckovic's faces several objections. First, the status of the Inverse Case Filter is unclear.   Once we assume that all features are interpretable – one of the central reasons to get rid of the EPP -- it is no longer possible to claim that the T has case-features. After all, case features are interpretable functional head features (such as the tense feature for example), hence the Inverse Case Filter loses its status. However, more importantly, there is a problem with the argument Boscovic uses to explain the intermediate EPP. If the embedded IP in (2a) a phase much like the CP in (4) is, why is the matrix IP not a phase? His argument for the phasehood of the intermediate IP is merely the fact that it has full propositional content, but by that token wouldn't any IP have that? Finally, to account for raising in the ECM constructions, Boskovic claims that English has overt object shift (following Lasnik 1999) whereby the ECM-ed object raise overtly to satisfy the Inverse Case Filter. However, an important shortcoming of this argument is that Boskovic is led to claim that while overt object shift is required in the English

ECM constructions, it is blocked in the standard transitive constructions because the accusative in

ECM constructions is structural while in the transitive constructions it is inherent (p.46). This

break in parallelism between the accusative case in the ECM and transitive constructions is

unexpected and ad hoc. Invoking inherent case-marking in transitive constructions remains a pure

stipulation and is therefore suspect. The current account gets rid of the EPP without resorting to

the Inverse Case filter or stipulating that the infinitival IP is a phase. Crucially, the Inverse Case

filter cannot be invoked in any account that wants to do away with purely uninterpretable features

such as the EPP. Given my extension of Pesetsky and Torrego's 2001 insight that case features

are actually interpretable features of functional heads, there cannot be any such thing as an

uninterpetable case feature on T. This is a desirable result because replacing the EPP with the

Inverse Case filter weakens one of the central reasons why we want to get rid of the EPP in the

first place – we want to have a minimum number of features and to have only those features that

carry semantic content. Finally, Boskovic has two distinct mechanisms to deal with the final and

the intermediate EPP, while the current proposal uses only phase-driven movement to account for

both.

Boeckx 2000

Boeckx 2000 also argues that the EPP must be eliminated and reduced to the case-

checking (phi-feature-checking) needs of the T which are independently motivated. However, his

argument is different from Boscovic's in that he does not invoke the Inverse Case Filter at all.

Instead, he argues that clauses need to have a spec because (a) the T needs to delete its

uninterpretable phi-features prior to spell-out and (b) the IP/TP is not a phase and will not allow

an NP with a checked case feature has to be sent to the PF interface, causing a problem. Because

the TP is not a phase, it cannot be spelled-out before the CP is built. However, the NP with a

checked feature must reach the interface to be interpreted – that is, it must be spelled out. To

allow an NP with a checked feature to reach the interface level, Boeckx invokes a proposal in

Uriagereka 1999 regarding Multiple Spell-out. He argues that specifiers are spelled out

separately from the head-complement units he call the Command Units. Thus, the NP with a

checked case feature is moved to spec TP for spell-out because otherwise it cannot be spelled out

– TP is not a phase. The case-feature on the NP, in turn, gets checked as a result of the T having

matched phi-features with the NP.

Boeckx's account also faces several problems. First he has to adopt a 'special case' for

dative subjects: according to him they must get the 'Generic' case in addition to the

morphological case they receive. This is needed to motivate their movement to the spec TP.

However, there is no other independent definition of 'generic' case. Second, Boeckx does not

seem to address the arguments for EPP in infinitival constructions. Since the infinitival T

arguably lacks phi-features and case features, it is unclear what would drive movement in a

construction such as (2a). Instead Boeckx argues that the infinitival constructions are bare vP's

where 'to' is an event head, not a Tense head. In that he is crucially following the arguments

presented in Wurmbrandt 1998, Travis 1999. However, this argument faces a number of serious

challenges such as the fact that there are verbs that take bare vP complements such as:

(5)   a. John saw/ let Bill leave

        b. John allowed Bill [to leave]

If [to] is an event head in (5b) then it is unclear what kind of a phrase [Bill leave] in (5a) would

be. Since (a) and (b) both contain an agentive verb, it is plausible that they both involve a small v.

But why then does 'to' appear in (5b) but not in (5a) if 'to' is the spell-out of small v. Hence, the

argument that the infinitival constructions do not involve a TP at all is problematic.

Finally, there is question that goes to the very heart of Boeckx's proposal. The question is

the following. Why can't the CP be built and then spelled out without the NP moving to the spec

TP and getting spelled out separately? [CP [TP [T is [vP John likely to leave]]]. It is unclear

from Boeckx's arguments what would rule out this option.

That being said, the proposal in this chapter is similar to Boeckx's in that it also crucially

relies on the important status of phases in the theory of syntax. Although I do not assume

Boeckx's details regarding multiple spell-out, it is central to my proposal as well as the claim that

CP is a phase while IP is not. The phase-marking head Force [C] checks the derivation for

uninterpretable features and can trigger movement to do away with them. Like Boeckx 2000, I

utilize the crucial condition imposed on phases – the requirement that they contain no

uninterpretable features at spell-out prior to LF. However, in contrast to the above proposals that

argue to do away with the EPP, the proposal presented here (e.g. the claim that the phase-marking

head Force can license movement to create configurations in which uninterpretable features can

be deleted) accounts for the movement of the NP in infinitival clauses but avoids positing the

Inverse Case filter or Multiple Spell Out. The 'final' EPP effect is accounted for by phase-driven

movement, i.e. the independently motivated need to delete uninterpertable features prior to spell-

out.

Appendix 2B (Chapter 2)   A typology of event heads: exploring the relationship

between event structure and argument structure

Here I show that the relative positioning of event-introducing and argument-introducing

heads determines whether the resulting construction is unaccusative, unergative or transitive. In

addition, the kind of event head merged is what determines the eventuality type/ inner aspect of

the predicate (in the sense of Travis 2000).

Unaccusatives:

Consider first the unaccusative construction. Following Baker 2003c I assume that an

unaccusative verb involves conflation(Hale and Keyser 1993) of an abstract adjective with Pred –

the head that introduces the theme argument (Bowers 1991, Baker 2003c). Extending Baker's

idea, I propose that there is an additional step in the derivation of the unaccusative verb:

conflation of Adj with Event head. The event head introduces an eventuality argument and is

responsible for the Aktionsart (eventuality type) of the resulting verb. Consider the following:

(1)   Dima   bolejet / sushchestvujet

         Dima   sicks   / exists

         Dima is sick / exists
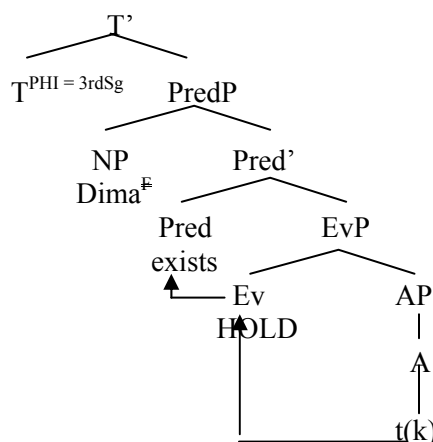
In the construction above we have a stative event head conflating with an adjectival node and

further with Pred. This yields a stative unaccusative verb such as "exists" or the Russian [bolejet

= sicks = is being sick]. The stative aspect of the construction is determined by Ev [HOLD].

However, if instead of HOLD we have DO, the result will be an achievement unaccusative verb[1]

such as 'arrive' or 'fall'.   Note that in the above derivation the event head is merged below the

theme and consequently cannot value the case feature of the object NP. This means that the

---

[1]   Interestingly, CAUS seems to be impossible in the above configuration – unaccusative verbs are not causative. At this point I can suggest the following reason for why this may be so. If instead of HOLD we had CAUS in the above structure, the argument added by Pred would have to be a Causer . However, by definition John must be a theme. Having a CAUS head would thus lead to a contradiction: the same argument is both a causer and a theme. (However, see Jackendoff 1990 for the claim that a single NP can have both agent and theme theta-roles e.g. *John rolled down the hill)*

unaccusative will not have the option of having accusative case. Merging the event head below

Pred is a defining feature of an unaccusative construction.

Before moving on to the transitive constructions, I would like to answer three questions

that may arise with respect to the above representation. *Question (1)*: what forces the Ev to be

merged above A but below Pred? *Answer:* nothing in the syntax forces it. It is possible to merge

the event head above Pred, but in this case we will no longer have an unaccusative construction.

Instead, we will have the accidental construction discussed in the previous section. That is, when

Ev is merged above Pred, the theme argument will be able to have the accusative case[2] which is

what we saw in the accidental construction repeated below for convenience:

(2)   Dimu   ubilo

         Dima-ACC   killed

         Dima got killed

 [EvP [Ev(CAUS) [PredP [NP [Pred]]]]

Question (2): Do we need the event head in the above representation if the adjective

already introduces a state argument as argued in Parsons 1990, inter alia? The short answer to this

question is that we do need the Ev for semantic reasons. Although the adjective introduces a state

argument it is not the kind of argument that can combine with the tense node (as argued

extensively in Rothstein 1999) because it cannot be located in time by the T. Consequently, we

need the event head to map the state argument introduced by the adjective to a temporally

locatable eventuality. *Question (3)*: the representation above is assumed for unaccusative verbs

crosslinguistically, but in the previous discussion it seemed that in English the event head is

realized together with V. How can we reconcile this with the representation in which the event

---

[2] I have no answer at this point for why the Ev in the accidental construction is CAUS and not HOLD. It is possible that different event heads can have restrictions on where they can be merged. I leave this issue open for now.

head is merged below Pred and consequently cannot possibly be bundled with V? *Answer*:

modifying what was said previously, let's assume that in bundling languages the Event head has

to be bundled with *some* argument-introducing head, but not necessarily with V. It can be

bundled with Pred:

(3)
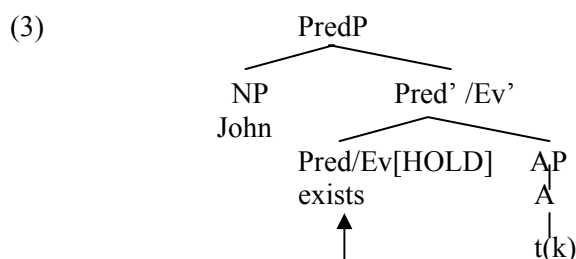
The above is the representation of an unaccusative verb in English: the event head and Pred are
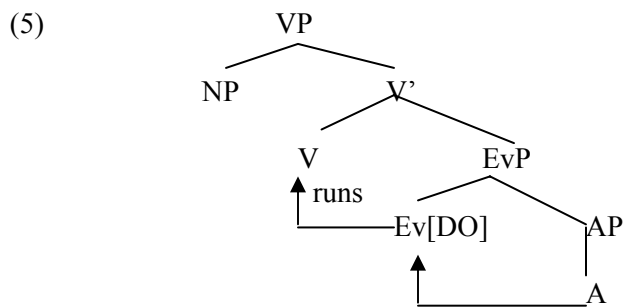
the same.

Transitive

Next, I turn to transitives. Below I represent a transitive construction in a non-V-

bundling language such as Russian:

(4)
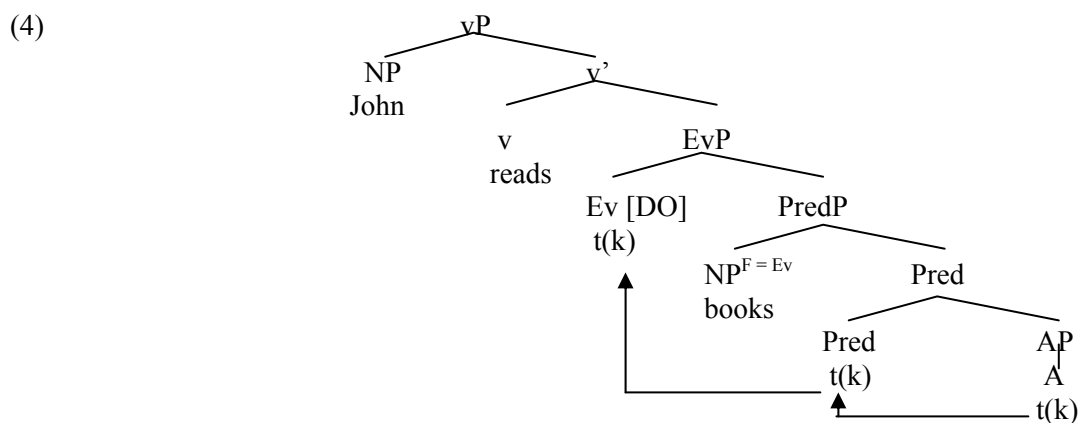
In the representation above the Ev[DO] is merged above PredP.[3] The event head determines the

inner aspect of the VP - in this case it is an activity.

Unergatives

An unergatives verb involves the following configuration:

(5)

I assume that unergatives do not involve an internal argument introduced by Pred. In the above

configuration, V introduces a specifier – a defining feature of a verb (Baker 2003), while the

event head introduces an event argument.   As previously, the event head determines whether the

resulting verb is a state or activity.   Note also that if we assume the view of unergatives on which

there is a theme argument (Chomsky 1995, Hale and Keyser 1993, 1997), the above

representation would become identical to that of transitive verbs. This would in turn explain the

accusative case on the object in 'John danced a beautiful dance.'

---

[3]   There is a question why Ev isn't be merged below Pred as in the unaccusative construction? Answer: if
we believe in Kratzer's idea that the external argument is not an argument of the verb, then to be fully
consistent, we have to believe that it is an argument of an event introduced by some other head. In the case
above, the external argument [John] is an argument of the Ev [DO]. However, if DO were merged below
Pred, then technically speaking Ev[DO] would be a part of the event structure of the VP. (VP is just
another name for PredP in the above structure. See Baker 2003). Hence, [John] would be an argument of
the verb, which is not what we want. For this reason, the event head in a transitive construction has to be
merged below V but above Pred.

<u>Adverbial experiencers:</u>

The familiar adverbial experiencers are similar to the unaccusative construction up to the

Ev but are different from it in that there is no conflation and there is no Pred introducing the

theme argument. Also, instead of an adjective we have an adverb.[4]

I repeat the construction below:

(6)   Dime   xolodno

         Dima-DAT   cold

         Dima is cold

```
                    EvP
              ┌──────┴──────┐
             PP            Ev'
           ┌──┴──┐       ┌──┴──┐
           P    NP      Ev    AdvP
          TO θ→ Dima   HOLD   cold
```
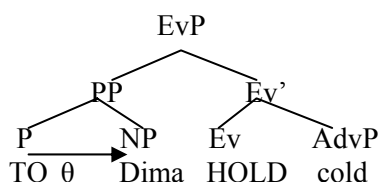
<u>Experiencer unergatives:</u>

This construction has similar structure to the agentive unergative [e.g it involves

conflation between A and Ev]; however, unlike the agentive unergative there is no v head.[5]

(7)   Dime   legko   bezhitsja

---

[4]   I   follow Baker (2003) in assuming that there is no categorial difference between adjectives and adverbs. Syntactically, they are the same- they involve neither a specifier no a referential index (Baker 2003). However, semantically, they are distinct: adverbs express properties of events while adjectives are predicates of individuals. Hence their type is different. Adjectives: $\lambda x\ \lambda s\ [A(x, s)]$; adverbs: $\lambda P\lambda s[A(s)\ \&\ P(s)]$. Now, I am assuming that semantically Pred, is an identity function: $\lambda P.P$ and exists purely for syntactic reasons - to introduce a specifier (Baker 2003). If the identity function applies to an EvP that has combined with the adverb we will get a predicate of the type that could not combine with an individual: λs $[A(s)\ \&\ HOLD(s)]$ This explains why an experiencer adverbial cannot have a theme-argument: merging a Pred into the derivation containing an adverbial and an event head would result in the wrong type to combine with the theme argument. It does not explain why V cannot introduce an argument in the adverbial construction. As I already mentioned in Ft.Note 16, I don't have an answer to this question.

[5] Note that I depart slightly from the representation of the experiencer unergative given in section 3 of Chapter 2 since in that section I hadn't introduced conflation yet.

Dima-DAT   easily   run-sja

Running goes easy for Dima.

```
              EvP
            /      \
         PP          Ev'
       TO-Dima      /    \
              Ev run-sja    AP
                  ↑          |
                  |_____A
```
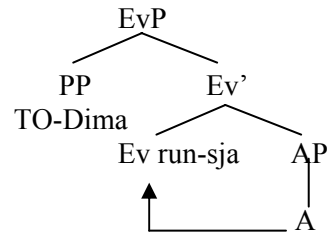
Transitive constructions with dative subjects:

(8)   a. Mne   nuzhna   kniga

         Me-DAT needed-fem-SG   book-fem

         I need a book

       b. Mne   vsopomnilsja   etot   son

         Me-DAT remembered-sja   this   dream

         I remembered this dream

The transitive construction above is minimally different from an ordinary transitive construction

in that there is no v. Instead, we have a PP merged into the spec of EvP.

       To recap, different event heads merged in different places result in different kinds of

predicates. Below I summarize the constructions we talked about:

i . Unaccusatives: Pred + Ev +A

ii. Transitive constructions involve: V+Ev+Pred+A

iii. Transitive construction with dative subjects: [PP in spec of Ev]+Pred+A

iv. Accidental construction: Ev (CAUS) + Pred + A

v. Unergative : V +Ev[DO] +A

vi. Unergative experiencer: PP in spec of Ev[Do] where Ev conflates with A but no further conflation with   V takes place

vii. Adverbial experiecer: PP in spec of Ev[HOLD] + AdvP

Thus, unaccusative, transitive, and unergative constructions are defined not only by the kind of arguments they involve (e.g. agent, theme, or both), but also by the position at which the event head is merged.   Now, since the event -head does not introduce a theta-role, it is possible to merge a PP into the spec of EvP, i.e. the adverbial experiencer, unergative experiencer, and transitive dative-subject constructions. Crucially, this depends on whether or not the language has event-heads realized independantly from an argument-introducing heads - Pred or v. In languages where an event head comes separately from an argument –introducing head, we can find dative subject constructions and also the accidental construction. However, if Ev and an argument-introducing head is one and the same, then out of the 7 constructions mentioned above we will only have 3: unaccusative, transitive, agentive unergative. The dative-subject constructions and the accidental construction will be blocked by the Theta-Criterion.

References

Alexiadou, A. and E. Anagnastopolou 1998. "Parametrizing Agr: word order, V-movement and EPP checking", *Natural Language and Linguistic Theory* 16, 491-539.

Andrews, A. 1990. Case structures and control in Modern Icelandic. In Maling and Zaenen 1990, 187 – 234.

Austin, J. and Lopez, L. 1995. Nominative, absolute and dative languages. In Proceedings of NELS 25: 1-15, GLSA, University of Massachusetts, Amherst.

Babby, L.H. 1993a. "A Theta-theoretic Analysis of Adversity Impersonal in Russian". *FASL 2: The MIT Meeting.*

Babby, L.H.1993b. "Impersonal Forms of the Verb in Russian." Paper delivered at the 1993 AATSEEL Winter meeting (Toronto).

Baker, M., Johnson, K. and I. Roberts 1989. "Passive Arguments Raised" Linguistic Inquiry 20: 219 - 52

Baker, M. 1997. Thematic Roles and Syntactic Structure. In: Haegeman, Liliane (ed.), *Elements of Grammar: Handbook of Generative Syntax,* Dordrecht: Kluwer, 73 – 137.

Baker, M. 1996. *The Polysynthesis Parameter*. Oxford University Press, NY.

Baker, M. 1988. *Incorporation: A theory of grammatical function-changing*. Chicago University Press.

Baker, M. 2003a. "Agreement, dislocation,and partial configurationality." Rutgers University, Ms

Baker, M. 2003b. "Verbal adjectives as adjectives without phi-features" in ???

Baker, M. and O. Stewart 1999**.** On Double-Headedness and the Anatomy of the Clause. Rutgers University ms.

Baker, Mark. 2003. *Verbs, Nouns, and Adjectives: Their Universal Grammar*. Cambridge University Press.

Barbosa, P. 1994. "Subject Positions in the Null Subject Languages", paper presented at CONSOLE III, Venice.

Baltin, M. and Barrett, T. (2002). "The Null Content of Null Case." New York University, Ms.

Barnes, M 1986. Subject, Nominative and Oblique Case in Faroese. Scripta Islnadica 37: 13-46.

Bickel, B. and Y. Yadava 2000. A fresh look at grammatical relations in Indo-Aryan, *Lingua* 110, 343- 373.

Bittner, M. 1994. *Case, Scope, and Binding*. Dordrecht: Kluwer

Bittner, M. and Ken Hale 1996. Ergativity: toward a theory of a heterogeneous class. *Linguistic Theory* 27, 531 – 604.

Blake, B. 2001. *Case*. Cambridge: Cambridge University Press.

Bobaljik, J. 1995. *Morphosyntax: the Syntax of verbal inflection.* Ph.D. Dissertation, MIT.

Bobaljik, J. 2002. PF-merge. "A-Chains at the PF-Interface: copies and 'covert' movement." *Natural Language and Linguistic Theory* 20: 197 – 267.

Bobaljik, J. 1992. "Nominally absolute is not absolutely nominative." Proceedings of the 11th West Coast Conference on Formal Linguistics, 44- 60.

Bobaljik, J. 2005. Where's PHI, University of Connecticut, Ms.

Bobaljik, J. and A. Carnie 1996. Irish word order. in Robert Borseley and Ian Roberts (eds.) *The Syntax of Celtic Languages*, Cambridge University Press, Cambrdige

Bobaljik, J. and S. Wurmbrandt in press. The domain of agreement. In *Natural Language and Linguistic Theory***.**

Boeckx, C. 2000. Quirky Agreement, *Studia Linguistica* 54.3, 354- 380.

Boeckx, C. 2002. Eliminating the EPP. UConn, Ms.

Boeckx, C. 2004. Long distance agreement in Hindi: some theoretical implications. In *Studia Linguistica* 58. 1 pp23- 36.

Borer, H. 1989. "Anaphoric AGR" in O. Jaeggli and Ken Safir (eds). The Null Subject Parameter, Kluwer, Dordrecht, pp. 69 - 109

Borer, H. 2005. *In Name Only. Structuring Sense,* Volume I. Oxford: Oxford University Press

Boskovic, Z. 1997. *The Syntax of non-finite complementation*. Cambridge, Mass., MIT Press.

Boskovic, Z. 2002. A-movement and the EPP. *Syntax* 5. 167 - 219

Bresnan, J. and J. Kanerva 1989. Locative inversion in Chichewa: a case study of factorization in grammar. *Linguistic Inquiry* 20, 1- 50.

Bresnan , Joan and Sam Mchombo 1987. Topic, pronoun, and agreement in Chichewa. *Language 63* 741 – 782.

Bresnan, J. and Sam Mchombo 1987. "Topic, pronoun and agreement in Chichewa", *Language* 63: 741 – 783.

Burzio, Luigi 1986. Italian Syntax: A Government-Binding Approach. Reidel.

Burzio, Luigi 2000. "Anatomy of a Generalization" in *Arguments and Case: Explaining Burzio's Generalization* ed. Eric Reuland.

Butt, R. and T. King. 1991   Semantic case in Urdu. In I.M. Dobrin, L. Nichols, and R.M. Rodriguez (eds.) *Papers from the 27th Regional Meeting of the Chicago Linguistic Society*, Vol. 1, 31- 45. Chicago Linguistics Society.

Castillo, J.C., J. Drury and K.K. Grohmann 1999. Merge over Move and the EPP. In S. Aoshima, J. Drury, and T. Neuovonen (eds) *University of Maryland Working Papers in Linguistics*, 8, 63 – 103.

Cinque, G. 1990. *Types of A-bar Dependencies,* MIT Press, Cambridge Massachusetts.

Chomsky, N. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.

Chomsky, N. 1986. *Knowledge of Language*. New York: Praeger.

Chierchia, G. 1995. Introduction. Gregory Carlson and Jeff Peletier (eds.) *The Generic Book, 125 - 175*. Chicago, IL. The University of Chicago Press.

Chomsky, N. and H. Lasnik 1993. The theory of principles and parameters. In J. Jacobs, A. von Stechow, W. Sternefel and T. Vennemann (eds). *Syntax: an international handbook of contemporary research.* New York: Wlter de Gruyter, 506 – 569.

Chomsky, N. 1995. *The Minimalist Program.* MIT Press. Cambridge Massachusetts.

Chomsky, N. 2000. "Minimalist Inquiries: the framework." *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik, ed.* Roger Martin, David Michaels, and Juan Uriaguereka, 89 – 155. Cambridge, Massachusetts: MIT Press.

Chomsky, N.2001a. "Derivation by phase." In Michael Kenstowicz (ed.), *Ken Hale: a life in language*. Cambridge, MA: MIT Press, pp.1-52.

Chomsky, N. 2001b. Beyond explanatory adequacy. Ms. MIT.

Cole, P and J. Jake 1978. Accusative subjects in Imbabura Quechua. Studies in the Linguistic Sciences 8: 72 – 96.

Comrie, B. 1989. *Language Universals and Linguistic Typology*. The University of Chicago Press, Chicago.

Croft, W 1990. *Typology and Universals*, Cambridge University Press, Cambridge.

Davis, W. 1986. Choctaw verb agreement and universal grammar. Dordrecht: Reidel.

Deprez, V. 1991. "Raising constructions in Haitian Creole", *Natural Language and Linguistic Theory 10:* 191- 231.

Deprez, V. 1994. Haitian Creole: a pro-drop language? *Journal of Pidgin and Creole Languages 9*: 1, 1- 24.

Dixon, R.M.W. 1994. Ergativity. Cambridge Studies in Linguistics, 69. Cambridge University Press.

Enc, M. 1987. Anchoring conditions for tense. *Linguistic Inquiry* 18:633-657

Enc, M.1990. On the absence of present tense morpheme in English. Ms. University of Wisconsin, Madison.

Enc, M.1996. Tense and Modality. In *The Handbook of Contemporary Semantic Theory*. Shalom Lappin, ed. pp. 345 – 358

Epstein, S.D and D. Seely (1999). *On the Non-Existence of the EPP, A-Chains, and Successive Cyclic Movement.* Ms., University of Michigan and Eastern Michigan University.

Fabb, N, 1984 Syntactic affixation. Doctoral Dissertation. MIT, Cambridge, Mass.

Fox, D. and D. Pesetsky 2004. Cyclic Linearization of syntactic structure. Ms. MIT.

Franks, S. 1995. *Parameters of Slavic Morphosyntax*. Oxford University Press. **NY?**

Gair and Wali 1989. "Hindi agreement as anaphor" *Linguistics* 27: 45- 70.

Givon, T. 1979. *On understanding grammar*. Orlando, Fla.: Academic Press.

Grima, J. 1978. Categories of zero nominal reference and clausal structure in Thai. Ph.D Dissertation, University of Michigan, Ann Arbor.

Grohmann, K., John Drury, and Juan Carlos Castillo (2000). No More EPP. In the Proceedings of WCCFL, 19, 153 – 166.

Hale, K. 1983. Walpiri and the grammar of non-configurational languages. *Natural Language and Linguistic Theory* 1: 5 5- 49.

Hale, K. and S. Keyser 1993. On argument structure and the lexical expression of syntactic relations. In The View from Building 20: Essays *Essays in Linguistics in honor of Sylvain Bromberger,* 53- 109. MIT Press, Cambridge, Mass

Halle, M. and A. Marantz 1993. Distributed Morphology and the pieces of inflections in Ken Hale and S. Keyser (eds) *The view from Building 20: Essays in Linguistics in honor of Sylvain Bromberger,* MIT Press, Cambridge, Mass., pp. 111- 176.

Harley, H. 1995. Subjects, Case, and Licensing. Ph.D. Dissertation, MIT.

Higginbotham, J. 1985. On Semantics. *Linguistic Inquiry*. 16, 4. 547 – 593.

Holmer, A. 2001. The ergativity parameter. *Working Papers* 48, Lund University.

Hornstein, N. (2003). On Control. In Randall Hendrick, (ed). *Minimalist Syntax*. Blackwell Publishing, Ltd.

Jalinek, E. 1984. "Empty categories, case, and configurationality", *Natural Language and Linguistic Theory* 2: 39 – 76.

Jacobson, R 1936. Beitrag zur algeimenen Kasuslehre**.** *Travaux de Cercle linguistique de Prague 6.*

Jonas, D. 1992. Checking theory and nominative case in Icelandic. In S. Kuno and H. Thrainsson (eds.) *Harvard Working Papers in Linguistics*, I. 175 – 195.

Jonsson, G. 1996. *Clausal architecture and case in Icelandic*. Ph.D. dissertation, University of Massachusetts, Amherst.

Karttunen, L. 1971. Implicative Verbs. *Language* 47.2:340-358.

Kayne, R. 1989. Facets of past participle agreement in French. Dialect Variation and the theory of Grammar, ed. by P. Beninca. Dordrecht: Foris

Kayne, R. 1994. The Antisymmetry of syntax. MIT Press. Cambridge, Massachusetts.

Keenan, E. 1976. Towards a unified definition of "subject". In C.N. Li (ed.) Subject and Topic, 303-333. New York: Academic Press.

Kiparsky, Paul, and Carl Kiparsky. 1970. "Fact." *In Progress in Linguistics*, edited by M. Bierwisch and K. E. Heidolph. The Hague: Mouton. (143--173.)

Kiparsky, P. 1987. Morphology and grammatical relations. Ms. Stanford University.

Kiparsky, 1997. The rise of positional licensing. In *Parameters of Morphosyntactic Change*. A. Kemenade and N. Vincent. 460 – 494. Cambridge. University Press.

Kiss, E. K. 1987 Configurationality in Hungarian. Dordrecht: Reidel.

Ko, H. 2004. Asymmetries in scrambling and cyclic linearization. Ms. Cambridge, MA.

Kratzer, A. 1995. Stage-level and individual level predicates as inherent generics. In Gregory Carlson and Jeff Peletier (eds.) *The Generic Book, 125 - 175*. Chicago, IL. The University of Chicago Press.

Kratzer, A.1996. "Severing the External Argument from its Verb." In J. Rooryck and L. Zaring (eds.) *Phrase Structure and The Lexicon*. Dordrecht (Kluwer Academic Publishers)

Kinyalolo, K. 1991. Syntactic dependencies and the Spec-head agreement hypothesis in KiLega, Ph.D. dissertation, UCLA.

Landau, I. 1999. *Elements of Control*. PhD Dissertation, MIT.

Landau, I. 2003b Movement out of Control. *Linguistic Inquiry* pp. 471 – 498.

Landau, I.2003a. The Locative Syntax of Experiencers. Ben Gurion University, Ms.

Lasnik, H. 1981 "Restricting the theory of transformations: a case study" In N. Hornstein and D.Lightfoot (eds.) *Explanations in Linguistics*. London: Longmans 152 – 173.

Lasnik, H. and M. Saito (1991). On the subject of Infinitives. In Papers from the 27th regional meeting of the Chicago Linguistic Society, eds. Dorin, L., Lynn Nichols, and Rosa M. Rodriguez., 324-343.

Lasnik, H. 1995. A note on Pseudo-gapping. MIT Working Papers in Linguistics., Vol.#27. Papers on Minimalist Syntax., pp. 143 – 163.

Lavine, J. and R. Freidin (2001) "The subject of defective tense in Slavic". *Journal of Slavic Linguistics*

Lehmann, C 1982. Universal and typological aspects of agreement. In H.Seiler and F.J. Stachovwak (eds.) Apprehension: das sprachliche Erfassen von Gegenstanden Teil II, 201 – 267, Tubengen: Gunter Narr**.**

Lehmann, C. 1988. On the function of agreement. In Agreement in Natural Language: approaches, theories, descriptions. (Eds) by M. Barlow and C. Fergusson

Legate, 2003. Split ergativity in Warlpiri. Ms. Harvard University.

Levin, B. 1989. The Basque verbal inventory and configurationality. In Configurationality: the typology of asymmetries, eds. Laszlo Maracz and Pieter Muysken, 39 – 62. Dordrecht: Foris.

Levin, B. and Simpson 1981. Quirky case and lexical representation of Icelandic verbs. *Papers from the 17th Regional Meeting of the Chicago Linguistic Society*, 185 – 196.

MacSwan, J.1998. "The argument status of NPs in Southeast Puebla Nahuatl: Comments on the Polysynthesis Parameter." *Southwest Journal of Linguistics*, Vol.17, 2.

Mahajan, A. 1997. "Universal Grammar and the Typology of Ergative Languages" in A. Alexiadou and T.A. Hall (Eds) Studies on Universal Grammar and Typological Variation, John Benjamins Publications.

Maling, J and Sprouse, R. 1995. Structural case, specifier-head relations, and the case of predicate NPs. *Studies in Comparative Germanic Syntax., eds.* Hubert Heider, Susan Olsen and Sten Vikner, 167- 186. Dordrecht, Kluwer.

Manning, C. 1996. *Ergativity: Argument structure and grammatical relations*. CSLI Publications., Stanford, CA.

Marantz, A. 1984. *On the nature of grammatical relations*. Cambridge, Mass.: MIT Press

Marantz, A. 1991. Case and licensing. In *the Eighth Eastern States Conference in Linguistics*. 234-253.

Markman, V. 2004. "Causatives without causers and Burzio's Generalization", NELS

Martin, R.1996. A Minimalist Theory of PRO and control. Doctoral Dissertation., University of Connecticut, Ms.

Martin, R. 1999. Case, the Extended Projection Principle, and minimalism. In *Working Minimalism*, ed. S.Epstein and N. Hornstein, 1-25. Cambridge, Mass., MIT

Martin, R. 2001. Null Case and the distribution of PRO. *Linguistic Inquiry*, 32, 1, 141 – 166

McClosky, J. 1996a. "On the scope of verb movement in Irish", *Natural Language and Linguistic Theory* 14, 47- 104.

McClosky, J. 1996b. "Subjects and Subject Positions" in Robert Borseley and Ian Roberts (eds.) *The Syntax of Celtic Languages*, Cambridge University Press, Cambrdige.

McFadden, T. 2004. *A position of morphological case in the derivation: a study of morphology-syntax interface.* Ph.D. Dissertation, University of Pennsylvania.

Meyr 1984. Zero-derivation and inflection. *In MIT Working Papers in linguistics 7*. MIT.

Milliken, M. 1984. Quechua person reference. Cornell Working Papers in Linguistics 5: 158-179.

Miyagawa, S. 2003. On the EPP. To appear in Proceedings of the EPP/Phase Workshop, Norvin Richards and Martha McGinnis, eds. MIT Working Papers in Linguistics.

Mohannan, T. 1994. *Argument Structure in Hindi*. CSLI Publications Standford, California.

Moor and Perlmutter (2000). "What does it take to be a dative subject?", Natural Language and Linguistic Theory 18, 373 – 416.

Moravcik, E 1974. Object-verb agreement, *Working papers on language universals*, 15, pp.24-140.

Moravcik, E 1978. Agreement. In Joseph Greenberg (ed.) *Universals of Human Language: IV: Syntax,* Stanford University Press, Stanford University Press, Stanford, pp. 331-374.

Muysken, P. 1981. Quechua word structure. In Binding and Filtering. ed. Frank Heny, 279- 327. Combridge, Mass., MIT Press.

Ndayiragije, J. 1996. Case checking and OVS in Kirundi. In Configurations: *Essays on structure and interpretation*, ed. A-M. di Sciulo, 267-292. Sommerville, Mass.: Cascadilla Press

Nevins, A, and P. Anand. 2002. "The locus of ergative case assignment: evidence from Scope." To appear in *Ergativity* (eds) Johns, Massam, and Ndayiragije, Kluwer.

Nichols, J. 1986. "Head-marking and dependent-marking grammar." *Language 62*: 56 – 119.

Nichols, J. 1992. *Linguistic diversity in space and time*. Chicago: University pf Chicago Press.

Nunes, J. 1999. "Linearization of Chains and Phonetic Realization of Chain Links" in S. Epstein and N. Hornstein, (eds). *Working Minimalism,* MIT Press, Cambridge, Mass. Pp.217-249.

Nunes, J. 2004. Linearization of Chains and Sideward Movement. Linguistic Inquiry Monograph 43. MIT Press: Cambridge Massachusetts.

Partee, B.1973. "Some structural analogies between Tenses and Pronouns in English," *The Journal of Philosophy 70*, 601- 609.

Partee, B. (1984). "Nominal and Temporal Anaphora, " *Linguistics and Philosophy* 7, 243 – 286.

Pereltsvaig, A. 2001 On the Nature of Intra-Clausal Relations: A Study of Copular Sentences in Russian and Italian, Ph.D Dissertation. McGill University, Canada.

Pesetsky, D. 1982. *Paths and Categories*. Ph.D. dissertation MIT.

Pesetsky, D. 1991. *Zero Syntax, Part II.* Ms, MIT.

Pesetsky, D. 1995. *Zero Syntax.* Cambridge, Massachusetts, MIT Press.

Pesetsky, D. and E. Torrego 2001. "T-to-C Movement: Causes and Consequences " in Michael Kenstowicz (ed.), *Ken Hale: A Life in Language*. Cambridge, MA: MIT Press.

Phillipaki-Warburton, I 1985. "Word Order in Modern Greek", *Transactions of the Philological Society*, 113-143.

Platzack, C. 2003. "Agreement and Null Subjects". In Nordlyd 31.2:326 – 355.

Polinsky, M. 1993. Subject inversion and intransitive subject incorporation. In *Proceedings of CLS* 29, 343- 361.

Postal, P. 1974. On raising: one rule of English grammar and its theoretical implications. Cambridge, Mass. MIT press.

Prince, E. 2003. The Yiddish impersonal pronoun men 'one' in discourse. Presented at the Annual Meeting of the LSA, Atlanta.

Pylkkanen, L. 2002. *Introducing Arguments*. Ph.D. Thesis, MIT

Raposo. E. 1987. Case theory and Infl-to-Comp: the inflected infinitive in European Portuguese. *Linguistics Inquiry* 18: 85- 109.

Reuland, E.2000. *Arguments and Case: Explaining Burzio's Generalization*, John Benjamins, Amsterdam.

Richards, N. 1997. *What moves where when in which language*. Ph.D. Dissertation, MIT. Cambridge Massachusetts.

Richards, N. 1998. The Principle of Minimal Compliance. *Linguistic Inquiry* 29. 4. 599-629.

Ritter, E. and S. Rosen 2000. "Event structure and ergativity". In Events as Grammatical Objects: the converging perspectives of lexical semantics and syntax. Stanford: CSLI Publications.

Rizzi, L. 1986. "Null Objects in Italian and the Theory of *pro*", *Linguistic Inquiry* 17, 501 – 558.

Rizzi, L. 1997. The fine structure of the left periphery. Elements of Grammar. Handbook of Generative Syntax, ed. Liliane Haegeman, 281 – 337.

Rouveret, A and J-R Vergnaud 1980. Specifying Reference to the Subject, *Linguistic Inquiry*, 11.1.

Sadakane and Koizumi 1995. On the nature of the dative particle 'ni' in Japanese. *Linguistics* 33, 5 – 33.

Saito, M. 1982. Case-marking in Japanese. A Preliminary Study. Ms. MIT

Schutze, C. 1997. *Infl in Child and Adult Language*. Ph.D. Thesis, MIT

Schutze, C. 1999. Expletive 'there' constructions are not infected. *Linguistic Inquiry* 30, 467 – 484.

Sigurdsson, H. 1989. *Verbal Syntax and Case in Icelandic*. PhD dissertation, University of Lund.

Sigurdsson, H. 1991. Icelandic Case-marked PRO and the licensing of lexical arguments. *Natural Language and Linguistic Theory 9:* 327 – 363.

Sigurdsson, H. 1992. The case of quirky subjects. *Working Papers in Scandinavian Syntax* 49: 1 – 26.

Sigurdsson, H. 2000. The Locus of case and agreement. *Working Papers in Scandinavian Syntax* 57: 1 – 46.

Sigurdsson, H. 2001. Meaningful Silence, Meaningless Sounds. Lund, Ms.

Sigurdsson, H. 2002. Agree and agreement: evidence from Germanic, Ms. Lund.

Sigurdsson, H. 2003. "Case: Abstract vs. Morphological" in *New Perspectives on Case Theory*. (eds) Ellen Brandner and Heike Zinsmeister, CSLI.

Sola, J. 1992. Agreement and Subjects, Unpublished Ph.D. dissertation, Universitat Autonoma de Barcelona.

Stowell, T.1982. The Tense of Infinitives. *Linguistic Inquiry*, 13, 3, 561 – 570.

Takahashi, S. 1994. "Case, agreement, and multiple subjects: subjectivization in syntax and LF, " in Noriko Akatsuka eds. *Japanese/ Korean Linguistics*, 4, CSLI Stanford, pp.394- 411.

Takezawa, K. 1987. A configurational approach to Japanese case-marking, Ph.D dissertation, University of Washington.

Tateshi, K. 1991. The syntax of "subjects." Ph.D. dissertation, University of Massachusetts, Amherst.

Taraldsen, T.1995. On agreement and nominative objects in Icelandic. *Studies in Comparative Germanic Syntax., eds.* Hubert Heider, Susan Olsen and Sten Vikner, 307 – 327. Dordrecht, Kluwer.

Travis, L. 2000. Event Structure in Syntax. In Carol Tenny and James Pustejovsky, (eds.), *Events as Grammatical Objects: The Converging Perspectives of Lexical Semantics and Syntax*, 145 – 185.

Ura, H. 1994. Varieties of Raising and the Feature-based bare phrase structure theory: *MIT occasional papers in Linguistics 7.*

Ura, H. 1996. Multiple feature-checkinh: a theory of grammatical function splitting, Ph.D dissertation, MIT.

Ura, H. 2000. *Checking theory and grammatical functions in Universal Grammar*. Oxford University Press, NY.

Uriaguereka, J. 1999 Multiple Spell-out. In *Working Minimalism*, ed. S.Epstein and N. Hornstein, 1-25. Cambridge, Mass., MIT

Vermeulen, R. 2002. Possessive and adjunct multiple nominative constructions in Japanese, University College London, Ms.

Vitale, A. *Swahili Syntax*. Dordrecht: Foris.

Watai, F. 1996. Two subject positions and a functional category predicate. MA Thesis, Univresity of Calgary, Calgary, Alberta.

Watanabe, A. 1993. *Agr-based case theory and its interaction with A-bar system*. Ph.D dissertation, MIT.

Woolford, E. 1999a. Ergative Agreement Systems, Workshop Univresity of Maryland, College Park (May 1999).

Woolford, E. 1999b. More on the anaphor agreement effect. *In Linguistic Inquiry* 30. 2, 257-287.

Woolford, E. 2004. Case-Agreement Mismatches. To appear in C.Boeckx ed. volume on agreement in Comparative Syntax Series, Oxford University Press.

Woolford, E. 2005. Lexical case, inherent case, and argument structure. University of Massachusetts, Ms.

Wurmbrandt, S. 2001. *Infinitives: restructuring and clause structure*. Berlin. Mouton de Gruyter.

Yang, Dong-Whee 1983. The extended binding theory of anaphors. *Language Research 19*: 169 – 192**.**

Yip, M., Maling and R. Jackendoff 1987. Case in Tiers. Language 63: 217 – 250.

Zaenen, A., Joan Maling, and H. Thrainsson 1985. Case and grammatical functions: the Icelandic Passive. Natural Language and Linguistic Theory 3: 441

Curriculum Vitae

Education

2000	**B.A. (Honors)**	**New York University, New York, NY**
2005	**Ph. D.**	**Rutgers University, New Brunswick, NJ**

Academic and Teaching Experience

1/04 – 7/04   Part Time Lecturer (Linguistics 201)
Department of Linguistics Rutgers University

5/03 – 7/03   Part Time Lecturer (Language 101)
Department of Linguistics, Rutgers University

9/02 – 5/03   Teaching Assistant (Language 101)
Department of Linguistics, Rutgers University

9/01 – 5/02   Graduate Assistant (Professor Veneeta Dayal)
Department of Linguistics, Rutgers University

Presentations and Publications

Vita G. Markman (2005) "On Feature Misplacement: Case, Agreement, and (Non)-configurationality". Paper presented at the West Coast Conference on Formal Linguistics (WCCFL) 24, Simon Fraser University, British Columbia, Canada.
To appear in WCCFL 24 conference proceedings.

Vita G. Markman (2004) "The Case of Experiencers: Receiving, Holding, Doing." Paper presented at West Coast Conference on Formal Linguistics (WCCFL) 23, UC Davis.
Published in the proceedings from WCCFL 23, Cascadilla Press.
      Also presented at the 28th Penn Linguistics Colloquium, University of Pennsylvania, February, 2004.

Vita G. Markman (2004) "Dative subjects within a minimalist theory of case and agreement" Invited talk at Syntax Supper, CUNY Graduate Center Department of Linguistics.

Vita G. Markman (2003) "Causatives without Causers and Burzio's Generalization." Paper presented at Northeastern Linguistic Society (NELS) 34, State University of Stony Brook, NY.
Published in NELS 34, 2004 conference proceedings.
      Also presented as a poster at Center for Advanced Study of Theoretical Linguistics (CASTL-1), Tromso, Norway, October 2003.

Vita G. Markman (2003) "Morphological effects on default stress placement in Russian novel words: an experimental approach" – together with Katherine Crosswhite, John Alderete and Tim

Beasley. Paper presented at the West Coast Conference on Formal Linguistics (WCCFL) 22, UC San Diego. Published WCCFL 22, 2003 conference proceedings, Cascadilla Press.

Vita G. Markman (2003). "On the place of passive participles within lexical categories." Paper presented at DGfS 25, Munich, Germany.

Vita G. Markman (2001) "On the syntax and semantics of some Russian –sja constructions" paper presented at Formal Descriptions of Slavic Linguistics (FDSL) 4, Potsdam, Germany. Published in the FDSL 4 conference proceedings.