Agreement Restrictions



Interface Explorations 15

Editors

Artemis Alexiadou T. Alan Hall

Mouton de Gruyter Berlin · New York

Agreement Restrictions

edited by Roberta D'Alessandro Susann Fischer Gunnar Hrafn Hrafnbjargarson

Mouton de Gruyter Berlin · New York Mouton de Gruyter (formerly Mouton, The Hague) is a Division of Walter de Gruyter GmbH & Co. KG, Berlin.

Printed on acid-free paper which falls within the guidelines of the ANSI to ensure permanence and durability.

Library of Congress Cataloging-in-Publication Data

Agreement restrictions / edited by Roberta D'Alessandro, Susann Fischer, Gunnar Hrafn Hrafnbjargarson. p. cm. – (Interface explorations ; 15) Includes bibliographical references and index. ISBN 978-3-11-020065-2 (cloth : alk. paper) 1. Grammar, Comparative and general – Agreement. I. D'Alessandro, Roberta, 1973 – II. Fischer, Susann, 1964 – III. Hrafnbjargarson, Gunnar Hrafn, 1975 – P299.A35A358 2008 415-dc22 2008018245

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at http://dnb.d-nb.de.

ISBN 978-3-11-020065-2 ISSN 1861-4167

© Copyright 2008 by Walter de Gruyter GmbH & Co. KG, 10785 Berlin All rights reserved, including those of translation into foreign languages. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher. Cover design: Christopher Schneider, Berlin.

Printed in Germany.

To Ragna

Preface

During the last two decades, especially with the rise of the Minimalist Program, agreement restriction phenomena have received increasing attention in research. Our idea has been to collect the different views in one place, a volume on *Agreement Restrictions*. We contacted the major experts of the field (in our opinion) and asked them whether they would be interested in writing a paper for such a volume. Now, a couple of years later, we are proud to present you with ten papers of cutting edge research on the topic. We hope that you will enjoy the articles as much as we have.

There are quite a few people to whom we want to express our sincere gratitude for their help and support. Many thanks to the people who helped us reviewing the papers in the present volume: Karlos Arregi, Theresa Biberauer, Anders Holmberg, Luis López, Andrew Nevins, Hamid Ouali, Gillian Ramchand, Marc Richards, María Luisa Rivero, Isabelle Roy, Florian Schäfer and Halldór Ármann Sigurðsson. We would also like to thank Artemis Alexiadou, Terje Lohndal, Thomas McFadden, and Anna-Lena Wiklund for their valuable comments on our introductory chapter.

Finally, we would like to thank the series editors, T. Alan Hall and especially Artemis Alexiadou for their interest in the project, and Ursula Kleinhenz at Mouton de Gruyter for her never ending patience.

Last, but not least, our families and friends deserve to be thanked for their understanding and support and the countless ways in which they brighten up our lives outside linguistics.

Contents

On agreement restrictions1Roberta D'Alessandro, Susann Fischer and Gunnar H. Hrafnbjargarson
Notes on the Person Case Constraint in Germanic(with special reference to German)15Elena Anagnostopoulou
Agreement and clitic restrictions in Basque49Karlos Arregi and Andrew Nevins
The Person-Case Constraint and patterns of exclusivity87Cedric Boeckx
The Person-Case constraint and repair strategies
The [person] restriction: why? and, most specially, why not?
On C-to-T φ-feature transfer: The nature of Agreement and Anti-Agreement in Berber159 <i>Hamid Ouali</i>
Quirky Expletives
Oblique subjects and person restrictions in Spanish: A morphological approach
Icelandic Dative Intervention: Person and Number are separate probes 251 Halldór Ármann Sigurðsson and Anders Holmberg
Person-hierarchy effects without a person-hierarchy
Contributors
Index of subjects317Index of languages321Index of authors322

On agreement restrictions

Roberta D'Alessandro, Susann Fischer and Gunnar Hrafn Hrafnbjargarson

Over the years, many different phonological, morphological and syntactic phenomena have been grouped under the label 'agreement restrictions'. Latin grammarians for instance, such as Marcus Terentius Varro in his De lingua latina (ca. 47-49 b.C.), listed environments where the verb could only show a 3rd person agreement ending. These cases, and all cases of defective verbal agreement, can certainly be subsumed under the wide definition of 'agreement restrictions'. However, in this volume our main focus lies on cases in which agreement between the verb and one of its arguments obtains only when the argument shows certain characteristics, such as when it is 3rd person, or when no other element of a specific kind is present. Moreover, we refer to all combinations of agreement markers which are banned from appearing together. The agreement restriction that we address in this volume concerns the interaction between syntactic elements and/or the features that characterise these elements. It needs to be said, in addition, that while the common view has been so far that agreement (or AGREE) is part of narrow syntax, see, however, Bobaljik (2007), Chandra (2007), and Hornstein (to appear) for another view. We do not enter into this discussion, and consider Agree as a narrow-syntactic phenomenon.

In general, observations on agreement and agreement restrictions have played an important role in the development and design of generative syntactic theories. Specifically, they have influenced the way in which feature checking, locality, long distance agreement, case, and subjects are envisioned, and shaped the theories of syntax-morphology and syntaxsemantics interfaces. That is why during these last years, agreement restrictions phenomena have received increasing attention in research. However, most of the relevant work that has been produced on agreement relations during the last decade is scattered in journals, conference proceedings, working papers and dissertation chapters, which are often quite difficult to obtain. The present collection of papers intends to fill the gap by offering a compendium of cutting edge research on the topic. In particular, it aims at contributing to the ongoing debate on agreement restrictions within a generative framework by presenting ten articles by the major experts of the field collected in one volume. The articles give an extensive overview of the results that have been achieved so far but also underline the shortcomings in the theory, and can therefore help indicate the path for future research.

It needs to be said that there is no consensus on the 'name' for agreement restriction phenomena. Agreement restrictions, or constraints, are in fact labeled in a number of different ways (**me/lui constraint*, the *I-II Constraint*, the *Person-Case Constraint*, the *Person Restriction on Nominative Objects*, and lately the *Person-Role Constraint*). They have also received a number of different explanations: in terms of structural positions, markedness, alignment requirements, interaction of more general constraints, and so on.

The papers that appear in this volume can be grouped into three main sets: The *Person-case constraint* (PCC) set, which includes those papers which address the restriction on the co-occurrence of agreement markers and case markers, the *Person/number-restriction* set which addresses the restriction on agreement features of a lexical item agreeing with a case-assigning head, and the *Anti-agreement* or *Lack of agreement* set that treats the same restrictions with the surface result of no agreement or anti-agreement. These three groups are obviously not unrelated. In fact, for some authors (such as e.g. Boeckx 2000 and Anagnostopoulou 2003) restrictions like that of person on nominative objects in Icelandic quirky dative constructions descend from the same constraint on structural configurations as does the lack of agreement in Basque, (Arregi & Nevins, this volume) and the anti-agreement in Berber (Ouali, this volume).

Since there is no consensus on whether these apparently different kinds of restrictions are indeed one and the same, we treat them separately in this introduction. We hence provide a short overview of the three constraints and give short summaries of the contributions, to provide the reader with as clear a picture as possible of what this volume is about.

In the first group belongs the article by Bonet, who gave the name to the Person-Case-Constraint, as well as the novel insightful paper by Anagnostopoulou on the PCC in Germanic. A modified version of this constraint is also found in Spanish and addressed by both Rivero and López.

The second set includes the papers by Sigurðsson and Holmberg, who discuss the person restriction on nominative objects in Icelandic, and Richards, who addresses the problem of quirky expletives in Germanic languages. Boeckx also addresses the PCC but detaches methodologically from the rest of the group, since he aims at reducing this phenomenon to conditions on local domains rather than situations of intervention and multiple agreement. The third set of papers groups those articles that address situations in which the clash of syntactic and morphological rules results in lack of agreement (Arregi and Nevins), arbitrary gaps (Wiltschko) or anti-agreement (Ouali).

In what follows, we provide a short introduction to the basic facts concerning the core phenomena addressed in this volume: the person-case constraint, the person/number restriction and the anti-agreement effects. We believe that the discussion of these effects can serve as a starting point for those who wish to follow the argumentation in the book but have no previous background on the topic.

1. The Person Case Constraint

Since Meyer-Lübke (1899), who documented the fact for Romance, it has been well known that languages show restrictions on specific combinations of morphological features. Such constraints have since been described for many languages, most extensively for the Germanic and Romance languages. Below, we see two Catalan examples from Bonet's (1991) dissertation. The examples illustrate that the combination of weak elements of a specific kind (a direct and an indirect object) is subject to restrictions on the person of the direct object.¹

- (1) **Me li ha recomanat la senyora B*. ACC.1SG DAT.3SG has recommended the Mrs. B. 'Mrs. Bofill has recommended me to him/her.'
- (1') In a combination of a weak direct object and an indirect object [clitic, agreement marker, weak pronoun], the direct object has to be 3rd person.
 (Bonet 1991: 182)
- (2) % *Te* m'ha venut el mercader més important. ACC.2ND DAT.1SG'ha sold the merchant most important a. 'The most important merchant has sold you to me.' b. 'The most important merchant has sold me to you.'
- (2') In a combination of a weak direct object and an indirect object [clitic, agreement marker, weak pronoun], if there is a third person it has to be the direct object. (Bonet 1991: 182, Bonet 1994: 41)

The PCC thus results in the impossibility of certain clitic combinations, such as 1st person clitic combinations which are possible in the singular but not

in the plural. Some authors maintain that the restrictions on the combination of clitics or weak elements or agreement markers are determined by structural constraints on agreement or on feature combinations. According to others, the PCC is seen in some cases as the result of multiple agreement with the case-assigning head, which constitutes a bridge between the sets (for an analysis of the person restriction in impersonal *si* constructions in Italian in these terms, see D'Alessandro 2007).

Up to present, it has been uncontroversial that in many languages clitics and agreement markers are subject to the PCC. However, with respect to Germanic weak pronouns, different opinions have been discussed in the literature. Whereas Bonet (1991) sees the PCC as operative in English and Swiss German, Haspelmath (2004) and Cardinaletti (1999) claim that the PCC is not operative in Dutch and Standard German. Anagnostopoulou in her present article investigates constraints on weak-pronoun combinations in Germanic, with a special focus on German. The primary goal of her article is to demonstrate that Germanic weak pronouns are actually subject to the Person Case Constraint. She provides a set of data that clearly shows that clusters of weak pronouns in German and in Dutch are subject to the PCC, more precisely to the weak version of the PCC as proposed by Bonet (1991). In German, the PCC is additionally connected to another constraint on weak pronouns, which was observed by Wackernagel (1892) and is known as Wackernagel's law. The data presented in Anagnostopoulou's paper show that the PCC in Modern German only applies when the weak pronouns appear in the Wackernagel position (the second position in a clause) preceding the subject. After discussing the data, Anagnostopoulou shows how the analysis of the PCC outlined in Anagostopoulou (2005) can be extended to German.

Bonet focuses in her contribution on the repair strategies that can be used in Catalan in order to avoid the PCC. The observed strategies involve replacing the third person dative clitic, li (singular) and (e)lzi (plural) with the clitic hi, a clitic which is described in "traditional" Catalan grammars as a locative clitic. Bonet convincingly argues that the clitic hi/i/ is the morph corresponding to dative case, i.e. the indirect object. Bonet's conclusion is that the indirect object is sensitive to animacy (*contra* Ormazábal and Romero 2007). The Catalan repair strategy thus challenges the common view that the PCC can be formulated considering only the features of the direct object.

López's paper addresses the person restriction phenomenon in Spanish in contrast to Icelandic. The central claim is that the person restriction emerges when the external argument, T, and the internal argument are bound together in what he calls a complex dependency. A complex dependency arises when two elements, which are in a Match relation of unvalued features, enter Agree with a third element, which values their unvalued features together. Starting from the assumption that external arguments need to be licensed by finiteness, Lopez argues that a person restriction arises in Spanish and Icelandic whenever the two following conditions are met: the external argument is licensed by finiteness, and these is a complex dependency relation between T, the external argument and the internal argument. Spanish oblique subjects are then shown not to undergo a person restriction precisely because one of these two conditions, namely licensing of the external argument by finiteness, fails to apply.

Rivero, in her contribution, develops a morphological account of person restrictions that arise in Spanish unaccusative constructions with "quirky" subjects and objects. She discusses different clitic combinations and mainly offers three new ideas. Her first proposal concerns the fact that *se* does not trigger any person restriction. For this empirical fact she proposes that *se* is unspecified for person, following Adger and Harbour (2005) and Anagnostopoulou (2003, this volume). Her second proposal concerns 1p/1p clitic combinations that are grammatical in the singular but not in the plural. The plural combinations are deviant because these clitics have too rich a content, which poses problems when they appear in adjacent positions in the clitic cluster because of markedness. Markedness leads in fact to ungrammaticality. The third proposal pertains to experiencers / involuntary causer clitics. She proposes that these clitics must be marked in the syntax with a mental state feature.

2. The person restriction on nominative objects

Unlike many languages where nominative arguments are unrestricted agreement controllers, Icelandic exhibits a Person Restriction on nominative objects first discussed by Sigurðsson (1990-91, 1992, 1996). The Person Restriction bans the agreement of a verb with a first or second person nominative object, as shown in examples (3) and (4), whereas agreement with third person objects is not affected, as shown in (5).

(3)	a. * <i>Ykkur</i> you.PL.DAT	<i>líkaði</i> liked.1/3SG	ég. I.nom	(verb: 1/3SG	object:1SG)
	b. * <i>Þér</i> you.SG.DAT	<i>líkuðum</i> liked.1PL	<i>við.</i> we.NOM	(verb: 1PL	object:1PL)

(4)	a.	* <i>Okkur</i> us.DAT	<i>líkaðir</i> liked.2SG	þú. you.SG.NOM	(verb:2SG	object:2SG)
	b.	* <i>Mér</i> me.DAT	<i>líkuðuð</i> liked.2PL	þið. you.PL.NOM	(verb:2PL	object:2PL)
(5)	a.	<i>Okkur</i> us.DAT	<i>líkaði</i> liked.3sG	<i>hann</i> . he.NOM	(verb:3SG	object:3SG)
	b.	<i>Mér</i> me.DAT	<i>líkuðu</i> liked.3PL	<i>þau.</i> they.NOM	(verb:3PL	object: 3PL)

As Sigurðsson (1996) points out, not all speakers of Icelandic disallow first and second person pronouns from surfacing as nominative objects. Instead, for these speakers, the morpho-phonological realisation of agreement is not possible in case the nominative object is first or second person. Based on these observations, Sigurðsson and Holmberg (this volume) formulate the Person Restriction as follows:

(6) In DAT-NOM constructions, *only 3rd person* NOM may control agreement.

The Person Restriction is also found in passives of ditransitives, illustrated in (7).

(7)	a.	Þú	sýndir	þeim	mig.	
		You.SG.NOM	A showed	them.DAT	me.AC	С
	b.	*Þeim	var	sýndur		ég.
		them.DAT	was.1/3SG	shown.MA	SC.SG	I.NOM
	c.	*Þeim	var	sýnt		ég.
		them.DAT	was.1/3SG	shown.NE	UT.SG	I.NOM
	d.	Ég var	sýn	dur	þeir	n.
		I.NOM was.	1/3SG sho	wn.MASC.S	SG ther	n.DAT

Apart from the above mono-clausal constructions, the Person Restriction regulates the agreement of the verb with a nominative element of an infinitival clause (in the so-called *dativus/nominativus cum infinitivo* (D/NcI) constructions), see e.g. Sigurðsson (1989, 1996), and Hrafnbjargarson (2001, 2004). The example in (8) illustrates a DcI-construction. The grammaticality judgments of these differ from those of the mono-clausal constructions as all speakers accept the occurrence of first and second person nominative in the former. The di-clausal constructions share the ban on visible agreement with the mono-clausal constructions; if the verb shows agreement, it only shows agreement in number with third person plural.

(8)	a.	Þér	þótti	ég	/ við	koma of	seint.	
		you.DA	T thought.38	g I.nom	we.NOM	come to	o late	
	b.	<i>Okkur</i> us.DAT	<i>þótti</i> thought.3SG	<i>þú</i> you.SG.	/ <i>þið</i> NOM you	.pl.NOM	<i>koma of</i> come to	<i>seint.</i> o late
	c.	<i>Mér</i> me.DAT	<i>þótti</i> thought.380	/ <i>þóttu</i> 5 though	<i>þau</i> nt.3PL they	<i>ko</i> v.NOM co	<i>ma of</i> me too	<i>seint</i> . late

The issue on whether person agreement is local is still under much debate. According to Hrafnbjargarson (2004), person agreement is local, i.e. it requires a spec-head relation (see also Koopman 2006) as verbs only show person agreement with nominative elements which are positioned in the canonical subject position. Sigurðsson and Holmberg (this volume), on the other hand, argue for the opposite.

In the light of the agreement pattern shown in the examples in (8), i.e. that verbs may show agreement in number with third person plural but not with first and second person, Hrafnbjargarson (2001, 2004) interprets the Person Restriction in Icelandic in terms of interacting constraints on agreement dependencies. This is based on the assumption that verbs cannot show partial agreement in Icelandic. The controlled verb shows agreement in number if and only if it has the same value for the feature [person] as its controller, which in the relevant case happens to be a third person nominative object or a third person nominative subject of an infinitival clause.

Under the above view, the Person Restriction is not directly related to the Person Case Constraint, the scope of which it was later brought under (see e.g. Boeckx 2000, Anagnostopoulou 2003), neither does it arise from intervention effects or constraints on multiple agreement with the nominative-assigning head (see D'Alessandro 2007): While the Person Case Constraint requires that the direct object is third person, the Person Restriction states that verbs may only show agreement with third person. In other words, the Person Case Constraint restricts the occurence and structural position of interpretable features (person on object), whereas the Person Restriction restricts the checking of uninterpretable features (person/number on verb).

One of the papers in the present volume retains the idea that the Person Restriction and the Person Case Constraint are unrelated. In their contribution, Sigurðsson and Holmberg discuss intervention facts and show that we can distinguish between three varieties of Icelandic as regards the strength of the Person Restriction and to which extent the verb shows number agreement with a third person nominative object. Their conclusion is that the absence of number agreement is in fact caused by the intervention of a dative argument, and that it, furthermore, is caused by ordinary dative intervention rather than being related to some special property of the Icelandic dative. In the most restrictive variety, number agreement is possible because the dative moves out of the intervening position, but whenever the dative is prevented from moving, number agreement is excluded.

Richards continues along the lines of Boeckx (2000) and Anagnostopoulou (2003) in pursuing the unification of the Icelandic Person Restriction and the Person Case Constraint. In essence, Richards agues that the partial agreement effects with nominative objects in Icelandic are the same phenomeneon as definiteness effects in English existential constructions and Russian *Genitive of Negation*; they all reduce to Case Filter violations under incomplete matching. Richards gives a thorough explanation of the long-observed, but previously poorly understood, similarities in behaviour between quirky subjects and expletives introducing the term *minimal unit of activeness* – a cased default φ -set, dubbed 'quirky expletive', which serves to reactivate an inherently case-marked, syntactically-inert DP for Agree with a higher probe.

In a slightly different direction, Boeckx aims at making the Person Restriction (which he also unifies with the Person Case Constraint) less construction specific, connecting it to a wider range of conditions that apply within local domains (projections, phases, or chains) such as the Antilocality ban on vacuous movement (cf. Chomsky 1973 where this was first discussed), Grohmann's (2003) condition on Domain Exclusivity, and Kayne's (1984) Binary Branching Requirement, and so on. He argues that the Person Case Constraint is not about restricted situations of interference involving quirky datives, or situations where both goals find themselves in the c-command path of the probe. Rather, Boeckx argues, the Person Case Constraint should be seen as a reflex of a more general ban on symmetric structures, imposed at the interfaces, i.e. a condition that regulates the output of multiple agree situations.

3. Anti-agreement and lack of agreement

In languages that present anti-agreement, the canonical subject-verb marker is replaced by another marker or is dropped in contexts of subject whextraction. Anti-agreement hence belongs to the set of restrictions targeting the agreement between the verb and one of its arguments. Berber is one of the languages most often cited as prototypically showing anti-agreement effects. In Berber, the subject agreement inflectional morphology that is found in a declarative matrix clause is suppressed when the subject is A-bar moved (Ouhalla 1993).

Anti-agreement constitutes a problem for all those approaches which consider morphology and syntax as unrelated units. In this volume, Ouali offers a novel analysis of anti-agreement effects in Tamazight Berber and in Berber. According to this author, anti-agreement effects are the by-product of the application of one of the logical possibilities that characterise Chomsky's (2004) feature inheritance. Specifically, Ouali argues that there are three logically possible options for feature inheritance: the first one, that he calls DONATE, which states that C must transfer all its φ -features to T; the second, KEEP, states that C does not transfer the φ -features to T but also keeps a copy.

These possibilities are organised 'hierarchically', meaning that they take place one after the other. If DONATE fails, then KEEP is applied as a repair strategy. If KEEP fails, then SHARE takes place. Ouali shows that each of these three options is in fact attested in Berber. The case of DONATE is that of simple declarative sentences in Berber, when C does not bear a whfeature. When C does bear a wh-feature, DONATE causes a crash of the derivation, and therefore KEEP is at work to repair the derivation. This results in Anti-Agreement effects. Finally, in long distance extraction clauses, SHARE applies as last resort. The different nature of C in these different contexts is nothing more than the instantiation of these logical possibilities at work in Tamazight Berber and in Berber in general.

Ouali's paper offers a sensible contribution to the ongoing debate on feature inheritance (see e.g. Chomsky 2007, to appear; Richards 2007).

As stated above, anti-agreement effects constitute straightforward evidence for the interaction of the morphological and syntactic component of language. However, anti-agreement is not the only phenomenon that involves the interaction of these two components. Arregi & Nevins (this volume) examine agreement in the Biskaian variety of Zamudio, spoken in the Basque Country, which exhibits the clitic combination and restriction on agreement endings in this variety. The main claim of their paper is that these clitic combinations and agreement restrictions cannot be analysed as purely syntactic or purely morphological, but they rather need to be addressed by considering both hierarchical structure and linear order, as well as morpho-phonological sensitivity and deletion of featural combinations. Arregi & Nevins argue that the morphemes targeting the auxiliary, usually considered to be agreement morphemes, are in fact pronominal clitics, which double arguments, and this explains their invariability with respect to tense. Agreement restrictions in Basque may thus be reanalysed in terms of the PCC. This is however not intended as a constraint on morpho-syntactic feature combination, but as a result of the fact that a head can only host one auxiliary, and therefore a combination of two clitics (like ergative and dative) targeting the same head is never possible. Syntactic and post-syntactic rules, which apply prior to Vocabulaty Insertion, determine the order of the clitics with respect to T. Finally, Arregi & Nevins examine a case of true Agree involving the auxiliary and the absolutive argument. This Agree operation may be subject to defective intervention in the context of dative arguments, leading to lack of agreement.

Gaps in the transitive agreement paradigm are instead the topic of Wiltschko's paper (this volume). In Halkomelem and other dialects of Salish, these gaps were traditionally analysed as reminiscent of inverse systems, and hence as determined by a person hierarchy. Wiltshko shows however that these gaps are simply the result of morphemes competing for the same position, and that therefore a person hierarchy is not a primitive part of the grammar of Halkomelem. She hence shows that apparent person-hierarchy effects can be derived without reference to a person hierarchy, but can be a by-product of syntax. This idea provides a new and different approach and constitutes an interesting alternative to the idea of a functionally-based hierarchy directly encoded in the grammar.

4. Closing words

In this short overview we have only touched upon the many facets of and problems concerning agreement restrictions. We hope that it has proven to be helpful for the readers who were not familiar with the phenomena. We also hope that it constitutes an advantage for a volume that presents a stateof-the-art picture of the ongoing discussion, rendering this discussion clearer for those who are familiar with it but at the same time introducing it to those who had never taken part in it before.

We have selected the contributions of this volume for their uniformity as regards the theoretical background used, namely Chomsky's Minimalist Program, and because of the combination of empirical data and theoretical insights which have developed during the last few years. All of the contributors have been active in the debate. We find it challenging and inspiring to gather their different views in one book. A volume on agreement restrictions, as the present one, will obviously have a preponderance of Romance and Germanic data, since these language families have played the most prominent role in the discussion of agreement restrictions. Nonetheless, the volume provides both novel theoretical discussions and excellent empirical overviews of agreement restriction phenomena that take place also in other languages, such as Basque, Berber, and Salish.

Note

1. The example in (2) has two different readings given in (2a) and (2b), both of which are accepted by most speakers of Catalan. The example is, however, marked % as some speakers only accept the reading given in (2a).

References

Adger, David and Daniel Harbour

2005	The Syntax and Syncretisms of the Person Case Constraint. MIT					
	Working Papers in Linguistics 50: 1–36.					
Anagnostopo	ulou, Elena					
2003	<i>The syntax of ditransitives: Evidence from clitics.</i> Berlin/New York:					
	Mouton de Gruyter.					
2005	Strong and Weak Person Restrictions: a Feature Checking analysis.					
	In Clitics and affixation, L. Heggie and F. Ordoñez (eds.), 199-235.					
	Amsterdam: John Benjamins.					
Bobaljik, Jon	athan David					
2007	Where's Phi? Agreement as a Post-Syntactic Operation. In Phi The-					
	ory: Phi features across interfaces and modules, D. Adger, S. Béjar,					
	and D. Harbour (eds.). Oxford: Oxford University Press.					
Boeckx, Cedr	ic					
2007	Understanding minimalist syntax: lessons from locality in long-dis-					
	tance dependencies. Oxford: Blackwell.					
Bonet, Eulàlia	1					
1991	Morphology after syntax: Pronominal clitics in Romance. PhD the-					
	sis, Department of Linguistics and Philosophy, Cambridge, MIT.					
Cardinaletti,	Anna					
1999	Pronouns in Germanic and Romance Languages: An overview. In					
	Clitics in the Languages of Europe, H. van Riemsdijk (ed.), 33-82.					
	Berlin/New York: Mouton de Gruyter.					

Chandra, Pritha

2007 (Dis)Agree: Movement and Agreement Reconsidered. PhD Thesis, University of Maryland, College Park.

Chomsky, Noam

- 1973 Conditions on transformations. In A festschrift for Morris Halle, S. Anderson and P. Kiparsky (eds.), 232–286. New York: Holt, Rinehart & Winston.
- 2004 Beyond explanatory adequacy. In *The cartography of syntactic structures. Vol. 3, Structures and beyond*, A. Belletti (ed.). Oxford: Oxford University Press.
- 2007 Approaching UG from Below. In Interfaces + Recursion = Language?: Chomsky's Minimalism and the View from Syntax-Semantics, U. Sauerland and H.-M. Gärtner (eds.), 1–29. Berlin/New York: Mouton de Gruyter.
- to appear On phases. In *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud*, R. Fredin, C. P. Otero and M. L. Zubizarreta (eds.). Cambridge, MA: MIT Press.

D'Alessandro, Roberta

2007 *Impersonal "si" constructions*. Berlin/New York: Mouton de Gruyter. Grohmann, Kleanthes K.

2003 Prolific domains. Amsterdam: John Benjamins.

Haspelmath, Martin

2004 Explaining the Ditransitive Person-Role Constraint: a usage-based account. *Constructions* 2/2004, 49 pp.

Hornstein, Norbert

to appear A Theory of Syntax. Cambridge: Cambridge University Press.

- Hrafnbjargarson, Gunnar Hrafn
 - 2001 An Optimality Theory analysis of agreement in Icelandic DAT-NOM constructions. *Working Papers in Scandinavian Syntax* 68: 15–47.
 - 2004 Oblique subjects and stylistic fronting in the history of Scandinavian and English. PhD Thesis, University of Aarhus.

Kayne, Richard

1984 *Connectedness and binary branching*. Dordrecht, Foris.

Koopman, Hilda

2006 Agreement configurations: In defence of "Spec head". In Agreement Systems, Cedric Boeckx (ed.), 159–199. Amsterdam/Philadelphia: John Benjamins.

Meyer-Lübke, Wilhelm

1899 *Romanische Syntax.* Leipzig, O.R. Reisland (*Grammatik der Roma*nischen Sprachen 3)

Ormazábal, Javier and Juan Romero

2007 The Object Agreement Constraint. *Natural Language and Linguistic Theory* 25 (2): 315–347 Ouhalla, Jamal

1993 Subject-Extraction, Negation and the Anti-Agreement Effect. *Natural Language and Linguistic Theory* 11: 477–518.

Richards, Marc D.

2007 On feature inheritance: An argument from the Phase Impenetrability Condition. *Linguistic Inquiry* 38(3): 563–571.

Ormazábal, Javier and Juan Romero.

- 2007 The Object Agreement Constraint. *Natural Language and Linguistic Theory* 25(2): 315–347.
- Sigurðsson, Halldór Ármann
 - 1989 Verbal Syntax and Case in Icelandic. PhD Thesis, University of Lund.
 - 1990-91 Beygingarsamræmi [Agreement], Íslenskt mál og almenn málfræði 12–13: 31–77.
 - 1992 The Case of Quirky Subjects. *Working Papers in Scandinavian Syntax* 49: 1–26.
 - 1996 Icelandic Finite Verb Agreement. *Working Papers in Scandinavian* Syntax 57: 1–46.

Varro, Marcus Terentius

1964 De Lingua Latina. Reedited Amsterdam: Hackert [Leipzig 1910].

- Wackernagel, Jacob
 - 1892 Über ein Gesetz der indogermanischen Wortstellung. *Indogermanische Forschungen* 1: 333–436.

Notes on the Person Case Constraint in Germanic (with special reference to German)

Elena Anagnostopoulou

1. Goals

This is a preliminary investigation of person restrictions in clusters of weak pronouns in Germanic, with special focus on German. My primary goal is to determine whether Germanic weak pronouns are subject to the *Person Case Constraint* (PCC), a constraint prohibiting certain combinations of clitics and agreement markers. I argue that clusters of weak pronouns in German (and perhaps also Dutch) are indeed subject to a version of the PCC, namely the *weak PCC* (Bonet 1991; Anagnostopoulou 2005; Nevins 2007). In German, the PCC arises when pronouns occur in a special position in the clause, the, so called, Wackernagel Position, and they precede subjects. I explore how the analysis of the PCC developed in Anagnostopoulou (2003, 2005) can be extended to German, highlighting – and attempting to resolve – certain challenges that arise concerning the relationship between the laws governing pronominal serialization and the emergence of the PCC.

2. Background

The *me lui* or *Person Case* Constraint (PCC) prohibits 1st and 2nd person direct object clitics and agreement markers from co-occurring with indirect object clitics/agreement markers. The PCC comes in two versions. The *strong version* (based on Bonet 1991: 182) is formulated in (1) and exemplified in (2) with data from Greek:

(1) The Strong Version of the PCC

In a combination of a weak direct object and an indirect object [clitic, agreement marker, weak pronoun], the direct object has to be 3rd person. (Bonet 1991: 182)

- (2) a. *Tha mu* to stilune Fut CL(GEN,1ST, SG) CL(ACC, *3RD*,SG, NEUT) send-3PL 'They will send it to me'
 - b. *Tha* su **ton** stilune Fut CL(GEN, 2ND, SG) CL(ACC, *3RD*, SG, MASC) send-3PL 'They will send him to you'
 - c. **Tha su me sistisune* Fut CL (GEN, 2ND, SG) CL(ACC, 1ST, SG) introduce-3PL 'They will introduce me to you'
 - d. **Tha tu* se stilune Fut CL(GEN, 3RD, SG, MASC) CL(ACC, 2ND, SG) send-3PL 'They will send you to him'

Examples (2a) and (2b) which contain a genitive 1^{st} and 2^{nd} person indirect object clitic and an accusative 3^{rd} person direct object clitic are well-formed. On the other hand, examples (2b) and (2c) in which a genitive co-occurs with a 1^{st} and 2^{nd} person accusative are ill-formed. Observe that (2c), which contains a cluster of a 2^{nd} and a 1^{st} person clitic, is as strongly ungrammatical as (2d) in which a 3^{rd} person genitive co-occurs with a 2^{nd} person accusative. French is similar to Greek in showing an absolute prohibition against 1^{st} and 2^{nd} person weak direct objects in the presence of higher weak indirect objects of any person.

The *weak version* of the PCC is formulated in (3).

(3) The Weak Version of the PCC

In a combination of a weak direct object and an indirect object [clitic, agreement marker, weak pronoun], if there is a third person it has to be the direct object. (Bonet 1991: 182)

The weak version intends to capture the fact that in some languages combinations of 1^{st} and 2^{nd} indirect object and direct object clitics are acceptable. This is exemplified in (4a) and (4b) with examples from Catalan (see Bonet 1994: 41):

 (4) a. Te m' ha venut el mercader més important you-DO me-IO has sold the merchant most important 'The most important merchant has sold you to me' b. *Vi ci manderà* 2-PL-IO 1PL-DO send-FUT-3SG 'S/he will send us to you (PL)'

Similar facts obtain in Spanish, Italian and Old Occitan (Nicol 2005):¹

(5)	Te	me	presentas	Spanish
	DO-2SG	IO-1SG	presented-2SG	
	'You pre	sented yo	purself to me'	

- (6) *Mi ti presentano Italian* DO-1SG IO-2SG introduce-3PL 'They introduce me to you'
- (7) qu'ie us mi don ses bauzia. Old Occitan that I 2PL-IO 1SG-DO give without deceit
 'I surrender myself to you without deceit'. (Jensen 1986: 105–106)

In these languages, combinations of 1^{st} and 2^{nd} person direct object and 3^{rd} person indirect object clitics are not tolerated (Bonet 1991: 178, 183):

(8)	a.	* <i>A en Josep, me li va recon</i> To the Josep 1 st -DO 3 rd -IO recomm	nanar ended-38G	
		<i>la Mireia</i> the Mireia	Catalan	l
		'She (Mireia) recommended me to him (Josep)'	
	b.	* <i>Me le recomendaron</i> 1 st -DO 3 rd -IO recommended-3PL 'They recommended me to him/her'	Spanish	ı
	c.	* <i>Mi gli ha presentata Gia</i> 1 st -DO 3 rd -IO has presented-FEM Gia	ovanni Italian ovanni	l

'Giovanni introduced me-fem to him'

Thus, clitic² languages split into two types:

- (i) Greek and French have the *strong PCC*. 1st and 2nd person direct object clitics are absolutely impossible.
- (ii) Italian, Spanish and Catalan have the *weak PCC*. Combinations of 1^{st} and 2^{nd} person clitics are allowed to surface. What is not permitted is a $1^{st}/2^{nd}$ direct object in the presence of a 3^{rd} person indirect object.

In Anagnostopoulou (2003, 2005), I argued that the *strong* and the *weak PCC* both arise in configurations in which the two objects enter Agree with a single Probe. However, they should be seen as separate constraints, as they reflect different checking conditions. The *strong PCC* arises under *cyclic Agree* while the *weak PCC* under *multiple Agree*.

More specifically, I argued that datives have person features which permit them to enter Agree with functional heads. Datives are "defective" in the sense that their number feature is inaccessible for checking (i.e. in Chomsky's terminology "it does not match T or v"), but they do check person. 1st, 2nd and reflexive pronouns are [+person] pronouns (Bonet 1991; 1995; Taraldsen 1995; Ritter 1995; Kayne 2000), while the person specification of 3rd person pronouns depends on the type of Case they have. Accusative-nominative/direct object 3rd person pronouns lack person features altogether, they are 'determiner pronouns' (Benveniste 1966; Postal 1966; Silverstein 1986; Bonet 1991; Johns 1993; Taraldsen 1995; Ritter 1995; Kayne 2000, among many others). On the other hand, 3rd person dative/indirect object arguments are understood as animate /affected, they encode point of view, properties encoded through person features. In order to express the intuition that dative arguments are specified for person even when they are 3rd person, I proposed, following Adger and Harbour (2007), that 3rd person indirect objects have a negative person specification, they are [-person]. On the other hand, 3rd person direct object pronouns are neither [+person] nor [-person], they simply lack person (see Anagnostopoulou 2003 and 2005 for extensive discussion of the above assumptions; cf. Nevins 2007 for a broader claim according to which all 3rd person arguments, and not just datives, have negative person feature specifications). To summarise the different feature specifications of pronouns (for present purposes, it is sufficient to assume that accusatives check number and datives have inaccessible number without becoming more precise on how exactly number features are represented; see Harbour 2003 for a recent discussion and references):

1,2 ACC	= +person, number	1,2dat	T = +person (inaccessible number)
3acc	= number, (no person)	3dat	= -person (inaccessible number)

In constructions where the *strong PCC* arises φ -features are not checked as a bundle. Agree takes place between a single probe and two goals and proceeds cyclically as follows. The dative argument moves first to a functional head F, which I take to be transitive v (v-TR), entering person Agree with F.

The accusative, which moves/agrees second, may only Agree with F in number:



Step I: Person Agree with high argument

Step II: Number Agree with low argument



If the accusative is of an appropriate type (3^{rd} person) the derivation converges. If, however, the accusative is inappropriate $(1^{st}, 2^{nd} \text{person})$, i.e. +person) the derivation crashes. On the assumption that 3^{rd} person direct object pronouns lack a person feature, they are the only ones that can match number on F, once person on F has been checked.

As discussed in detail in Anagnostopoulou (2003), the most straightforward way of explaining the inappropriateness of 1^{st} and 2^{nd} person in contexts where only the N feature of F is available for checking is to propose that [+person] accusative arguments entering Move/Agree must check person along with number. In other words, accusative arguments must check the complete set of their φ -features. In turn, the requirement for complete checking can be linked to structural Case. If, as suggested by Chomsky (2000, 2001), structural Case checking results from complete φ -checking, then accusative pronouns entering Move / Agree are not allowed to have φ -features that remain unchecked because their Case also remains unchecked.

Turning to the *weak PCC*, I proposed that in e.g. Catalan, Italian, person on F is allowed to enter *Multiple Agree* with the two objects, i.e. [person] can be checked *simultaneously* against both objects. The proposal that person can enter multiple Agree explains why 1^{st} and 2^{nd} person clitics are allowed to co-occur in clitic clusters. The person feature of the direct object can be checked against F along with its number feature even when the higher indirect object enters Agree with the person feature of F.³ There are three cases to consider in languages with the *weak PCC*, which are schematically represented in (10):

(10) a. $\sqrt{1^{st}/2^{nd}} \text{ IO} > 1^{st}/2^{nd} \text{ DO}$ b. $\sqrt{1^{st}/2^{nd}}/3^{rd} \text{ IO} > 3^{rd} \text{ DO}$ c. $*3^{rd} \text{ IO} > 1^{st}/2^{nd} \text{ DO}$

As already mentioned, 1^{st} and 2^{nd} person are allowed to co-occur in the well-formed sequences in (10a) since both objects are allowed to check [+person] against F due to the Multiple Agree parameter. Sequences as in (10b), i.e. combinations of 1^{st} , 2^{nd} and 3^{rd} person indirect objects with 3^{rd} person direct objects, receive the same analysis as comparable clusters in languages with the *strong version of the PCC*. The indirect object checks the person feature of v and the direct object the number feature of v. These combinations instantiate cyclic φ -feature checking and do not invoke multiple Agree. Finally, in order to account for the ungrammaticality of (10c), I proposed that two pronouns are allowed to enter into *multiple Agree* with T or v-TR only when they do not have conflicting feature specifications:

 A Condition on Multiple Agree Multiple Agree can take place only under non-conflicting feature specifications of the agreeing elements

In (10c) the indirect object is 3^{rd} person, hence specified as [-person]. On the other hand, the direct object is specified as [+person]. Since the feature specifications of the two objects are contradictory, sequences as in (10c) are ruled out by (11) (see Anagnostopoulou 2005 for more details). Observe that the ban against conflicting feature specifications of DPs in contexts of Multiple Agree is quite natural if checking is linked to valuation.

Two DPs that check and value the φ -features of T or v cannot have conflicting feature specifications as this will lead to contradictory values for the features of T and v. Following Bejar (2003) I assume that in the languages under discussion the probe is not fully specified (as 1st and 2nd person), but only specified as [+/-person]. Languages fully specified for person show finer grained hierarchical effects (see Bejar 2003 for discussion).

3. Do weak pronouns show the PCC?

While it is uncontroversial that clitics and agreement markers are subject to the PCC, it is unclear whether the constraint applies to combinations of weak pronouns in languages lacking clitics.

The PCC has been claimed to be operative in English (Bonet 1991; Haspelmath 2004) and in Swiss German (Bonet 1991), as the data in (12) and (13) show:

(12)	a. b.	They showed me it *They showed her me	English
(13)	a.	D' Maria zeigt mir en The Maria shows to me him 'Mary shows him to me'	Swiss German
	b.	*D' Maria zeigt em mich The Maria shows to him me 'Mary shows me to him'	

Unlike clitics and agreement markers, though, PCC effects on weak pronouns seem to be less robust crosslinguistically. For example, German and Dutch have been claimed in the literature to not have the PCC, on the basis of well-formed examples like (14) and (15) below (Cardinaletti 1999: 65, Haspelmath 2004):

(14)	<i>weil er</i> because he	<i>mich ihm</i> me to-him	<i>gestern n</i> yesterday n	<i>icht vorgestellt hat</i> ot introduced hat	German
(15)	Ze stelden they introdu	<i>me 'm</i> aced me to h	/ ? 'm im / to hir	<i>me voor</i> n me PRT	Dutch

In what follows, I argue that German does show the PCC, but only in a particular syntactic configuration. 3.1. Placement and serialization of weak pronouns in German

German has different types of pronoun classes. According to Müller (2001a), the hierarchy of pronouns is as follows:⁴

(16) Personal Pronoun Scale:

Pronouns falling under the categories *unstressed*, *weak*, *reduced* undergo obligatory movement to the Wackernagel position.⁵ This is a left-peripheral position following C in German (Lenerz 1977, 1992; Thiersch 1978; Haftka 1981; Hoberg 1997; Haider and Rosengren 1998; Müller 2001a):

- (17) a. daß ihr der Fritz gestern t ein Buch that her-DAT the Fritz-NOM yesterday t a book-ACC geschenkt hat given has
 - b. **daß der Fritz gestern ihr ein Buch geschenkt hat* that the Fritz yesterday her-DAT a book-ACC given has 'that Fritz has given a book to her yesterday'
- (18) a. daβ sie der Fritz gestern der Maria t that she-ACC the Fritz-NOM yesterday the Maria-DAT t geschenkt hat given has
 - b. * daβ der Fritz gestern der Maria sie that the Fritz-NOM yesterday the Maria-DAT she-ACC geschenkt hat given has 'that Fritz has given Mary it(Fem) yesterday'

 (19) a. daβ es der Fritz gestern der Maria t that it-ACC the Fritz-NOM yesterday the Maria-DAT t geschenkt hat given has b. * daβ der Fritz gestern der Maria es that the Fritz-NOM yesterday the Maria-DAT it-ACC geschenkt hat given has 'that Fritz has given Mary it yesterday'

According to Müller, strong pronouns are not allowed in the Wackernagel position:⁶

- (20) a. *daβ IHR der Fritz gestern t ein Buch that her-DAT the Fritz-NOM yesterday t a book-ACC geschenkt hat given has
 - b. $da\beta der Fritz gestern IHR$ ein Buch geschenkt hat that the Fritz yesterday her-DAT a book-ACC given has 'that Fritz has given a book to her yesterday'

The three classes of weak pronouns (unstressed/weak/reduced) obligatorily precede adverbs of all types. They must also precede all non-pronominal arguments, except for subjects. Subjects are allowed to occur before Wackernagel pronouns (they can also occur after pronouns, see (17)-(19) above):

(21) a. $da\beta der Fritz$ es gestern der Maria that the Fritz-NOM it-ACC vesterday the Maria-DAT t geschenkt hat given has b. **daß der Maria* es der Fritz gestern that the Mary-DAT it-ACC the Fritz-NOM yesterday t geschenkt hat given has

Müller attributes the SUBJ>pronoun, pronoun>SUBJ alternation to the fact that subjects may optionally raise from the vP-internal subject position to Spec,TP. On the assumption that Spec,TP precedes Wackernagel clitics, SUBJ>pronoun orders arise when the subject moves to T while pronoun >SUBJ orders obtain when the subject remains in its base position.

What is the position targeted by Wackernagel movement? An obvious analysis would be to postulate a functional head W situated between the vP and the TP which hosts weak pronouns. Müller, alternatively, proposes that Wackernagel movement is identical to scrambling. Both operations target (layered) specifiers of vP. The reason why weak pronouns must precede all other clause-internal material has to do with the trigger of Wackernagel movement, as opposed to the trigger of scrambling. Müller suggests that Wackernagel movement is not feature-driven and targets the left-edge of vP. By contrast, scrambling is either triggered by formal features (Grewendorf and Sabel 1999; Sauerland 1999) or by conditions governing the relative order of elements ([+def] precedes [-def], [+animate] precedes [-animate]; Büring 2001); scrambled elements do not have to appear in a left-edge position.

Turning now to the serialization of Wackernagel pronouns, they occur in a fixed order (Lenerz 1977, 1992; Haftka 1981; Müller 2001b). Subject pronouns obligatorily precede object pronouns:

(21)	a.	<i>daβ</i> that	<i>sie</i> she	es it	wahrscheinlich probably	<i>gelesen</i> read	<i>hat</i> has
	b.	* <i>daβ</i> that	es it	<i>sie</i> she	<i>wahrscheinlich</i> probably	<i>gelesen</i> read	<i>hat</i> has

Direct object pronouns precede indirect object pronouns:

(22)	a.	<i>daβ es</i> that it		<i>ihm</i> him	<i>der Fritz</i> the Fritz-NOM	<i>gegeben</i> given	<i>hat</i> has
	b.	* <i>daβ</i> that	<i>ihm</i> him	es it	<i>der Fritz</i> the Fritz-NOM	<i>gegeben</i> given	<i>hat</i> has

The same rigid DO>IO order is maintained when the subject precedes the cluster:

(23)	a.	<i>daβ</i> that	<i>der Fritz</i> the Fritz-NOM	es it	<i>ihm</i> him	<i>gegeben</i> given	<i>hat</i> has
	b.	* <i>daβ</i> that	<i>der Fritz</i> the Fritz-NOM	<i>ihm</i> him	es it	<i>gegeben</i> given	<i>hat</i> has

When all three pronouns co-occur their order is strictly SUBJ>DO>IO:

(24)	a.	daß	sie	es	ihm	wahrscheinlich	zum	Geburtstag
		that	she	it	him	probably	for the	birthday
		sche						
		give		W	ill			

- b. *daβ sie ihm es...
 c. *daβ es sie ihm...
 d. *daβ es ihm sie...
 e. *daβ ihm es sie...
- f. $*da\beta$ ihm sie es...

Note, however, that there are certain cases where the strict DO>IO pronominal order is relaxed. As pointed out by Sternefeld and Featherston (2002), the allegedly ungrammatical order *mir-es* is extremely common (49 hits in a corpus search). Here are some of the examples they cite:

(25) a. Versprochen hat sie mir es jedenfalls Promised has she me it in any case
b. Lieber Herr Krenz, bitte nehmen Sie mir es nicht übel Dear Mr. Krenz, please take you me it not amiss

The second most common order is dir es:

(26) Wenn du mir helfen könntest, wollte ich dir es wohl sagen if you me help could, would I you it certainly say

Moreover, in Southern dialects of German, such as Swabian and Frankonian, the order of pronouns is free, as pointed out to me by Susann Fischer, p.c. See section 3.4. below for an interesting correlation between the (un-) availability of the PCC and the free vs. strict serialization in German.

3.2. Wackernagel pronouns, the PCC and the position of Subjects in German

Contrary to what has been claimed in the literature, I have found that German (several dialects of German as well as standard German) has the PCC. Most of my German informants⁷ do not tolerate combinations of 2nd person direct objects (DOs) and 3rd person indirect objects (IOs) when the subject follows the weak pronominal cluster, as in (27). These speakers characterize the combination of 1st person DOs and 3rd person IOs in examples like (28) as deviant:⁸

- (27) **weil dich ihm irgendwer vorgestellt hat* because you-ACC him-DAT someone-NOM introduced has 'because someone has introduced you to him'
- (28) ??weil mich ihr irgendwer vorgestellt hat because me-ACC her-DAT someone introduced has 'because someone has introduced me to her'

It is crucial that the subject follows the pronominal cluster. When the subject precedes, the PCC effect vanishes:

(29)	weil	sie	dich		ihm		vor	gestellt	hat	
	because	she-NOM	you-	ACC	him	-DAT	inti	roduced	has	
(30)	weil	die Maria	l	micl	h	ihr		vorgest	ellt	hat
	because	the Mary-	NOM	me-	ACC	het-D	DAT	introdu	ced	has

Note that the subject precedes the pronominal cluster in the well-formed example (14) above, which Cardinaletti (1999) takes to be evidence that German lacks the PCC. Cardinaletti is right that examples like (14) (and (29)-(30)) do not show the PCC. However, the constraint does apply when the subject follows the pronominal cluster.

There seems to be a correlation between the emergence of PCC effects and word order restrictions on weak pronouns. The speakers that judge (27) and (28) as unacceptable require DOs to be placed before IOs when these occur in the Wackernagel position. They judge the DO-IO order in (31) as grammatical and the IO-DO order in (32) as ungrammatical:

- (31) *weil ihn ihr irgendwer vorgestellt hat* because him-ACC her-DAT someone introduced has 'because someone has introduced him to her'
- (32) ?* weil ihr ihn irgendwer vorgestellt hat because her-DAT him-ACC someone introduced has 'because someone has introduced him to her'

On the other hand, the few speakers that accept (27) and (28) also accept the two serializations in (31) and (32).⁹

Finally, it should be noted that German has the *weak* rather than the *strong* PCC. Combinations of 1^{st} and 2^{nd} person weak pronouns are generally¹⁰ tolerated:
- (33) a. *weil dich mir irgendwer vorgestellt hat* because you-ACC me-DAT someone introduced has 'because someone has introduced you to me'
 - b. *weil mich dir irgendwer vorgestellt hat* because me-ACC you-DAT someone introduced has 'because someone has introduced me to you'

3.3. PCC effects in other Germanic languages

Apart from German, PCC effects seem to also arise in Dutch and Swedish. Starting from Dutch, the order of weak pronouns/clitics in this language is less strict than in German for all speakers. The DO-IO serialization is pre-ferred, but IO-DO orders are not ungrammatical. As in German, PCC effects do arise, but for some speakers only under certain orders. More specifically, one of my informants¹¹ finds combinations of 1st and 2nd person DO and 3rd person IO pronouns ungrammatical regardless of their order:

(34)	a.	*dat Jan	'r/'m	me	voorstelde
			IO	DO	
			her/him	me	
	b.	*dat Jan	me	'r/'m	voorstelde
			DO	ΙΟ	
	6.1	· · · ·	1 1	. 1 /1	. ,

'that Jan introduced me to her/him

(35)	a.	*dat Jan	'r∕ 'm IO	je DO	voorstelde
	b.	*dat Jan	je DO	'r∕ 'm IO	voorstelde

'that Jan introduced you to her/him'

For other informants the combination 1^{st} DO 3^{rd} IO in (34) is grammatical under the DO>IO serialization (34b) and ungrammatical under the IO>DO serialization (34a). There is further disagreement on the status of the sentences in (35). For some both (35a) and (35b) are ill-formed; for others (35a) is ill-formed and (35b) well-formed.

The correlation between the order of weak pronouns and the presence/ absence of the PCC for some speakers of Dutch is reminiscent of the situation in Swiss German. As discussed in Bonet (1991) and Anagnostopoulou (2003), the word order among weak pronouns is free in Swiss German when the dative is 1^{st} or 2^{nd} person and the accusative 3^{rd} person, as illustrated in (36):

(36)	a.	D'	Maria	zeigt	en	mir	Acc3 > Dat1
		The	Maria	shows	him	to-me	
	b.	D'	Maria	zeigt	mir	en	Dat1 > Acc3
		The	Maria	shows	to me	him	
		'Ma	ry show	s him to	o me'		

When the accusative is specified for person, however, it has to precede the dative, as in (37a). When the accusative follows the dative as in (37b) ungrammaticality arises:

(37)	a.	D'	Maria	zeigt	mi	em	Acc1 > Dat3
		The	Mary	shows	me	to-him	
	b.	*D'	Maria	zeigt	em	mich	*Dat3 > Acc1
		The	Maria	shows	to him	me	
		'Mai	ry shows	s me to	him'		

Another language showing a correlation between ordering and the PCC is Swedish. As pointed out by Hellan and Platzack (1999: 131), when the order is $1^{st}/3^{rd}$, as in (38a), the only possible interpretation is IO>DO. When the order of pronouns is $3^{rd}/1^{st}$, however, as in (38b), the interpretation IO>DO is for a group of speakers possible along with the alternative DO>IO interpretation:

(38)	a.	Han	visade	mig	henne	inte
		He	showed	pronoun-1	pronoun-3	not
		'He c	lid not pr	esent her to	me'	
	b.	Han	visade	henne	mig inte	
		He	showed	pronoun-3	pronoun-1	not
		'He c	lid not pr	esent her to	me / He did	not present me to her'

The correlation between pronominal order and the PCC will be important later on.

3.4. Some generalizations

My investigation of PCC effects on weak pronouns, as opposed to clitics and agreement markers, has led to a number of generalizations which are summarized below:

(i) A striking difference between clitic languages and weak pronoun languages concerns the stability and robustness of PCC judgments. Speakers of clitic languages do not hesitate to characterize grammatical the combinations that do not yield a PCC effect and ungrammatical the ones that lead to a PCC violation. On the other hand, for all speakers of German and Dutch it was extremely hard to judge the sentences in question.

(ii) A further striking difference concerns idiolectal variation. Clitic languages do not show speaker variation on PCC effects yielded by 3^{rd} person IOs and $1^{st}/2^{nd}$ DOs (Bonet 1991). In weak pronoun languages, on the other hand, speakers vary tremendously on how they judge sentences with such combinations.

(iii) A third observation has to do with the type of PCC constraint attested in (dialects of) German and Dutch. Both languages seem to have the *weak PCC*, i.e. combinations of 1^{st} and 2^{nd} person IOs and DOs are acceptable for most speakers (with idiolectal variation concerning the precise combinations that are accepted).

(iv) There is an interaction between the availability of different word orders in languages with weak pronouns and the emergence of PCC effects. As was shown above, PCC effects arise only when the order of pronouns is IO-DO in Swiss German and in some varieties of Dutch. We also saw that certain person combinations impose particular interpretations in Swedish: 1>3 is interpreted as IO>DO obligatorily. Even in German, where the order of pronouns is strictly DO-IO for most speakers, I have found that speakers attempt to resort to the alternative IO-DO serialization in order to rescue combinations that would otherwise yield a PCC effect. Furthermore, when the IO and DO are both 1st and 2nd person in German, serialization of pronouns in the Wackernagel position becomes freer: speakers tend to accept the IO-DO serialization along with the DO-IO one. As is well known, clitic languages have a strict serialization of clitics. This seems to correlate with the robustness of PCC effects.

In what follows, I will mainly concentrate on an analysis of German, the language I have investigated in more detail.

4. Analysis and challenges

A number of non-trivial questions arise when it comes to extending the analysis of the PCC outlined in section 2 to German.

4.1. The PCC and the position of subjects

The first issue concerns subjects. It is not clear why the position of the subject relative to Wackernagel pronouns matters. Recall that the PCC arises when dative and accusative pronouns enter Agree against a single probe. For German, let us call this head W (Wackernagel). If Müller is right that Spec,TP precedes W, and that SUBJ>pronoun orders arise when the subject moves to T while pronoun>SUBJ orders obtain when the subject remains in its base position, then we do not expect an interaction between the relative order of subjects and pronouns and the emergence (or lack thereof) of the PCC. Dative and accusative pronouns are expected to enter multiple Agree with W, regardless of whether the subject moves to Spec,TP or it remains vP-internal. I can see two ways in which this problem can be resolved:

(i) One possibility is that pronouns reside in a position where Agree takes place only when they precede subjects, i.e. pronouns target what we have called W only when they occur before the subject. This would mean that unstressed/weak/reduced pronouns in German do not always move to the same position (contra Müller 2001a,b), i.e. there is a position before subjects where Agree takes place and another position following subjects where Agree does not take place.

(ii) An alternative would be to build on an idea suggested by Cardinaletti (1999: 65), namely that the PCC arises only when both pronouns belong to the same class. Suppose that only elements belonging to the same class (i.e. both are 'weak') enter cyclic/ multiple Agree against the same goal; the PCC can be obviated when one of the two pronouns is strong. A similar strategy is found in clitic languages. As extensively discussed by Bonet (1991, 1994), Anagnostopoulou (2003) and others, the PCC does not arise when either (i) the dative argument is spelled out as a strong pronoun (as shown in (39) for French) or (ii) the accusative argument is spelled out as a strong pronoun (as shown in (40) for Greek):

(39) a. *Paul me présentera à lui* Paul Cl-ACC will-introduce to him 'Paul will introduce me to him'

- b. **Paul me lui présentera* Paul Cl-ACC Cl-DAT will-introduce 'Paul will introduce me to him'
- (40) a. *Tu* sistisan emena Cl-GEN-3SG introduced-3PL me-ACC 'They introduced me to him'
 - b. **Tu me sistisan* Cl-GEN-3SG Cl-ACC-1SG introduced-3PL 'They introduced me to him'

The fact that the PCC arises only when both pronouns precede the subject would, under these assumptions, be explained as follows. When the DO and IO pronouns precede subjects they have to be parsed as weak, hence entering Multiple Agree which leads to the PCC. On the other hand, when the two pronouns follow the subject one of them can be parsed as strong, escaping the PCC.

For present purposes, both options sketched here would do. The issue awaits further research.

4.2. Order of movements and the landing position of IO and DO: Evidence from Swiss German and Dutch

According to the analysis sketched in section 2, the PCC arises when the (dative) IO moves/agrees first and the (accusative) DO moves/agrees second. On the assumption that movement of two elements to the same head respects *Shortest* (Richards 1997), this derivation is expected to take place when the IO is merged higher than the DO and they both move resulting in an order which preserves the base order of elements (i.e. IO>DO) due to tucking in.

In Anagnostopoulou (2003: 295–297), I argued that Swiss German provides evidence in favor of this analysis. Consider again the Swiss German facts mentioned in section 3.4. When the accusative is 3^{rd} person, the word order among the weak pronouns is free, as illustrated in (36), repeated from above:

(36)	a.	D'	Maria	zeigt	en	mir	Acc3 > Dat
		The	Maria	shows	him	to-me	

b.	D'	Maria	zeigt	mir	en	Dat > Acc3
	The	Maria	shows	to-me	him	
	'Ma	ry show	s him t	o me'		

When the accusative is specified for person, however, it has to precede the dative, as in (37a), repeated from above. When it follows the dative, as in (37b), ungrammaticality arises:

(37)	a.	D'	Maria	zeigt	mi	em	Accl > Dat
		The	Mary	shows	me	to-him	
	b.	*D'	Maria	zeigt	em	mich	*Dat > Acc1
		Th	e Maria	shows	to-him	me	
		'M	ary show	s me to	him'		

The optionality in the word order of pronouns in (36) indicates that in Swiss German, either the accusative or the dative are allowed to move/ Agree to first. In (36a) the accusative pronoun moves first and checks all φ -features against the goal, taken to be transitive v, vTR, in Anagnostopoulou (2003). The dative moves to v-TR next, and there are no φ -features left for checking, as illustrated in (41). (Presumably, the dative only checks definiteness and / or phonological features.¹²) By contrast, the dative raises first in (36b), checking person, and the accusative checks the remaining number, as schematized in (42):



Since the accusative is 3rd (i.e. no) person, the result is grammatical.

Consider now (37) where the accusative is specified for person. When the accusative moves to v-TR first, as in (37a), it checks all of its φ -features, as schematized (43). On the other hand, when the dative raises first, as in (37b)/ (44), it checks person on v-TR. Further movement of the 1st person accusative pronoun to v-TR leads to ill-formedness, because the pronoun ({P,N}) cannot be checked against v-TR{0,N}:



In sum, the Swiss German facts demonstrate that word order determines the occurrence of a person restriction, a fact strongly supporting a syntactic approach towards the PCC. As mentioned in section 3.2, the same correlation between the order of weak pronouns and the presence/absence of the PCC obtains in Dutch for some speakers. They find the combination 1^{st} DO 3^{rd} IO in (34), repeated here as (45), grammatical under the DO>IO serialization (45b) and ungrammatical under the IO>DO serialization (45a):

(45) a. dat Jan 'r/'m me voorstelde IO DO her/ him me 'that Jan introduced me to her/him'
b. *dat Jan me 'r/'m voorstelde DO IO The "tucking in" analysis of the surface order of weak pronouns in Swiss German and Dutch explains the fact that the PCC arises in the DAT>ACC order and not in the ACC>DAT order.

4.3. German?

It is evident that the varieties of German discussed in this paper are problematic for the analysis of the PCC outlined so far. Since the order of pronouns is DO>IO obligatorily¹³ we would expect the PCC not to arise, just as in Swiss German, contrary to facts. In order to accommodate the PCC facts, it is necessary to make two assumptions:

(i) The underlying order of objects is IO>DO, i.e. the indirect object is merged higher than the direct object.

(ii) When the weak pronouns move to the Wackernagel position the dative argument moves first and the accusative second.¹⁴

Assumptions (i) and (ii) are directly contradicting the analysis of German double object constructions argued for in Müller (1995, 2001b), which was adopted in den Dikken (1995) and Anagnostopoulou (2003: 130–137). According to Müller, the underlying order of objects in German is DO>IO, an order which is reflected by the DO>IO order of Wackernagel pronouns. Assuming that order preservation results from tucking in, this would mean that the weak DO pronoun moves first to W followed by movement of the IO. Since the account of PCC facts crucially relies on the opposite assumptions ((i) and (ii) above), Müller's analysis cannot be maintained. The underlying order of the DO and IO in German is an extremely controversial issue; it is therefore necessary to summarize first the main arguments for the DO>IO analysis, turning next to the counterarguments against it.

The unmarked linearization of arguments in German can be derived from the hierarchy (46) (see, e.g. Lenerz 1977; Webelhuth 1989, 1992; Frey and Tappe 1991; Müller 1995 and many others):

(46) Subject>IO>DO>OBLIQUES>V

While this description reflects more or less "the standard view" on German ditransitives, the precise analysis of the DAT>ACC construction in (47) below is controversial:

(47) Sie hat dem Mann das Buch geschenkt She-NOM has the man-DAT the book-ACC given 'She has given the man the book' There is considerable debate about the question whether the DAT>ACC construction represents a base or a derived order. On the standard view (Lenerz 1977 and many others), the DAT>ACC construction is base-generated as such. However, this assumption encounters problems which come in form of the distribution of anaphoric dependencies between objects. Grewendorf (1984, 1988) points out that dative indirect objects cannot bind accusative anaphors in the IO>DO order (48a), while accusative themes may antecede dative anaphors to their right, as shown by (49a). The same effect shows up with reciprocals (48b) and (49b):

- (48) a. $da\beta \ der \ Arzt$ $dem \ Patienten_j \ sich_{i/*j}$ that the doctor-NOM the patient-DAT refl-ACC $im \ Spiegel \ zeigte$ in-the mirror showed 'that the doctor showed himself to the patient in the mirror'
 - b. $*da\beta man$ den Gästen_i einander_i vorgestellt hat that one-NOM the guests-DAT each other-ACC introduced has 'that someone has introduced the guests each other'

(49) a. $da\beta \ der \ Arzt$ $den \ Patienten_j \ sich_j$ that the doctor-NOM the patient-ACC refl-DAT $im \ Spiegel \ zeigte$ in-the mirror showed 'that the doctor showed the patient to himself in the mirror'

b. $da\beta$ man die Gäste_i einander_i vorgestellt hat that one-NOM the guests-ACC each other-DAT introduced has 'that someone has introduced the guests to each other'

Müller (1995: 159–160) argues that the data in (48), which attest to the inability of datives to bind anaphors to their right, militate against the widely held assumption that datives originate above accusatives (see e.g. Webelhuth 1989; Moltmann 1990 and Santorini 1990). Müller therefore suggests that the underlying order is ACC>DAT, and that in the DAT>ACC construction the goal undergoes movement to an A'-position to the left of the theme. On this view, binding in (49) proceeds straightforwardly. Moreover, the goals in (48) occupy A'- positions, and binding is therefore precluded.

Müller (2001b) furthermore argues that Wackernagel pronouns furnish independent evidence in support of the ACC>DAT hypothesis. The fact that movement of pronouns to the Wackernagel position results in a rigid

NOM>ACC>DAT order is argued to result from parallel movement which reflects the base order of arguments.

However, there are many objections to this account discussed in Lechner (2001) and Sternefeld and Featherston (2002).

The first issue concerns reflexive binding. While Grewendorf and Müller claim that (49a), where the accusative DO binds the dative *sich* is well-formed, Lechner (2001) and Sternefeld and Featherston (2002) judge such examples as ungrammatical. These authors, furthermore, point out that when the dative is a pronoun, the dative can bind the accusative, and not vice versa:¹⁵

- (50) *weil ich ihm sich im Spiegel gezeigt habe* because I him-DAT himself-ACC in the mirror shown have 'because I showed him himself in the mirror'
- (51) a. Fritz zeigte ihr_i sich_i im Spiegel Fritz showed her-DAT herself-ACC in the mirror 'Fritz showed her herself in the mirror'
 - b. ?* Fritz zeigte sie_i $sich_i$ im Spiegel Fritz showed her-ACC herself-DAT in-the mirror

Hence it is not correct that accusatives bind dative reflexives in German.

Proceeding to reciprocals, the contrast between (48b) and (49b) reported above is correct. Accusatives may indeed antecede dative reciprocals and not vice versa. However, Sternefeld and Featherston (2002) argue that this fact should not be attributed to binding theory. What seems to be the case is that there is a strong preference for reciprocals to be dative instead of accusative in German. Many speakers judge as unacceptable even examples where accusative reciprocals are bound by subjects:

- (52) a. **weil die Leute dem Hans einander vorgestellt haben* because the people the Hans-DAT each other introduced have
 - b. ?? weil sie ihm einander vorgestellt haben because they him-DAT each other introduced have
 - c. **weil sie mir einander vorgestellt haben* because they me-DAT each other introduced have

Sternefeld and Featherston (2002) conduct an experiment which shows that *einander* as an IO is clearly preferred over being a DO even in cases of subject coreference illustrated in (52). They argue that the observed asymmetry in reciprocal DOCs is not the result of grammatical constraints but reflects a general tendency to interpret *einander* as a dative DP. Hence the reciprocal facts do not support the DO>IO base order either.

Having presented arguments that neither reflexive nor reciprocal binding supports the view that the underlying order of arguments is DO>IO, we now turn to evidence from scope discussed in Lechner (1996, 1998, 2001) which argues for the opposite IO>DO base order. German is a scope rigid language in which quantifier scope is unambiguous in base orders; scope ambiguity depends on movement of quantificational elements. We can thus test whether the IO>DO/DO>IO orders are base-generated or derived by looking at whether they show scope ambiguity or not. What we find is that the IO>DO order is the base order (no scope ambiguity) while the DO>IO order is derived (ambiguous scope):

(53)	a.	weil sie [genau einem	Freund] [jeden	Gast]
		because she exactly one	friend-DAT every	guest-ACC
		vorgestellt hat		
		introduced has		∃>∀, *∀>∃
	b.	weil sie [genau einen	Gast] [jedem	Freund]
		because she exactly one	guest-ACC every	friend-DAT
		vorgestellt hat		
		introduced has		E < V, $V > E$

The contrast between (53a) and (53b) can be explained by assuming that (53b) derives from (53a) by movement of the accusative over the dative and scope ambiguity derives from optional reconstruction of the fronted quantifier. Scope then provides evidence that the base order of arguments is the unmarked IO>DO order.

Turning, finally, to the argument from Wackernagel pronouns (i.e. the claim that the DO>IO order of pronouns is a result of order preserving movement reflecting the base order of arguments), again this is problematic for various reasons. First, we saw that other orders are possible, e.g. examples (25), (26), (50) and (51) above. More importantly, the order DO>IO obtains even when the IO is clearly merged above the DO, as acknowl-edged by Müller (2001b, fn. 28). This holds e.g. for coherent infinitive constructions:

- (54) a. weil es₂ ihm₃ keiner t₃ [t₂ zu lesen] because it-ACC him-DAT no-one to read empfohlen hat recommended has 'because no-one recommended him to read it'
 b. 2*weil ihm as a keiner t [t zu lesen]
 - b. ?**weil ihm es*₂ *keiner t*₃ [*t*₂ *zu lesen*] because him-DAT it-ACC no-one to read *empfohlen hat* recommended has

Here the dative argument is generated as an indirect object in the higher clause while the accusative is the object of the infinitival. The dative is clearly higher than the accusative, and still the relative order of the two in the Wackernagel position is ACC>DAT. These facts, therefore, strongly undermine the claim that the relative order of pronouns in the Wackernagel position mirrors their base order.

On the basis of the discussion so far, I conclude that the base order of objects is IO>DO, in accordance with assumption (i) in the beginning of this section needed to account for the PCC. The other necessary assumption is (ii), namely that the dative moves before the accusative. But if the dative moves before the accusative, then why is it that the order of pronouns is DO>IO rather than the IO>DO serialization expected by the tucking in analysis? Even though I do not have a definitive answer to this question, I would like to compare here German Wackernagel pronouns to clitics also showing ACC>DAT orders suggesting some possible analyses for the ACC>DAT serialization.

If the linear order of clitics was determined by their syntax, DAT>ACC sequences would result from a derivation in which the dative moves before the accusative. The reverse ACC>DAT serialization from a derivation in which the accusative moves before the dative. Accordingly, the PCC would arise only in languages showing the DAT>ACC order. As discussed in Anagnostopoulou (2003), this picture is often but not always supported by the data. The order of clitics is DAT>ACC in Serbocroatian, Greek, Romanian, Albanian, Polish, Slovak, Russian, Czech (Vos and Veselovská 1999: 938), Standard Italian, Valencian, (Bonet 1991: 72), and many of these languages are reported to show the PCC. However, the surface order of clitics does not always reflect their syntax. Bonet (1991) argues that arrangement of forms within the clitic cluster is often determined by morphology. In many Romance languages, specific clitics occupy a specific position within the clitic cluster, regardless of their syntaxic function. For example, the

linear order of clitics is always 2^{nd} person followed by 1^{st} in Catalan, independently of grammatical function. In Standard Catalan and Barceloní, clitics are arranged by person, not by their syntactic role. 1^{st} , 2^{nd} and reflexive / impersonal clitics form a natural class, while neuter, 3^{rd} person dative and accusative clitics, locatives, partitives form another natural class with respect to their position within the clitic group. As a result of organization according to person in Catalan, 1^{st} or 2^{nd} dative clitics precede 3^{rd} person accusative clitics, as in (55a). Ungrammatical combinations involving a 1^{st} or 2^{nd} accusative and a 3^{rd} person dative show the reverse accusative>dative order, as illustrated by (55b) (Bonet 1991: 177):

- (55) a. M' l va recomanar la Mireia Cl-DAT,1 Cl-ACC,3 recommended-3 the Mireia 'Mireia recommended him to me'
 b. *Me li va recomanar la Mireia
 - Cl-ACC,1 Cl-DAT,3 recommended-3 the Mireia 'Mireia recommended me to him'

The serialization of weak pronouns corresponding to the illformed (55b) has been seen above to be grammatical in Swiss German. Unlike Swiss German, though, where the ACC>DAT and the DAT>ACC orders result from syntactic movement and tucking in the DAT>ACC and ACC>DAT sequences in (55) reflect organization of clitics according to [person] in Catalan.

As pointed out by Perlmutter (1971), French is another language where the order of clitics is determined by person rather than syntactic function. In (56) a 1^{st} person dative clitic precedes the 3^{rd} person accusative clitic (Kayne 1975: 83):

(56) Jean me le donnera Jean Cl-DAT,1SG Cl-ACC,3SG will give-3SG 'Jean will give it to me'

Combinations of two 3rd person clitics yield orders in which the accusative precedes the dative, as in German:

(57) *Paul la lui présentera* Paul Cl-ACC,3SG Cl-DAT,3PL will introduce-3SG 'Paul will introduce her to him' Since French has the PCC it is unexpected that the order of the two 3^{rd} person clitics is ACC>DAT, just as is in German.

To resolve the problem, I suggested (Anagnostopoulou 2003: 338f., fn. 90) that the ACC>DAT order in French is either not derived by the syntax (but rather by the morphology), or, if it is derived by the syntax, it represents a case in which multiple movement does not result in tucking in. In the latter alternative, the dative clitic moves first, and the accusative, which moves second, targets a position above the dative. Exactly the same two alternatives can be extended to German. As in French, serialization of Wackernagel pronouns is either determined by another module (e.g. morphology, information structure), or, if it derives from syntax, it does not involve tucking in. Note that there is strong evidence against an analysis of ACC>DAT orders in terms of syntactic movement obeying *Shortest* and tucking in for French, as in German. Cliticization of the dative embedded subject and the accusative embedded object to the matrix verb in causative constructions also results in an ACC>DAT order (Kayne 1975: 279):

(58) *Elle le lui fera manger* She it-ACC him-DAT have eat 'She will have him eat it'

Since cliticization of the two arguments in causatives takes place from an underlying position in which the subject is higher than the direct object, the *direct object>subject* sequence cannot involve a derivation that preserves the base order among arguments. Recall that very similar facts have been observed to hold in German where the accusative embedded object precedes the matrix indirect object when the two occur in the Wackernagel position in coherent infinitive constructions (data in (54) above).

I conclude that German Wackernagel pronouns share many similarities with French clitics. What remains to be answered is why the order of arguments is ACC>DAT even though the dative undergoes movement before the accusative.

One option to account for ACC>DAT orders would be to suggest that they do not result from syntax but from a templating arrangement of features dictated either by the morphology or from semantic or information structure requirements similar to those regulating scrambling.

Alternatively, ACC>DAT orders are the output of a syntactic derivation not displaying tucking in. Lack of tucking could be accounted for as follows: (i) One option would be to follow McGinnis (1998: 115) who proposes that specifiers checking features of the same type tuck in while specifiers checking features of different types do not tuck in. Extending this to German, one could propose that accusatives do not tuck in below datives because the two pronouns check different features (for instance, the dative checks person while the accusative number). Such an approach would face some problems, however: (i) It is implausible to claim that weak pronouns or clitics do not check features of the same type, i.e. that movement leading to person checking and movement resulting in number checking represent two different types of processes. (ii) Moreover, in weak PCC languages like German datives and accusatives enter multiple person Agree, i.e. they clearly check the same type of feature. (iii) In many languages weak pronouns and clitics do tuck in.

(ii) A, perhaps more promising, alternative would be to follow Anagnostopoulou (2003) who suggests that the base order among arguments is preserved only if all arguments uniformly undergo the same type of movement process (XP-movement or head movement). When a construction combines phrasal and head movement to the same functional head, the phrase moves to a specifier and the head moves to the head, resulting in a configuration in which the phrase precedes the head, regardless of the order of the movements. Extending this analysis to ACC>DAT orders in German it could be suggested that datives move as heads and accusatives as XPs in the constructions under discussion. Consider in this light the Swedish facts in (38), repeated below:

(38)	a.	Han	visade	mig	henne	inte
		He	showed	pronoun-1	pronoun-3	not
		'He o	lid not pr	resent her to	me'	
	b.	Han	visade	henne	mig	inte
		He	showed	pronoun-3	pronoun-1	not
		'He d	lid not pr	esent her to	me / He did	l not present me to her'

Recall that according to the description of Hellan and Platzack (1999), when the order of pronouns is $1^{st}/3^{rd}$, as in (38a), the only possible interpretation is IO>DO. When the order of pronouns is $3^{rd}/1^{st}$, as in (38b), the interpretation IO>DO is for a group of speakers possible along with the alternative DO>IO interpretation. (Note that not all Swedish speakers accept DO>IO orders of pronouns to begin with, as pointed out to me by Gunnar Hrafn Hrafnbjargarson, and as discussed in detail in Anagnostopoulou 2003; for reasons having to do with order preservation; it would lead us too far afield to address this here.) An alternative way of stating the facts is this: In Swedish the PCC arises only under the DO>IO and not under the IO>DO serialization. While both the DO>IO and the IO>DO orders are, in principle, possible, the DO>IO order is banned when the DO is 1st person. Crucially, in (38a) the only possible interpretation is IO>DO, i.e. the 1st person pronoun cannot be interpreted as the DO. On the other hand, the IO>DO order does not display the PCC. In (38b) the IO>DO interpretation is possible, even though the DO is 1st person. Swedish then is reverse of Swiss German. While in Swiss German the PCC is obviated in the DO>IO order, in Swedish the PCC arises in the DO>IO serialization and is obviated when the IO precedes the DO. This suggests that the Swedish DO>IO order reflects a derivation in which the IO moves first followed by the DO while in IO>DO sequences the DO moves first followed by movement of the IO; both derivations do not invoke tucking in. Turning back to the dialects of German described in this paper, if they work essentially like Swedish (except that they lack the IO>DO derivation), then lack of tucking in is the correct analysis of DO>IO Wackernagel pronouns showing the PCC, possibly because the IO moves like a head and the DO as an XP.

5. Conclusions

In this paper, I identified an environment where the PCC obtains in German and I compared German to other Germanic languages showing this constraint. In order to account for the PCC with Wackernagel pronouns, I argued that the underlying order of objects is IO>DO and that the DO>IO serialization of pronouns reflects a derivation in which the IO moves first and the DO second in apparent violation of *Shortest* (Richards 1997). To account for lack of tucking in, I suggested that Wackernagel pronouns undergo different styles of movement: IOs move as heads and DOs as XPs. Whether or not this analysis is tenable awaits future research.

Acknowledgements

I would like to thank the editors, Gunnar Hrafn Hrafnbjargarson, Susann Fischer and Roberta D'Alessandro, for their patience and encouragement, Winfried Lechner, Norvin Richards and Susann Fischer for helpful discussion and comments, and my German and Dutch colleagues (mentioned in footnotes 7 and 11) for their great help with the data.

Notes

- 1. See Seuren (1976) for Italian and Spanish, and Wanner (1987) for Italian. See also Monachesi (1996) for Italian.
- 2. Bonet (1994) claims that only clitic languages show the weak version of the PCC. Agreement languages always have the strong version of the PCC.
- 3. The ban against 1st and 2nd person direct object pronouns is absolute in languages showing the *strong version of the PCC* because these languages do not have the option of multiple Agree.
- 4. Cardinaletti (1999) only distinguishes between strong, weak and clitic pronouns in German. Cardinaletti's weak pronouns subsume Müller's *unstressed*, *weak and reduced* pronouns. Her description of weak pronoun movement does not make explicit reference to the Wackernagel position. Nevertheless, she points out that weak pronouns move to the left of adverbs, converging (partially) with Müller's description (she only considers cases where moved pronouns follow subjects; see below).
- 5. Clitics behave differently than other pronoun classes with respect to both placement and serialization and will not be discussed here (see Gärtner & Steinbach 2003a,b, among others, for discussion of clitics in German and references).
- 6. According to Susann Fischer (personal communication), stressed pronouns are allowed in the Wackernagel position. The informants she has consulted find (20a) grammatical. I am concentrating here on unstressed, weak and reduced pronouns, which must undergo Wackernagel movement; the syntactic behavior of stressed pronouns (i.e. whether or not they undergo optional Wackernagel movement) is not immediately relevant for present purposes.
- 7. My German informants were: Uli Sauerland, Kleanthes Grohmann, Susi Wurmbrand, Winfried Lechner, Florian Schaefer and Gereon Mueller. Susann Fischer (personal communication) along with Kirsten Gengel and Eva Forster (personal communication to Susann Fischer) share these judgments. The German informants consulted are native speakers of several dialects of German (e.g. Austrian, Franconian, Swabian) as well as of Standard German.
- 8. For all my informants the PCC effect is stronger with 2nd person than with 1st person pronouns for reasons I do not understand.
- 9. This correlation could be taken to mean that the PCC arises only when true Wackernagel movement is involved. For speakers that accept both serializations pronouns undergo the same type of movement as scrambling, an operation that does not lead to φ -feature checking.
- 10. One of my informants finds (33b) deviant; for all others the example is well-formed.
- 11. My Dutch informants were: Angeliek van Hout, Jan-Wouter Zwart, Marcel den Dikken, Hans van de Koot, Hans Broekhuis and Henk van Riemsdjik.
- 12. According to this analysis, person checking of datives is optional, unlike person checking of accusatives, which is obligatory. This seems to correlate with the quirky vs. structural Case of datives and accusatives, respectively.

- 13. With the qualifications discussed in section 3.1. (Sternefeld and Featherston 2002).
- 14. Recall how the weak PCC effect is then derived: When both pronouns are [+person], multiple Agree takes place resulting in a grammatical combination of two 1st and 2nd person pronouns. When the dative is 3rd person ([–person]) and the accusative is $1^{st}/2^{nd}$ person ([+person]) the condition on Multiple Agree (11) is violated, resulting in ungrammaticality. When the dative is $1^{st}/2^{nd}$ ([+person]) or 3^{rd} ([–person]) and the accusative is 3^{rd} person (lacks person specification entirely), the dative checks person and the accusative number, a Cyclic Agree process (the one that always takes place in strong PCC languages).
- 15. Note that in examples (50) and (51a) the dative pronoun precedes the accusative, one more exception to the claim that the DO pronoun always precedes the IO in German.

References

Adger, David and Daniel Harbour

2007 Syntax and Syncretisms of the Person Case Constraint. *Syntax* 10: 2–37.

Anagnostopoulou, Elena

- 2003 *The Syntax of Ditransitives. Evidence from Clitics.* Berlin/New York: Mouton de Gruyter.
- 2005 Strong and Weak Person Restrictions: A feature checking analysis. In *Clitic and Affix Combinations*, L. Heggie and F. Ordóñez (eds.), 199–235. Amsterdam: Benjamins.

Bejar, Susana

2003 *Phi-Syntax. A Theory of Agreement.* Ph.D. Dissertation. University of Toronto.

Benveniste, Émile

1966 Problèmes de linguistique générale. Gallimard.

Bonet, Eulàlia

- 1991 Morphology after Syntax: Pronominal Clitics in Romance Languages. Ph.D. Dissertation, Cambridge, MIT.
- 1994 The Person-Case Constraint: A Morphological Approach. *MIT Working Papers in Linguistics 22. The Morphology-Syntax Connection*: 33–52.
- 1995 Feature Structure of Romance Clitics. *Natural Language and Linguistic Theory* 13: 607–647.

Büring, Daniel

2001 Let's Phrase It! Focus, Word Order and Prosodic Phrasing in German. In *Competition in Syntax*, G. Müller and W. Sternefeld (eds.), 69–105. Berlin/New York: Mouton de Gruyter.

Cardinaletti,	Anna
1999	Pronouns in Germanic and Romance Languages: An overview. In
	Clitics in the Languages of Europe, H. van Riemsdijk (ed.), 33-82.
	Berlin/New York: Mouton de Gruyter.
Dikken, Marc	cel den
1995	<i>Particles: on the Syntax of Verb-particle, Triadic and Causative con-</i> <i>structions.</i> Oxford/New York: Oxford University Press.
Frey, Werner	and Thilo Tappe
1991	Zur Interpretation der X-bar-Theorie und zur Syntax des Mittelfeldes.
	Grundlagen eines GB-Fragmentes. Ms. University of Stuttgart.
Gärtner, Han	s-Martin and Markus Steinbach
2003a	What Do Reduced Pronominals Reveal About the Syntax of Dutch
	and German? Part 1: Clause-Internal Positions. <i>Linguistische Berichte</i> 195: 257–294.
2003b	What Do Reduced Pronominals Reveal About the Syntax of Dutch and German? Part 2: Fronting. <i>Linguistische Berichte</i> 196: 459–490.
Grewendorf,	Günther
1984	Reflexivierungsregeln im Deutschen. Deutsche Sprache 1. 14-30.
1988	Aspekte der deutschen Syntax. Tübingen: Narr.
Grewendorf,	Günther and Joachim Sabel
1999	Scrambling in German and Japanese. <i>Natural Language and Linguis-</i> <i>tic Theory</i> 17: 1–65.
Haider, Hube	rt and Inger Rosengren
1998	Scrambling. Sprache und Pragmatic 49. Lund: Germanistisches In- stitut.
Haftka, Birgi	tta
1981	Reihenfolgebeziehungen im Satz. In <i>Grundzüge einer deutschen Grammatik</i> , Karl-Erich Heidolph et al. (eds.), 702–764. Berlin: Akademieverlag
Harbour, Dar	niel
2003	Elements of Number Theory. Ph.D. Dissertation, Cambridge, MIT.
Haspelmath,	Martin
2004	Explaining the Ditransitive Person-Role Constraint: A usage-based approach. <i>Constructions</i> 2/2004, 49pp. (free online journal, University of Düsseldorf).
Hellan, Lars	and Christer Platzack
1999	Pronouns in Scandinavian Languages. An overview. In Clitics in the
	<i>Languages of Europe</i> , H. van Riemsdijk (ed.), 123–142. Berlin/New York: Mouton de Gruyter.
Hoberg, Ursu	la
1997	Die Linearstruktur des Satzes. In <i>Grammatik der deutschen Sprache</i> , G. Sifonun, L. Hoffmann and B. Strecker (eds.) 1498–1680. (Schriften des Instituts für Deutsche Sprache.) Berlin/New York: Mouton de

Gruyter.

Jensen, Fred	e
1986	<i>The Syntax of Medieval Occitan</i> , Max Niemeyer Verlag, Tübingen, Beihefte zur Zeitschrift für Romanische Philologie, 208.
Johns, Alana	l
1993	Symmetry in Labrador Inuttut. <i>MIT Working Papers in Linguistics</i> 18. <i>Papers on Case & Agreement I</i> : 43–57.
Kayne, Rich	ard
1975	French Syntax. Cambridge, MA: MIT Press.
2000	Parameters and Universals. Oxford: Oxford University Press.
Lechner, Wi	nfried
1996	On Semantic and Syntactic Reconstruction. <i>Wiener Linguistische Gazette</i> 57–59: 63–100.
1998	Two Kinds of Reconstruction. Studia Linguistica 52: 276–310.
2001	Binding and Scope in Double Object Constructions. Ms., University of Tübingen.
Lenerz, Jürg	en
1977	Zur Abfolge nominaler Satzglieder im Deutschen. Tübingen: Narr.
1992	Zur Syntax der Pronomina im Deutshen. Sprache und Pragmatik 29, University of Lund.
McGinnis, M	Iartha
1998	Locality in A-Movement. Ph.D. Dissertation, MIT.
Moltmann, H	Friederike
1990	Scrambling in German and the Specificity Effect. Ms. MIT.
Monachesi,	Paola
1996	A Grammar of Italian Clitics. Ph.D. Dissertation, University of Tilburg.
Müller, Gere	eon
1995	<i>A-bar Syntax. A Study in Movement Types.</i> Berlin/New York: Mouton de Gruvter.
2001a	Harmonic Alignment and the Hierarchy of Pronouns in German. In <i>Pronouns – Grammar and Representation</i> , H. Simon and H. Wiese (eds.), 205–232. Amsterdam: Benjamins.
2001b	Order Preservation, Parallel Movement and the Emergence of the Unmarked. In <i>Optimality-Theoretic Syntax</i> , G. Legendre, J. Grimshaw and S. Vikner (eds.) 279–313. Cambridge, MA: MIT Press.
Nevins, And	rew
2007	The Representation of Third Person and ist Consequences for Person- Case effects. <i>Natural Language and Linguistic Theory</i> 25: 273–313.
Nicol, Fabrie	ce
2005	Romance clitic clusters: On diachronic changes and cross-linguistic contrasts. In <i>Clitic and Affix Combinations</i> , L. Heggie and F. Ordóñez (eds.) 141–197. Amsterdam: Benjamins.
Perlmutter, I	David
1971	Deep and Surface Structure Constraints in Syntax. New York: Rine- hart & Winston.

Postal, Paul 1966 On So-Called "Pronouns" in English. In F.P. Dineen (ed.), Report of the 17th Annual Roundtable Meeting on Linguistics and Language Studies: 177-206. Washington, D.C.: Georgetown University Press. [reprinted in Reibel, D.A. and S.A. Schane (eds.). 1969. Modern Studies in English. Englewood Cliffs, New Jersey: Prentice-Hall. Richards, Norvin 1997 What Moves Where When in Which Language? Ph.D. Dissertation, MIT. Ritter, Elizabeth 1995 On the Syntactic Category of Pronouns and Agreement. Natural Language and Linguistic Theory 13: 405–443. Santorini, Beatrice 1990 Scrambling and INFL in German. Ms. University of Pennsylvania. Sauerland, Uli 1999 Erasability and Interpretation. Syntax 3: 161-188. Seuren. Pieter 1976 Clitic pronoun clusters. *Italian Linguistics* 2: 17–36. Silverstein. Michael 1986 Hierarchy of Features and Ergativity. In Features and Projections, P. Muysken and H. van Riemsdijk (eds.), 163-232. Dordrecht: Foris. Sternefeld, Wolfgang and Sam Featherston 2002 The German Reciprocal 'einander' in Double Object Constructions. In Arbeiten zur Reflexivierung, L. Gunkel, G. Müller and G. Zifonun (eds.), 239-266. Tübingen: Niemeyer. Taraldsen, Knut Tarald 1995 On Agreement and Nominative Objects in Icelandic. In Studies in Comparative Germanic Syntax, H. Haider, S. Olsen and S. Vikner (eds.), 307–327. Dordrecht: Kluwer. Thiersch, Craig 1978 Topics in German Syntax. Ph.D. Dissertation, MIT. Vos. Riet and Ludmila Veselovská 1999 Clitic Questionnaire. In Clitics in the Languages of Europe, H. van Riemsdijk (ed.), 891–1009. Berlin/New York: Mouton de Gruyter. Wanner, Dieter 1987 The Development of Romance Clitic Pronouns from Latin to Old Romance. Berlin: Mouton de Gruyter. Webelhuth, Gert 1989 Syntactic Saturation Phenomena and the Modern Germanic Languages. Ph.D. Dissertation. University of Massachusetts, Amherst. 1992 Principles and Parameters of Syntactic Saturation. Oxford: Oxford University Press.

Agreement and clitic restrictions in Basque

Karlos Arregi and Andrew Nevins

1. Introduction

The φ -features of ergative, absolutive, and dative arguments interact in various ways in the clitic and agreement system of the Basque finite auxiliary. In this paper, we discuss the syntax and morphology of agreement realization in a detailed study of the Bizkaian variety of Zamudio. Our main objective is to argue that the proper treatment of Basque verbal morphology must take into account both syntactic and postsyntactic principles and operations. That is, neither a strictly syntactic nor a strictly morphological account does justice to the clitic combination and agreement restriction effects. Rather, as certain processes refer to hierarchical structure and doubly-filled projections, and others refer to locality constraints on agreement at a distance, yet others refer to linear edge properties of morphophonological sensitivity and deletion of featural combinations, the division of labor for building and realizing the agreement morphology must be distributed, as delineated in the framework of Distributed Morphology (Halle and Marantz 1993, 1994, and much subsequent work).

Crucial to the discussion will be the claim that, contrary to the dominant viewpoint in the literature, the morphemes attached to the auxiliary that are often identified as agreement are actually clitics that double the ergative, absolutive, and dative arguments. Such a view is supported by the reanalysis it enables for the Person Case Constraint (PCC) in Basque, as well as providing a principled account for the distribution of plural enclisis. Importantly, however, we argue that the auxiliary does manifest a single instance of syntactic Agree, with the absolutive argument. We show that this Agree operation may be subject to defective intervention in the context of dative arguments, leading to lack of agreement. The resulting model illustrates a dissociation in the effects of dative arguments on absolutive encoding, with distinct mechanisms for competition in clitic positions and locality-based agreement intervention.

Previous work on Basque verbal morphology addressing these issues in the generative framework typically does not concentrate on any local varieties of the language (though see Rezac 2006). However, we believe that significant progress can be made in understanding the division of labor between syntactic and postsyntactic operations by looking at specific dialects thoroughly. Except when otherwise noted, all the data reported here are from Zamudio, and most of it has been taken from Gaminde (2000), a detailed descriptive grammar of this variety.¹

This paper is organized as follows. Sections 2 and 3 lay out some background on the theoretical model, and on basic clause structure in Basque, respectively. Section 4 introduces our basic claim about the clitic system of Basque and the constraints on clitic placement, offering a new account of the Person Case Constraint in Basque, while Section 5 is devoted to the morphophonological realization of clitics. In Section 6, we turn to bona fide agreement between T and the absolutive argument, and demonstrate the effects of dative intervention on this Agree relation. The paper ends with a general summary in section 7.

2. Background: Division of labor within the grammar

The general model of grammatical computation assumed here is one in which syntactic operations put together phrases and heads, and in which agreement involves copying of abstract morphosyntactic features with no phonological content. We assume the model of Chomsky (2000), in which the *Agree* operation establishes a syntactic relation between a functional category (a *Probe*) and a category within its c-command domain (the *Goal*). Importantly, the Agree relation respects syntactic locality, and no Probe-Goal relation may be established with a DP if a higher DP intervenes between the Probe and the Goal.

After syntactic operations are complete, phonological content is inserted for morphosyntactic features at PF, terminal by terminal. In this paper, we employ several syntactic and postsyntactic operations. Implicit throughout is the assumption that the former always precede the latter. This follows from the Distributed Morphology model that we adopt, in which postsyntactic operations apply in a module called *Morphological Structure* (MS).

In turn, MS itself contains several modules that follow a fixed derivational order. All the postsyntactic rules proposed here belong to one of these modules. They operate on the abstract terminal nodes of syntax, enacting either feature deletion (*Impoverishment*), *Fusion* of two terminals into one position of exponence, and/or reversal of the linear order of terminals (*Metathesis*). After all these operations apply, Vocabulary Insertion assigns phonological exponents to the terminal nodes, and readjustment rules modify these phonological exponents in specific ways. We will discuss each of these operations as they become relevant throughout the paper.

The basic currency of agreement relations and Impoverishment operations are abstract morphosyntactic features. We provide the inventory of features that are relevant for this paper below.

- (1) *Person* (Halle 1997)
 - a. [+Author, +Participant] = first person
 - b. [-Author, +Participant] = second person
 - c. [-Author, -Participant] = third person
 - d. [+Author, –Participant] = logically impossible
- (2) *Case* (Calabrese 2008)
 - a. [+Motion, –Peripheral] = ergative
 - b. [+Motion, +Peripheral] = dative
 - c. [-Motion, -Peripheral] = absolutive

Vocabulary Insertion is a process of inserting a *vocabulary item* (i.e. an exponent) that realizes phonologically a set of syntactic features present at a particular syntactic terminal node. The *Subset Principle* governs the selection of an exponent to realize a particular set of features at a node, as stated in (3) (adapted from Halle (1997)).

(3) A phonological exponent realizes a feature bundle in a terminal node if the item matches all or a subset of the grammatical features specified in the syntactic node. Insertion does not take place if the vocabulary item contains features not present in the syntactic node. Where several vocabulary items meet the conditions for insertion, the item matching the greatest number of features specified in the syntactic node must be chosen.

In what follows, we adhere to the following division of labor between agreement mechanisms themselves and the principles that govern their realization. We assume that agreement intervention that is hierarchical in nature is syntactic. However, agreement restrictions that are demonstrably not hierarchical are postsyntactic. For example, the g-/z- constraint in Bizkaian Basque (Arregi and Nevins 2007) bans first plural and second person on the same auxiliary, regardless of which argument those features are on. Rather, the appropriate domain of the restriction is stated within the morphological word. Moreover, syntax-morphology linear mismatches such as

Ergative Displacement, to be discussed in section 5.3, are due to constraints on the linearization of a particular morpheme and hence, are by their very nature postsyntactic. Thus, a key component of the overall analysis we adopt is that the φ -sensitive restrictions operating throughout the auxiliary complex are parceled out into domains that may be hierarchical, morphological, or morphophonological, each operating with their own principles.

3. Basque clause structure

Finite sentences in Basque typically contain an analytical verbal complex, with a participle inflected for aspect,² and an auxiliary containing tense, agreement, clitics, and other inflectional affixes.³ The external argument of a transitive verb is ergative, and the object absolutive. On the other hand, unaccusative sentences always contain an absolutive argument, and no ergative argument:^{4,5}

- (4) Su-k ni-Ø paño giau-Ø ekar-Ø d -o -su.
 2S-E 1S-E than more-A bring-PRF PRE -PRS.3S -ERG.2S
 'You have brought more than me.' (353)
- (5) Bakotx-a bere etze-an bixi d -a.
 each-A.S 3S.G house-IN.S live PRE -PRS.3S
 'Each person lives in their house.' (360)

We assume the basic clause structure depicted in Figure 1, where HP is a projection for clitics that we introduce in Section 4. Ergative case is an inherent case assigned by transitive v to its specifier (Woolford 2006; Holguín 2007).⁶

We also assume that dative case is inherent, and assigned by Appl⁰ to its specifier.⁷ Absolutive case is the default case in Basque, and does not require case assignment of any sort. Basque is not a split ergative language along tense or aspectual lines.

The verbal forms in finite sentences are derived from the structure in Figure 1 as follows (Laka 1990). The participle is formed by movement of V to v, and of the V-v complex to Asp. This accounts for the appearance of an aspectual suffix on the main verb (e.g. $ekar-\emptyset$ in (4) and ego-n in (6) below). The auxiliary is the result of several syntactic operations of agreement and cliticization (and postsyntactic operations discussed in 4.1). The root of the auxiliary, which we claim is in fact the realization of T, agrees



Figure 1. Basic syntax of Basque sentences

with the absolutive argument. This is in fact a controversial claim, and much of the present paper is dedicated to establishing it (see especially Section 6). In addition, there are morphemes in the auxiliary cross-referencing absolutive, ergative and dative arguments in the clause. Although these are commonly referred to as agreement morphemes (see, among others, Ortiz de Urbina 1989; Laka 1993a; Fernández and Albizu 2000; Rezac 2003), we claim that they are in fact pronominal clitics, as explained in detail in Sections 4-5.⁸ (4) contains an example of an ergative clitic; absolutive and dative clitics are illustrated in the following:⁹

- (6) *Lau aste-an ego-n n -as geixorik.* four week-IN be-PRF ABS.1S -PRS.1S sick 'I've been sick for four weeks.' (367)
- (7) Bat-an bat-eri emo-ngo d -o -tze -t.
 one-G one-D give-FUT PRE -PRS.DEF -DAT.3S -ERG.1S
 'I'll give it to someone or other.' (361)
- (8) Ondo etor- \emptyset d -a -tzu. well come-PRF PRE -PRS.DEF -DAT.2S 'You've deserved it.' (413)

The present analysis does not take into account two suffixes, -s and -n, that typically appear at the end of the auxiliary. These suffixes are traditionally described as realizing plural absolutive and past tense features, respectively. However, their distribution is much more complex than suggested by these claims.¹⁰

It should be clear from what we have said above that in Basque the mechanisms of case assignment and absolutive agreement are independent. Ergative and dative cases are inherent, and absolutive reflects the absence of any case assignment (indeed, it is available in nonfinite and nontensed environments such as fragment answers and left-dislocated arguments). Agreement occurs between T and the absolutive argument when it can, though as we discuss in Section 6.3, this Agree relation may be blocked and fail to be established, with detrimental effects on verbal agreement but with no change in the case of the absolutive argument.

A crucial claim made in this paper is that the root of the auxiliary is in fact the realization of a T head specified for tense and agreement. Previous work has often analyzed it as the realization of a lower functional head. For instance, Fernández and Albizu (2000) and Rezac (2003) claim that it is the realization of v. The main reason why we have not adopted this view is that it cannot account for some basic facts about the syntax-morphology mapping in Basque verbs. As discussed above, the participle (main verb) and the auxiliary form separate words in the syntax. Although they often appear adjacent, they clearly surface in separate parts of the structure in some contexts, such as matrix negative sentences (Laka 1990):

(9) *Es s -eu -n iño-k urte-tan iño-ra.* not PRE PST.3S -N anybody-E leave-IMP anywhere-AL 'Nobody went anywhere.' (359)

Under the assumption that the root of the tensed auxiliary is v, this head would have to undergo head movement to T (we omit here H and its projection):

(10)
$$\begin{bmatrix} TP \begin{bmatrix} ASPP \end{bmatrix} VP \begin{bmatrix} VP \end{bmatrix} VP \end{bmatrix} \begin{bmatrix} VP \end{bmatrix} \\ \begin{bmatrix} VP \end{bmatrix} \begin{bmatrix} VP \end{bmatrix} \begin{bmatrix} VP \end{bmatrix} \\ \hline \\ \hline \end{bmatrix} \\$$

However, this movement would skip the intervening Asp head, since the latter is part of the participle, not the auxiliary. This is a violation of the Head Movement Constraint (Travis 1984). Under the analysis defended here, this issue does not arise; movement of v to T does not occur, and the auxiliary root is the realization of T.

4. Clitic placement and the Person Case Constraint

All finite auxiliaries conform to the following template:

(11) ABS clitic – tense/absolutive agreement – DAT clitic – ERG clitic¹¹

In our analysis, this template has no theoretical status, but is the result of the interaction of various syntactic and postsyntactic operations discussed throughout this paper. The basic syntax that underlies the positioning of morphemes in the auxiliary is shown in Figure 1. In this structure, the abstract head H (for *host*) is never realized overtly; its function is to attract certain clitics.

4.1. The syntax of pronominal clitics

Basque pronominal clitics can have ergative, dative, or absolutive case. These clitics are generated in argument position, and must be licensed by moving to certain functional heads that are only available in finite clauses. Specifically, dative and absolutive clitics must move to H, and ergative clitics must move to T.

Consider, for instance, the following transitive sentence:

(12) *su-k gure ba-n -o -su* 2S-E want if -ABS.1S-PRS.1S-ERG.2S 'if you want me' (419)

In this sentence, the auxiliary contains the first singular absolutive proclitic n- and the second singular ergative enclitic -su. These also illustrate the obligatoriness of cliticization in Basque finite clauses. Being a pro-drop language for ergative, absolutive and dative arguments, Basque allows both arguments in this example to be null. However, the clitics must be present on the auxiliary, irrespective of the presence or absence of an overt argument.

We account for cliticization in Basque by adopting a form of the socalled *big DP* analysis, following Torrego (1992) and Uriagereka (1995). The clitic heads a DP whose complement is the DP argument (which can be null):

(13) $[_{DP} DP D_{Cl}]$

 D_{Cl} in this structure is the clitic, which must move to H (for absolutive/dative clitics) or T (for ergative clitics). With the exception of third person absolutive (see sections 4.2 and 5), all arguments in Basque are generated as big DPs. This structure accounts for obligatory clitic doubling in this language.¹²

Returning to the clause structure of transitive verbs Basque, the auxiliary in (12) is derived by moving the absolutive clitic to H and the ergative to T:¹³

(14)
$$[_{\text{TP}} [_{\text{HP}} [_{\text{vP}} [\text{DP DP } t_{ERG}] [_{\text{DP}} \text{DP } t_{ABS}]...]_{\text{vP}} \text{H-ABS}]_{\text{HP}} \text{T-ERG}]_{\text{TF}}$$

We assume that cliticization is a particular kind of head movement with certain properties. As illustrated in (14), it typically skips intervening heads (Kayne 1991). Furthermore, each clitic can adjoin only to a particular host: absolutive and dative clitics can only adjoin to H, and ergative clitics can only adjoin to T. An important consequence of this is that there are no intervention effects in clitic movement: the absolutive clitic in (14) skips the c-commanding ergative clitic on its way to H (since the specifier of vP is not a potential landing site), and the ergative clitic skips the absolutive clitic in H on its way to T (since H is not a potential landing site for ergative clitics).

The resulting structure is the input to Morphological Structure, which modifies it by merging the complex T and H heads, resulting in a single morphological word (Marantz 1988; Embick and Noyer 2001):

(15) $[_{\rm H} \, {\rm H} \, {\rm ABS}] [_{\rm T} \, {\rm T} \, {\rm ERG}] \rightarrow [_{\rm T} [_{\rm H} \, {\rm H} \, {\rm ABS}] [_{\rm T} \, {\rm T} \, {\rm ERG}]]$

Another important fact about the morphology of finite auxiliaries in Basque is that the head H is systematically ignored by postsyntactic rules. We implement this by positing a postsyntactic Fusion operation that conflates the terminal node H with its sister. When applied to the structure in (15), this results in the Fusion of terminal H with the absolutive clitic into a single node:

(16) $[_{T} [_{H} H ABS] [_{T} T ERG]] \rightarrow [_{T} ABS [_{T} T ERG]]$

As we will see throughout this paper, the sister of H is not always an absolutive clitic. In some cases, it is a dative clitic, and in others, T (due to the lack of dative/absolutive clitics in the sentence). As a notational convention, we label the node resulting from Fusion with the label of the node that is fused with H. This reflects the fact that vocabulary insertion into the fused node is not affected in any way by features that may be in H. The derivation of an intransitive sentence is similar, the main difference being that there is no ergative clitic adjoined to T. The analysis thus correctly derives the fact represented in (11) that absolutive clitics precede, and ergative clitics follow, the T head. We turn to the syntax of dative clitics, and some of its consequences for the morphology of finite auxiliaries.

4.2. Dative clitics and the PCC

The PCC is a condition on the combination of clitics and agreement morphemes that holds in many languages (see Perlmutter (1971), Bonet (1991), and much subsequent work). In Basque, it is instantiated by banning first and second person absolutive clitics in the presence of a dative clitic (Azkue 1923; Laka 1993a; Albizu 1997; Ormazabal and Romero 2007; Rezac 2006). This can be seen in the contrast between (7) (repeated here as (17)) and (18).

- (17) Bat-an bat-eri emo-ngo d -o -tze -t.
 one-G one-D give-FUT PRE -PRS.DEF -DAT.3S -ERG.1S
 'I'll give it to someone or other.' (361)
- (18) * *Eur-ek su-ri ni-Ø sal-du n -o -tzu -e.* 3S-E 2S-D 1S-A sell-PRF ABS.1S -PRS.DEF -DAT.2S -ERG.3P 'They have sold me to you.'

Both auxiliaries contain a dative clitic. However, (17), with a (null) third person absolutive argument is grammatical, while (18), with a first person absolutive argument, is not.¹⁴

This follows in our analysis from the basic structure proposed in Figure 1 (page 5) combined with the following hypotheses:

(19) Basque has no third person absolutive clitics.

(20) H in Basque can only host one clitic.

Wiltschko (2008) makes a claim similar to (19) for Salish, in which some third person arguments would be expected to compete for positions but are lexically zero. In Basque, both absolutive and dative clitics must move to H, but the latter can only host one clitic. Thus, a sentence with both an absolutive and a dative clitic will crash (18). Given (19), this situation does

not arise if the absolutive argument is third person, since the absolutive argument remains in vP. The addition of a dative clitic does not result in ungrammaticality (17): the dative clitic moves to H. In essence, our claim is that (17) is grammatical because it has the same clitic syntax as a transitive sentence lacking an absolutive argument. The latter type of sentence can be illustrated with a verb like *jo* 'hit', which has the exceptional case assignment pattern ergative-dative:¹⁵

(21) bonete-agas jo-te \emptyset -o -sku -n $a-\emptyset$ hat-C.S hit-IMP PRE -PST.DEF -DAT.1P -REL that-A 'that person who used to hit us with a hat' (285)

It is important to emphasize that the PCC, i.e. the fact that a dative clitic is only allowed when an absolutive clitic is third person, has nothing to do with the morphosyntactic features of third person. In fact, ergative and dative third person arguments do require clitic doubling. The PCC results from the fact that internal argument clitics compete for occupying the clitic position in H. There is only one position, and when there are two clitics, H simply cannot host both of them, so there is no well-formed syntactic derivation in this configuration. The only circumstance in which a dative clitic can surface, then, is when there is no absolutive clitic – either because the verb is exceptional in not selecting an absolutive argument, or in a sentence where there is no absolutive clitic because third person absolutive arguments simply have no clitic forms.

5. Clitic realization in the morphophonology

In the previous section, we have argued, contrary to some existing literature, that the apparent set of agreement prefixes and suffixes on the auxiliary root in Basque are in fact not the reflex of agreement at all, but instead clitics that double an argument. No such proposal would be complete without actually providing an account of the mapping from the abstract syntactic features of the clitic D^0 elements to their phonological form. In this section we provide a complete account of the realization of argumental clitics for ergative, dative, and absolutive.

	Absolutive	Ergative	Dative
First singular	n-	-t/-a	-t/-st
First plural	g-	-u	-ku/-sku
Second singular	S-	-su	-tzu
Second plural	se	-su-e	-tzu-e
Third singular	_	-Ø/-o	-ko/-tze
Third plural	—	-Ø-е/-о-е	-ko-e/-tze-e
Third singular Third plural	_	-Ø/-о -Ø-е/-о-е	-ko/-tze -ko-e/-tze-e

Table 1.	Basque	clitics
10000 1.	Dubque	entres

5.1. Clitics and morpheme order in the auxiliary

In the previous section we showed how certain syntactic and postsyntactic operations derive the basic template of finite auxiliaries:

(22) ABS clitic - tense/absolutive agreement - DAT clitic - ERG clitic

The absolutive clitic precedes T as a result of cliticization to H. Cliticization of the ergative clitic results in right-adjunction to T, which accounts for its enclitic position (see (14)-(16)). Recall, furthermore, that dative clitics also move to H. After Merger and Fusion in the morphological component, the structure of a finite auxiliary with both a dative and an ergative clitic is the following:

(23) $[_{T} [_{H} H DAT] [_{T} T ERG]] \rightarrow [_{T} DAT [_{T} T ERG]]$

In this structure, the dative clitic precedes T. However, as shown in the template in (22), dative clitics are enclitic to T. We propose that this is due to a Metathesis rule that applies prior to Vocabulary Insertion. As a result of this Metathesis, the dative clitic and T are inverted, accounting for the attested order of morphemes within the auxiliary (for different cases of metathetic-type rules and accounts in the framework of Distributed Morphology, see Marantz (1988); Embick and Noyer (2001); Noyer (2001); Harris and Halle (2005) and section 5.3 below). All theories that identify the root as T and subscribe to some version of the mirror principle will have to account for why the dative clitic is syntactically lower than T but linearly to the right. That the dative is lower than T has been shown by the fact that it competes for H, yielding a ban on participant absolutive clitics, and by the intervention effects for T-absolutive agreement, which we discuss in 6.3.

5.2. The realization of clitics

Basque has a system of proclitics and enclitics for the various person-number features of the argument they correspond to. The forms of these clitics appear in Table 1. The vocabulary entries that realize in these clitics are the following:¹⁶

(24)	Vocabulary entries for second person clitics		
	a. $/tzu/ \leftrightarrow [+Periph, +Part, -Auth] / T$	Dat	
	b. $/su/ \leftrightarrow [+Part, -Auth] / T$	Erg	
	c. $/s/ \leftrightarrow [+Part, -Auth] / \ T$	Abs	
(25)	Vocabulary entries for first plural clitics		
	a. $/\text{sku}/ \leftrightarrow [+\text{Periph}, +\text{Part}, +\text{Auth}, -\text{Sing}] / [_T +\text{Have}] \$	Dat	
	b. $/ku/ \leftrightarrow [+Periph, +Part, +Auth, -Sing] / T$	Dat	
	c. $/u/ \leftrightarrow [+Part, +Auth, -Sing] / T$	Erg	
	d. $/g/ \leftrightarrow [+Part, +Auth, -Sing] / \ T$	Abs	
(26)	Vocabulary entries for first singular clitics		
	a. $/\text{st} \leftrightarrow [+\text{Periph}, +\text{Part}, +\text{Auth}, +\text{Sing}] / [_T +\text{Have}] ___$	Dat	
	b. $/a/ \leftrightarrow [+Part, +Auth, +Sing] / tze \s$	Erg	
	c. $/t/ \leftrightarrow [+Part, +Auth, +Sing] / T$	Erg/Dat	
	d. $/n/ \leftrightarrow [+Part, +Auth, +Sing] / \ T$	Abs	
(27)	Vocabulary entries for third person clitics		
	a. $/\text{tze} \leftrightarrow [+\text{Periph}, -\text{Part}, -\text{Auth}] / [_T + \text{Have}] \$	Dat	
	b. $/\text{ko}/\leftrightarrow$ [+Periph, –Part, –Auth] / T	Dat	
	c. $/o/ \leftrightarrow [-Part, -Auth] / tze$	Erg	

d. $\emptyset \leftrightarrow [-Part, -Auth] / T$ Erg

As discussed in the previous Section, the syntactic and postsyntactic rules, which apply prior to Vocabulary Insertion, determine that absolutive clitics precede T, and dative and ergative clitics follow T. Since clitics can be identified as proclitic or enclitic in this way after linearization, it is not necessary to specify case features in the vocabulary entries (with the exception of dative clitics, discussed below). The lack of case specification, especially in the proclitics, will provide a natural account for the phenomenon of Ergative Displacement below.

Consider, for instance, the second person clitics (24). Proclitic *s*- (24c) is inserted in a terminal that precedes T, that is, it realizes an absolutive morpheme. On the other hand, -tzu (24a) and -su (24b) are specified as following T, so that they spell out dative and ergative clitics, respectively. What distinguishes the latter two is the case feature [+Peripheral] on -tzu, which makes it dative. The vocabulary entries for first and third person in (25)–(27) are organized in a similar way.¹⁷

Another important feature of the clitic paradigm in Table 1 is the existence of two separate forms for all first and third person dative clitics. As reflected in the relevant vocabulary entries in (25)-(27), this allomorphy is dependent on the presence of the feature [+Have] in T. As shown in section 6.2 below, this feature is dependent on the presence of an ergative clitic in the auxiliary, and is crucial in accounting for several allomorphy phenomena in Basque finite verbs. In the particular case of dative clitics, it explains why *-sku* (first plural), *-st* (first singular) and *-tze* (third) are used in the context of an ergative clitic, while *-ku*, *-t* and *-ko* are used in the absence of an ergative clitic.¹⁸

All second and third plural dative and ergative clitics also contain the exponent *-e*. For instance, the second plural dative clitic is *-tzu-e* (as opposed to singular *-tzu*), and the third plural ergative clitic is $-\emptyset$ -*e*/-*o*-*e* (as opposed to singular $-\emptyset$ /-*o*). We account for this fact by positing the following vocabulary entry:

(28) Vocabulary entry for plural clitic /-e/ ↔ [-Singular]

Basque is not unique in having a clitic dedicated to realizing number features; Noyer (2001) provides an extensive analysis of the Nunggubuyu nonsingular clitic *wa*. In Basque, the discontinuous appearance of the clitic *-e* along with other clitics is the result of *Fission*. We propose that vocabulary insertion into clitics in Basque is subject to clitic Fission (Noyer 1992; Halle 1997). After insertion of the entry whose feature specification matches the most features in the morpheme (in accordance with the Subset Principle), Fission splits off the remaining (i.e. unrealized) features into a separate terminal of exponence. Vocabulary Insertion then proceeds onto this morpheme as usual. In particular, Fission accounts for the fact that all second and third plural clitics contain the additional enclitic *-e*, as discussed above. For instance, in the second plural ergative enclitic *-su-e*, *-su* matches the features [+Participant, –Author], and *-e* matches [–Singular]:

(29) Clitic Fission in second plural ergative

[+Participant, –Author, –Singular] $\xrightarrow{(24b)}$ su [–Singular] $\xrightarrow{(28)}$ su-e

Note that the plural enclitic *-e* never appears with first plural clitics. This is due to the fact that the more specific exponents in (25) already match [–Singular]:

(30) No clitic Fission in first plural ergative [+Participant, +Author, –Singular] $\xrightarrow{(25c)} u$

One aspect of the entry in (28) is that it is not contextually restricted to clitics that precede or follow T, which entails that it can also be used to realize the [–Singular] feature of absolutive clitics. This is indeed the case, although perhaps not as transparently. Consider, for instance, the second plural absolutive auxiliary form *s-ara-e* (cf. singular *s-ara*). As with the second plural ergative clitic, the absolutive clitic in this auxiliary is realized with two exponents: *s*- (24c) matches the features [+Participant, –Author], and *-e* matches [–Singular]. Note, however, that *-e* appears after T, even though all other exponents for absolutive clitics precede T, as predicted by the structure in (15). This is due to the fact that the exponent in (28) is specified as an enclitic.

We now turn to the realization of third person absolutive. As shown in 4.2 above, our hypothesis that Basque has no third person absolutive clitics (19) explains the apparent PCC effects in this language. In terms of Vocabulary Insertion, this hypothesis is the basis for the lack of exponents for third person absolutive in (27). The entries in (27) can only be inserted in a clitic that follows T, and can thus never spell out an absolutive clitic, which is always linearly placed to the left of T. What we find preceding the root when there is no available proclitic is a special epenthetic prefix, which can be d-, s- or \emptyset -. This phenomenon is intimately tied to the phenomenon of Ergative Displacement discussed in 5.3 below, in that both seem to satisfy a requirement that T be noninitial within the finite auxiliary.

The proposal is thus that third person absolutives do not require a clitic and thus no clitic is generated. The main clue that this is on the right track is the fact that the presence of a third plural absolutive argument does not trigger the insertion of the plural enclitic -e. If a third person absolutive clitic were present in the auxiliary, we would also expect clitic Fission and the insertion of plural enclitic -e in the context of a third person absolutive
argument. As can be seen in the paradigm in Table 1 (p. 59), this is not the case. The proposal that there are no third person proclitics is additionally supported by the analysis it affords for PCC effects in Basque (4.2 above), and from the phenomenon of Ergative Displacement, to which we now turn.

5.3. Ergative Displacement

Crucial to the claim that there are no third person proclitics in Basque is a discussion of the resulting morphophonological effect on the auxiliary root. There is a requirement in Basque that T (i.e. the root of the auxiliary) not be word-initial, essentially a second position constraint. When there is a first or second person absolutive argument, this requirement is satisfied by an absolutive proclitic. However, since there is no such clitic when absolutive is third person, Basque resorts to two different strategies to satisfy the requirement: (i) an epenthetic prefix (d-, s- or Ø-, as discussed below) is inserted, or (ii) if there is an ergative clitic present, the features of the ergative clitic are borrowed in the past tense. We examine these two operations briefly here, and refer the reader to a formal account developed in Arregi and Nevins (2008).

In examples such as (31), the clitic *s*- in initial position corresponds to the features of the ergative argument, but it is in the place that the absolutive clitics normally show up, and it takes the same form that absolutive clitics normally have (thus compare (31), where the second singular ergative is proclitic *s*-, with (4), where it is enclitic *-su*). Following Laka (1993a), we call this phenomenon *Ergative Displacement* (ED).

(31) pro.2S.E *i-ten* s -endu -n au-Ø. pro.2S.E do-PRF ERG.2S -PST.3S -N this-A 'You used to do this.' (387)

The observation that third person absolutive is somehow defective in Basque and the relation of this defectivity to ED is due to Azkue (1923). This insight is crucial in understanding several aspects of Basque verbal morphology, and has been adopted in one way or another by virtually all previous formal accounts of verbal inflection in Basque since Bossong (1984) and Laka (1993a) (see, among others, Gómez and Sainz 1995; Albizu and Eguren 2000; Fernández and Albizu 2000; Rezac 2003; Béjar and Rezac 2004; and Rezac 2006).¹⁹

When there is no proclitic (because the absolutive is third person), we propose that, prior to Vocabulary Insertion, an operation of Metathesis transfers the ergative clitic to word-initial position in the past tense, in order to satisfy the second position condition on T^{20} .

(32) Ergative Metathesis # T ERG \rightarrow # ERG T Condition: T is [+Past]

We view the implementation of this movement not as the result of actual syntactic movement (i.e. no dominance relations actually change in a tree), but rather as the operation of a postsyntactic Metathesis rule (Marantz 1988; Embick and Noyer 2001; Noyer 2001; Harris and Halle 2005).

The derivation of the ED example (31) proceeds as follows. In the syntax, T agrees with the third singular object, and the ergative clitic moves to T. After Merger and Fusion in the morphological component, the finite auxiliary has the structure in (33). Crucially, as no clitic is adjoined to the left of T, due to the fact that the absolutive argument is third person, this structure must undergo Metathesis:

(33) $[_T T_{PST.3S} ERG_{2S}] \rightarrow [_T ERG_{2S} T_{PST.3S}] \rightarrow [_T s- endu]$

Following linearization and this Metathesis operation, these terminal nodes are assigned exponents through the process of Vocabulary Insertion. The relevant exponents are -su (24b) and s- (24c).²¹ The reader will notice that the vocabulary items s- and -su differ only in terms of their linear position, not their case features. In non-ED contexts, the absolutive proclitic precedes T, and the ergative clitic follows it, so s- is the realization of second person absolutive and -su realizes second person ergative in these contexts. However, the lack of case features in the vocabulary entries predicts that this correlation between the case of the clitic and its realization might be disturbed if some rule alters the linear order of clitics in a relevant way. This is precisely what happens when Metathesis (32) applies. Since the ergative clitic precedes T due to Metathesis, the entry for enclitic -su (24b) cannot be used, and the proclitic s- (24c) is inserted instead. The end result is that the ergative clitic's morphosyntactic features are realized in the same position and with the same form as an absolutive clitic in non-ED contexts.

As formulated, the Metathesis rule (32) predicts that ED applies to ergative clitics regardless of their feature specification. However, due to an observation made independently by Bossong (1984) and Ortiz de Urbina (1989), it is a standard claim in the literature that ED does not apply when the ergative clitic is third person (see all references on ED cited above). These authors observed that in ED contexts, a third plural ergative argument is not referenced by a proclitic, but rather by an enclitic, which is unexpected if wholesale conversion of ergative to absolutive were taking place in ED. This is illustrated in the following Zamudio example, where enclitic plural -*e* crossreferences a (null) third plural ergative argument (see section 5.2):

(34)baye $\int_{CP} almuda - n$ igual ollosko-a forme-ta [CP pillow-IN.S perhaps chicken-A.S materialize-IMP but l esa-te Ø -eur S -a -la -e -n. PRE PST.3S -COMP] say-IMP PRE -PST.3S -ERG.P -N 'but they say that perhaps a chicken used to materialize on the pillow' (403)

Their conclusion is that the auxiliary in (34) does not contain a proclitic; rather, the ergative is realized as an enclitic as usual, and there is no ED.

However, under our analysis of clitics in section 5.2, this conclusion is not warranted. Consider the derivation of the auxiliary in (34) under the assumption that ED in fact does apply. The output of the syntax and Merger and Fusion of H and T is an auxiliary with an ergative clitic adjoined to a past tense T with third singular features (due to agreement with the absolutive argument). Metathesis applies to this structure yielding the following:

(35) $[_{T} T_{PST.3S} ERG_{3P}] \rightarrow [_{T} ERG_{3P} T_{PST.3S}] \rightarrow [_{T} \emptyset - eu - e]^{22}$

Since none of the vocabulary entries for proclitics (24)–(26) match the third person specification of the ergative clitic node, the auxiliary is simply left with no exponent for the proclitic position. On the other hand, the vocabulary entry for enclitic -e (28) does match [–Singular] in the ergative clitic's set of morphosyntactic features. The net result is that the ergative clitic is realized with only enclitic -e. The proclisis of the ergative occurs, but yields no phonological exponent as a prefix. However, ordinary plural enclisis still occurs.

Finally, Ergative Metathesis cannot always be used to satisfy the requirement that T not be word-initial within the finite auxiliary. As noted above, this requirement can also be satisfied by inserting a prefix, which can be d-, s- or \emptyset -. These are inserted whenever Ergative Metathesis does not apply (i.e. T is present tense or there is no ergative clitic), or when Metathesis inverts a third person ergative clitic for which there is no enclitic form, as discussed above. We view this epenthetic insertion of a prefix as a last resort postsyntactic rule that applies prior to Vocabulary Insertion in order to satisfy the noninitiality requirement on T. Specifically, the rule inserts a terminal node to the left of T, which is realized at Vocabulary Insertion by one of the prefixes mentioned above. The distribution of these prefixes is somewhat complex, and can be summarized as follows (see Arregi and Nevins (2008) for details): *d*- is inserted in the present, *s*- appears in past auxiliaries when the ergative clitic is absent or agreement in T is third person plural, and \emptyset - is used elsewhere in the past tense.

Note that the noninitiality requirement on T is morphological in nature, not phonological. As a consequence, the two rules discussed above (Meta-thesis and insertion of a prefix) manipulate terminal nodes in the structure of the auxiliary, and apply prior to Vocabulary Insertion. This is seen most clearly in the fact that the requirement can be satisfied by the prefix \emptyset -.

To conclude, contexts with a third person absolutive argument lead to a variety of morphological operations to satisfy the noninitiality requirement of the auxiliary root T, which can be well-characterized as proxies for the failure of these arguments to generate an associated clitic.

6. Agreement by T with the absolutive

Having argued that a majority of the pieces of the Basque auxiliary complex that have been traditionally analyzed as agreement markers are in fact clitics, we turn to what we argue is a true instantiation of bona fide agreement by T, as modeled with the Agree operation. This Agree operation establishes a relation of feature valuation between the φ -features on T and those of the absolutive argument. In this Section, we discuss the basic Agree operation between T and the absolutive (6.1), the morphophonological realization of the φ -features that T acquires (6.2), and the voiding of an Agree relation by a dative intervener (6.3).



Figure 2. Movement of ergative clitic and agreement of T with absolutive clitic

6.1. Agree between T and the absolutive

As mentioned above, we identify the root of the finite auxiliary as the realization of the head T. In order to understand how agreement affects the realization of the root, we first discuss sentences with a first or second person absolutive argument, and then sentences with a third person absolutive argument. In both cases, Agree occurs, though the syntactic position of the Goal differs slightly.

A sample derivation with a second person singular absolutive argument and a first person singular ergative argument is shown in Figure 2. After the absolutive clitic moves to H, T is merged and triggers two operations: (i) it attracts the ergative clitic, and (ii) it agrees with the absolutive clitic in H.²³ In an intransitive sentence, the derivation is the same, except for the fact that there is no ergative argument, so there is no clitic movement to T.

Due to the fact that third person absolutive arguments do not generate a clitic that moves to H (see Sections 4.2, 5), the derivation of agreement with T and the absolutive is slightly different. T in this case establishes an Agree relation with the absolutive argument itself, in situ in VP.²⁴ This is shown in Figure 3.



Figure 3. Agreement of T with third person absolutive argument

Importantly, in these cases, while the ergative clitic has moved to T, the ergative argument still intervenes between T and the VP-internal absolutive argument. We thus assume that clitic-doubling of an argument A renders the original argument A invisible for Agree operations (see Anagnostopoulou (2003: 206–215) and references cited there). This locality must be evaluated representationally, for instance at the phase-level derivational step reached with the merge of matrix C, by which point the agreement relation between T and the absolutive in VP crosses the trace of the ergative clitic in the specifier of vP.

The derivation of an Agree relation between T and the absolutive argument thus depends indirectly on whether the absolutive has triggered clitic doubling or not. If it does, then T agrees with the absolutive clitic in H. If it does not, then T agrees with the absolutive argument itself, within VP. The configurations we have just described are simple cases of Agree with the closest D element in the asymmetric c-command domain of a probing head. Moreover, this Agree operation is one in which the Goal is not inherently case-marked, and hence visible for agreement. Although in this type of configuration, there is no intervening D element, we will see below that this is not always the case, namely when a dative argument intervenes, which results in lack of agreement.

As we will see in the next subsection, the realization of successful Agree valuation of T's φ -features is subject to a good deal of allomorphy, often tense-dependent-which is what one might expect of agreement (as opposed to clitics).

6.2. The realization of agreement on T

The person/number features acquired by T via agreement with the absolutive argument are crucial in understanding its realization by vocabulary entries. In addition, T shows a variety of allomorphs depending on the presence or absence of an ergative clitic. This apparent *have/be* alternation, indirectly conditioned by the argument structure of the verb, will figure in our discussion as well. As can be seen in Tables 2–4 (pages 71–72), the form of T is highly dependent on the features of the absolutive argument, as well as the feature [\pm Past].²⁵

Furthermore, these Tables also show that the realization of T is also dependent on the presence or absence of an ergative clitic (and, to a limited extent, on its feature content). We implement this latter fact with the following rule, which applies prior to Vocabulary Insertion:

(36) Insert the feature [+Have] in T in the context of an ergative clitic. Insert [-Have] otherwise.

For ease of exposition, we refer to T specified as [+Have] as *transitive T*, and to T specified as [-Have] as *intransitive T*.

The fact that the form of the root depends on the presence/absence of an ergative clitic might lead to the hypothesis this is the same phenomenon as the *have/be* alternation in many Romance and Germanic languages. However, Arregi (2004) presents thorough argumentation that the alternation in Basque is based on the presence/absence of an ergative clitic on the auxiliary, and not on the ergative DP argument (i.e. transitive/intransitive syntax). That this is the case can be best detected when ergative cliticization and ergative arguments part ways.

One demonstration that [+Have] allomorphy depends on the presence of an ergative clitic comes from allocutive auxiliary forms in Zamudio. In many dialects of Basque, a distinction is made between second singular formal and colloquial forms. Due to the marginal status of this opposition in Zamudio, we have only reported formal forms (glossing them as second singular). However, Gaminde (2000) has collected some colloquial forms, including allocutive ones. Allocutive finite forms in Basque are unique in that they contain a second person clitic that agrees with the addressee when the latter is someone who would be addressed using colloquial forms (Oyharçabal 1993). Importantly, this clitic does not crossreference any DP in the clause, hence the name *allocutive*. Of interest for the present discussion is the particular form that allocutive clitics have. In an intransitive auxiliary with only an absolutive clitic, the allocutive clitic is realized as an enclitic. (38) is the allocutive counterpart of (37):²⁶

- (37) Lau aste-an ego-n n -as geixorik. four week-IN be-PRF ABS.1S -PRS.1S sick 'I've been sick for four weeks.' (367)
- (38) *Lau aste-an ego-n n -o -k geixorik.* four week-IN be-PRF ABS.1S -PRS.1S -ALL.2S.COLL.M sick 'I've been sick for four weeks.'

Both sentences in (38) have the same syntax and meaning: they are syntactically intransitive, in the sense that they contain a single absolutive argument. The only difference is that (38) is used whenever addressing a male friend, and (37) is more formal. The allocutive auxiliary in (38) contains the additional allocutive enclitic -k, which does not crossreference any DP in the sentence.²⁷ Furthermore, this allocutive clitic has the same form and occupies the same position as an ergative clitic.

Crucially for the discussion of the distribution of $[\pm$ Have] is the fact that T (the root) takes a different form in both examples in (38). While in both, T agrees with the first singular absolutive argument, T in the nonallocutive auxiliary (37) is intransitive *as*, as expected, but T in the allocutive auxiliary (38) is transitive *o* (see below for the relevant vocabulary entries). Even though the sentence lacks transitive syntax and an ergative argument, the syntactically unmotivated presence of a clitic with the form and position of an ergative clitic triggers the insertion of transitive T. Thus, (38) shows that ergative cliticization, and not an ergative argument, triggers the presence of transitive T.

Thus, the transitivity alternation in the realization of T in Basque is determined by the presence of an ergative enclitic in the auxiliary that does not necessarily signal the presence of an ergative argument, and is thus is a postsyntactic determination of allomorphy. We turn to an exhaustive listing of the interaction between tense, [\pm Have], and agreement with the absolutive in determining the allomorphs of T. The vocabulary entries for intransitive T are the following (see Table 2):

Absolutive	Present	Past
First singular	as	entz
First plural	ara	intz
Second singular	ara	intz
Second plural	ara	intz
Third singular	a	а
Third plural	ire	ire

Table 2. Intransitive T

<i>Table 3.</i> Present transitive

	Absolutive					
Ergative	1 sing.	1 plural	2 sing.	2 plural	3 sing.	3 plural
1 sing.	Х	Х	aitu	aitu	0	0
1 plural	Х	Х	ara	ara	0	0
2 sing.	0	0	Х	Х	0	0
2 plural	0	0	Х	Х	0	0
3 sing.	eu	aitu	aitu	aitu	eu	eitu
3 plural	eu	aitu	aitu	aitu	eu	eitu

(39)	Vocabulary entries for first singular intransitive T	
	 a. /entz/ ↔ [-Have, +Past, +Part, +Author, +Singular] b. /as/ ↔ [-Have, -Past, +Part, +Author, +Singular] 	Past Present
(40)	Vocabulary entries for first plural/second person intransitiv	e T

a.	$/intz/ \leftrightarrow [-Have, +Past, +Participant]$	Past
b.	$/ara/ \leftrightarrow [-Have, -Past, +Participant]$	Present

- (41) Vocabulary entry for third plural intransitive T
 /ire/ ↔ [-Have,-Participant, -Author, -Singular]
- (42) Default vocabulary entry for intransitive T /a/ ↔ [-Have]

These vocabulary entries account for the forms of T in Table 2 in a straightforward way. The following are the entries relevant to transitive T (see Tables 3-4):²⁸

	Absolutive					
Ergative	1 sing.	1 plural	2 sing.	2 plural	3 sing.	3 plural
1 sing.	Х	Х	endu	endu	endu	endu
1 plural	Х	Х	endu	endu	endu	endu
2 sing.	endu	endu	Х	Х	endu	endu
2 plural	endu	endu	Х	Х	endu	endu
3 sing.	endu	endu	endu	endu	eu	eitu
3 plural	endu	endu	endu	endu	eu	eitu

Table 4. Past transitive T

(43) Vocabulary entry for participant transitive T in the present
 /aitu/ ↔ [+Have, -Past, +Participant]

- (44) Vocabulary entries for third person transitive T
 a. /eitu/ ↔ [+Have, -Participant, -Author, -Singular]
 b. /eu/ ↔ [+Have, -Author]
 3.SG
- (45) Default vocabulary entries for transitive T²⁹
 a. /endu/ ↔ [+Have, +Past] / [+Participant] _____
 b. /o/ ↔ [+Have]

The entries in (44) assign the correct exponents to T in the third person (*eu*, *eitu*), except in the environment of a participant ergative clitic. In the latter context, T is realized as the default o/endu (in the present and the past, respectively; see (45)), due to the following Impoverishment rule, which deletes person features in T:

(46) Third Impoverishment

 $[+Have, -Part, -Author] \rightarrow [+Have, -Part] / _ [-Peripheral, +Part]$

This rule applies after (36) and prior to Vocabulary Insertion. The following example illustrates this rule:

(47) *Beskari-e i-n d -o -t.* lunch-A.S make-PRF PRE -**PRS.3S** -ERG.1S 'I've made lunch.' (388)

In the syntax, the first singular ergative clitic moves to T, and the latter agrees with the third singular absolutive argument. The presence of this er-

gative clitic triggers the application of (36), so that T is specified for [+Have], as well as present tense and the φ -features of the absolutive:

(48) [+Have, -Past, -Participant, -Author, +Singular]

Since the presence of the first singular ergative clitic provides the context for the deletion rule (46), the auxiliary ends up with the following feature specification:

(49) [+Have, -Past, -Participant, +Singular]

As T in this case lacks the specification for [-Author], eu (44b) cannot be inserted, and it is realized with the default o (45b).

In the present, second person is realized as *aitu* (43). In the past, there are no particular entries applying to second person, so T is realized as the default *endu* (45a). The same is true for first person singular in the past. However, in the present tense, the auxiliary shows a syncretism between first singular and third singular agreement. This is arguably due to a marked-ness-based Impoverishment rule, like one found in German (Müller 2005). In Basque, first person singular is impoverished in the present ((50), which applies before (46)), so that its postsyntactic feature composition is identical to that of third singular.

(50) First Singular Impoverishment

[+Have, –Past, +Participant, +Author, +Singular] → [+Have, –Past, –Participant, –Author, +Singular]

Due to this rule, first person singular is realized as eu or o, just like the third person singular. Finally, first person plural is realized as default *endu* in the past. In the present, the realization of first plural is affected by the following Impoverishment rule, which applies before (46):

(51) First Plural Impoverishment

[+Have, -Past, +Part, +Auth, -Sing] → [+Have, -Past, -Part, -Auth, -Sing] / ___ [-Peripheral, +Part]

This rule impoverishes first person plural to third person in the present in the context of a participant ergative clitic. As a consequence, T is realized as o (45b) in this context (due to the further application of (46)). Otherwise, first person plural is realized as *aitu* (43) in the present tense.

6.3. Dative intervention and default agreement

In Section 6.1 we discussed the derivation of Agree between T and the absolutive for intransitive and transitive clauses. However, the combination of absolutive and dative arguments in a Basque sentence gives rise to a separate phenomenon within the finite auxiliary. One of the central claims that we have made in this paper is that the root of the auxiliary is T, which must agree with the absolutive argument. As discussed in Subsection 6.1, this agreement operation satisfies standard locality conditions: T agrees with an absolutive DP x in its c-command domain as long as there is no intervening DP y between T and x. Clauses with both absolutive and dative arguments illustrate one such case where an intervener blocks agreement by T and the absolutive argument.

Due to the clitic competition resulting in restricted absolutive-dative argument combinations, as discussed in 4.2, the only type of clauses with a dative argument that are eligible for Agree are those with a third person absolutive argument (which, as we have seen in 6.1, normally triggers agreement). In these sentences, the dative cliticizes to H, and the absolutive remains in VP (since there are no third person absolutive clitics). As shown in Figure 4, agreement with the absolutive DP is blocked by the dative clitic in H. Thus, the analysis predicts that T must take a default form whenever the auxiliary contains a dative clitic. This prediction is borne out. The distribution of the different forms of T in the context of dative clitics can be summarized as follows:³⁰

(52) Forms of T in the context of a dative clitic

- a. Intransitive T: a (42)
- b. Present transitive T: *o* (45b)
- c. Past transitive T: o (45b) or eun (53a)

Cases (52a)-(52b) are straightforward: if there were no intervention by dative clitics, we would expect T to agree with the absolutive argument; however, T has a default form in both cases. Case (52c) also confirms the prediction, but is somewhat more complicated, and merits some discussion. The realization of T in this case is summarized in Table 5. The relevant vocabulary entries are (53a), which is new, and (45a) and (45b), repeated here as (53b)-(53c).



Figure 4. Dative intervention

Table 5. Past transitive T in the context of a dative clitic
--

	Dative					
Ergative	1 sing.	1 plural	2 sing.	2 plural	3 sing.	3 plural
1 sing.	Х	Х	eun	eun	eun	eun
1 plural	Х	Х	eun	eun	eun	eun
2 sing.	0	endu	Х	Х	eun	eun
2 plural	0	endu	Х	Х	eun	eun
3 sing.	0	0	0	0	0	0
3 plural	0	0	0	0	0	0

(53) Default vocabulary entries

- a. $/eun/ \leftrightarrow [+Have, +Past] / [+Participant] _ [+Peripheral]$
- b. $/endu/ \leftrightarrow [+Have, +Past] / [+Participant] _____$
- c. $/o/ \leftrightarrow [+Have]$

All these entries are potential candidates to realize default past transitive T in case (52c), since none of them are specified for any agreement feature. Of relevance here is the fact that past transitive auxiliaries undergo Ergative Metathesis (section 5.3), which places ergative clitics before T in the absence of an absolutive proclitic. Due to the PCC (section 4.2), past transitive forms with a dative clitic are only possible if the absolutive argument is

third person. These forms additionally undergo Ergative Metathesis. A metathesized participant ergative clitic triggers the insertion of *eun* (53a) in T (see Table 5).³¹

In cases where the metathesized ergative clitic is third person (or when Metathesis fails to apply; see note 31), both *eun* (53a) and *endu* (53b) are blocked, since they can only be inserted in the context of a participant proclitic. The result is that, as shown in Table 5, o (53c) is inserted wherever *eun* is not. Finally, *endu* (53b) is limited to transitive auxiliaries with no dative clitic, as can be seen in Tables 4–5.

To conclude, the realization of T in the context of a dative argument and the absence of the otherwise expected number distinctions provides a strong argument for the claim that the root is in fact a head (T) that agrees with the absolutive argument. As expected, intervention by the dative argument blocks this agreement relation, and T takes a default form.

6.4. Clitic competition and agreement intervention

We have discussed two syntactic effects that dative clitics may have on the realization of absolutive arguments. The first concerned the fact that as datives and absolutives are in the same syntactic domain, their clitics compete for HP (Section 4.2). Thus, when there is a dative clitic, the absolutive clitic cannot be hosted. This yields the apparent Person Case Constraint on clitics in Basque. There is a wide range of repair strategies that various dialects of Basque use in order to circumvent the Person Case Constraint, but the ultimate fact is that a combination of both absolutive and dative clitics in Basque simply cannot surface. Thus, dative competition results in an absolute ban on absolutive clitics in the presence of datives.

When it comes to the higher head T whose attempt at Agree with a third person absolutive argument is blocked by the intervening dative, the result of this failure to agree is not absolute ungrammaticality, but rather simply a failure to record the agreement features of the absolutive argument on T (Subsection 6.3). Thus, as in Icelandic (see, among others, Holmberg and Hróarsdóttir 2004), blocking of T's agreement path yields default agreement (i.e. no syntactic agreement, and Vocabulary Insertion of the elsewhere item). Thus, for the purposes of dative intervention, the blocking of an Agree relation between T and the absolutive argument does not result in absolute ungrammaticality, but simply failure to copy the features of the absolutive and hence a default vocabulary item for T.

7. Summary

The Basque auxiliary shows a number of agreement and clitic restrictions. We have proposed that some of these are due to syntactic operations and some are due to postsyntactic operations.

The relevant syntactic operations that occur in Basque are cliticization of ergative, dative, and (nonthird) absolutive arguments, and an Agree operation between T and the absolutive argument. When cliticization yields two internal argument clitics, one source of agreement restrictions is the competition for occupying H. When the dative clitic intervenes between T and the absolutive argument, another source of agreement restrictions is the intervention condition on Agree. These two agreement restrictions find a number of crosslinguistic parallels and can be understood in terms of wellmotivated limitations on the syntactic computation.

Thus, while third person absolutive arguments in Basque behave differently from both third person ergative and from other absolutive arguments (i.e., allowing dative-absolutive combinations, and inducing Ergative Displacement), we have not attributed this to anything specific about the morphosyntactic features of third person. It is simply due to the lack of a clitic realization of this argument, which has consequences only because of the nature of the clitic-hosting head, and because of the noninitiality requirement of the Basque auxiliary root.

A number of postsyntactic operations occur in the Basque auxiliary, which fall into two basic categories. One set of operations are Impoverishment rules, which are rules of postsyntactic feature-deletion that are largely motivated by considerations of morphological markedness. A second set of operations are Metathesis rules, which are responsible for the mismatch between the hierarchical and surface position of the dative clitic, and which play a crucial role in understanding the rule of Ergative Metathesis. Both sets of operations find numerous crosslinguistic parallels: Impoverishment rules yield syncretism in the realization of agreement in a wide range of languages, and Metathesis rules occur to satisfy second position requirements in a number of domains. Importantly, neither of these operations are responsible for agreement restrictions per se; they are operations that yield a number of syntax-morphology mismatches and which operate over the currency of φ -features, but they do not refer to hierarchical structure in the way that the syntactic operations above do. The resulting picture is one in which the seeming complexity of Basque auxiliary morphology results from the interaction of a number of independent principles operating in distinct subdomains of the grammar.

Notes

- 1. Example sentences from Gaminde (2000) are cited by giving the page number in parenthesis. In cases where that work does not have relevant examples, we have consulted de Yrizar (1992, 1: 585–625), which contains a detailed inventory of finite auxiliary paradigms in this dialect. All forms are given here in their underlying forms after Vocabulary Insertion (Sections 5.2 and 6); they are further modified by readjustment and phonological rules discussed in Arregi and Nevins (2006). The data are transcribed using the orthographic conventions in Gaminde (2000). The reader not familiar with Basque spelling rules should take into account the following: ñ is a palatal nasal [n], (*t*)*x* is a voiceless alveopalatal fricative/affricate [(t)ʃ], *tz* is a voiceless alveolar affricate [ts], and *y* is a palatal obstruent with different realizations.
- 2. The participle can also be inflected for future, as in (7).
- 3. A reduced number of verbs can also appear in simple tenses; see Gaminde (2000).
- 4. We use the following abbreviations: Abs/A (absolutive), ABS (absolutive clitic), AL allative, ALL (allocutive clitic), C (comitative), COLL (colloquial), Dat/D (dative), DAT (dative clitic), DEF (default agreement), Erg/E (ergative), ERG (ergative clitic), G (genitive), FUT (future), IMP (imperfective), IN (inessive), M (masculine), N (-*n* suffix), NF (nonfinite inflection), NOM (nominative), Pl/P (plural), PRE (epenthetic prefix), PRF (perfective), PRS (present), PST (past), REL (relativizing suffix), Sg/S (singular).
- 5. In the examples below, some auxiliaries contain the prefix d, glossed as PRE. On the status of this morpheme, see section 5.3.
- 6. Unergatives assign ergative to their argument, but Laka (1993b) shows that these are really transitives, as proposed by Hale and Keyser (1993).
- 7. We assume that the indirect object is the specifier of a low applicative head whose complement is the direct object. See Larson (1988), Marantz (1993), Pesetsky (1995), and Pylkkänen (2002) for relevant discussion.
- 8. The form of these morphemes resembles that of (nonclitic) pronouns. This justifies in part the adoption of the clitic analysis, and has been taken as evidence for the claim that these morphemes are historically derived from pronouns (Gómez and Sainz (1995) and references cited there).
- 9. These examples also show that DPs cross-referenced in the auxiliary can be pro-dropped.
- 10. There is a morphological distinction between colloquial and formal in the second singular. We have omitted inclusion of this aspect of Basque morphology, since our main source on Zamudio contains very few colloquial auxiliary forms, reflecting the loss of the formal/colloquial contrast in favor of formal forms. The present paper only discusses indicative auxiliary paradigms, since the nonindicative auxiliary forms and finite forms of main verbs are greatly leveled in Zamudio (Gaminde 2000).

- 11. There is a well-defined class of exceptions to this template. In certain environments, the absolutive clitic position is occupied by certain special prefixes or by an ergative clitic. The morphological operations responsible for these cases are discussed in 5.3.
- 12. Cliticization is impossible in nonfinite clauses. This is due to the fact that the latter do not have the relevant heads that host clitics (H and T). Thus, arguments are generated as big DPs only in finite clauses.
- 13. We omit the Asp projection from Figure 1 in all diagrams below for ease of exposition. The auxiliary in this example also contains absolutive agreement (see Section 6).
- 14. Gaminde (2000: 372) has some forms that apparently violate the PCC. Specifically, these are present tense intransitive forms with a dative clitic and a first singular absolutive clitic. However, the paradigm is greatly leveled, and is limited to the aforementioned forms (e.g. there are no past tense forms nor ones containing a first plural absolutive clitic). Secondly, as has been noted for many other Basque dialects, they are limited to intransitive low dative sentences, and are not allowed in sentences that have the structure in Figure 1, where both the dative and absolutive are internal arguments generated under vP, such as unaccusative psych verb sentences and ditransitive sentences (see Rezac (2006) for discussion). Since the syntax of dative and absolutive arguments is crucial in our explanation of PCC effects in Basque, and it is not clear to us what the syntax of these apparent PCC violating sentences should be, we leave this as a matter in need of further research. We thank Iñaki Gaminde for clarifying the data for us.
- 15. Note that the auxiliary in (21) undergoes ED (section 5.3), since it is in a past tense ditransitive sentence. This is not completely transparent, since the ergative clitic that undergoes ED is third person, and thus is not realized by any vocabulary entry.
- In some forms, a first plural clitic is missing in the context of a second person clitic. This is due to the g-/z- constraint, discussed in Arregi and Nevins (2007).
- 17. As in the second person, the realization of dative and ergative clitics is different in the first and third persons, with one exception. In the first singular, enclitic -t is the default exponent for both dative and ergative clitics.
- 18. Other alternations present in Table 1 not discussed in the text are the following. First, the exponent of third person ergative can be $-\emptyset$ or -o. As shown in the entries in (27c)-(27d), -o is a very specific allomorph of third ergative inserted in the context of the third singular dative clitic exponent *tze*, and $-\emptyset$ is the default third ergative exponent. Second, *a* (26b) is a very specific allomorph of first singular ergative inserted when preceded by aforementioned *-tze* and followed by the so-called plural suffix *-s* (see discussion below (8)). Otherwise, the default realization of first singular ergative is *-t* (26c).
- 19. For other accounts of ED, see Ortiz de Urbina (1989), Heath (1976), and Hualde (2002).

- 20. In many dialects of Basque, there are particular exceptions to this Metathesis rule. In Zamudio, Metathesis does not apply in the context of a first singular dative clitic. We assume that this is due to dialect-particular conditions on the application of Metathesis.
- 21. Past tense T in the example contains third singular absolutive agreement, which is realized as *endu* (see section 6.2). This auxiliary also contains the suffix *-n*, not dealt with in this paper (see discussion below (8)).
- 22. T in this auxiliary is realized as *eu* (section 6.2), which is further modified to *eur* by readjustment rules (Arregi and Nevins 2006).
- 23. Following Anagnostopoulou (2003), we assume that the ergative clitic adjoined to T is in the minimal domain of T, and thus does not block the Agree relation between T and the absolutive clitic.
- 24. Thus, either vP is a weak phase in Basque, or it is a strong phase and consistent with the definition of the Phase Impenetrability Condition in Chomsky (2001) in which a strong phase remains accessible until the next phase head up, which is C, not T.
- 25. As in all dialects of Basque, reflexive auxiliary forms (first with first, second with second) are not possible in Zamudio Basque. This is reflected in Tables 3–4 and all other Tables in this paper by the symbol X in the relevant cells. On the underlined forms in Table 3, see note 28.
- 26. Unfortunately, Gaminde (2000) does not have any relevant sentence containing allocutive forms, which reflects the fact that these forms are not in much use any more. Gaminde lists the allocutive form n-o-k in (38) on page 382.
- 27. Oyharçabal (1993) provides several arguments that the presence of an allocutive clitic in the auxiliary does not signal the presence of an additional argument in the sentence. For instance, this alleged argument cannot bind anaphors. Oyharçabal interprets these arguments as showing that the clitic cross-references a pro in a high A'-position.
- 28. The underlined forms of T in table 3 are in fact intransitive. This is due to the g-/z- constraint (Arregi and Nevins 2007), which bans certain combinations of first plural with second person clitics. In this particular case, it triggers the deletion of a first plural ergative clitic in the context of a second person absolutive clitic. As predicted by the analysis of the *have/be* alternation in Arregi (2004) outlined above, this triggers the insertion of the feature [-Have] in the auxiliary. Despite being derived from a transitive syntax, the auxiliary is, in the sense defined above, morphologically intransitive.
- 29. (45a) is a default entry in the sense that it does not realize person and number features of T. However, it has a very specific context that limits its insertion to forms with a participant proclitic. See section 6.3 below.
- 30. In some of these forms, the specific allomorph of default T that is used is different from what is described below due to the g-/z- constraint (see note 28). Specifically, in the context of a second person dative and a first plural ergative clitic, the latter is deleted. This triggers the insertion of [-Have] in T, which is realized as the default intransitive form *a* (42).

31. There is an apparent exception: transitive past T in the context of a first singular dative clitic is *o*, rather than *eun* (see Table 5). However, this is due to the fact that, as discussed in note 20, Ergative Metathesis is blocked in precisely this context in Zamudio, so that the participant ergative clitic is in its original enclitic position. Since the vocabulary entry for *eun* only applies in the context of a participant proclitic, it cannot be inserted in this case, and default *o* is used instead.

References

Albizu, Pablo

1997 The syntax of person agreement. Ph.D. diss., Department of Linguistics, University of Southern California.

Albizu, Pablo, and Luis Eguren

2000 An optimality theoretic account for "Ergative Displacement" in Basque. In *Morphological Analysis in Comparison*, Wolfgang U. Dressler, Oskar E. Pfeiffer, Markus A. Pöchtrager and John R. Rennison (eds.), 1–23. Amsterdam: John Benjamins.

Anagnostopoulou, Elena

2003 *The Syntax of Ditransitives*. Berlin/New York: Mouton de Gruyter. Arregi, Karlos

2004 The have/h

2004 The *have/be* Alternation in Basque. Ms., University of Illinois at Urbana-Champaign. Available at http://uiuc.edu/~karlos/have.pdf.

Arregi, Karlos and Andrew Nevins

- 2006 A Distributed Morphology analysis of present tense auxiliaries in Zamudio Basque. *Euskalingua* 9: 146–156. See: www.mendebalde.com.
- 2007 Obliteration vs. Impoverishment in the Basque g-/z- constraint. In *Proceedings of the 30th Annual Penn Linguistics Colloquium*, Tatjana Scheffler, Joshua Tauberer, Aviad Eilam and Laia Mayol (eds.), 1–4. (Penn Working Papers in Linguistics 13.1.) Philadelphia: Penn Linguistics Club. Available at http://ling.auf.net/lingBuzz/000280.
- 2008 Ergative Displacement in Basque: A second position requirement satisfied by Metathesis. Ms., University of Illinois at Urbana-Champaign and Harvard University. In preparation.

Azkue, Resurrección María

1923 Morfología Vasca. Bilbao: Euskaltzaindia.

Béjar, Susana and Milan Rezac

2004 Cyclic Agree. Ms., University of Toronto.

Bonet, Eulália

1991 Morphology after syntax: Pronominal clitics in Romance. Ph.D. diss., Department of Linguistics and Philosophy, MIT.

Bossong, Georg

1984 Ergativity in Basque. *Linguistics* 22(3): 341–392.

Calabrese, Andrea

2006 On absolute and contextual syncretism: remarks on the structure of paradigms and how toderive them. In *Inflectional identity*, Asaf Bachrach and Andrew Nevins (eds.), 156–205. Oxford: Oxford University Press.

Chomsky, Noam

- 2000 Minimalist inquiries: The framework. In *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, Roger Martin, David Michaels and Juan Uriagereka (eds.), 89–155. Cambridge, MA: MIT Press.
- 2001 Derivation by phase. In *Ken Hale: A life in language*, Michael Kenstowicz (ed.), 1–52. Cambridge, MA: MIT Press.
- Embick, David and Rolf Noyer
 - 2001 Movement operations after syntax. *Linguistic Inquiry* 32 (4): 555–595.
- Fernández, Beatriz and Pablo Albizu
 - 2000 Ergative displacement in Basque and the division of labor between morphology and syntax. In *The Proceedings from the Panels of the Chicago Linguistic Society's Thirty-Sixth Meeting*, Akira Okrent and John P. Boyle (eds.), 103–117. Chicago: Chicago Linguistic Society.

Gaminde, Iñaki

- 2000 Zamudio Berbarik Berba. Bilbo: Labayru Ikastegi. Also available at http://bips.bi.ehu.es/manwe-bideoteka/zamudio/.
- Gómez, Ricardo and Koldo Sainz
 - 1995 On the origin of the finite forms of the Basque verb. In *Towards a History of the Basque Language*; José Ignacio Hualde, Joseba A. Lakarra and R. L. Trask (eds.), 235–274. Amsterdam: John Benjamins.
- Hale, Kenneth and Samuel Jay Keyser
 - 1993 On argument structure and the lexical expression of syntactic relations. In *The View from Building 20: Essays in Honor of Sylvain Bromberger*, Kenneth Hale and Samuel Jay Keyser (eds.), 53–109. Cambridge, MA: MIT Press.

Halle, Morris

1997 Distributed Morphology: Impoverishment and Fission. In *PF: Papers at the Interface*, Benjamin Bruening, Yoonjung Kang and Martha McGinnis (eds.), 425–450. (MIT Working Papers in Linguistics 30.) Cambridge, MA: MITWPL.

Halle, Morris and Alec Marantz

- 1993 Distributed Morphology and the Pieces of Inflection. In *The View* from Building 20: Essays in Honor of Sylvain Bromberger, Kenneth Hale and Samuel Jay Keyser (eds.), 111–176. Cambridge, MA: MIT Press.
- 1994 Some key features of Distributed Morphology. In *Papers on Phonology and Morphology*, Andrew Carnie, Heidi Harley, and Tony Bures

(eds.), 275–288. (MIT Working Papers in Linguistics 21.) Cambridge, MA: MITWPL.

- Harris, James and Morris Halle
 - 2005 Unexpected plural inflections in Spanish: Reduplication and Metathesis. *Linguistic Inquiry* 36(2): 192–222.

Heath, Jeffrey

1976 Antipassivization: a functional typology. In Proceedings of the Second Annual Meeting of the Berkeley Linguistics Society, 202–211. Berkeley, CA: Berkeley Linguistics Society.

Holguín, Justin

- 2007 The status of ergative case in Basque: A Minimalist approach. Bachelor's thesis, Reed College. Available at http://ling.auf.net/lingBuzz/ 000449.
- Holmberg, Anders and Thorbjörg Hróarsdóttir
 - Agreement and movement in Icelandic raising construct ions. *Lingua* 114 (5): 651–673.

Hualde, José Ignacio

2002 On the loss of ergative displacement in Basque and the role of analogy in the development of morphological paradigms. In *The Linguist's Linguist: A Collection of Papers in Honour of Alexis Manaster Ramer, Volume 1*, Fabrice Cavoto (ed.), 219–230. Munich: Lincom Europa.

Kayne, Richard

1991 Romance clitics, verb movement and PRO. *Linguistic Inquiry* 22 (4): 647–686.

Laka, Itziar

- 1990 Negation in syntax: On the nature of functional categories and projections. Ph.D. diss., Department of Linguistics and Philosophy, MIT.
- 1993a The structure of inflection: A case study in X⁰ syntax. In *Generative Studies in Basque Linguistics*, José Ignacio Hualde and Jon Ortiz de Urbina (eds.), 21–70. Amsterdam: John Benjamins.
- 1993b Unergatives that assign ergative, unaccusatives that assign accusative. In *Papers on Case and Agreement I*, Jonathan D. Bobaljik and Colin Phillips (eds.), 149–172. (MIT Working Papers in Linguistics 18.) Cambridge, MA: MITWPL.

Larson, Richard

1988 On the double object construction. *Linguistic Inquiry* 19 (3): 335–391.

Marantz, Alec

- 1988 Clitics, morphological Merger, and the mapping to phonological structure. In *Theoretical Morphology: Approaches in Modern Linguistics*, Michael Hammond and Michael Noonan (eds.), 253–270. San Diego: Academic Press.
- 1993 Implications of asymmetries in double object constructions. In *Theo*retical Aspects of Bantu Grammar; Sam Mchombo (ed.), 113–150. Stanford, Calif.: CSLI.

Müller, Gereon

2005 Pro-drop and Impoverishment. Ms., Universität Leipzig.

Noyer, Rolf

- 1992 Features, positions and affixes in autonomous morphological structure. Ph.D. diss., Department of Linguistics and Philosophy, MIT.
- 2001 Clitic sequences in Nunggubuyu and PF convergence. *Natural Language and Linguistic Theory* 19 (4): 751–826.

Ormazabal, Javier and Juan Romero

- 2007 The Object Agreement Constraint. *Natural Language and Linguistic Theory* 25 (2): 315–347.
- Ortiz de Urbina, Jon
 - 1989 *Parameters in the Grammar of Basque: A GB Approach to Basque Syntax.* Dordrecht: Foris.

Oyharçabal, Bernard

1993 Verb agreement with non arguments: On allocutive agreement. In *Generative Studies in Basque Linguistics*; José Ignacio Hualde and Jon Ortiz de Urbina (eds.), 89–114. Amsterdam: John Benjamins.

Perlmutter, David

1971 *Deep and Surface Structure Constraints in Syntax.* New York: Holt, Rinehart and Winston.

Pesetsky, David

1995 Zero Syntax. Cambridge, MA: MIT Press.

Pylkkänen, Liina

2002 Introducing arguments. Ph.D. diss., Department of Linguistics and Philosophy, MIT.

Rezac, Milan

- 2003 The fine structure of cyclic Agree. *Syntax* 6(2): 156–182.
- 2006 Agreement displacement in Basque: Derivational principles and lexical parameters. Ms., University of the Basque Country. Available online at http://loargann.batcave.net/index.html.

Torrego, Esther

1992 Case and agreement structure. Ms., University of Massachusetts, Boston.

Travis, Lisa deMena

1984 Parameters and effects of word order variation. Ph.D. diss., Department of Linguistics and Philosophy, MIT.

Uriagereka, Juan

1995 Aspects of the syntax of clitic placement in Western Romance. *Linguistic Inquiry* 26(1): 79–123.

Wiltschko, Martina

2008 Person hierarchy effects without a person hierarchy. In *Agreement restrictions* (this volume).

Woolford, Ellen

2006 Lexical case, inherent case, and argument structure. *Linguistic Inquiry* 37(1): 111–130.

de Yrizar, Pedro

1992 Morfología del Verbo Auxiliar Vizcaíno: Estudio Dialectológico. Bilbao: Euskaltzaindia.

The Person-Case Constraint and patterns of exclusivity

Cedric Boeckx

1.

The empirical roots of modern linguistic theory can be easily traced back to the fabulous works of the late 1960s. (For a discussion of the conceptual roots of modern linguistic theory, see Boeckx 2006a.) Rosenbaum, Ross, Kayne, and Perlmutter gave us descriptions and generalizations that to this day remain the focus of research in syntax. Perlmutter in particular uncovered the three conditions on syntactic forms in (1) that still await a deep explanation (see Perlmutter 1971). Old chestnuts indeed often have hard shells.

- (1) a. The *that*-trace filter
 - b. The Extended Projection Principle
 - c. The Person-Case Constraint

The present paper will focus on the Person-Case Constraint (henceforth, PCC). After a brief description of what the constraint amounts to, and a brief discussion of how modern scholars have suggested we ought to understand it, I will argue for some empirical refinements, and will conclude the paper by relating the PCC to other conditions of grammar that also demand 'exclusivity' (in a sense to be made clear below). The latter step will make it possible for me to address the *why*-question: Why should natural language syntax show signs of the PCC?

In some ways, the organization of the present paper will follow the course of theorizing in generative grammar. The latter can be fairly accurately characterized in three steps: a first stage of discovery, during which core phenomena such as islands and the PCC were identified [the Standard Theory]; a second stage of generalization, during which the phenomena previously uncovered were organized, classified, and in some cases deduced using a principles-and-parameters vocabulary [the Government-Binding era], and a third stage, which seeks to determine how much of the results achieved so far can be genuinely explained, i.e., be made to follow from

more primitive computational principles that can make sense of the architecture of the language faculty [the minimalist program].

2.

The PCC can be formulated in its simplest form as in (2).¹

(2) Person-Case Constraint (PCC)

If Dative agreement/clitic, then Accusative agreement/clitic = 3^{rd} person.

The constraint in (2) covers cases like the multiple agreement constraint in Basque (3), and the clitic cluster constraint in French (4).

- (3) a. Azpisapoek etsaiari misilak saldu d-Ø-izki-o-te traitors-ERG enemy-DAT missiles-ABS sell ABS3-DAT3-ERG3
 'The traitors sold the missiles to the enemy'
 - b. **Azpisapoek etsaiari ni saldu na-i-o-te* traitors-ERG enemy-DAT me-ABS sell ABS1-DAT3-ERG3 'The traitors sold me to the enemy.'
- (4) a. Jean le lui présentera Jean it him will-present'Jean will introduce it to him.'
 - b. **Jean me lui présentera* Jean me him will-present 'Jean will introduce me to him.'

As is well-known, in languages that display verbal agreement with all arguments (subject, direct object, indirect object), such as Basque, direct object agreement is restricted to 3rd person if indirect object agreement obtains. Similarly, in languages like French, direct object clitics must be 3rd person if an indirect object clitic is present in the clitic cluster.

The constraint at issue relates the phi-feature values of PF-dependent direct object markings (clitic, agreement suffix) to the presence of marking of the same type (clitic, agreement marker) associated with a typically dative indirect object. As Bonet's 1991 comprehensive investigation makes clear, there are good reasons to believe that, once various factors are controlled for, the PCC is a universal constraint on clitic clusters/multiple agreement realizations.²

The scope of the PCC was expanded by Boeckx 2000 (see also Anagnostopoulou 2003), who brought under its fold the now well-known constraint on nominative objects in Icelandic, originally discussed by Sigurðsson (1996).

The syntax of nominative objects in Icelandic has been the subject of intensive research within the minimalist program in recent years (see Boeckx 2003b for review and a comprehensive list of references; see also Sigurðsson and Holmberg, this volume).

The key facts are as follows.

First, Nominative objects are found only in the context of Quirky subject constructions. Contrast (5) and (6).

- (5) *Henni voru gefnar bækurnar* She.DAT were.PL given.PL books.Nom.PL 'She was given the books.'
- (6) Við kusum *hún/hana
 We.NOM elected she.NOM/she.ACC
 'We elected her.'

Second, Quirky subjects, unlike nominative subjects, do not trigger morphological agreement on the finite verb. This is illustrated in (7).

(7) *Stelpunum var hjálpað* The girls.DAT.PL.FEM was.3SG helped.SG 'The girls were helped.'

Third, 1st and 2nd person nominative objects are excluded from mono-clausal contexts in which quirky subjects are found.

Compare (5) and (8).

(8) *Henni leiddumst við
 She.DAT bored.1PL we.NOM
 'They were bored with us.'

Boeckx 2000 took the latter fact to mean that nominative objects can only trigger number agreement (compatible with 3^{rd} person, but not with 1^{st} and

 2^{nd} person elements), and that pronominal nominative objects require verbal agreement for (case-)licensing. Hence the unacceptability of (8).

As Boeckx 2000 argues, a slight modification of (2) such as (9) accommodates the restriction on Icelandic nominative objects agreement.

(9) Person-Case Constraint (revised)

In the presence of dative (/Quirky) agreement on a verb, the direct object can only agree with that verb in number, not person.

What is crucial at this point is that for (9) to apply to Icelandic, Quirky subjects must agree. Boeckx argues that Quirky subjects indeed do agree, albeit covertly, and that this agreement is responsible for movement of quirky subjects to SpecTP.

Pursuing this line of thought, and building on the works of Béjar (2003), Béjar and Rezac (2003), Anagnostopoulou (2003), and Boeckx (2003a), Rezac (2007) argues that PCC effects reduce to the following four conditions:

- (i) PCC arises when two (or more) DPs, $\gamma 1$ and $\gamma 2$, relate to the same φ -probe/Case-licenser τ .
- (ii) The closer DP γ 1 has "quirky" Case which has the following properties: it is inherent (theta-related) Case that is nevertheless visible to a φ probe and consequently available to A-movement; it values a φ -probe's person feature to 3 regardless of the φ -features of the DP it contains, but does not value its number feature. The farther DP, γ 2, needs structural Case.
- (iii) $\gamma 1$, valuing the person probe of τ to 3, prevents it from reaching the farther DP, $\gamma 2$; thus there can be no person Agree with $\gamma 2$. As a consequence of the τ $\gamma 1$ relation, $\gamma 1$ may displace "out of the way" by cliticization or A-movement, which permits a τ $\gamma 2$ relation for τ 's remaining number feature.
- (iv) Case is assigned under φ -Agree. DPs with marked person features, $1^{st}/2^{nd}$ person, need person Agree for Case licensing; for 3^{rd} person DPs number Agree suffices. This follows if 3^{rd} person DPs have just number and Case must license each feature of a DP.

In many ways, Rezac's characterization is a summary of research on the PCC up to now. It certainly seems to me to capture the core PCC cases, and I will adopt it as my working hypothesis. But, as we will see in the next section, Rezac's four conditions are not unproblematic, empirically.

The first problematic aspect of Rezac's characterization concerns the nature of the element whose presence forces the structurally case marked direct object to be confined to 3rd person status. Call this element the 'interfering' element.

Jeong 2005 has discussed PCC effects that cast doubt on the claim that the interfering element must be quirky (inherently case marked).

Jeong's study focuses on asymmetries that emerge in the context of multiple Case assignment in Korean. Jeong shows that the two objects in a multiple accusative case construction cannot be [+animate] (10).

(10) *?John-i Swuni-lul yetongsayng-ul ttayly-ess-ta John-NOM Swuni-ACC sister-ACC hit-PST-DECL 'John hit Swuni's sister.'

Multiple accusative assignment is available if both objects are [-animate] (11) or vary in animacy (12).

- (11) John-i catongcha-lul mun-ul pusy-ess-ta John-NOM car-ACC door-ACC break-PST-DECL 'John broke the car's door.'
- (12) John-i Swuni-lul meri-lul cal-ass-ta John-NOM Swuni-ACC hair-ACC cut-PST-DECL 'John cut Swuni's hair.'

Similarly, in situations of multiple nominative assignment, the possessor NP can't be 1^{st} or 2^{nd} person if the possessed NP is [+animate] (13).

(13)	*Nay-ka	yetongsayng-i	yeyppu-ta
	I-NOM	sister-NOM	pretty-DECL
	'My siste		

No such constraint obtains if the possessed NP is [-animate] (14).

(14) Nay-ka meri-ka kilta I-NOM hair-NOM long 'My hair is long.'

3.

As Jeong shows, these constraints also disappear if the possessor is marked with genitive (by hypothesis, inherent) case, or with a topic-marker. Jeong's generalization is given in (15).

- (15) a. The nominative possessor NP cannot be [+person] if the nominative possessee NP has checked [+animate].
 - b. The accusative possessor NP cannot be [+animate] if the accusative possessee object NP is [+animate].

Jeong points out that (15) (in particular, (15b)) bears a striking resemblance with the PCC.

The similarity between (15b) and the PCC is further enhanced by data from *leista* (dialects of) Spanish discussed by Ormazabal and Romero (2007).

(16) *Te lo/*le di* you.DAT it.ACC/he.ACC gave.1SG 'I gave it/*him to you'

Leista Spanish is more restrictive than French in forcing the accusative clitic to be [–person; –animate] in the presence of a dative clitic. Based on this, Ormazabal and Romero revise the PCC as in (17).³

(17) PCC-revised (Ormazabal and Romero, 2007) If Dat agreement/clitic, Accusative agreement/clitic = [-animate].

If Jeong is correct in relating the animacy condition imposed on multiple *structural* case constructions in Korean to the PCC, the interfering element in Rezac's PCC schema need not be quirky, since in Korean the interfering element bears structural case. (If the intervener bears inherent case, the constraint goes away.)

Equally problematic is Rezac's claim that "PCC arises when two (or more) DPs, $\gamma 1$ and $\gamma 2$, relate to the same φ -probe / Case-licenser τ ." Behind this claim is the idea (going back to Boeckx 2000 and explored in great detail in Anagnostopoulou 2003; see also Béjar and Rezac 2003, Boeckx 2003a) that PCC effects arise in the context of 'checking competition.' Specifically, Anagnostopoulou reduces PCC effects to the nature of multiple Agree operations by a single Probe. Schematically: in contexts where a Probe P enters into a checking relation at a distance (Agree) with more than one Goal (G1, G2), where G1 c-commands G2, G1 interferes in the manner

discussed by Rezac 2007. (Anagnostopoulou's idea is that the first Agree operation between P and G1 does something to the Person feature of the Probe; specifically, it irrevocably values the Person feature. As a result, the Probe is rendered unable to Agree with G2 that have a Person feature, since this feature would contradict the Person feature already established on the Probe by the first Agree operation.)

Notice that this analysis accounts for why agreement with G2 cannot involve person values (the Basque facts above), it leaves unexplained why G2 must be 3^{rd} person (the French/Icelandic facts above), unless we claim, as Rezac does, that $1^{st}/2^{nd}$ person pronouns require full (person + number) agreement for (structural case) licensing.

The account also fails to explain why G1 does not block number feature checking. (For an attempt to address this question, see Boeckx 2003a.) But despite its shortcomings, an Anagnostopoulou-style account elegantly reduces PCC effects to an intervention effect of the standard relativized minimality sort. This should be good news to the minimalists, who see relativized minimality effects as a prime example of optimal design and efficient computation at work in natural languages.

Unfortunately, evidence against this position comes from Icelandic, one of the languages that Anagnostopoulou relied on to motivate her analysis.

The evidence boils down to a crucial case, first discussed (to my knowledge) in Boeckx 2003b. The evidence will become straightforward once I introduce a few more properties of Icelandic syntax.

The original case for Icelandic nominative object syntax falling under the purview of the PCC crucially depended on the quirky subject interfering with the relation between finite T and the nominative object (Boeckx 2000 and subsequent works). Finite T was the probe for which both the quirky subject and the nominative object competed. There is, however, evidence against analyzing nominative objects as being licensed by finite T.

First, note that nominative objects can be licensed in the absence of (number) agreement with finite T. Agreement with the finite verb is optional if the (ECM) nominative object is in an embedded non-finite clause.

(18) *Mér fannst/fundust [beir vera skemmtilegir]* I.DAT seemed.3SG/3PL they.NOM be interesting 'I thought they were interesting.'

Agreement is impossible if the embedded clause also contains a dative subject.

(19) Mér fannst/*fundust [henni leiðast þeir]
 I.DAT seemed.3SG/3PL she.DAT bore they.NOM
 'I thought she was bored with them.'

Interestingly, a non-nominative (ECM) object can be 1^{st} or 2^{nd} person if agreement does not obtain with the finite verb (20), unless in those cases where the embedded clause also contains a dative subject.

- (20) *Peim hefur/*höfum/*hafa alltaf fundist [við vinna vel]* They.DAT have.3SG/1PL/3PL always found we.NOM work well 'They have always thought that we worked well.'
- (21) **Jóni virtist [Bjarna hafa líkað ég/við/þið]* John.DAT seemed Bjarni.DAT have liked I.NOM/we.NOM/you.NOM 'It seems to John that Bjarni likes me/us/you.'

The very last example clearly indicates that whatever PCC effects obtain in Icelandic, they must be dissociated from agreement with finite T.⁴ Boeckx 2003b concluded from this that nominative objects are elements licensed by v° , not (finite) T^o (see Alexiadou 2002 for a similar proposal; see also Sigurðsson 2006, and Taraldsen 1995). I argued that the number restriction on agreement with nominative objects is shown to follow from restrictions on VP-level agreement (i.e., object agreement) in general. Let me briefly sketch the argument here.

That v^0 may enter into φ -feature checking is now standardly assumed for object agreement languages. It is also reasonable to assume that v^0 is the locus of past participle agreement in Icelandic. Consider (22).

(22) Við virðumst hafa verið kosnar
 We.NOM seemed.1PL have been elected.NOM.PL
 'We seemed to have been elected.'

Interestingly, agreement on the participle in Icelandic (as in all other languages I am familiar with) is limited to number, gender, and Case. Crucially, participles show no sign of person agreement. This is highly relevant in the present context, as person agreement is impossible with nominative objects. This would follow from the licensing role of v° for nominative Case on objects. It would have nothing to do with whether Quirky subjects agree with finite T^o or not. This is not to say that it has nothing to do with the presence of Quirky subjects. Recall that objects will surface with nominative case in Icelandic only in the presence of quirky subjects. At a general level, we are here facing a situation in which the availability of a given structural Case (Nominative) is tied to the presence of thematic information (thematic/Quirky Case). The situation is strongly reminiscent of Burzio's Generalization (Burzio 1986). The latter expresses the idea that (structural) accusative Case is available only in the presence of an element bearing the external theta-role assignment. Chomsky 1995 captures the correlation by position that both external theta-role assignment and (structural) accusative Case are properties of one and the same head: v° . Recast in Chomsky's terms, Burzio's expresses the idea that theta-role assignment by v° determines the latter's Case-licensing property.

In a similar vein, I would like to propose that a verbal head v° is endowed with the option of nominative Case licensing only if it assigns a theta-role realized as Quirky Case to an NP in its specifier. Several studies have now appeared (Svenonius 2002; Eythórsson 2000; Jónsson 2003) that indicate that the thematic nature of elements bearing Quirky Case is not as random as one might have thought. Most Quirky NPs are experiencers, Goals, or beneficiaries; crucially, non-agents (see already Maling, Yip, and Jackendoff 1987). For the sake of concreteness, I will assume that Quirky-Case-marked elements are introduced as specifiers of v[non-agentive] (on flavors of v° , including non-agentive v° , see Pylkkänen 2002; Folli and Harley 2005; among others). By hypothesis, v° , especially v° [non-agentive], lacks person phi-features.

The number-restriction on nominative objects (the PCC effect found in Icelandic) would then follow not from an intervention effect on Probing (by T°), but from the fact that the Probe that unambiguously licenses nominative objects, with no intervening element along the checking path, is of a special kind, a kind that licenses inherently case marked experiencer (nonagentive) elements.⁵ The interfering effect by the dative element would then be established upon First Merge (of the dative element), not under Agree (i.e., not because the dative element intervenes between the Probe and the nominative Goal).

Notice that my analysis of the Icelandic facts only requires a minimal departure from Rezac's characterization of the PCC. It is still true that the agreement restriction that obtains in Icelandic is due to the fact that the relevant element (nominative object) relates to a Probe that is in a checking relation with a quirky element. The only difference is that the quirky element does not intervene in a standard minimality way (it is not on the c-command path that connects v° and the nominative object). (It does interfere with the checking relation between v° and the nominative object in a specific sense: if Merge takes precedence over Move/long-distance Agree,

as Chomsky 1995 speculated, v° is forced to enter into a (theta) checking relation with the quirky argument first.)

From the discussion in this section, I conclude that PCC effects do not reduce to a minimality effect on multiple phi-agree, nor do they require the presence of a quirky element. The following appear to be necessary conditions for PCC effects to arise:⁶

- (i) Two DPs relate to a given head.
- (ii) The lower DP is structurally case-marked, which means that it must enter into a Probe matching its phi-features to be case-licensed (avoid a case-filter violation; on structural case as dependent on agreement, see Chomsky 2001, 2004).

The next question is, of course, why a situation that meets these two conditions should yield a PCC effect.

4.

An answer to this *why*-question necessitates a more abstract perspective on the PCC. Very generally speaking, the PCC says that in situation of multiple (checking) relations against a given head (the Probe), the higher Goal takes precedence, with morpho-syntactic consequences of the PCC-sort for the lower Goal.

From a different angle, one can see the PCC as a reflex of forced asymmetric checking in situations of potential symmetry (multiple Probe-Goal relations). Viewed in this light, the PCC, which seemingly regulates agreement relations only, is no different from:

- (i) The recurring superiority effect imposed in multiple wh fronting circumstances (although all wh-phrases are required to move [symmetry], they cannot do so in any order [asymmetry]) (see Boeckx 2003a)
- (ii) The ban on movement internal to a projection (an element can enter into only one checking relation with a given head), a ban known as Antilocality or ban on vacuous movement (see Boeckx 2008a)
- (iii) Grohmann's 2003 Condition on Domain Exclusivity, which prohibits an element from having multiple occurrences inside domains such as vP, IP, and CP
- (iv) McGinnis's 2004 Lethal Ambiguity condition, which bans the establishment of an anaphoric [i.e., identity/symmetry] relation between two specifiers of the same head (see also Richards's 2002 distinctness condition on labels inside phases)

- (v) Boeckx's 2003c Principle of Unambiguous Chains, which prevents chains from containing more than one 'head', or strong occurrence (see also Richards 1997, 2001; and Rizzi 2006)
- (vi) Kayne's 1984 Binary Branching requirement, necessary to yield unambiguous, asymmetric paths

All these conditions, including the PCC, are conditions applying inside very local domains (projections, phases, or chains, which Boeckx 2008b argues reduce to one and the same object, a phrase), forcing distinctness, or asymmetry. In this respect, these conditions are on a par with Nunes's (2004) copy-deletion condition on chains (eliminating all but one copy inside a chain at PF), Moro's (2000) need to move one of the two members of small clauses to prevent situations of symmetric labeling, and Citko's (2005) need to move to destroy multi-dominance structures.

In all these cases one finds syntax being able to establish multiple relations (via copying, multiple agree, parallel merge, co-projection, etc.), forming points of symmetry that must then be broken (typically, for purposes of linearization, but, I suspect, due to more general interface needs concerning information flow; see Boeckx 2008b for elaboration).

5.

What I have done in this chapter is in some sense debunk the specificity of the PCC, a small step in the direction of the principles-and-parameters eradication of construction-specific rules.

I have first argued that contrary to the growing consensus regarding the nature of the PCC, well summarized in Rezac (2007), the PCC is not about restricted to situations of interference involving quirky datives, or situations where both goals find themselves in the c-command path of the probe.

I then proceeded to argue that the PCC is but a reflex of a more general ban on symmetric structures imposed at the interfaces, a condition regulating the output of multiple agree situations. If correct, this paper takes a small step towards the unification of syntactic principles, as mandated by the minimalist program for linguistic theory.

Acknowledgements

My thanks to the editors of the present volume for their interest in this piece, and to two anonymous reviewers for useful comments.

Notes

- 1. I will set aside various manifestations of the PCC, such as the Weak vs. Strong PCC effects (Bonet 1991; Anagnostopoulou 2005). If Anagnostopoulou is correct in her characterization of such variation, the existence of various PCC effects do not affect the main line of my argument here.
- 2. I have in mind here the fact that second-position clitic languages like Serbo-Croatian tend to lack PCC effects, presumably due to the distinct nature of clitic clustering in second-position clitic languages (on which, see Bošković 2001, Stjepanović 1999).
- 3. An abstractly similar asymmetry is found in the realm of ditransitives in Japanese in the context of honorification agreement. For discussion, see Boeckx (2006b), Boeckx and Niinuma (2004).
- 4. The expert reader may be surprised at finding a PCC effect in a non-finite context, given the absence of PCC effects in non-finite contexts in Basque discussed in Ormazabal 2000. Contrast (ia) and (ib).
 - (i) a. *Zuk ni etsaiari saldu na-i-o-zu you-ERG me-ABS enemy-DAT sell 1ABS-3DAT-2ERG
 'You sold me to the enemy.'
 - b. Gaizki iruditzen zait zuk ni etsaiari saltzea wrong seem AUX you-ERG me-ABS enemy-DAT sell-NOMIN. 'Your selling me to the enemy seems wrong to me.'

However, I think that the difference between Icelandic and Basque results from the fact that in Basque (ib), we are dealing with a gerund-clause, where arguments are case-licensed upon first-merge, as in nominals more generally (possibly via (null) Pred/P-heads). Accordingly, the two internal arguments of the predicate do not relate case-wise to the same head, hence the absence of PCC effects.

- 5. Perhaps one could speculate that the heads that license inherent case are restricted to number phi-features because of a certain connection between inherent case-number and structural case-person. (To the extend they partake in agreement, inherently case marked arguments can participate in number agreement/concord, in Icelandic and elsewhere, but never enter into person-agreement relations.) For discussion of the case-agreement relations, see Boeckx 2007.
- 6. The conditions in (i)-(ii) appear better equipped to deal with the PCC cases discussed in Adger and Harbour, 2007, and Richards 2005.
References

Adger, David	and Daniel Harbour
2007	The syntax and syncretisms of the Person Case Constraint. <i>Syntax</i> 10: 2–37.
Alexiadou, A	rtemis
2002	On nominative Case features and split agreement. Ms., University of
	Stuttgart.
Anagnostopo	ulou, Elena
2003	The syntax of ditransitives: evidence from clitics. Berlin/New York:
	Mouton de Gruyter.
2005	Strong and weak person restrictions: a feature checking analysis. In
	Clitic and affix combinations, L. Heggie and F. Ordonez (ed.), 199-
	235. Amsterdam: John Benjamins.
Béjar, Susana	1
2003	Phi-syntax. A theory of agreement. Ph.D. diss., University of Toronto.
Béjar, Susana	and Milan Rezac
2003	Person licensing and the derivation of PCC effects. In Proceedings
	of LSRL 32, 49-62. Amsterdam: John Benjamins.
Boeckx, Cedu	ric
2000	Quirky agreement. Studia Linguistica 54: 354-380.
2003a	Symmetries and asymmetries in multiple checking. In Multiple Wh-
	fronting, C. Boeckx and K.K. Grohmann (ed.), 17-26. Amsterdam:
	John Benjamins.
2003b	Intricacies of Icelandic agreement. Ms., Harvard University. [Appears
	in C. Boeckx, 2008, Aspects of the syntax of agreement. London:
	Routledge.]
2003c	Islands and chains. Amsterdam: John Benjamins.
2006a	Linguistic minimalism: Origins, methods, concepts, and aims. Oxford:
	Oxford University Press.
2006b	Honorification as agreement. Natural Language and Linguistic Theory
	24: 385–398.
2007	Case and agreement. Ms., Harvard University.
2008a	Understanding minimalist syntax: lessons from locality in long-dis-
	tance dependencies. Oxford: Blackwell.
2008b	Bare syntax. Oxford: Oxford University Press.
Boeckx, Cedu	ric and Fumikazu Niinuma
2004	Agreement constraints in Japanese. Natural Language and Linguistic
	<i>Theory</i> 22: 453–480.
Bonet, Eulàli	a

1991 Morphology after syntax: pronominal clitic in Romance. PhD. diss., MIT.

Bošković, Že	ljko	
2001	On the nature of the syntax-phonology interface: cliticization and	
	related phenomena. London: Elsevier.	
Burzio, Luigi		
1986	Italian syntax. Dordrecht: Reidel.	
Chomsky, No	am	
1995	Categories and transformations. In The minimalist program, N.	
	Chomsky (ed.), 219–394. Cambridge, MA: MIT Press.	
2001	Derivation by phase. In Ken Hale: a life in language, M. Kenstowicz	
	(ed.), 1–50. Cambridge, Mass.: MIT Press.	
2004	Beyond explanatory adequacy. In Structures and beyond, A. Belletti	
	(ed.), 104–131. Oxford: Oxford University Press.	
Citko, Barbar	a	
2005	On the nature of merge: external merge, internal merge, and parallel	
	merge. Linguistic Inquiry 36: 475–496.	
Eythórsson, 7	Thórhallur	
2000	Dative vs. Nominative: changes in quirky subjects in Icelandic. Leeds	
	Working Papers in Linguistics 8: 1–28.	
Folli, Raffael	la and Heidi Harley	
2005 Flavors of v. In <i>Aspectual inquiries</i> . P. Kempchinsky and R. S		
	(eds.), 95–120. Dordrecht: Springer.	
Grohmann, K	leanthes K.	
2003	Prolific domains. Amsterdam: John Benjamins.	
Jeong, Young	mi	
2005	Asymmetries in multiple case checking. Proceedings of WCCFL 23,	
	413-421. Somerville, Mass.: Cascadilla Press.	
Jónsson, Joha	nnes G.	
2003	Not so quirky: on subject case in Icelandic. In New perspectives on	
	case theory, E. Brandner and H. Zinsmeister (ed.), 127-163. Stanford,	
	CA: CSLI.	
Kayne, Richa	rd S.	
1984	Connectedness and binary branching. Dordrecht: Foris.	
McGinnis, M	artha	
2004	Lethal ambiguity. Linguistic Inquiry 35: 47–95.	
Moro, Andrea	1	
2000	Dynamic antisymmetry. Cambridge, MA: MIT Press.	
Nunes, Jairo		
2004	Linearization of chains and sideward movement. Cambridge, MA:	
	MIT Press.	
Ormazabal, Ja	avier	
2000	A conspiracy theory of Case and agreement. In Step by step, R. Martin,	
	D. Michaels and J. Uriagereka (ed.), 235-260. Cambridge, MA: MIT	
	Press.	

Ormazabal, J	avier and Juan Romero
2007	The Object Agreement Constraint. Natural Language and Linguistic
	<i>Theory</i> 25(2): 315–347.
Perlmutter, D	David
1971	Deep and surface constraints in syntax. New York: Holt, Rinehart
	and Winston.
Pylkkänen, L	iina
2002	Introducing arguments. PhD. diss., MIT.
Rezac, Milan	L
2007	Escaping the Person Case Constraint: Reference-set computation in
	the phi-system. Linguistic Variation Yearbook 6: 97–138.
Richards, No	rvin
1997	What moves where when in which language? PhD. diss., MIT.
2001	Movement in language. Oxford: Oxford University Press.
2002	A distinctness condition on linearization. Ms., MIT.
2005	Person-Case effects in Tagalog and the nature of long-distance ex-
	traction. Ms., MIT.
Rizzi, Luigi	
2006	On the form of chains. In Wh-movement: Moving on, L. Cheng and
	N. Corver (ed.), 97–133. Cambridge, MA: MIT Press.
Sigurðsson, I	Halldór Ármann
1996	Icelandic finite verb agreement. Working Papers in Scandinavian
	<i>Syntax</i> 57: 1–46.
2006	The nominative puzzle and the low nominative hypothesis. Linguistic
	Inquiry 37: 289–308.
Stjepanović,	Sandra
1999	What do scrambling, second position cliticization, and multiple wh-
	fronting have in common? PhD. diss., University of Connecticut.
Svenonius, P	eter
2002	Icelandic Case and the structure of events. Journal of Comparative
	Germanic Linguistics 5: 197–225.
Taraldsen, K	nut Tarald
1995	On agreement and nominative objects in Icelandic. In Studies in Com-
	parative Germanic Syntax, H. Haider, S. Olsen, and S. Vikner (ed.),
	307–327. Dordrecht: Kluwer.
Yip, Moira, J	oan Maling and Ray Jackendoff
1987	Case in tiers. Language 63: 217–250.

The Person-Case constraint and repair strategies

Eulàlia Bonet

1. The Person-Case constraint

Sentences like (1), from Catalan, are ungrammatical.¹

(1) **Al director, me li ha recomanat la Mireia* to-the director, 1SG 3SG.DAT has recommended the Mireia 'As for the director, Mireia has recommended me to him'

Crucial to the ungrammaticality of (1) is the fact that it contains two clitics, which correspond to the direct object, Direct Object (me), and the indirect object, Indirect Object (li), and where the Direct Object clitic is first person and the Indirect Object clitic is third person. If the roles were reversed (first person corresponding to the Indirect Object and third person corresponding to the Direct Object), no conflict would arise, as illustrated in (2).

(2) *El director, me l' ha recomanat la Mireia* the director, 1SG 3SG.ACC has recommended the Mireia 'As for the director, Mireia has recommended him to me'

If (1) did not contain a left dislocated element (*al director*) no resumptive clitic pronoun with the function of Indirect Object would be required and the sentence would also be grammatical.

(3) *La Mireia m' ha recomanat al director* the Mireia 1SG has recommended to-the director 'Mireia has recommended me to the director'

The ungrammaticality of (1), noticed for Spanish and French by Perlmutter (1971), is attributed in Bonet (1991) to the **Me-lui/*I-II Constraint, later called the Person-Case constraint (PCC). This constraint, claimed there to be universal, is present in languages that have pronominal clitics, like the Romance languages, languages with weakened pronouns, like English, and languages that have a rich agreement system, like Southern Tiwa. The con-

straint, thus, affects complexes of φ -features related to the argumental structure of the verb. The most common context for the Person-Case Constraint is ditransitive clauses, even though other constructions that can trigger it are causative constructions, and constructions with datives of inalienable possession, for instance.

In (1) the effects of the Person-Case Constraint are shown with a first person clitic corresponding to the Direct Object, but ungrammaticality would also arise with a second person clitic (singular or plural). Combinations of two third person clitics do not usually lead to ungrammaticality, even though they often trigger changes not relevant here. The judgements on combinations of first and second person clitics, illustrated in (4), seem to vary a lot. In some languages, these combinations are ungrammatical, while in others, like Catalan, they are grammatical for some speakers, and plainly ungrammatical for others. An additional set of speakers of Catalan accept them in only one of the possible readings, but the judgements as to which one is preferrable seem to vary from speaker to speaker.^{2,3}

- (4) (*) *Te m' ha recomanat la Mireia* 2SG 1SG has recommended the Mireia
 - a. 'Mireia has recommended me to you'
 - b. 'Mireia has recommended you to me'

This difference in behavior led Bonet (1991) to posit a strong version of the constraint, for speakers who do not accept sentences like (4), and a weak version of it, for speakers who do accept such combinations. These two versions were stated as follows ((5) corresponds to Bonet 1991: 182, (11)).

- (5) **Me lui* / I-II Constraint
 - a. STRONG VERSION: the direct object has to be third person
 - b. WEAK VERSION: if there is a third person it has to be the direct object

In recent years much work has been devoted to the constraint, mostly in its strong version. Here I will also assume it only in the strong version (for an account of the differences between the strong and the weak version of the Person-Case Constraint, see Ormazábal and Romero 2007; Nevins 2007). Most of the proposed accounts of the Person-Case Constraint that have been made are syntactic (see, among the more recent ones, Anagnostopoulou 2003; Ormazábal and Romero 2002, 2007; Adger and Harbour 2007), even though morphological approaches also exist (see, for instance, Miller

and Sag 1997 or Boeckx 2000).⁴ Another line of research has related the Person-Case Constraint to other constructions, like Icelandic quirky subjects (see, for instance, Taraldsen 1995; Sigurðsson 1996; Boeckx 2000; or Hrafnbjargarson 2001).

The goal of this paper is neither to take a stand on the morphological or syntactic nature of the Person-Case Constraint (which partially depends on the framework assumed) nor to concentrate on environments sensitive to the constraint, but to focus on the repair strategy that Catalan uses in ditransitives to avoid it and to see how well it can be accounted for in three recent syntactic proposals that have been made on the nature of the Person-Case Constraint. The rest of the paper is organized as follows: in section 2, the Catalan strategy to overcome the effects of the Person-Case Constraint in ditransitives is described, and it is suggested that the resulting clitic is related to the Indirect Object; it is not a locative clitic, as it could seem at first sight, given the shape the clitic has. It is also argued that this clitic is devoid of all features except case. Section 3 contains a summary of three different recent accounts, namely Ormazábal and Romero (2007), Anagnostopoulou (2003), and Adger and Harbour (2007); the Catalan strategy is contrasted with each one of these syntactic accounts, and it is shown that it poses serious problems especially for the proposal by Adger and Harbour (2007). Finally, section 4 includes some concluding remarks.

2. Change of clitic as a repair strategy in Catalan

Many languages overcome the effects of the Person-Case Constraint by avoiding one of the clitics or agreement elements that enter the constraint. For instance, Spanish uses a strong pronoun instead of one of the clitics (the one corresponding to the Indirect Object), as is illustrated in (6). (6a) does not present any problems because only one pronoun is present (the Indirect Object being a full Determiner Phrase); (6b) violates the Person-Case constraint and is therefore ungrammatical; finally, (6c) has a strong pronoun preceded by a preposition, *a él*, which avoids the presence of a conflicting Indirect Object clitic.

- (6) a. Me recomendó a Pedro
 1SG recommended to Pedro
 'S/he recommended me to Pedro'
 - b. **Me le recomendó* 1SG 3SG.DAT recommended

c. *Me recomendó a él* 1SG recommended to him 'S/he recommended me to him'

The strategy used by Catalan in ditransitives is very different: two clitics are kept, but one of them, the one corresponding to the Indirect Object changes its shape; instead of the third person clitic li /li/ the clitic hi /i/ shows up.⁵ (7a) illustrates the change of clitic; (7b) is ungrammatical because it contains a third person dative pronoun, the expected one, and thus causes a violation of the Person-Case Constraint.

- (7) a. Al president, m' hi ha recomanat en Miquel to-the president, 1SG hi has recommended the Miquel 'As for the president, Miquel has recommended me to him'
 - b. **Al president, me li ha recomanat en Miquel* to-the president, 1SG 3SG.DAT has recommended the Miquel 'As for the president, Miquel has recommended me to him'

As far as I know, in the recent literature on the Person-Case Constraint this repair strategy is only taken into consideration in Anagnostopoulou (2003), discussed in section 3.2, and Nevins (2007). Both of them interpret the clitic hi as a locative, a non-agreeing clitic that avoids the effects of the constraint. The clitic hi is in fact used as a locative clitic in Catalan, as (8) illustrates.

(8) A Matadepera, avui no hi seré, però hi aniré demà to Matadepera, today not hi will-be, but hi will-go tomorrow 'As for Matadepera, I will not be there today, but I will go there tomorrow'

But is the hi used in (7a) really a locative clitic, like the ones that appear in (8)? Rigau (1978), (1982) has argued that the clitic hi is also an inanimate dative.⁶ When an animate Indirect Object is represented by a clitic, the clitic is *li*, as shown in (9b) (Rigau 1982, (3a)); but when, in the same construction, the Indirect Object is inanimate it can be represented by the clitic *hi*, as shown in (10b) (Rigau 1982, (5a)).

 (9) a. En Joan donà cops a la Maria the Joan gave blows to the Maria 'Joan struck Maria'

- b. *En Joan li donà cops* the Joan 3SG.DAT gave blows 'Joan struck her'
- (10) a. En Joan donà cops a la porta the Joan gave blows to the door 'Joan struck the door'
 - b. *En Joan hi donà cops* the Joan *hi* gave blows 'Joan struck it'

Even though *li* can also be used for inanimate datives, *hi* cannot be used with animates, as shown in (11).

- (11) a. En Joan li donà cops (a la porta) the Joan 3SG.DAT gave blows (to the door) 'Joan struck it'
 - b. **En Joan hi donà cops (a la Maria)* the Joan hi gave blows (to the Maria) 'Joan struck her'

The difference between (10b) and (11a) is that (10b) has an interpretation of goal plus location, while (11a) is interpreted more like an affected goal. The *hi* present in Person-Case Constraint environments, as in (7a), does not have at all the interpretation of a location; it is interpreted only as a goal.

It is not always the case that hi with inanimates is used with a locative interpretation, as illustrated by (12b) and (13b); again (12b) and (13b) differ from (12a) and (13a) only in terms of animacy of the Indirect Object and the use of the clitic ((12) corresponds to Rigau 1978, (7); examples very similar to the ones in (12) and (13) can be found in Rigau 1982).

- (12) a. A la meva filla, li dedico molt de temps to the my daughter, 3SG.DAT devote lot of time 'As for my daughter, I devote lots of time to her'
 - b. A això, hi dedico molt de temps to this, hi devote lot of time 'As for this, I devote lots of time to it'

- (13) a. Als empresaris, el Govern els concedeix to-the businessmen, the Government 3PL.DAT give molta importància lot importance
 'As for the businessmen, the government gives them a lot of importance'
 - b. A les crítiques, el Govern hi concedeix molta to the criticisms, the Government hi gives lot importància importance
 'As for the criticism, the Government gives them a lot of importance'

Rigau (1978), (1982) also argues that inanimate Indirect Objects like the one in (10b) have a very different behavior from real locatives in other respects. For instance, when *donar cops* 'give blows' is replaced by the verb *colpejar* 'to strike', the Indirect Object becomes a Direct Object, and this happens regardless of the animacy of the Indirect Object, as shown in (14) and (15); notice that (14b) and (15b) are identical.

- (14) a. *En Joan colpeja la Maria* the Joan strikes the Maria 'Joan strikes Maria'
 - b. *En Joan la colpeja* the Joan 3FEM.SG.ACC strikes 'Joan strikes her'
- (15) a. *En Joan colpeja la porta* the Joan strikes the door 'Joan strikes the table'
 - b. *En Joan la colpeja* the Joan 3FEM.SG.ACC strikes 'Joan strikes it'

Real locatives can never become a Direct Oject when a light verb plus a noun is replaced by a verb. (16) shows that the locative argument *a Roma* 'to Rome' is replaced by the clitic *hi* ((16a) corresponds to Rigau 1982, (7a)). In (17) (Rigau 1982, (7b,c)), with the verb *viatjar*, the locative *a Roma* stays a locative and is replaced by *hi*, not by an accusative clitic.

- (16) a. En Joan fa un viatge a Roma the Joan makes a journey to Rome 'Joan makes a journey to Rome'
 - b. *En Joan hi fa un viatge* the Joan *hi* makes a journey 'Joan makes a journey there'
- (17) a. *En Joan viatja a Roma* the Joan travels to Rome 'Joan travels to Rome'
 - b. *En Joan hi viatja* the Joan *hi* travels 'Joan travels there'

Finally, Rigau (1978), (1982) shows that in wh- questions inanimate datives receive a different pronoun than real locatives (inanimate datives receive *a què* 'to what', while real locatives receive *on* 'where').⁷ An additional difference between the clitic *li* and the clitic *hi* is that *li* is inflected for number (not gender), while *hi* has no inflection at all. The normative form of the plural of *li* is *els* (identical to a third person accusative masculine plural clitic), while its colloquial form in most dialects is (*e*)*lzi*.

- (18) a. *Li donaré un cop (a la noia)* 3SG.DAT will-give a blow (to the.FEM.SG girl.FEM.SG) 'I will strike her (the girl)'
 - b. *Els / elzi donaré un cop (a les noies)* 3PL.DAT will-give a blow (to the.FEM.PL girl.FEM.PL) 'I will strike them (the girls)'
- (19) a. *Hi donaré un cop (a la taula) hi* will-give a blow (to the.FEM.SG table.FEM.SG) 'I will strike it (the table)'
 - b. *Hi donaré un cop (a les taules) hi* will-give a blow (to the.FEM.PL table.FEM.PL) 'I will strike them (the tables)'

Linguists like Viaplana (1980), and Mascaró (1986) (also Bonet 1991, using a different set of features) have interpreted the colloquial form (e)lzi of the the third person plural dative clitic as expressing dative case through the

morph /i/, the same morph that appears in the singular li; the morph /l/ expresses third person both in the dative and the accusative.

- (20) Dative clitics *li* and *(e)lzi*
 - a. /l/: third person
 - b. /z/: plural
 - c. /i/: dative

Under this view, the clitic *hi* that appears in (19) and other sentences, which has been argued to be an inanimate dative, is the /i/ morph corresponding to dative case in (20c). *Hi* /i/ expresses case, but not gender, number or person.

3. Three recent syntactic approaches to the Person-Case constraint and their compatibility with the *hi* strategy

In this section I review three recent accounts of the Person-Case Constraint and contrast them with the strategy to the Person-Case Constraint that has been presented in section 2. These three accounts are Ormazábal and Romero (2007), Anagnostopoulou (2003), and Adger and Harbour (2007). It will be shown that two of them could accomodate it, while the third one runs into very serious problems.

3.1. Ormazábal and Romero (2007)

The aim of Ormazábal and Romero (2007) is to arrive at more adequate generalizations concerning the Person-Case constraint, rather than to give a detailed technical account of their findings. They do argue in favor of a syntactic approach, as opposed to a morphological account, based on several observations.

Even though most approaches to the Person-Case Constraint make crucial reference to person (with first person and second person being banned in object position), Ormazábal and Romero (2007) give evidence that what is relevant to the constraint is rather the feature [animate]. The feature [animate] is inherently present in first and second person, and only third person can make a distinction between [+animate] and [-animate].⁸ The evidence that Ormazábal and Romero (2007) give comes mostly from *leísta* dialects of Spanish, which are spoken in different areas of Spain. Contrary to Standard Spanish, in which the accusative clitic is *lo/la/los/las* for both animates and inanimates, in some *leísta* dialects lo/la/los/la is reserved for inanimates, while animates have the clitic *le/les* (homophonous with the third person dative clitic). The examples in (21) correspond to Ormazábal and Romero (2007), (15).

(21) a. Lo vi 3SG.ACC_[-animate] saw.1SG 'I saw it'
b. Le vi 3SG.ACC_[+animate] saw.1SG 'I saw him/her'

In ditransitive contexts with a third person accusative clitic and a first or second person dative clitic, *leísta* dialects show a clear contrast between inanimate and animate objects, as shown in (22), which corresponds to Ormazábal and Romero (2007), (16).

- (22) a. *Te lo di* 2SG.DAT 3SG.ACC gave 'I gave it to you'
 - b. **Te le di* 2SG.DAT 3SG.ACC gave 'I gave him/her to you'

If the Person-Case Constraint were about person, the contrast between (22a) and (22b) would be a mystery, since in both cases the accusative clitic is third person. If one assumes that animacy and not person is relevant, the ungrammaticality of (22b) can readily be attributed to the constraint.

As mentioned earlier, Ormazábal and Romero (2007) do not provide a fully-fledged analysis of the Person-Case Constraint but they propose that the Person-Case Constraint should actually be split into one generalization, the Object Animacy Generalization, reproduced in (23), and a constraint called the Object Agreement Constraint, reproduced in (24).⁹

- (23) *Object Animacy Generalization*: Object relations, in contrast to subject and applied object relations, are sensitive to animacy.
- (24) *Object Agreement Constraint (OAC)*: If the verbal complex encodes object agreement, no other argument can be licensed through verbal agreement.

In order to account for the ungrammaticality of (1), with a typical Person-Case Constraint violation, an additional claim is made: Direct Object agreement takes place only if the Direct Object is animate; if it is inanimate it does not agree (and this is fine).¹⁰ Given the generalization in (23), animacy is irrelevant for the Indirect Object; for that argument (the applied object), agreement always has to take place. In sentences like (2), in which the Direct Object is third person (not specified for animacy), there is no Direct Object agreement and therefore the Indirect Object can agree freely; this situation appears schematized in (25a). Examples like (1) are ruled out because, since there must be agreement with the Direct Object (it is [+animate]), the Indirect Object cannot agree and the derivation crashes, as the bomb indicates in (25b).



Notice that the situation schematized in (25b) is applicable also to sentences like (22b), **Te le di* 'I gave him to you', from *leísta* dialects, in which there is a Person-Case Constraint / Object Agreement Constraint violation in spite of the fact that the accusative clitic is third person: the presence of the [+animate] feature in the Direct Object, which causes the presence of the *le* clitic, forces agreement with the Direct Object and therefore blocks the also necessary agreement with the Indirect Object, and the derivation crashes.

Ormazábal and Romero (2007) prefer not to include animacy in the constraint itself, and include it in a separate generalization, (23), because "from a theoretical perspective it is hard to see why animate agreement should behave so differently from inanimate agreement" (Ormazábal and Romero 2007: 335); they leave this issue unresolved. The Object Animacy Generalization in (23) comes from the observation that in several languages there is only agreement with animates (like in KiRimi or Mohawk) and that in many other languages there are specific relations between the verb and animate internal arguments. The empirical evidence for excluding applied objects (the Indirect Object) from the generalization in (23) comes from Spanish data, and they use these data to argue against analyses of the Person-Case Constraint based on competition, such as Anagnostopoulou (2003), to be discussed in section 3.2. As shown in (26) (Ormazábal and Romero 2007, (54)), the clitic *le* is also used for inanimate applied objects in Spanish.

(26) *Le pongo la pata a la mesa* 3SG.DAT put the leg to the table 'I assemble the leg to the table'

In (forced) contexts in which the Direct Object is replaced with a first or second person clitic, the sentence becomes ungrammatical ((27) corresponds to Ormazábal and Romero 2007, (55)).

- (27) CONTEXT: I'm fed up; if you mention that the table is missing a leg once again and do nothing to fix it...
 - a. ...te pongo a ti (de pata) en la mesa ...2ACC put-1SG.SUBJ A you (as leg) in the table 'I assemble you as a leg in the table'
 - b. *...te le pongo a ti (de pata) a la mesa ...2ACC 3DAT put-1SG.SUBJ A you (as leg) to the table 'I assemble you as a leg in the table'

The crucial difference between (27a) and (27b) is that in (27a) *en la mesa* is a locative and therefore the sentence has only one clitic (one agreement element), *te*, while, according to them, in (27b) *a la mesa* is an Indirect Object, which is doubled by an (inanimate) clitic *le* (similarly to what is found in (26)) and which cooccurs with a second person Direct Object clitic. Their explanation for the ungrammaticality of (27b) is that the agreement of the Direct Object with the verb (necessary because it is animate) prevents agreement with the Indirect Object, regardless of its animacy feature, and that causes the derivation to crash. However, it is very dubious that the ungrammaticality of (27b) is due to the constraint (in whatever version). As illustrated in (26), colloquial Spanish has clitic doubling with the Indirect Object. This is illustrated again in (28) with the verb *recomendar* 'to recommend'.

(28) *Le recomendaron el salmón a Pedro* 3SG.DAT recommended the salmon to Pedro 'They recommended the salmon to Pedro' When the Direct Object is a first or second person clitic a Person-Case Constraint / Object Agreement Constraint conflict arises (see (29a)); one of the most common repair strategies in those cases is to omit the doubled clitic, as in (29b); with only one clitic, no conflict arises.

- (29) a. **Te le recomendaron a Pedro* 2SG 3SG.DAT recommended to Pedro 'They recommended you to Pedro'
 - b. *Te recomendaron a Pedro* 2SG recommended to Pedro 'They recommended you to Pedro'

However, this omission strategy does not render the sentence in (27b) better, as shown in (30). The presence or absence of the strong pronoun *a ti* (compare (30a) with (30b)) does not make any difference.¹¹

- (30) a. **Te pongo a ti a la mesa* 2SG put to you to the table 'I assemble you to the table'
 - b. **Te pongo a la mesa* 2SG put to the table 'I assemble you to the table'

If the ungrammaticality of (27b) were due to the Object Agreement Constraint, one would expect the sentences in (30) to be grammatical because only one clitic is present and this clitic should be able to agree with the verb, no other agreement being needed in the verbal complex. The ungrammaticality of the sentences in (30) has to be found elsewhere. Notice that the sentences in (30) become much more acceptable if the phrase (*de pata*) which appears in parentheses in the two examples in (27), and which was omitted on purpose in (30), is present, as shown in (31a); they are fully acceptable if the phrase *a la mesa* is replaced with *de mesa*, as shown in (31b).¹²

- (31) a. *?Te pongo a ti de pata a la mesa* 2SG put to you of leg to the table 'I assemble you as a leg to the table'
 - b. *Te pongo a ti de pata de mesa* 2SG put to you of leg of table 'I assemble you as a leg of a table'

If the ungrammaticality of the sentence in (27b) lies beyond the Person-Case Constraint, and if the interpretation given to the Catalan strategy discussed in section 2 is also correct, then it means that the Object Animacy Generalization in (23) has to be modified: applied objects (Indirect Objects) are sensitive to animacy. In Catalan, the use of the inanimate dative *hi* for the Indirect Object avoids a Person-Case Constraint conflict. This strategy is not completely different from the one used in *leísta* dialects to avoid the effects of the Person-Case Constraint, which was illustrated in (22b), and is repeated below as (32b); in these varieties, and precisely in these contexts, the otherwise inanimate clitic *lo* can be used to refer to animates, as would be the case in (32a), a slightly modified version of (22a) with respect to the translation.

- (32) a. *Te lo di* 2SG.DAT 3SG.ACC gave 'I gave it / him to you'
 - b. **Te le di* 2SG.DAT 3SG.ACC gave 'I gave him/her to you'

The main difference between the *leísta* repair strategy and the Catalan repair strategy is that the former targets the animacy of the Direct Object, while the latter targets the animacy of the Indirect Object.

With respect to the Object Agreement Constraint (OAC), recall that, according to it, "if the verbal complex encodes object agreement, no other argument can be licensed through verbal agreement" (see (24)). Given the Catalan strategy, one would have to conclude that hi does not show any agreement, because only a first or second person Direct Object will be able to encode agreement, being animate. However, if, as Ormazábal and Romero (2007) assume, case is a by-product of agreement, it might be difficult to account for the presence of hi, if it encodes, as claimed, dative case.

3.2. Anagnostopoulou (2003)

Anagnostopoulou (2003), in a study about ditransitive constructions, proposes an analysis of the Person-Case Constraint based on competition in which feature checking takes place with one and the same head. She assumes, as is often done, that first and second person have a [person] feature ([1], [2]), while third person does not have one (but see below). Indirect

Object clitics are defective in the sense that their number feature is not accessible for checking; Anagnostopoulou (2003) argues that evidence for this claim comes from past participle agreement, which is possible with an accusative, but impossible with a dative. Direct Object clitics can check both number and person.¹³ Agreement of the Indirect Object and the Direct Object takes place with one and the same functional head, v-TR, a head with [person] and [number] ({P,N}). The Indirect Object moves first, because it is closer to v-TR, and checks the person feature $(\{0,N\})$. The Direct Object agrees afterwards and it can do so only with the number feature $(\{0,0\})$. Therefore, movement applies in a counter-cyclic fashion. If the Direct Object is third person, no problem arises because there is no [person] feature to check (she assumes that a third person Direct Object is a determiner pronoun); if the Direct Object is first or second person (or a reflexive) it is not able to check its person features and the derivation crashes. In transitive clauses the Direct Object is able to check both person and number. This accounts for the fact that Direct Object agreement with a first or second person is possible only when there is no Indirect Object.

(33), which corresponds to Anagnostopoulou (2003, (380)), illustrates the relevant part of the derivation of a ditransitive clause with non-conflicting clitics¹⁴



Having said that third person does not have a person feature, it could seem strange that a third person Indirect Object can value the person feature of

the functional head (blocking it for the Direct Object). The reason for the asymmetry in behavior between a third person Direct Object and a third person Indirect Object is related to the idea that, even when they are third person, datives have the person-related feature [participant], given that usually an Indirect Object is animate. That means that, while a third person Direct Object does not have any person-related feature, a third person Indirect Object does have one, [participant].

Anagnostopoulou (2003) acknowledges the relevance of the *leista* dialects of Spanish discussed in an early version of Ormazábal and Romero (2007) (Ormazábal and Romero 2002), which was also discussed in section 3.1. To accomodate the facts from *leista* dialects and other languages that behave in a similar way she suggests that in these languages (not in others) v-TR has an active animacy feature or, rather, an active animacy/gender feature; an animate Direct Object clitic will have to check it, as well as the Indirect Object clitic. Movement of the Indirect Object clitic first will prevent the Direct Object from checking its animacy/gender feature and the derivation will crash.

Anagnostopoulou (2003), however, rejects the possibility that animacy is relevant in Person-Case Constraint environments for languages like Greek. According to her, Greek is sensitive to animacy/gender, as shown by the following facts. In Greek ditransitives, sentences with just a Direct Object clitic are acceptable only if that clitic is neuter, as is shown in (34) (Anagnostopoulou 2003, (289b)). When the Direct Object clitic is masculine or feminine, the sentences are very marginal (see (35a)), unless an Indirect Object clitic (which receives Genitive case) is also present, as shown in (35b) ((35a) and (35b) correspond to Anagnostopoulou 2003, (287b) and (287d), respectively).

- (34) ?O Gianis to edhose tis Marias the Gianis.NOM CL.ACC.NEUT gave the Maria.GEN 'John gave it to Mary'
- (35) a. *?*Tin sistisa tu adhelfu mu* CL.ACC.FEM introduced the brother-GEN my 'I introduced her to my brother'
 - b. *Tu tin sistisa* CL.GEN.MASC CL.ACC.FEM introduced 'I introduced her to him'

However, the presence of a masculine or feminine Direct Object clitic does not trigger a Person Case Constraint violation, as would have been the case in *leísta* dialects of Spanish with an animate Direct Object (recall the examples in (32)). The example in (35a), grammatical, illustrates this fact. In (36) another example is given, with a second person Indirect Object clitic ((36) corresponds to Anagnostopoulou 2003, (342b)).

(36) Tha su ton stilune Fut CL.2SG.GEN CL.ACC.MASC send 'They will send him to you'

Therefore, for languages like Greek, and contrary to *leísta* dialects of Spanish, she keeps the account sketched in (33), in which only the feature [person] (together with [participant] for the Indirect Object clitic) are relevant.

Nevertheless, as Anagnostopoulou herself acknowledges when discussing (35a), in chapter 4 of her book, the relevant feature to account for the ungrammaticality of (35a) could be either gender or animacy (she says that it is difficult to find examples that could tease the two options apart). Therefore, since gender could also be the relevant feature in this case, one can keep a uniform Person-Case Constraint that makes reference to the feature [animate] instead of person. As for Standard Spanish, Direct Object clitics in Greek would not be marked for animacy, while Direct Objects in *leísta* dialects of Spanish would be sensitive to this feature.

Anagnostopoulou (2003) does discuss the change from li to hi that Catalan uses to overcome the effects of the Person-Case Constraint, discussed in section 2. However she interprets the clitic as a locative; and as a locative it does not check person features. That leaves the accusative clitic free to check both number and person, thus skipping the effects of the Person-Case Constraint. She does not mention, though, what structure clauses with this locative clitic would have. Nevertheless, the conclusion reached in section 2, according to which hi is an inanimate dative, more concretly a clitic with dative case and no other feature (neither person nor number), can easily be accomodated to Anagnostopoulou's (2003) account of the Person-Case Constraint. One has to assume that the Indirect Object, which has no person or number features, does not check [person]; this leaves the Direct Object free to agree both in number and person. There is no need to assume that the clitic is really a locative clitic.

3.3. Adger and Harbour (2007)

Adger and Harbour (2007) base their analysis of the Person-Case Constraint mostly on Kiowa, a Kiowa-Tanoan language from Oklahoma that encodes agreement with the subject, the Direct Object and the Indirect Object on a verbal prefix; but in their analysis they also consider Indoeuropean languages. Like Ormazábal and Romero (2007), they acknowledge the relevance of animacy, but they encode it in an indirect way, through the feature [participant], a feature that is also crucial, as we have seen, in Anagnostopoulou (2003). This feature is present in first and second person ([participant: 1] for first person exclusive, [participant: 12] for first person inclusive, [participant: 2] for second person). The feature [participant], without further specifications, is also present in Romance third person reflexive clitics (which are also targets for the Person-Case Constraint), and in third person Indirect Objects; a third person Direct Object is not specified for the feature.¹⁵ These specifications appear in (37).

(37)	First person exclusive:	[participant: 1]
	First person inclusive:	[participant: 12]
	Second person:	[participant: 2]
	Romance 3rd person reflexive:	[participant:]
	3rd person IO:	[participant:]
	3rd person DO:	

The presence of [participant] entails semantic animacy, but its absence does not entail anything (an argument could be semantically animate but not bear any specific feature related to it). Support for the indirect relation between the feature [participant] and animacy comes from the fact that in Kiowa in certain cases an animate Direct Object can coexist with an Indirect Object without triggering any Person-Case Constraint effects; Adger and Harbour (2007) argue that in these cases the relevant feature encoding semantic animacy is [empathy], not [participant] ([empathy] being a feature present in only certain nominals that comprise adult Kiowas, sometimes children and sometimes horses).

Adger and Harbour (2007) claim that the Indirect Object always bears the feature [participant:], as (37) above shows. Their evidence comes from Kiowa, where indirect objects are always interpreted as semantically animate and also from Indoeuropean languages. They cite work by Fillmore and Pesetsky (Fillmore 1968; Pesetsky 1995) and they mention the fact that, in English double object constructions are not really acceptable with an inanimate Indirect Object. In sentences like (38) the Indirect Object has to be interpreted as personified ((38) corresponds to Adger and Harbour 2007, (62)).

(38) ?We sent the conference the abstract

Adger and Harbour (2007), similarly to Anagnostopoulou (2003), claim that the Person-Case Constraint arises from a conflict in feature checking. But, contrary to her approach, where checking for the Indirect Object and the Direct Object is done with the same functional head, here checking is done with different functional heads, namely Appl (a head which is present in ditransitives and other constructions not relevant here) and v. Their account relies crucially on two claims: (a) the Appl head is defective and only carries the feature [number:] (other functional heads being able to bear all φ -features); (b) the Appl head requires its Specifier, the Indirect Object, to bear the feature [participant:] (because, as mentioned earlier, they assume that Indirect Objects have to be animate. (39) schematically illustrates these claims plus the structure they assume for ditransitives and the relevant agreement relations (in what follows I abstract away from more technical issues).



Since, as shown in (39), the Direct Object and the Appl head have an agreement relation, and the Appl head, being defective, only bears the feature

[num:], it follows that the Direct Object cannot have the feature [participant:] (it cannot be checked and the derivation will crash), which means that the Direct Object always has to be third person; first and second person, which unavoidably have the feature [participant:], always trigger a Person-Case Constraint violation.¹⁶ Indirect Objects, which also bear the feature [participant], will not have any checking problems because the functional head they agree with, v, has all φ -features.

The effects of the Person-Case Constraint are stated in (40) (Adger and Harbour 2007, (76)).

(40) Appl cannot enter into an Agree relation with a [participant:] argument in its complement domain.

In transitive clauses, the Appl head is absent, and the Direct Object agrees with the v head, which is not defective; in those cases the Direct Object can be first or second person.

The account in Adger and Harbour (2007) faces serious problems once we consider the data presented in section 2. A first problem is that the idea that an Indirect Object always bears the feature [participant:] is contradicted by the data presented from Catalan; as has been shown in section 2, this language (at least) can have inanimate datives, as argued for in Rigau (1978), (1982) (the hi clitic). This problem is easily solved if one assumes that an Indirect Object need not bear the feature [participant:], at least universally. A second, much more serious problem, is related to the claims concerning the Direct Object in this approach: since in this account the Direct Object cannot bear the feature [participant:] in a ditransitive, a first or second person Direct Object will never be licensed in this type of construction (it does not conform to (40)). This means that Adger and Harbour (2007) cannot account for the repair strategy used in Catalan to overcome the effects of the Person-Case Constraint. Recall that in Catalan, in these environments, the third person dative clitic is replaced by hi, as was illustrated in (7), repeated here as (41).

- (41) a. Al president, m' hi ha recomanat en Miquel to-the president, 1SG hi has recommended the Miquel 'As for the president, Miquel has recommended me to him'
 - b. **Al president, me li ha recomanat en Miquel* to-the president, 1SG.ACC 3SG.DAT has recommended the Miquel 'As for the president, Miquel has recommended me to him'

What (41) illustrates is that, precisely, in Catalan a first or second person Direct Object is kept and what changes is the Indirect Object, which surfaces only with dative case (therefore, without any morph related to the feature [person:]). The only way out for Adger and Harbour (2007) would be to assume, similarly to Anagnostopoulou (2003), that in sentences like (41a) the clitic that surfaces is a locative; the structure of the sentence would be the one corresponding to a transitive verb (a structure without an Appl head) plus a locative argument. This is, however, not a desirable move, given the arguments given in section 2 against *hi* being a locative in the relevant constructions.

4. Concluding remarks

One of the goals of this paper was to decribe and analyze the strategy that Catalan uses in ditransitives to avoid the effects of the Person-Case Constraint. The strategy involves replacing the third person dative clitic, li (singular) and (e)lzi (plural), with the clitic hi, a clitic that is homophonous with the locative clitic.

With arguments from Rigau (1978), (1982), it has been shown that the clitic *hi* is also an inanimate dative, an inanimate Indirect Object. This is the clitic used in Person-Case Constraint environments. It has further been claimed that *hi* /i/ is actually the morph corresponding to dative case, a morph which is also present in the third person dative singular *li* /l+i/ and in the third person dative plural (*e*)*lzi* /l+z+i/. The conclusion has been that in Person-Case Constraint environments the clitic that surfaces lacks person and number features; it only has case.

For Anagnostopoulou (2003) (discussed in section 3.2), and Adger and Harbour (2007) (discussed in section 3.3.), Indirect Objects are always animate, a property that both papers encode in the feature [participant]. As for Ormazábal and Romero (2007) (discussed in section 3.1), they admit that Indirect Objects can be inanimate, but they also claim that animacy is only relevant for Direct Objects (see the Object Animacy Generalization in (23)). What this paper has shown is that Indirect Objects are also sensitive to animacy¹⁷

An additional conclusion that can be drawn from the present paper is that the Person-Case constraint cannot be formulated focusing only on the features of the Direct Object. The problem that was pointed out in section 3.3 for Adger and Harbour (2007) was precisely that they relate the contraint to the checking relation between the Direct Object and a defective Appl head which only has number features. This defectiveness forces the presence of a Direct Object without the feature [participant:], which means that it has to be third person. The Catalan *hi* strategy, however, constitutes a counterexample to this hypothesis, because in this case the Direct Object can be first or second person, which inherently have the feature [participant:]; what changes is the Indirect Object clitic, which becomes an impoverished clitic, without person and number, and therefore without any feature related to animacy.

The Person-Case Constraint, then, arises from a conflict between animacy-related φ -features of the verbal complex. One obvious strategy to avoid the problem is to supress at least one of the conflicting clitics or agreement markers, which implies a supression not only of the corresponding exponent but also of all the morphosyntactic features associated to it. This strategy was illustrated in (6c) for Standard Spanish; in Kiowa an alternative construction is chosen, with postpositional phrases, which does not trigger verbal agreement (see Adger and Harbour 2007). Other strategies involve the modification of the featural composition of one of the positions involved. In *leísta* dialects of Spanish an animate Direct Object is realized as an inanimate clitic (this strategy was illustrated in (32a)). In Catalan an animate Indirect Object is realized as an inanimate clitic, a clitic devoid of all features except case¹⁸

A complete explanation of the Person-Case Constraint not only has to integrate the strategies used to skip the conflicting feature combination. Other questions have to be addressed and answered. As we saw in section 1, there is variation in the judgements concerning combinations of a first person with a second person, while combinations with a third person trigger much sharper distinctions in judgements. What is the origin of this variation? In trying to find an answer to this question one should perform a more careful empirical study of the judgements. Another question that should be addressed is the proven lack of universality of the constraint (see Haspelmath 2004 for an overview). Here too one should study to which degree the relevant languages are insensitive to the constraint. For instance, Bonet (1991) and Anagnostopoulou (2003) mention Swiss German, which at first sight seems to be insensitive to the constraint. The fact is, though, that it is not completely insensitive to it: when the accusative is third person, the order between accusative and dative clitics is free, while in Person-Case Constraint environments the order is fixed, and the accusative has to precede the dative. Anagnostopoulou (2003) accounts for the Swiss German facts (lack of Person-Case Constraint effects in accusative > dative environments) by claiming that in this case the accusative moves first and checks person and number features; the dative moves afterwards and presumably checks only "definiteness and / or phonological features" (Anagnostopoulou 2003: 296). This movement also gives the fixed order accusative > dative. The idea is then that the order dative > accusative gives rise to Person-Case Constraint effects, while the order accusative > dative does not. However, data from Majorcan Catalan pose a serious problem to this hypothesis. In this variety, the accusative clitic precedes the dative clitic, as is shown in (42).

(42) La me recomanen 3SG.FEM.ACC 1SG recommend 'They recommend her to me'

Following Anagnostopoulou (2003) the order between the two clitics in (42), accusative > dative, would be obtained by checking first the features of the accusative clitic. The problem with this account is that it predicts that Majorcan Catalan should be insensitive to the Person-Case Constraint: as in Swiss German, the order accusative > dative would imply checking all φ -features corresponding to the accusative, especially person and number, and therefore no conflict should arise. However, the fact is that sentences like (43a), with a first person Direct Object and a third person Indirect Object, are ungrammatical in Majorcan Catalan (as in all other dialects of Catalan); in these cases this variety resorts to the *hi* strategy described in section 2, as shown in (43b).

- (43) a. **Me li recomanen* 1SG 3SG.DAT recommend 'They recommend me to him/her'
 - b. *M' hi recomanen* 1SG *hi* recommend 'They recommend me to him/her'

If questions like the ones presented here are answered, without having to resort to crucial stipulations, we might be able to understand the exact nature of the constraint.

Acknowledgements

I am very grateful to Joan Mascaró, Carme Picallo, Gemma Rigau, and two anonymous reviewers for their valuable comments on a previous draft of this paper. Research for this paper was partially funded by grant HUM 2006-13295-CO2-01 from the Spanish Ministerio de Educación y Ciencia and FEDER, and 2005SGR-00753 from the Generalitat de Catalunya.

Notes

- 1. For reasons of clarity, in the glosses of the examples I specify the gender, person and number of the items only when this information is directly relevant to the discussion.
- 2. It might be the case that speakers that accept the grammaticality of sentences like (4) but only in one of the readings have trouble getting a second reading, independently of which one they computed first. A more detailed study should be made to reach more solid conclusions. See Ormazábal and Romero (2007) for judgements on similar sentences in Spanish.
- Conflicting judgements are also obtained with Direct Object reflexive clitics. It seems that in most languages they are subject to the Person-Case Constraint. In Catalan the facts are not so clear (see Bonet 1991 for some discussion of this issue).
- 4. For a morphological approach to person restrictions se also Rivero (2008, this volume).
- 5. *Hi* can also replace a first or second person clitic for those speakers with the strong version of the Person-Case Constraint; that is, for those speakers who do not accept a combination of a first person and a second person. For speakers with the weak version of the constraint this replacement is also acceptable.
- 6. The clitic *hi*, as other clitics, has different uses. For a brief description, see Hualde (1992).
- 7. One property that real locatives and other uses of *hi* share is that they can never be subject to clitic doubling, not even in Person-Case Constraint environments; constructions with *li* can always surface with clitic doubling. Clitic doubling with a third person dative clitic is illustrated for Spanish in (28).
- 8. Even though for convenience I assume the feature [animate] to be binary, it might very well be the case that it is a monovalent feature.
- 9. Two anonymous reviewers wonder why Ormazábal and Romero (2007) use the terms *object relations* and *applied object relations* (see (23)), instead of simply referring to Direct Object and Indirect Object, respectively. The reason is that, even though they often concentrate on ditransitive constructions in Spanish, they also discuss some other constructions and other language fami-

lies, and the terms they use cover all cases. In the present paper, limited to ditransitive constructions, the terms are equivalent.

- Later in the paper Ormazábal and Romero (2007) argue that third person Direct Object clitics are clitic determiners, as opposed to first and second person Direct Object clitics and all Indirect Object clitics, which are agreement markers.
- 11. The sentences in (30) are grammatical under the interpretation 'I set you at the table'.
- 12. Carme Picallo (personal communication) suggests that in sentences like (31a,b) the sequences *a ti de pata a la mesa* or *a ti de pata de mesa* can be analyzed as a small clause in which *de pata* is a predicative element and *a ti* is the subject.
- 13. The evidence based on past participle agreement might not be decisive, given some facts concerning Catalan: in most dialects where this phenomenon is found agreement is indeed possible only with accusatives, not with datives. But with accusatives it is only possible with third person clitics; never with first or second person. Following the line of reasoning in the main text, one would have to conclude that Direct Object clitics cannot always check number.
- 14. In the structure in (33) vAPPL is a light applicative head present in all double object constructions (Romance ditransitives with clitics being considered double object constructions).
- 15. The feature [participant] with the additional 1, 2 values is actually a shorthand for a complex of features, which include [±participant], [±author] and [±hearer]. Third person (non-reflexive) with [participant] has actually the value [-participant].
- 16. The *leísta* dialects of Spanish discussed by Ormazábal and Romero (2002), (2007), which appear illustrated in (21) and (22), do not pose a problem for this approach: a *le* clitic has the feature [participant:], and therefore behaves like first and second person clitics with respect to the Person-Case Constraint; a *lo* clitic does not have this feature, and therefore behaves like third person clitics or third person agreement in other languages.
- 17. Taking into account the discussion on the interpretation of sentences with hi and sentences with li (see the paragraph after (11)), maybe, rather than animacy, the relevant feature should be related to affectedness; a door is an inanimate object, but it can be affected.
- 18. Rezac (2006) studies the theoretical implications of several strategies used to avoid the Person-Case Constraint. His conclusion is that trans-derivational comparison is essential in accounting for them. Resorting to paraphrases is impossible given that many of them are unavailable in any other context. As we saw for Catalan, the clitic *hi* can be related to animate goals only in Person-Case Constraint environments; in any other context this is impossible (see the ungrammatical example in (11b)). In Standard Spanish non-subject strong pronouns have to be doubled by a clitic, except in Person-Case Constraint environments, where the clitic has to be absent.

References

Adger, David	l and Daniel Harbour			
2007	The Syntax and Syncretisms of the Person Case Constraint. Syntax			
	10: 2–37.			
Anagnastopo	ulou, Elena			
2003	The Syntax of Ditransitives: Evidence from Clitics. Berlin/New York:			
	Mouton de Gruvter.			
Boeckx. Ced	ric			
2000	Ouirky agreement, Studia Linguistica 54: 354–380.			
Bonet Eulàli	2 ann y agreement staata 2003 annot 2000 a 2000 a			
1991	Morphology after syntax: Pronominal clitics in Romance Ph D diss			
1771	MIT Department of Linguistics and Philosophy			
Fillmore Ch	arles			
1968	The case for case. In Universals in Linguistic Theory, Emmon Bach			
1700	and Robert T. Harms (eds.) 1.81 New York: Holt Rhinehart and			
	Winston			
Uconclmath	Winston.			
naspennaui,	Explaining the ditransitive person role constraint: A usage based on			
2004	Explaining the diffusive person-tole constraint. A usage-based ap-			
II	proach. Constructions 2/2004.			
Hrainbjargar	son, Gunnar Hrain			
2001	An Optimality Theory Analysis of Agreement in Icelandic DAT-NOM			
Constructions. <i>Working Papers in Scandinavian Syntax</i> 68: 1				
/	Available at http://www.hum.uit.no/a/hrafnbjargarson/			
Hualde, José	Ignacio			
1992	Catalan. London/New York: Routledge.			
Mascaró, Joa	n			
1986	Morfologia [Morphology]. Barcelona: Enciclopèdia Catalana.			
Miller, Philip	H. and Ivan A. Sag			
1997	French Clitic Movement without Clitics or Movement, Natural Lan-			
	guage and Linguistic Theory 15: 573–639.			
Nevins, And	rew			
2007	The representation of third person and its consequences for person-			
	case effects. Natural Language and Linguistic Theory 25(2): 273–313.			
Ormazábal, J	avier and Juan Romero			
2002	Agreement restrictions. Manuscript, University of the Basque Country			
	(EHU/Basque Center for Language Research (LEHIA), and Univer-			
	sity of Alcalá/Universidad Autónoma de Madrid.			
2007	The Object Agreement Constraint. Natural Language and Linguistic			
	<i>Theory</i> 25(2): 315–347.			
Perlmutter, D	David M.			
1971	Deep and Surface Structure Constraints in Syntax. New York: Holt,			
	Rinehart and Winston.			

Pesetsky, Day	vid	
1995 Zero Syntax: Experiencers and Cascades. Cambridge, MA: The		
	Press.	
Rezac, Milan		
2006	Escaping the Person Case Constraint: Reference-set computation in	
	the φ -system. To appear in <i>Linguistic Variation Yearbook</i> 6.	
Rigau, Gemn	na	
1978	"Hi" datiu inanimat ["Hi" inanimate dative]. Els Marges 12: 99–102.	
1982	Inanimate Indirect Object in Catalan. <i>Linguistic Inquiry</i> 13: 146–150.	
Rivero, María	a Luisa	
2008	Oblique subjects and person restrictions in Spanish: A morphological	
	approach. This volume.	
Sigurðsson, H	Halldór Ármann	
1996	Icelandic finite verb agreement. Working Papers in Scandinavian	
	<i>Syntax</i> 57: 1–46.	
Taraldsen, Ki	nut Tarald	
1995	On Agreement and Nominative Objects in Icelandic. In Studies in	
	Comparative Germanic Syntax, Hubert Haider, Susan Olsen and Sten	
	Vikner (eds.), 307–327. Dordrecht: Kluwer.	
Viaplana, Joa	iquim	
1980	Algunes consideracions sobre les formes clítiques del barceloní	
	[Some considerations on the clitic forms of Barceloní]. Anuario de	
	Filología 6: 459–483.	

The [person] restriction: why? and, most specially, why not?

Luis López

1. Introduction

Since it was brought to the attention of generative linguists by Bonet (1994) and Sigurðsson (1996), the [person] restriction has given rise to a considerable literature on the subject. I exemplify it in (1), an Icelandic example:

(1)	a.	<i>Henni</i> She.DAT 'She four	<i>leiddust</i> bored.3 rd .PL nd the boys b	<i>strákanir</i> . boys.the.No oring.'	OM		
	b.	<i>Henni</i> she.DAT	* <i>leiddumst</i> bored.1 st .PL	/ *? <i>leiddust</i> / .3 rd .PL	/ *? leiddist / .3 rd .SG (Sigu	<i>við</i> we.NOM rðsson 1996:	25, 28)

The sentences in (1) involve an external argument in dative case and an internal argument in nominative. Agreement between T and the internal argument is fully grammatical only in the third person. In the second and first persons it is not grammatical.

Spanish also has oblique external arguments accompanied by nominative internal arguments (as discussed in Masullo 1992, Fernández-Soriano 1999). However, they do not give rise to any agreement restrictions;

(2) A ella le aburrimos nosotros. DAT she CL.DAT.3rd.SG bore.1st.PL we.NOM 'We bore her.'

The Spanish case is interesting in another respect: it illustrates that one cannot describe the presence/absence of agreement restrictions as an arbitrary property "of a language" or "a construction", because we find the [person] restriction in impersonal SE constructions (as first noticed by Taraldsen 1995) and in experiencer verbs with inherent SE morphology (Rivero 2004, this volume):

- (3) a. Se multaron /*multamos / *multasteis unos lingüistas en el SE fined.3rd.PL / .1st.PL / .2nd.PL some linguists in the mercado. market place 'Some linguists were fined in the marketplace.'
 - b. *Se le antoja un helado*. SE CL.DAT.3rd crave.3rd.SG an ice-cream 'She/he is craving an ice-cream.'
 - c. **Se le antojo yo* SE CL.DAT.3rd crave.1st.SG I.NOM

The insightful analyses developed to account for (1) by Anagnostopoulou (2003), Sigurðsson (2002) and Taraldsen (1995) have not attempted to account for the absence of these restrictions in (2).

The specific parameter that my analysis builds upon is whether the external argument (oblique subject or SE) is licensed by finiteness or not (which can be formalized using traditional Case theory or some descendant). The evidence presented by Thráinsson (1979) and many others to the effect that the oblique argument in (1) is a full-fledged subject clearly argues that finiteness licenses it. Likewise, I present evidence that Spanish SE is also licensed by finiteness. Additionally, agreement between the internal argument and T shows that these two are also linked in a syntactic dependency. Thus, I argue that the agreement restrictions show up when T, the external argument (the quirky subject in Icelandic or SE in Spanish) and the internal argument are all bound up in one *complex dependency*.

I present empirical evidence showing that the Spanish oblique subjects are not linked to finiteness in any way – they are, as a matter of fact, fully licensed by the dative clitic. Consequently, there is no complex dependency linking T and the external and internal arguments; instead, there is a simple dependency linking the internal argument and T, which gives rise to the normal agreement pattern exemplified in (2).

Thus, the [person] restriction (or its absence) turns out to be not an unpredictable peculiarity of the grammars of some languages but consequence of the interaction of principles of universal validity with specific, definable properties of functional elements.

This chapter is organized as follows. In section 2 I show examples of this restriction in Icelandic and Spanish and present the descriptive generalization that needs to be accounted for. Section 3 introduces complex dependencies as well as the principle of *Full Sharing*, which is a crucial com-

ponent of syntactic dependencies. Section 4 explains how the [person] restriction is a consequence of a complex dependency linking T, the oblique subject and the object. Section 5 shows how absence of a complex dependency entails absence of the [person] restriction. Section 6 summarizes the conclusions.

2. The [Person] restriction

Oblique subjects in Icelandic have received a lot of attention in the generative literature because of its implications for our theory of Case and Adependencies (Thráinsson 1979; Zaenen et al 1985; Sigurðsson 1989, 1996, 2002, 2004; Taraldsen 1995; Jónsson 1996; Boeckx 2000; among others). They appear in three types of constructions: (i) experiencer subjects, (ii) passives of objects that bear a lexical dative case and (iii) raising to object constructions. In this chapter I discuss only experiencer subjects for space constraints.

As indicated in the introduction, the nominative object can agree in number with T but only in the third person. This is surprising: if the experiencer is an external argument and a DP, a dependency between T and the internal argument should be blocked. If the experiencer turned out to be not a DP but (say) a PP, then it should never block agreement. Instead, whether the experiencer blocks agreement between T and the object depends on the morphology of the latter.

(1)	a.	<i>Henni leiddust strákanir.</i> she.DAT bored.3 rd .PL boys.the.NOM 'She found the boys boring.'
	b.	Henni *leiddumst /*?leiddust/*?leiddist við she.DAT bored.1 st .PL/.3 rd .PL / .3 rd .SG we.NOM (Sigurðsson 1996: 25, 28)

According to numerous tests, the oblique subject is truly a subject (see Thráinsson 1979 and Sigurðsson 1989 in particular). One of the tests employed involves the finite/non-finite feature of T: the quirky subject is only available if T is finite. The quirky subject becomes PRO in a control context:

(4) Hún vonast til að PRO leiðast ekki bókin.
 she.NOM hopes for to bore not book.the.NOM
 'She hopes not to find the book boring.'

```
(Sigurðsson 1989: 204ff.)
```

The quirky subject is disallowed in non-finite clauses (unless the clause is of the raising type). The following examples were provided by Hrafnbjargarson p.c.:

- (5) a. *Að fólki líka hestar er ekkert að skammast to people.DAT like horses.NOM is nothing to shame sín fyrir.
 REFL for
 'For people to like horses is nothing to be ashamed of.'
 - b. Að líka hestar er ekkert að skammast sín fyrir. to like horses.NOM is nothing to shame REFL for 'To like horses is nothing to be ashamed of.'

I take examples (4) and (5) to imply that the quirky subject is in a dependency with T which results in satisfaction of an Abstract Case feature (Sigurðsson 1989, Jónsson 1995, etc). As for the nominative object, we can see in these examples that there must be a strategy in the grammar that allows the object to be fully licensed in nominative case without the help of a finite head. However, I take it that when T and the object agree (as in (1)) there must be a syntactic dependency between them and genuine abstract Case assignment by T. If so, we must conclude that in (1) both the oblique experiencer and the nominative object form a dependency with T.

The Spanish construction that involves what is called *indefinite SE* in English and *pasiva refleja* in Spanish has also received some attention from traditional grammarians as well as generative linguists (Burzio 1986; Cinque 1988; Raposo and Uriagereka 1996; Mendikoetxea 1999; among others). As far as I know, it seems that it was Taraldsen (1995) who brought to linguists' attention the fact that *indefinite SE* only works in the third person, as shown in (6). If instead of the invariable clitic SE we have an agreeing clitic, the result is still ungrammatical, as shown in (7):

- a. Se multaron unos lingüistas en el mercado ayer.
 SE fined.3rd.PL some linguists in the market yesterday
 'Some linguists were fined in the market yesterday.'
 - b. *Se multamos unos lingüistas en el mercado ayer SE fined.1st.PL some linguists in the market yesterday (Intended meaning: Some of us linguists were fined in the market yesterday)

- c. *Se multasteis unos lingüistas en el mercado ayer.
 SE fined.2nd.PL some linguists in the market yesterday (Intended meaning: Some of you linguists were fined in the market yesterday)
- a. *Nos multamos unos lingüistas en el mercado ayer.
 CL.1st.PL fined.1st.PL some linguists in the market yesterday (Intended meaning: Some of us linguists were fined in the market yesterday)
 - b. *Os multasteis unos lingüistas en el mercado ayer. CL.2nd.PL fined.2nd.PL some linguists in the market yesterday (Intended meaning: Some of you linguists were fined in the market yesterday)

It is important to note that neither SE nor the DP is incompatible with first and second person plural inflection on the verb. A plural DP can trigger first and second person agreement:

(8) Unos lingüistas multamos /multasteis/multaron a un policía some linguists fined.1st.pl /.2nd.pl /.3rd.pl ACC a policeman 'Some (of us / of you) linguists fined a policeman.'

The following two examples show that SE is compatible with first and second person plural if there is no agreement (the so-called *impersonal SE*):

- (9) a. Se nos multó (a unos lingüistas) en el mercado ayer. SE CL.1st.PL fined.3rd.SG
 'Some of us linguists were fined in the market yesterday.'
 - b. Se os multó (a unos lingüistas) en el mercado ayer.
 SE CL.2nd.PL fined.3rd.SG
 'Some of you linguists were fined in the market yesterday.'

I conclude that it is the *combination* of SE+agreement what causes the ungrammaticality of (6b,c).

Interestingly, SE, like the Icelandic quirky subject is licensed by a finite T (as known since Zubizarreta 1982, see Cinque 1988 for detailed discussion). The following examples are in Spanish:¹

- (10) a. Sería bueno para todos que el gobierno trabajara be.COND good for everyone that the government work.3rd.SG más.
 more
 'It would be good for everyone if the government worked harder.'
 - b. *Sería bueno para todos que se trabajara más.* be.COND good for everyone that SE work.3rd.SG more 'It would be good for everyone if people worked harder.'
 - c. *Trabajarmás sería bueno para todos.* work.INFmore be.COND good for all 'Working harder would be good for everyone.'
 - d. **Trabajarse más sería bueno para todos*.
 work.INF.SE more be.COND good for all (Intended meaning: 'For people to work harder would be good for everyone.')

(10a) shows an ordinary use of the verb *trabajar* 'work' and (10b) shows an example with indefinite SE in a finite clause. (10c) shows that *trabajar* can be found in non-finite clauses while (10d) shows that the indefinite SE is unavailable in non-finite subject clauses. SE is available in raising non-finite clauses:²

(11) *Parece no haberse trabajado lo suficiente.* seem.3rd.SG not have.INF.SE work.PTC it enough 'It seems that people have not worked hard enough.'

It is a well-known property of raising clauses that a constituent merged as an argument of the infinitive can be licensed by the matrix finite T or v. So, in (11) I claim that SE is licensed by the finite T of the matrix clause

Let me summarize the empirical puzzle to account for: Agreement between T and the object is normally ungrammatical if a DP intervenes, an effect that can be attributed to minimality. However, this dependency is permissible provided that the intervenor is in oblique case and the object is third person. Why should the morphology of the object affect the possibility that another constituent raises a minimality effect?


3. Complex Dependencies

'She is a a nice girl.'

The starting point of my analysis is the existence of complex dependencies in C_{HL} . Consider the Icelandic examples (12) through (14) and the Romanian (15). In these examples the constituents in bold agree at least in case morphology. Assuming the vocabulary for syntactic dependencies in Chomsky (2000, 2001), I take it that the same case assigner probes the two of them:

(12)	a.	<i>Hann</i> He.NOM	<i>telur</i> believes	<i>sig</i> himself.ACC	<i>vera [t</i> be	s terkan] strong.ACC
	b.	Hann he.NOM 'He belie	<i>tel-st</i> believes.I ves himse	<i>vera [t</i> REFL be elf to be strong	<i>sterkur]</i> strong.N g' (or 'he	OM is believed to be strong.') (McGinnis 1998: 184)
(13)	a.	<i>Hún</i> she.NOM 'She was	<i>var köll</i> was call called Ki	<i>uð Kidda.</i> ed Kidda.NO idda.'	М	(Zaenen et al 1985: 472)
	b.	<i>Hún</i> she.NOM	<i>er góð</i> is nice	<i>stelpa</i> . girl.NOM		

- c. Við töldum hana vera góða stelpu we.NOM believed her.ACC be nice girl.ACC
 'We believed her to be a nice girl.' (Sigurðsson 2004: 11)
- (14) Strákarnir komust allir í skóla.
 boys.the.NOM got all.PL.NOM to school
 'The boys all managed t to get to school.' (Sigurðsson 1991: 331)
- (15) Mi-au dat ele surorile mele me.DAT-have.3.PL given EXPL.3.PL.NOM sisters my.3.PL.NOM cadoul. present-the 'My sisters gave me the present.' (Remus Gergel (p.c.))

In (12), an adjective or participle agrees in number, gender and case with a noun. The case morphology ultimately depends on which case-assigning head eventually governs the noun. In (13), agreement in case morphology is between two nominals.³ Interestingly, note that (13b) and (13c) show that the case of the predicate nominal co-varies with that of its argument. In (14), the floating quantifier and the raised DP share gender, number and case morphology. Finally, in (15) the subject clitic agrees in number, person, gender and case with the subject.

Examples (12)–(15) exemplify the following general schema: two constituents share an unvalued Case feature (and maybe other features) which is later valued by a Case assigner. This is represented in example (16), where the letter [u] represents lack of valuation of a feature, [v] represents a valued feature and the sub-indexed numbers indicate "co-valuation":

(16) T/v_{vC} X_{u1C} Y_{u1C} Agree

Let's see how.

Under any version of feature valuation, a principle like Full Sharing is always assumed:

(17) Full Sharing

Take a,b to be features of the same type. If a,b are involved in an Agree (p,g) dependency, feature sharing is mandatory.

Full Sharing entails that e.g. if [a] is a valued feature and [b] is unvalued, feature valuation of [b] must take place. Probes do not resort to default features as a free option. Default features surface only when there is nothing available to agree with.

For Agree(p,g) to take place I assume that the features involved are (i) in a c-command configuration and (ii) very close – locality is understood strictly: a probe can only see as far as the spec (the "edge") of its complement. This strict locality is what drives the *complex dependency* framework of the following pages, in contrast to the relative permissiveness of Chomsky (1995, 2000), from which approaches such as Anagnostopoulou (2003) are derived.

So far, I have only considered the possibility that [a] is valued and [b] unvalued. Imagine now a second scenario for [a] and [b]. Imagine [a] and [b] are both unvalued:

Since neither [a] nor [b] is valued, valuation is impossible. However, Full Sharing will not allow them to acquire different values: since [a] and [b] are in an Agree dependency, they are bound. I refer to a dependency formed by bound unvalued features as an *Open Dependency*. I represent open dependencies by means of co-indexation of unvalued features. I refer to unvalued shared features as *co-valued features*:

(19)
$$\begin{bmatrix} u_1 a \end{bmatrix} \dots \begin{bmatrix} u_1 b \end{bmatrix}$$

$$Agree$$

Assume now that [a] is finally probed by a head that does have a valued version of [f]. As a consequence, a values its own [uf]:

[a] is now valued. But notice that the dependency with [b] persists and Full Sharing forces [a] and [b] to have the same value. It follows that [b] will also take up the same value as [a] and H:



Thus, when a probe reaches an open dependency, full sharing will affect all three members of the dependency. I refer to this as a *Complex Dependency*:

(22) Complex Dependency

If a probe P engages a constituent a involved in an open dependency D, the goal of P is D.



We can understand Agree (p,g) generally as an operation that co-values two sets of features. If one of the two sets is already valued, this value is simply copied on the other set and the [u] symbol is removed. Otherwise, a requirement that the two features co-vary together is forced. As a consequence, a higher probe reaches not a simple constituent but a dependency.

In all the examples above (participles/adjectives, floating quantifiers, subject clitics), two constituents co-value a Case feature, giving rise to an open dependency between them:



When a higher probe with a Case feature reaches this dependency, their unvalued Case features are valued at once.

This analysis entails two assumptions. The first one is that unvalued Case can be a probe. In Chomsky's (2000, 2001) system unvalued features are divided in two categories: those that can't probe and whose only function is to render a DP active (Case) and those that probe (all the others). I find this distinction arbitrary and I do not maintain it here.

The second assumption is that maximal categories can probe – this is how. e.g., two nominals can agree in case morphology. This is a very natural assumption within Bare Phrase Structure (Chomsky 1995). If a maximal projection is nothing but its head, it should follow that they both have the same features. If a feature of the head can probe, then the same feature on the maximal projection should be just as capable of doing so:



To see how complex dependencies work, take the floating quantifier example above, repeated here for the reader's convenience:

(14) Strákarnir komust allir í skóla.
boys.the.NOM got all.PL.NOM to school
'The boys all managed to get to school.' (Sigurðsson 1991: 331)

A moved DP and the stranded quantifier agree in φ -features and their case morphology co-varies as well. I take it that the DP *strákarnir* is initially merged as a complement of the floating quantifier (Sportiche 1988). The floating quantifier probes the DP and they co-value their respective Case features:



The DP moves out of the QP and ends up being probed by T. Since the DP and the floating quantifier have co-valued their Case feature, [nominative] Case gets to be assigned to the two of them:



4. Proposal for Person Restriction

The hypothesis I would like to put forward is the following:

- (i) (1) and (3) involve a Complex Dependency.
- (ii) The Person-number restriction derives directly from (i).

My analysis is based on the assumptions listed here as (i) through (v).

(i) Structure of SE/quirky SU: [KP K [DP D NP]]

I assume that the quirky subject is made up of a DP and an extra layer of functional structure, which I refer to as K (following the usage in Bayer et al. (2001)). The reason why I posit this extra layer is because the φ -features of the DP are not accessible to probes. K triggers no agreement, which suggests it has no φ -features. In a way, K is comparable to P, which is also a barrier to probes. However, K must need Abstract Case, given the facts presented above concerning its inability to show up in non-finite clauses.

(ii) 3^{rd} person=no person; singular=no number

I also assume that what is traditionally referred to as 3^{rd} person should actually be considered simply no person (as in Noyer 1997, Sigurðsson 2000). Likewise, I take singular to be no number. Under the assumption that both 3^{rd} person and singular are absence of any [person] or [number] features we can understand why " 3^{rd} person singular" is homophonous with default forms – forms adopted by probes when they find no goal in their c-command domain.

(iii) Structure of vP: [vP K v [vP V OB]]

Thus, I take K (quirky subject or SE) to be the external argument. Additionally, I take v to have no Case feature to assign.

(iv) Minimal Compliance

"For any dependency D that obeys constraint C, any elements that are relevant for determining whether D obeys C can be ignored for the rest of the derivation for purposes of determining whether any other dependency D' obeys C." (Richards 1998: 601)



I assume the structure in (v) for the f-features of the probe, as in Rigau (1991), Taraldsen (1995) and Anagnostopoulou (2003). It has the consequence that [uperson] probes first and only after [uperson] has valued its features and has deleted can [unumber] probe.

Assumptions (iv)+(v) together imply a crucial consequence: since the [person] dependency goes first, it needs to obey Full Sharing. The [number] dependency can disobey Full Sharing thanks to Minimal Compliance.

Thus, the [person] restriction is derived as follows:

(i) The unvalued Case of K probes and finds the object. Their Case features are covalued:



(ii) The (K,OB) dependency is probed by $[u\phi]$ of T:



(iii) As mentioned, [uperson] of T probes first. Full Sharing ensures that T, K and the object have the same [person] value. Since K has no [person], the object cannot have [person] either. That is, the object must be 3rd-person. If the object is [1st] or [2nd], the dependency ends up with non-matching features and the derivation crashes. (iv) Let's assume that the [person] probe has been successful. [unumber] probes second. Minimal Compliance permits a violation of Full Sharing because the latter principle is satisfied by the [person] dependency. So [unumber] can Agree with K or the object. Since agreeing with K forces default (which is last resort), [unumber] agrees with OB_[plural].

Let's look at the Spanish SE case more closely. Recall that the SE construction could agree (in the third person) with the internal argument or not:

- (28) a. Se multaron unos lingüistas en el mercado ayer. SE fined.3rd.PL some linguists in the market yesterday 'Some linguists were fined in the market yesterday.'
 - b. Se multó (a unos lingüistas) en el mercado ayer.
 SE fined.3rd.SG ACC
 'Some linguists were fined in the market yesterday.'

In the (28a) example, *unos lingüistas* agrees with the verb. In (28b), the internal argument does not agree and is introduced by the particle A, an accusative case marker.

The contrast between (28a) and (28b) can be traced to a minimal difference in the properties of their respective v. In (28a), v does not assign accusative Case. As a consequence, SE and the object form a complex dependency that is probed by T:



In (28b), accusative Case assignment by v leads to immediate deletion of the uninterpretable features involved. SE, like a regular external argument, finds no Case feature in v that could value its own Case feature. There is no dependency between SE and the object. When T probes SE, they form a simple dependency. SE ends up with nominative Case and T with default ϕ -features:



This analysis leads to a direct prediction. The light verb that introduces an agent external argument exhibits a fairly predictable behavior, captured in Burzio's generalization (Burzio 1986): if v does not assign an external θ -role it does not assign accusative Case either. This entails that the agreeing SE must be an expletive but also, somewhat surprisingly, that the non-agreeing SE is a fully-fledged argument, bearing a θ -role (or alternatively, that the non-agreeing SE construction licenses a *pro* as external argument). The difference is hard to see intuitively but it can be detected if we place the two constructions in an obligatory control context. As we can see in example (31), the non-agreeing SE is able to control a PRO in the adjunct clause. Correspondingly, the ungrammaticality of (32) is due to the absence of a proper controller for PRO:

- (31) Se azotó a unos prisioneros antes de encerrarlos SE flogged.3rd.SG ACC some prisoners before of lock-up.INF *de nuevo*. of new
 'Some prisoners were flogged before they were locked up again.'
- (32) *Se azotaron unos prisioneros antes de encerrarlos SE flogged.3rd.PL some prisoners before of lock-up.INF *de nuevo*. of new

5. Spanish quirky subjects

As the reader may recall, the evidence indicates that Icelandic quirky subjects and Spanish SE are licensed by finiteness. In this section I show that Spanish quirky subjects are not licensed by finiteness. Since the dative experiencer is not involved with T, the theme can do so directly without forming a complex dependency. It follows that there is no person restriction.

There are two pieces of evidence that Spanish dative experiencers are not licensed by finiteness. The first is that the dative experiencer is perfectly comfortable in non-finite clauses that do not license a nominative argument or a SE (*pace* Fernández-Soriano 1999: 119). The examples in (33) show

evidence of this. (33a) shows that a Spanish quirky subject can be found in non-finite subject clauses. (33b) shows that it does not become PRO in a control context. (33c) shows that the nominative object does become PRO. The nominative object behaves like any other nominative argument while the experiencer behaves like any other non-nominative argument:

- (33) a. *Gustarle a María es imposible.* please.INF-DAT.3rd.SG DAT Maria is impossible 'It is impossible to please Maria.'
 - b. *Juan quiere gustarle a María*. Juan want.3rd.SG please.INF-DAT.3rd.SG DAT Maria 'Juan wants for Mary to like him.'
 - c. *Juan quiere gustar los libros. Juan want.3rd.SG like.INF the books (Intended meaning: Juan wants to like books)

The second piece of evidence involves control into adjuncts. Chomsky (1995) argues that nominals that establish a dependency with T can control into adjuncts. This suggestion is based on the following contrast:

(34) There arrived three men (last night) without identifying themselves.

(35) **Il est entré trois hommes sans s' annoncer*. (French) it is come.PTC three men without SE identify (Chomsky 1995: 274)

Adapting Chomsky's analysis somewhat, the internal argument in (34) is in a dependency with T, as is evident by the agreement patterns. The internal argument in the French example is not in a dependency with T and cannot control into the adjunct clause. Whatever the ultimate reason for this generalization, I assume that it is correct.

The Icelandic quirky subject is able to control into an adjunct clause, which confirms our earlier conclusion that it is licensed by T:

(36) Mér líkuðu bækurnar án þess að búast við því.
I.DAT liked books.the without to expect it
'I liked the books without expecting to.'
(Toribio 1993: 155; Ura 2000: 128)

It is not possible to construct a similar example in Spanish. In (37), we see that the subject of the verb usually translated as 'love', a regular nominative-

accusative verb, can control into an adjunct clause while the dative subject of 'like' cannot. (37c) shows that it is possible to construct a sentence with a meaning parallel to that of (37b) as long as the adjunct clause is finite without a controlled PRO:⁴

- (37) a. María ama a un hombre casado sin avergonzarse Maria love.3rd.SG ACC a man married without shame.INF *de nada*. of nothing 'Maria loves a married man without feeling any shame.'
 - b. *A María le gusta un hombre casado sin DAT Maria DAT.3rd.SG like.3rd.SG a man married without *avergonzarse de nada*. shame.INF of nothing (Intended meaning: 'Maria likes a married man without feeling any shame.').
 - c. A Maria le gusta un hombre casado DAT Maria DAT.3rd.SG like.3rd.SG a man married sin que le dé ninguna vergüenza. without that DAT.3rd.SG give.3rd.SG no shame 'Maria likes a married man without feeling any shame.'

I take the contrast between (36) and (37) to show that the Icelandic quirky subject forms a dependency with T while the Spanish one does not.

Thus, the dative experiencer is not structurally licensed by T in Spanish. What kind of structural Case does the experiencer get then? The key datum – well-known to Spanish linguists but so far not fully integrated into the analyses – is the fact that the presence of the dative clitic *le* is obligatory to license a dative experiencer:

- (38) a. *A María le gustan los libros*. DAT Maria DAT.3rd.SG like.3rd.PL the books 'Maria likes books.'
 - b. **A María gustan los libros.* DAT Maria like.3rd.PL the books

I propose that *le* is the Case assigner for the dative Subject.

Largely following Demonte (1995) (who builds on Marantz 1993), I assume that the clitic is a verbal morpheme. I further suggest that it is attached to v before v merges with VP (in Demonte's article le heads its own functional head). We get a structure like the following:⁵



With this configuration, the derivation proceeds like this. The experiencer v (unlike Icelandic) never has any Case, so it does not probe (Belletti and Rizzi 1988). The clitic is embedded within v, so it cannot probe the VP domain either. But the experiencer argument *a María* can probe. So it does, and finds the clitic. An Agree dependency is established that values the unvalued Case feature of the experiencer as dative.



Assume that the internal argument raises to Spec,v, propelled by its unvalued Case feature (following the theory of locality and dependencies argued for in López 2007). The possibility of object raising – and the creation of VOS orders – is well documented: Ordóñez 1997 and Zubizarreta 1998 provide alternative analyses for regular transitive VOS while Torrego 2002 explores the same phenomenon with experiencer verbs):



The internal argument in Spec, v can be probed by T:



As a result of the Agree dependency established between T and the internal argument, the former copies the φ -features of the latter. There is no [person] restriction because the object and T form a simple dependency.

The analysis presented in (42) suggests an interesting property of Spanish experiencer predicates that contrasts with Icelandic. In the latter language there is a clear asymmetry between the two arguments to the extent that only one of them – the experiencer – is a true subject in Spec,T. In Spanish experiencers, both arguments surface in Spec,v, where their respective Case features are valued. One would expect that if further DP-movement were to take place, either argument could be affected because they are both in the minimal domain of the same head and thus, essentially, symmetric. In the following, I show that indeed there is A-movement to Spec,T in Spanish experiencers and that either argument can raise.

In Spanish quirky constructions either the dative or the nominative argument can appear in pre-verbal position without any noticeable difference in meaning:

- (43) a. *A María le gustan los libros.* DAT Maria DAT.3rd.SG like.3rd.PL the books
 - b. *Los libros le gustan a María.* 'María likes books.'

Given this datum, one could ask two questions: (i) Which one is the subject and (ii) What is this preverbal position?

As for question (i), it seems that both arguments are equally "subjectly". For instance, a quirky subject can raise subject-to-subject:

(44) A María parecen gustarle los bombones. DAT Maria seem.3rd.PL like.inf-DAT.3rd.SG the chocolates 'Maria seems to like chocolates.'

Before we jump to conclusions, we need to make sure that (44) instantiates subject raising and not topicalization/dislocation. (45) instantiates the latter type of movement:

(45) A María parece que le gustan los bombones. DAT Maria seem.3rd.PL that DAT.3rd.SG like.3rd.PL the chocolates 'Maria seems to like chocolates.'

The difference between (44) and (45) can be tested easily by using intervention. As is well known, experiencer arguments intervene in raising to subject (see for instance Torrego 2002 for discussion of the Romance facts). The difference between (44) and (45) is clear and shows that (44) indeed exemplifies raising to subject:

- (46) a. **A María me parecen gustarle los bombones.* DAT Maria DAT.1st.SG seem.3rd.PL like-DAT.3rd.SG the chocolates
 - b. A María me parece que le gustan DAT Maria DAT.1st.SG seem.3rd.PL that DAT.3rd.SG like.3rd.PL *los bombones*. the chocolates 'Maria seems to me to like chocolates.'

One interesting feature of these constructions that is never mentioned is that the nominative object can also undergo raising. The intervention test proves to be revealing again:

- (47) a. Los bombones le gustan a María. the chocolates DAT.3rd.SG like.3rd.PL DAT Maria 'Maria likes chocolates.'
 - b. Los bombones parecen gustarle a María. the chocolates seem.3rd.PL like.INF-DAT.3rd.SG DAT Maria 'Maria seems to like the chocolates.'
 - c. *Los bombones me parecen gustarle the chocolates DAT.1st.SG seem.3rd.PL like.INF-DAT.3rd.SG *a María.* DAT Maria
 - d. Los bombones me parece que le gustan the chocolates DAT.1st.SG seem.3rd.PL that DAT.3rd.SG like.3rd.PL a María.
 DAT Maria.
 'It seems to me that Maria likes the chocolates.'

So, both arguments of the experiencer predicate can raise to Spec,T in a raising construction. This is markedly different from Icelandic, where only the experiencer is subject to raising (Sigurðsson p.c.). The conclusion is that whereas the Icelandic experiencer is privileged over the object in a manner clearly redolent of subjecthood, in Spanish both arguments are equally "subjectly".

The following reinforces this conclusion. Pre-verbal subjects in Spanish cannot be bare NPs. Some sort of determiner or modification is required (see Contreras 1974 for the classic analysis and Casielles 2004 for a recent approach and references therein):

(48) a. *Hombres no saben bailar. men not know.3rd.PL dance.INF
b. Los hombres no saben bailar. the men not know.3rd.PL dance.INF
'Men do not know how to dance.'

This is another property shared by quirky subjects (as noticed by Fernández-Soriano 1999: 109):

- (49) a. **A niños necesitados les gustan los regalos.* DAT children needy DAT.3rd.PL like.3rd.PL the gifts
 - b. A los niños necesitados les gustan los regalos. DAT the children needy DAT.3rd.PL like.3rd.PL the gifts 'Needy children like gifts.'

Again, this feature does not tease apart the experiencer argument from the nominative object. The nominative object in pre-verbal position cannot be a bare NP either:

- (50) a. **Regalos les gustan a los niños necesitados.* gifts DAT.3rd.PL like.3rd.PL DAT the children needy
 - b. Los regalos les gustan a los niños necesitados the gifts DAT.3rd.PL like.3rd.PL DAT the children needy 'Needy children like gifts.'

All-focus sentences (thetic judgments) can work as a good test to find out what the "true subject" of the sentence is. In Spanish, transitive all-focus sentences impose the orders SVO or AdjunctVSO. When an object is preposed, it is always dislocated with a topic or contrastive focus reading and as a result it remains outside focus projection – you have a categorical proposition. Consider (51). The answer to the question 'what happened?' is an all-focus sentence. Sentence (51a), with the object in situ, is felicitous in this sort of context while (51b), with a dislocated object, is not. Instead, (51b) would be appropriate in a context in which *el ascensor* were outside the scope of focus, as a discourse-anaphoric constituent. Thus (51) shows that a clitic-doubled fronted object cannot be part of a thetic proposition:

- (51) [Context: What happened last night?]
 - a. *Pues que los mecánicos estuvieron arreglando el ascensor.* well that the repair-men were fixing the elevator 'The repairmen fixed the elevator.'
 - b. *#Pues que el ascensor, lo estuvieron arreglando* well that the elevator ACC.3rd.SG were fixing *los mecánicos.* the repair-men

Since the subject is the only argument that can show up to the left of the verb in all-focus sentences, I try out the Experiencer_{DAT} V Theme_{NOM} and

the Theme_{NOM} V Experiencer_{DAT} orders to see whether focus can project all the way up in out of the blue sentences that trigger the all-focus interpretations. The hypothesis is that whichever argument can appear in pre-verbal position is the "subject", sitting in Spec,T. The result is surprising: focus can project in either case, with no detectable difference in information structure:

(52) [Context: What's going on?]

a.	Que	a	Juan	le	interesa	María.
	that	DAT	Juan	DAT.3 rd .SG	interest.3 rd .SG	Maria

b. *Que María le interesa a Juan.* that Maria DAT.3rd.SG interest.3rd.SG DAT Juan 'Juan is interested in Maria.'

So, according to three different tests, the two arguments of the psych predicate behave alike, both of them being equally "subjectly".

As for the position they go to, if we assume a simple clause structure it must be Spec,T. However, the properties of Spec,T in Spanish must be quite different from those of English Spec,T: the availability of VSO and VOS in Spanish suggests that this position is not connected with Case assignment or EPP. However, Spec,T is not a topicalized, A'-position (*contra* Alexiadou and Anagnostopoulou (1998) and Barbosa (2000), among others) because movement to Spec,T is of the A-type, sensitive to minimality effects created by clitics, as shown above. It seems that an adequate study of syntactic dependencies will have to consider forms of A-movement that are not Case/EPP triggered. I leave this for future research.

As pointed out at the beginning of this article, there is one class of experiencer predicates that does show the [person] restriction. This is exemplified in (3b,c), repeated here for the reader's convenience:

(3)	b. Se le	antoja	un helado.
	SE CL.DAT	r.3 rd crave.3 rd .8	G an icecream
	'She/he is	craving an ice-	-cream.'
	c. *Se le	antojo	уо
	SE CL.DAT	.3 rd crave.1 st .S	g I.nom

These experiencer predicates all have one feature in common: they include the clitic *se* (see Rivero 2004, this volume). We already know that this clitic gives rise to the [person] restriction in impersonal SE constructions while

regular experiencer predicates do not give rise to any restrictions in this language. Thus, it is very natural to attribute the ungrammaticality of (3c) to the presence of SE and not the experiencer predicate. In the following, I suggest an analysis exactly parallel to the one presented in section 3.

SE is the external argument of a light verb which selects for the experiencer v. The experiencer v has an external argument and selects for a lexical verb. The complement of this lexical verb has [uCase] and raises to Spec,v:

(53) T [$_{vP}$ SE v [$_{vP}$ OB [$_{v'}$ IO v($_{(exp)}$ [$_{VP}$ V t(OB)]]]]

Since both SE and the object have [uCase] they co-value it, forming an open dependency. This open dependency is probed by T. Since SE has no [person] the object must also be without a person feature (3^{rd}) . SE has no number feature, but Minimal Compliance allows T to agree with the object.

6. Conclusion

Icelandic quirky subjects and Spanish SE get a nominative Case in a dependency with T. This explains why they are unavailable in non-finite clauses and can control into adjuncts. The opposite properties of Spanish quirky subjects are explained because they are fully licensed by the clitic and never enter a dependency with T.

The [person] constraint in Icelandic and Spanish SE is analyzed as a consequence of a complex dependency between T, K and the internal argument. The lack of visible φ -features on K forces the internal argument to be without [person]. It should also be without [number] but Minimal Compliance allows for a violation of Full Sharing such that T agrees with the internal argument only.

In Spanish, the quirky subject is fully licensed by the clitic. As a result, there is no dependency linking T or the internal argument to the quirky subject. There is no complex dependency, but a simple dependency linking the internal argument and T, which exhibits normal agreement patterns.

Acknowledgements

The ideas presented in this chapter are more fully developed in López (2007). I would like to thank Gunnar Hrafn Hrafnbjargarson and Halldór Sigurðsson for their generous help with the Icelandic data. I would also like

to thank two anonymous reviewers as well as the editors of this volume for a number of relevant comments on an earlier version of this chapter – the remaining errors, unfortunately, are all mine. I gratefully acknowledge the financial support provided by DAAD and the Alexander von Humboldt Foundation as well as the hospitality of the University of Tübingen and ZAS, Berlin.

Notes

- 1. The distinction between a nominative-assigner finite T and a non-nominativeassigner non-finite T is too simplistic to deal successfully with the whole range of Spanish phenomena (see Mensching 1995). As an anonymous reviewer points out, SE and nominative case are possible in adjunct non-finite clauses in Spanish:
 - (i) Al trabajarse tanto en este banco,... to.the work.INF.SE so much in this bank 'Since people work so hard in this bank,...'
 - (ii) Al trabajar tanto el director,...
 to.the work.INF so much the director
 'Since the director works so hard,...'

Nevertheless, we should not lose sight of the important datum: those contexts that allow for nominative case also allow for SE and vice-versa, which leads to the conclusion that nominative case and SE are licensed by the same mechanism (a T with the right property).

- 2. Provided that, as Cinque (1988) shows, the subordinate predicate is transitive or unergative.
- 3. Notice that agreement between a predicate nominal and its argument cannot be accounted for in terms of φ -incompleteness (Chomsky 2000, 2001).
- 4. Montrul (1998) argues that the quirky subject does control into adjuncts. She provides the following example:
 - (i) Sin PRO_i saber por qué, a Juan_i le gusta María.
 Without know.INF for what DAT Juan CL.DAT like.3rd.SG Maria
 'Without knowing why, Juan likes Mary.' (Montrul 1998: 32)

PRO and the dative experiencer can indeed be coreferent. The issue is whether there is true control. First, in (i) PRO can also have an arbitrary reference. This is clearer in the following example:

(ii) Sin PRO saber por qué, la tormenta estalló.
 without know.INF for what the storm exploded
 'Without knowing why, the storm began'

Second, PRO can also be coreferent with a higher Subject:

 (ii) Carlos_i dice que, sin PRO_i saber por qué, a Juan le Carlos says that without know.INF for what DAT Juan CL.DAT gusta María. like.3rd.SG Maria
 'Carlos says that without knowing why, Juan likes Mary.'

This behavior contrasts with true control, as in purpose clauses:

(iii) Carlos_i dice que, para PRO_{*1} impresionar a los periodistas, Carlos says that in.order.to impress ACC the journalists Juan se puso una corbata nueva Juan SE put.on a tie new
'Carlos says that, in order to inpress the journalists, Juan put on a new tie.'

In (iii) control is obligatory and cannot come from the matrix clause. I conclude that (i) does not instantiate true control

5. The experiencer could actually be KP. Since I do not have any evidence one way or another, I avoid making an additional claim.

References

Alexiadou, Artemis and Elena Anagnostopoulou 1998 Parametrizing AGR: word order, V-movement and EPP-checking. Natural Language and Linguistic Theory 16: 491–539. Anagnostopoulou, Elena The Structure of Ditransitives: Evidence from Clitics. Berlin/New 2003 York: Mouton de Gruyter. Barbosa, Pilar 2000 Clitics: A Window to the Null-Subject Property. In Portuguese Syntax, João Costa (ed.), 31–93. Oxford: Oxford University Press. Bayer, Josef, Markus Bader and Michael Meng Morphological Underspecification Meets Oblique Case: Syntactic and 2001 Processing Effects in German. Lingua 111: 465-514. Belletti, Adriana and Luigi Rizzi Psych Verbs and θ -Theory. *Natural Language and Linguistic Theory* 1988 6:291-352. Boeckx. Cedric 2000 Quirky Agreement. Studia Linguistica 54: 354-380. Bonet. Eulàlia 1994 The Person-Case Constraint: A Morphological Approach. MIT Working Papers in Linguistics 22: 33–52. Burzio, Luigi 1986 Italian Syntax. Dordrecht: Kluwer.

Casiellas, Eu	genia				
2004	The Syntax-Information Structure Interface. Evidence from Spanish				
	and English. New York: Garland.				
Chomsky, No	am				
1995	Categories and Transformations. In <i>The Minimalist Program</i> , 219–394. Cambridge, MA: MIT Press.				
2000	Minimalist Inquiries: The Framework. In <i>Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik</i> , Roger Martin, David Michaels and Juan Uriagereka (eds.) 89–155. Cambridge, MA: MIT Press.				
2001	Derivation by Phase. In Ken Hale: a Life in Language. Michael				
	Kenstowicz (ed.), 1–52. Cambridge, MA: MIT Press.				
Contreras, He	eles				
1974	A Theory of Word Order with Special Reference to Spanish. Amster- dam: North Holland Academic Publishers.				
Demonte, Vie	bleta				
1995	Dative Alternation in Spanish. Probus 7: 5–30.				
Dobrovie-So	rin, Carmen				
1998	Impersonal SE Constructions in Romance and the Passivization of Unergatives. <i>Linguistic Inquiry</i> 29: 399–437.				
Fernández-So	oriano, Olga				
1999	Two types of Impersonal Sentences in Spanish: Locative and Dative Subjects. <i>Syntax</i> 2: 101–140.				
Jónsson, Jóha	nnes Gísli				
1996	<i>Clausal Architecture and Case in Icelandic.</i> Doctoral dissertation, University of Massachussets, Amherst.				
López, Luis					
2007	Locality and the Architecture of Syntactic Dependencies. London: Palgrave-MacMillan.				
Marantz, Ale	с С				
1993	Implications of Asymmetries in Double Object Constructions. In <i>Theoretical Aspects of Bantu Grammar</i> , Sam Mchombo (ed.). Stanford, CA: CSLI Publications.				
Masullo, Pase	cual				
1992	Incorporation and Case Theory in Spanish. A Crosslinguistic Per- spective. Unpublished doctoral dissertation, University of Washington.				
McGinnis, M	aryJo				
1998	Locality of A-Movement. Doctoral dissertation, MIT, Cambridge.				
Mendikoetxe	a, Amaya				
1999	Construcciones con <i>se</i> : medias, pasivas e impersonales. In <i>Gramática descriptiva de la lengua española</i> , Ignacio Bosque and Violeta Demonte (eds.), Vol. 2, §26.1.6 1631–1711. Madrid: Real Academia Española / Espasa Calpe.				

Mensching,	Guido
1995	Infinitive Constructions with Specified Subjects. Oxford: Oxford University Press
Montrul, Silv	vina
1998	The L2 Acquisition of Dative Experiencer Subjects. <i>Second Language Research</i> 14: 27–61.
Noyer, Rolpl	1
1997	Features, Positions and Affixes in Autonomous Morphological Struc- ture. New York: Garland.
Ordóñez, Fra	nncisco
1998	Post-Verbal Asymmetries in Spanish. <i>Natural Language and Linguis-</i> <i>tic Theory</i> 16: 313–346.
Raposo, Edu	ardo and Juan Uriagereka
1996	Indefinite SE. Natural Language and Linguistic Theory 14: 749-810.
Richards, No	orvin
1998	The Principle of Minimal Compliance. <i>Linguistic Inquiry</i> 29: 599–629.
Rigau, Gemr	na
1991	On the Functional Properties of AGR. <i>Catalan Working Papers in Linguistics</i> 1: 235–260.
Rivero, Marí	'a-Luisa
2004	Spanish Quirky Subjects, Person Restrictions and the PCC. <i>Linguistic Inquiry</i> 35: 494–502.
this vol.	Oblique Subjects and Person Restrictions in Spanish: A Morphological Approach.
Sigurðsson, l	Halldór Ármann
1989	Verbal Syntax and Case in Icelandic. Doctoral dissertation, University of Lund.
1991	Icelandic Case Marked Pro and the Licensing of Lexical Arguments. <i>Natural Language and Linguistic Theory</i> 9: 327–363.
1996	Icelandic Finite Verb Agreement. Working Papers in Scandinavian Syntax 57: 1–46.
2000	The Locus of Case and Agreement. <i>Working Papers in Scandinavian Syntax</i> 65: 65–108.
2002	Agree and Agreement: Evidence from Germanic. Working Papers in Scandinavian Syntax 67.
Sportiche, D	ominique
1988	A Theory of Floating Quantifiers and its Corollaries for Constituent Structure. <i>Linguistic Inquiry</i> 19: 425–449.
Taraldsen. K	nut Tarald
1995	On Agreement and Nominative Objects in Icelandic. In <i>Studies in Comparative Germanic Syntax</i> , H. Haider, S. Olsen and S. Vikner (eds.) 307–327. Dordrecht: Kluwer
	$(u_0, j, J_0) = J_1$. Dolutont. Kluwel.

Thráinsson, H	Höskuldur			
1979	On Complementation in Icelandic. New York: Garland.			
Toribio, Jacq	ueline Almeida			
1993	Lexical Subjects in Finite and Non-Finite Clauses. Cornell Working			
	Papers in Linguistics 11: 149–178.			
Torrego, Esth	her			
2002	Arguments for a Derivational Approach to Syntactic Relations Based			
	on Clitics. In Derivation and Explanation in the Minimalist Program,			
	Samuel D. Epstein and Daniel Seely (eds.), 249-268. Oxford: Black-			
	well.			
Ura, Hiroyuk	i			
2000	Checking Theory and Grammatical Function Changing in Universal			
	Grammar. Oxford University Press.			
Zaenen, Ann	ie, Joan Maling and Hoskuldur Thráinsson			
1985	Case and Grammatical Functions: The Icelandic Passive. Natural Lan-			
	guage and Linguistic Theory 3: 441–483.			
Zubizarreta, 1	María-Luisa			
1992	On the Relationship of the Lexicon to the Syntax. Unpublished doc-			
	toral dissertation, MIT.			
1998	Prosody, Focus and Word Order. Cambridge, MA: MIT Press.			

On C-to-T φ-feature transfer: The nature of Agreement and Anti-Agreement in Berber

Hamid Ouali

1. Introduction

In recent developments of Minimalism, Chomsky (2000, 2001 and 2004) argues that agreement results from a Probe-Goal relation established between a head X and an argument YP. Chomsky proposes that Subject-verb agreement is obtained upon establishing an Agree relation between T and the subject (in Spec- ν P). T however is not merged bearing φ -features but inherits these φ -features from C. In light of this hypothesis, this paper ex°amines the nature of feature inheritance or Feature Transfer and its implications for the nature of agreement and the so-called Anti-Agreement Effect (AAE) (Ouhalla 1993, 2005b) in Berber.

Chomsky (2000, 2001, 2004) eliminates Spec-Head as a syntactic relation and proposes an analysis for how agreement is obtained since Spec-Head agreement is also eliminated. Alternatively, Chomsky argues that agreement is obtained as a result of an Agree operation that takes place upon establishing a Probe-Goal relation between a probing head and a target goal which is in the Probe's c-command domain. Subject-verb agreement, for example, is obtained as a result of a relation established between T, which bears uninterpretable and unvalued φ -features, and the subject, which bears among its features an uninterpretable unvalued Case feature, in Spec-*v*P. Bearing an uninterpretable and unvalued feature is a pre-condition for a Head or Phrase to be an active Goal or an active Probe respectively. Chomsky (2004) hypothesizes that T inherits its φ -features from C and writes:

T functions in the Case-agreement system only if it is selected by C, in which case, it is also complete. Further, in just this case T has the semantic properties of true Tense. These cannot be added by the φ -features, which are uninterpretable; they must therefore be added by C. Hence T enters into feature-checking only in the C-T configuration... (Chomsky 2004: 13)

Chomsky (2005b: 9) also writes:

In the lexicon, T lacks these features. T manifests them if and only if it is selected by C (default agreement aside); if not, it is a raising (or ECM) infinitival, lacking φ -features and tense. So it makes sense to assume that Agree- and Tense-features are inherited from C, the phase head.

In nonfinite clauses, the assumption is that T is not selected by C, and the argument that T does not have φ -features is reasonable since C, from which it inherits these features, was never merged. However, the assumption that in finite clauses, when C is merged, T inherits the φ -features from it is logically incomplete, and should in fact allow three logical possibilities: 1) C transfers the φ -features to T, 2) C does not transfer the φ -features to T and 3) C transfers the φ -features to T but also keeps a copy. In this paper and building on Ouali (2006), I will show that all these theoretically viable options are empirically attested. Option (1), which I call DONATE, and which is sketched in (i) below, is the case of simple declarative clauses:

i. C T Subject Decalaratives \square_{DONATE} \square_{AGREE}

Option (2), which I call KEEP, is the case of local subject extraction namely subject wh-clauses, clefts and subject relative clauses, which yield the so-called Anti-Agreement Effect (AAE) (Ouhalla 1993, 2005). This is schematized below (the representation shows the subject in situ prior to extraction; the position that is relevant for Agree to be established):

ii. C T Subject
$$AAE$$

Option (3), which I label SHARE, is the case of object local extraction, and subject or object long distance extraction. Local object extraction is schematized below (here also the subject and object are in situ):



I will argue that the application of DONATE, KEEP and SHARE is ordered with DONATE applying first and if that yields a derivation crash, KEEP then applies and if that in turns yields a crash SHARE applies. I will show that the ordering of application of these three mechanisms is empirically motivated given Berber facts, and theoretically desirable given principles of economy.

The paper is organized as follows: section 2 presents an analysis of subject-verb agreement in English and Berber, section 3 proposes an analysis of Anti-Agreement, section 4 discusses object extraction and long distance extraction, section 5 presents a note on wh-questions in English, and section 6 discusses the different cases of Feature Transfer and their order of application.

2. Subject-verb Agreement: Analysis

Chomsky (2001, 2004) argues that T inherits its φ -features from C; i.e. upon merging C, it transfers its [-interpretable] φ -features to T, and only then T, now having [-interpretable] φ -features, probes the subject. As a result of an Agree operation defined in (1), these φ -features are valued and deleted as illustrated in (2) and (3).

(1) Agree

The probe P agrees with the closest matching goal in D.

- a. Matching is feature identity
- b. D is the sister of P. [D=c-command Domain of P]
- c. Locality reduces to closest c-command (Chomsky 2000: 122)
- (2) John drinks coffee



Given this analysis, the questions that beg to be answered are:

- 1. Why does T inherit the C's φ -features, or in other words why does C transfer its features to T?
- 2. Does C always transfer its φ -features to T? Can it for example not transfer these features at all or transfer them but keep a copy?

Let us consider question 1. The only possible motivation and reason for why C transfers its φ -features to T is minimal search; the subject is closer to T than to C in terms of c-command path. One could argue that "closeness" in terms of c-command is more computationally efficient than the opposite. In principle, C could retain its φ -features hence remain an active probe and enter into an agreement relation with the subject. In this case it would have to probe the subject over T violating "locality conditions" (see Chomsky 2004 among others).¹

Lets us now take up question 2 which is: does C transfer its φ -features to T without keeping a copy of these features?

The answer to this question, considering the example from English represented in (3), is yes for the following reason:

These φ -features are [-interpretable] and presumably make any head that bears them 'active'. If C transfers them to T and retains a copy, now both C and T are active and would act as Probes. Minimal search would enable T, now bearing [-interpretable] φ -features to probe the subject. After the Agree operation takes place the φ -features on T are valued as well as the case feature on the DP subject. C, now bearing a copy of the [-interpretable] φ features will not be able to find an active goal because the case on the subject DP has been valued and hence it is inactive and invisible to C. Therefore, if C retains a copy of φ -features, the derivation is doomed to crash. This leads us to conclude that, in declarative finite clauses such as (2), when C is merged it transfers its φ -feature to T without keeping a copy, let us call this: DONATE.

(4) DONATE

Transfer φ -features from C to T without keeping a copy.

We just showed that C cannot keep a copy of the φ -features in English declarative sentences, but now the big puzzle is how do we ever get wh-questions in English? Consider the following sentence in (5) represented in (6).

(5) Who drinks coffee?



With the assumption that the wh-word has a [-interpretable] wh-feature whereas C has a [+interpretable] wh-feature, let us see what happens if we apply DONATE.² C transfers its φ -features to T without keeping a copy. Now T is active by virtue of bearing [-interpretable] φ -features whereas C is not. T probes and Agrees with the wh-subject, and as a result of this agreement the φ -features on T are valued as well as the case feature on the wh-subject. The [-interpretable] wh-feature on the wh-word is not valued however, and will not be able to be valued because the head that is needed for this to happen, namely C, is now inactive because it transferred its [-interpretable] φ -features to T. The derivation is doomed to crash. Let us leave this as an open problem for now and I will return to it in section 5.

Let us now ask another question and that is: can C keep the φ -features and not transfer them at all? I will show that this is exactly the case that we find in the subject extraction facts in Berber.

3. Subject extraction and Anti-Agreement Effects

Verbs in Tamazight Berber (TB) are always inflected for subject agreement. The agreement element can co-occur with the subject as illustrated in (7). TB is also a pro-drop language as illustrated in (8).

(7) *ytsha wrba thamen* 3SG.eat.PERF boy honey 'The boy ate honey' (8) *pro ytsha thamen pro* 3SG.ate.PERF honey 'He ate honey'

There are three contexts which show lack of subject-verb agreement in Tamazight and in Berber in general as pointed out by researchers such as Ouhalla (1993, 2005b). These are: subject-wh clauses, subject-relative clauses, and cleft-constructions. The obligatory lack of agreement between the verb and the subject, triggered by extraction of the subject is called, as previously mentioned, AAE (Ouhalla (1993, 2005), Richards (2001) and Ouali and Pires (*to appear*)). If we look at the two examples in (9) and (10), we see that the subject-verb agreement is overtly marked on the verb.

th-eSla	thamttut	araw	VSO
3SG.FEM-see.PERF	woman	boys	
'The woman saw t	he boys'		
	<i>th-eSla</i> 3SG.FEM-see.PERF 'The woman saw t	th-eSlathamttut3SG.FEM-see.PERFwoman'The woman saw the boys'	th-eSlathamttut araw3SG.FEM-see.PERF womanboys'The woman saw the boys'

(10) thamttut thfla araw SVO woman 3SG.FEM.see.PERF boys 'The woman saw the boys'

This subject-verb agreement is suppressed in the subject extraction environment. (11) is an example of a subject wh-extraction which shows AAE on the verb; and as illustrated by (12), full subject-verb agreement is impossible.³

- (11) *mani thamttut ag Slan araw* which woman COMP see.PERF.*Part* boys 'Which woman saw the boys'
- (12) **mani thamttut ag thSla araw* which woman COMP 3SG.FEM.see.PERF boys 'which woman saw the boys?'

The same pattern is observed in subject relative clauses as in (13) and (14), and clefts in (15) and (16) where subject verb agreement is again impossible.

(13) *thamttut ag Slan araw* woman COMP see.PERF.*PART* boys 'The woman who saw the boys...'

- (14) *thamttut ag thSla araw woman COMP 3SG.FEM-see.PERF boys 'the woman who saw the boys...'
- (15) *thamtutt-a ag Slan araw* woman-this COMP see.PERF.*PART* boys 'It was this woman that saw the boys'
- (16) *thamtutt-a ag thSla araw woman-this COMP 3SG.FEM-see.PERF boys

One of the main questions that I will address is: how can one account for these facts under a derivational approach and given the Probe-Goal Relation and the Agree operation adopted here and also given the hypothesis that T inherits the φ -features from C?⁴ Note that Agree holds between T which is specified for a full set of unvalued φ -features and the subject which is specified for valued φ -features and an unvalued case feature; and according to Chomsky's analysis the case feature of the DP gets valued and deleted as a "reflex" or a result of full agreement in φ -features between the probe T and the goal DP. If full agreement is a pre-requisite for case valuation and deletion, how can one derive the Berber subject extraction facts where T presumably is not specified for a full set of φ -features?

Take for example the wh-sentence from Tamazight Berber repeated in (17).

(17) *mani thamttut ag Slan araw* which woman COMP see.PERF.*PART* boys 'Which woman that saw the boys'

Given Chomsky's proposal that C transmits its φ -features to T, which I called DONATE in (4), let us examine the representation of this sentence in (18).



If DONATE applies, the following will take place:

- (a) T will probe the wh-subject and agree with it; agree meaning the [-interpretable] φ -features on T are valued and the case feature on the subject is also valued.
- (b) C, now bearing only [+interpretable] wh-feature, will not be active and the subject, which is still active by virtue of bearing an uninterpretable wh-feature will not get this feature checked. Recall that this is exactly the same puzzle I pointed out regarding English Wh-questions to which we will return in section 5.

Notice that the Numeration is now exhausted and there is no hope for the wh-subject to get its wh-feature valued and the ultimate result would be 'crash'.⁵ I assume then that there is a second option and that is: C does not transmit its φ -features to T, in for example wh-clauses, for the reasons mentioned in (a) and (b) above. Descriptively, AAE seems to be a repair strategy that results from enabling C to probe the wh-word and Agree with it. How does that take place at the feature level? When C is merged it does not transmit its [–interpretable] φ -features to T, and therefore remains active.

T bears [+interpretable] tense features and since it does not receive the [-interpretable] φ -features it will remain inactive. The wh-subject bears valued [+interpretable] φ -features, unvalued [-interpretable] Case, and [-interpretable] wh-feature. Principles of minimal search will force C to search for the closest goal, which is the active subject. As a result of Agree the φ -features on C are valued and the wh-feature on the subject is also valued. The question arises if the φ -features on T are "suppressed" how does the Case feature on the DP get valued and deleted?⁶ There is a good reason here to assume that this happens as a result of Agree with the φ -complete C. Since according to Chomsky 2000 and 2004, case valuation is a reflex of a Match relation and Agree between the φ -complete T and the DP, there is absolutely nothing that would prevent the same to happen when a φ -complete C probes a subject DP. Let us call this second option that I just laid out KEEP:

(19) KEEP

No φ -features transfer from C to T.

As a result of KEEP we expect not to have "T-agreement", i.e. no agreement between T and the subject, hence the so-called AAE is deduced.

As first noted in Ouhalla (1993) and discussed in Ouali & Pires (*to appear*), The AAE disappears in Berber when the subject is long-distance extracted; i.e. when it is extracted from an embedded clause to the front of a matrix clause. If we look at (20), we see that the subject is in post-verbal position and the verb is inflected for full agreement.

(20) *ydda ali* leave.IMP.3SG.MASC ali 'Ali left'

On the other hand, in (21), a cleft construction where the subject is in preverbal position, we see that the verb shows AAE.

(21) Ali ag dan Ali COMP leave.IMP.PART 'It was Ali that left'

In (22) the subject is extracted from the embedded clause all the way to the front of the matrix clause and as we can see only full subject-verb agreement is allowed on the embedded verb.

(22) Ali ay thenna Miriam_yedda /*dan Ali COMP say.PERF.3SG.FEM Miriam_leave.PERF.3SG.MASC/*.PART 'It was Ali that Miriam said left'

The same question that was raised before is again raised here about how an agreement theory could reconcile these facts. The next section proposes an analysis.

4. Evading Agreement Suppression Effects

As noted in the previous section, when the subject is Long-distance-extracted, full subject-verb agreement must occur as illustrated in (22) and the whquestion in (23).

(23) *ma ag inna ali theSla* (**Slan) araw* who COMP 3.SG.said ali 3SG.FEM.saw (**saw.PART*) boys 'Who did Ali say saw the boys'

Let us examine the derivation of the sentence above CP phase by CP phase.

(24)	та	ag	inna	ali [_{CF}	• ma C [T	[theSla	[vP ma	theSla	araw
				φ-Featur	re Transfer	AGREE]		
	Who	COMP	said	ali	who	3S.F.saw	wh	o 3S.F.saw	boys

By virtue of DONATE repeated in (25) (first option available), the embedded C, which does not bear a wh-feature, transfers it φ -features to T and T then agrees with the wh-subject.

(25) DONATE

Transfer φ -features from C to T without keeping a copy.

Up to this point the [-interpretable] wh-feature on the subject has not been valued yet. Does the derivation crash? The answer is no because the Numeration has not been exhausted yet which therefore means that there still is hope for the wh-subject. At the embedded CP level we get "T-agreement" hence full subject-verb agreement and now the wh-subject moves the intermediate Spec-CP. Let us then examine what happens at the matrix CP level.

Who COMP said ali 3S.aid [CP who 3S.F.saw [vP who 3SF.saw boys

The first available option is that DONATE by which the matrix C, which bears a [+interpretable] wh-feature, transfers its φ -features to T as represented in (26). Remember that at this point we have not valued the wh-feature of the wh-word yet. When C transfers its φ -features to T it will not remain active and consequently it will not act as a probe and Agree with the subject. The Numeration has been exhausted, and there remains no hope for the subject yielding a fatal crash. Now there is no other solution but to try KEEP repeated in (27).

(27) KEEP

NO φ -feature Transfer from C to T.

Given KEEP the matrix C retains its φ -features, and therefore is active. Minimal search forces C to search for the closest goal which is the matrix subject. Even though C bears a wh-feature, this feature, as we established before, is valued and [+interpretable], which means Agree with matrix subject would go through; C gets its φ -features valued and the matrix subject gets its case feature valued. Now C is inactivated and will not probe the active embedded wh-subject which is in the intermediate Spec-CP. Here again the Numeration is exhausted, no hope remains for the subject, and the derivation faces a fatal crash.

Only at this stage and as a last resort do we invoke a third option, namely SHARE, which I formulate as follows:

(29) SHARE

Transfer φ -features from C to T and keep a copy.

Since this is a last resort option, the derivation up to the embedded CP (lower CP phase) proceeds as explained in (24) appealing to DONATE, because the Numeration at the point of the intermediate CP is not exhausted and there is still hope for the subject. As we reach the matrix CP, and as we

just saw we exhaust both DONATE and KEEP, and our last hope is SHARE. Let us examine how SHARE operates.

(30) [CP ma [C ag [T [inna [vP ali inna [CP ma thesia [vP ma thesia araw ^{q-Feature Copy} + Transfer

The matrix C, which bears a [+interpretable] wh-feature, transfers its [-interpretable] φ -features to T and keeps a copy of these features. As a result, both C and T are now active probes. Minimal search enables T to find the closest active DP, namely the matrix subject. Agree takes place, now both matrix T and matrix subject are inactive and "T-agreement" is obtained. C, still active, probes the closest active DP, which is the embedded wh-subject in intermediate Spec-CP.⁷ Again, Agree takes place, the φ -features on C are valued as well as the wh-feature on the wh-subject. Now the derivation converges.⁸

Let us now recapitulate the analysis that I have proposed so far:

- (31) a. If C does not bear a wh-feature, or any left-periphery feature, C transmits its φ features to T by virtue of DONATE. This is the case in simple declarative sentences as in (32), represented in (33).
 - b. If C bears a wh-feature or a similar feature, appealing to DONATE and transferring the φ -features to T causes a fatal crash. As a repair strategy KEEP is invoked and C does not transfer its φ -features to T. This is the case in 'local' wh-clauses, clefts and subject-relative clauses, hence AAE as in (34) represented in (35).
 - c. In long distance extraction clauses, the embedded C does not bear a wh-feature or a similar feature, and transmits its φ -features to T, hence the evasion of AAE as shown in (36) and represented in (37). Matrix C however can make use of neither DONATE nor KEEP, for the reasons explained in detail above. As a last resort we appeal to SHARE and this is the case in (36) and (37).
- (32) *iswa ali aman* 3SG.drink.PERF Ali water 'Ali drank water'
- (33) [C [T [AspP iswa [vP ali iswa [VP iswa aman]]]]] _{q-feature Transfer} [VP iswa aman]]]]]
- (34) ma ag swan aman who COMP drink.PERF.PART(AAE) water 'Who drank water?' ^{NO φ-feature Transfer}
- (35) [_{CP} ma ag [T [AspP swan [vP ma swan [VP swan aman]]]]]
- (36) *ma ay thenna Fatima iswa aman* who COMP 3S.F.say.PERF Fatima 3S.M.drink.PERF water 'Who did Fatima say drank water?'

This analysis makes a prediction that an "agreeing" C i.e. a C that does not transmit its φ -features to T, should be different from a non-agreeing C i.e. a C that transmits its φ -features to T. This is exactly what we observe in Tamazight Berber and in Berber in general. In local extraction contexts such as (38) Comp is obligatory otherwise the sentence becomes ungrammatical as in (39):

- (38) *ma ag swan aman* who COMP drink.PERF.PART water 'Who drank water?'
- (39) **ma swan aman* who drink.PERF.PART water 'Who drank water?'

In long-distance extraction, on the other hand, Comp is disallowed in the embedded clause as illustrated by (40) and (41). This, I argue, is strong empirical evidence for C agreement or lack thereof. In other words, my proposal shows how C agreement is disallowed when T agreement (subject verb agreement) is allowed and how C agreement is allowed where T agreement is disallowed.

- (40) *ma ay thenna Fatima iswa aman* who COMP 3S.F.say.PERF Fatima 3S.M.drink.PERF water 'Who did Fatima say drank water?'
- (41) *ma ay thenna Fatima ay iswa aman who COMP 3S.F.say.PERF Fatima COMP 3S.M.drink.PERF water 'Who did Fatima say drank water?'

An even stronger prediction is that in long distance extraction contexts and given my proposal that matrix C transfers its φ -features to T and keeps a copy (SHARE), we expect to see both "T-agreement" and "C-agreement" when this happens in the matrix domain. This prediction is born out as we see in (40) repeated in (42):

(42) *ma ay thenna Fatima iswa aman* who COMP 3S.F.say.PERF Fatima 3S.M.drink.PERF water 'Who did Fatima say drank water?'

If we drop "T-agreement" we get an ungrammatical sentence as we see in (43).

 (43) *ma ag nan Fatima iswa aman who COMP say.PERF.PART Fatima 3S.M.drink.PERF water 'Who did Fatima say drank water?'

Also, if we drop "C-agreement" we get, again, an ungrammatical sentence as in (44):

(44) **ma thenna Fatima iswa aman* who 3S.F.say.PERF Fatima 3S.M.drink.PERF water 'Who did Fatima say drank water?'

Similarly, we expect to see both T-Agreement and C-Agreement in Object extraction contexts in Berber, since T will agree with the subject and C will agree with, for example, a wh-object. In other words we expect SHARE to be the only convergent option and to observe both subject-verb agreement and an obligatory Comp. These predictions are borne out as shown in (45), (46), and (47).

(45) *mani lekthab* *(*ay*) *theqra therbat* which book *(COMP) 3S.F.read.PERF girl 'Which book did the girl read?'

- (46) *lekthab-a* *(*ay*) *theqra therbat* book-this *(COMP) 3S.F.read.PERF girl 'It was this book that the girl read'
- (47) *lekthab* *(*ay*) *theqra therbat ur-ighuda* book-this *(COMP) 3S.F.read.PERF girl NEG-1S.M.good 'The book that the girl read is not good'

The example in (45) is an object wh-question, (46) is an object cleft-construction and (47) is an object relative clause. As shown in all these cases, Comp or C-Agreement is obligatory as expected if we consider the derivation of (45) represented in (48) below.



As shown in (48), we have a case of SHARE. Before we detail the analysis let us ask the question of what happens if we apply DONATE and KEEP? If DONATE applies C will transfer its φ -features to T, and C will cease to be active. T will probe the subject and T-Agreement will be achieved, yet the [-valued] [-interpretable] wh-feature on the object will not be valued and deleted and the derivation will ultimately crash. If, on the other hand KEEP applies, C will not transfer its φ -features to T, which means it will remain active and probe the closest active DP. The subject in Spec- ν P is the closest goal to C, and since C is φ -complete it will agree with the subject and value its case; the φ -features on C should conversely get valued and deleted. The same problem arises again here and that is the wh-feature on the wh-object will fail to get valued and deleted and the derivation will yet again crash. With SHARE, the derivation proceeds as follows: C transfers its φ -features to T and keeps a copy. C and T are both active; T probes the closest goal i.e. the subject, and as a result T-Agreement is obtained as marked by the subject-verb agreement, and C probes the closest active DP which is now the wh-object, since the subject has been inactivated by T. C-Agreement is then obtained as marked by the obligatory Comp. This is additional compelling evidence for the different φ -Transfer options that I have discussed so far namely: DONATE, KEEP, and SHARE.

5. A Note on English Wh-Questions

Now we return to the big question we left un-answered regarding how we ever get Wh-questions, such as (49) represented in (50), in English.

(49) Who drinks coffee?



Notice that DONATE (Transfer) is not going to help us here. If C transfers its φ -features to T, it will cease to be active hence it will not probe and value the wh-feature on the wh-subject. KEEP (No Transfer) however,

seems to be a viable option. C retains its φ -features, remains active and enters into a Probe-Goal Match relation with the subject. C is φ -complete and therefore should be able to value the case feature on the DP. It should also be able to value the wh-feature on the subject. Although it looks like what we get in English subject wh-questions is "C-agreement", it may be morphologically similar to "T-agreement", the reason why we do not observe the same effects we see in Tamazight Berber.

6. DONATE, KEEP and SHARE and their order of application

We will now shift gears to a larger question regarding the order of application of DOANTE, KEEP and SHARE. I pointed out at the beginning of this article that these operations are ordered in terms of principles of economy, computation efficiency and minimal search. They should not be thought of as constraints ranked in an Optimality Theory fashion. An alternative approach would be not to complicate the rule system by, what seems like, "stipulating" the ordering and to let some of the empirical burden fall on the bare-output conditions, namely feature interpretability at the interfaces. The application of these operations would be "free" and only derivations that meet bare-output conditions will ultimately converge. Berber facts however provide strong evidence for order of application of DONATE, SHARE and KEEP. This evidence comes mainly from the Anti-Agreement cases such as (17) repeated in (51).

(51) *mani thamttut ag Slan araw* which woman COMP see.PERF-PART boys 'Which woman saw the boys?'

If we consider the derivation of the sentence above we notice that both KEEP and SHARE should be convergent. Before I elaborate on this point recall that DONATE was not a viable option because if C does not keep φ -features it will eventually not value the wh-feature of the subject and the derivation will crash. What happens if KEEP applies? As I discussed in detail in the previous sections, C will have φ -features and will therefore be active, it will probe the closest active goal namely the wh-subject. C, by virtue of being φ -complete, will be able to value the case feature of the latter, and since it is also specified for a wh-feature it will value the wh-feature on the subject. Alternatively, if SHARE applies both C and T will have φ -features, hence both will be active. T will probe the subject, being

 φ -complete, it will value the subject's case feature and will get its own φ -features valued and deleted; as a result T-Agreement should obtain. The wh-feature on the subject is however still unvalued and the subject therefore should still remain active and visible to the still active C. C should probe the subject, the φ -features on C should get valued and deleted and so should the wh-feature on the subject and as a result C-Agreement should obtain. As we can see both KEEP and SHARE are convergent options, but only KEEP is empirically attested as shown by (52) vs. (53).

- (52) *mani thamttut ag flan araw* which woman COMP see.PERF.PART boys 'Which woman saw the boys?'
- (53) *mani thamttut ag thila araw which woman COMP 3S.F.see.PERF boys 'Which woman saw the boys?'

As we can see, (53), where both C-Agreement and T-Agreement are marked, is ungrammatical, whereas, (52) where only C-Agreement is marked, is grammatical. This may confirm that the ordering of DONATE, KEEP and SHARE follows naturally from principles of economy. In declarative sentences, C does not have any left-periphery feature and neither does the subject. KEEP seems to be, naturally, the first option given that T is closer to the subject than C. In wh-questions and other subject extraction cases, C possesses a left-periphery/"discourse" feature and so does the subject. It seems "natural" that applying KEEP, an operation, that requires only one Probe-Goal relation to value and delete all the uninterpretable features of both the subject and C would be preferred over an operation, namely SHARE, that requires two probe goal relations, hence two Agree operations, between two different probes i.e. C and T and the same goal namely the subject. Also, it seems natural that SHARE only applies when T and C probe two different goals as is the case in Long-distance extraction and in object wh/cleft/relative clauses. I therefore conclude that the ordering in (54) is both theoretically and empirically motivated:

(54) DONATE > KEEP > SHARE

7. Conclusion

Given Chomsky's (2001, 2004, 2005b) proposal that T inherits its ω -features from C, I argued that the hypothesis that C is first merged from the lexicon bearing ω -features allows three logical possibilities namely: a) C transfers its φ -features to T (DONATE), b) C does not transfer its φ -features to T (KEEP), and c) C transfers its φ -features to T and keeps a copy (SHARE). I argue that all these options are possible, and that they might be "ordered" naturally under principles of efficient computation i.e. economy and "Minimal Search", with (a) DONATE being the most "economical", and (c) SHARE being the last resort and least "economical". It remains to be seen if this analysis can be extended to the vP domain, given Chomsky's hypothesis within DbP (Chomsky 2001) that V is to v what T is to C. It will be interesting to see if DONATE, KEEP, and SHARE, which are hypothetically attested between C and T are also attested between v and V. It will also be interesting to see how this relates to unaccusatives, accusatives and double object constructions. Besides these two open questions, there are other questions that are worth pursuing. For example, why do certain features participate in "Transfer" whereas others do not? As detailed in this paper, φ-features are transferred from C to T, but the WH-feature, or any other left-periphery feature for that matter, is not. Also, are there differences in "Transfer" for different languages? In this paper I suggested that DONATE is "used" to derive declaratives in English whereas KEEP is invoked to derive Wh-questions; how does the analysis explain the subject-object asymmetry in English? If DONATE, KEEP and SHARE are Universal, is ordering, provided it is needed, parameterized? All these are potentially interesting questions that need to be addressed if one considers extensions of the φ -Feature Transfer model. Also, one could ask the question why doesn't C transfer both φ -fetaures and the wh-feature to T in wh-questions for example, and have T probe the subject and value both its Case and Whfeature, since T now, under this analysis, bears a wh-feature? Maybe be this is the case, and maybe AAE is a morphological reflex of this. In fact this might explain why we get the same subject-verb agreement in declaratives and subject wh-questions in English. I will leave this alternative open for future research.

Notes

- 1. See Hiraiwa (2001) for a different view according to which both C and T can enter in an Agree relation simultaneously (Multiple Agree).
- 2. Notice that this assumption is very crucial and seems to be unavoidable. If we reverse the situation and assume that C bears a [-interpretable] wh-feature whereas the wh-word bears a [+interpretable] wh-feature, the feature on C will not get valued. Why? Because T, having received φ -features from C will probe the wh-subject and Agree with it. After this takes place the wh-subject becomes inactive because the only feature that made it active was the unvalued case. C will not get its wh-feature checked and the derivation will crash.
- 3. I will use the word participle (Part) to gloss the impoverished form of agreement marking AAE, following Ouhalla (2005b).
- 4. See Richards (2001) and Ouhalla (2005b) for alternative analyses. Richard relies on Spec-Head relation to account for agreement and anti-agreement, a relation that is not compatible with the Probe-Goal approach adopted in this paper. Ouhalla (2005b) presents an analysis which shows that Anti-Agreement is a result of merging a featurely impoverished participle that in return requires merging a T specified for the feature [Class]. The requirement to check this feature forces DP movement through Spec-TP, hence the correlation between subject extraction and AAE. Ouhalla's approach does not assume Chomsky's hypothesis that T inherits its φ -features from C. I will therefore not review his work here.
- 5. "hope" in the same sense used in Boskovic. (2001).
- 6. By suppressed I mean T never received the φ -features from C, forcing default agreement morphology to appear on the verb (AAE).
- 7. For the sake of discussion I am abstracting away from the "possible" movement of the Wh-subject to Spec of matrix vP. One could assume that this movement takes place and adopt Richards (1997) tucking-in mechanism in Spec-vP and the same results should hold.
- 8. Note that Agree applies upon establishing a c-command Probe-Goal Match relation and it applies independently of Move. Move or internal merge is motivated by other independent mechanisms. For Chomsky, it is the EPP and for Epstein and Seely (2006) it is case. At this point I have nothing to contribute to this. The intermediate movement of the wh-word to the intermediate Spec-CP in sentences such as (36) represented in (37), is not forced by feature-checking, but rather by other mechanisms e.g. locality, as proposed by Boskovic (2002), or also as the result of the need for elements to move to the edge of the phase in order to check features in a higher projection later. The jury is still out on which of these different approaches is on the right track, although approaches that try to do away with stipulative mechanisms such as the EPP seem to be favorable on Minimalist grounds.

References

Boskovic, Ze	eljko			
2002	A-movement and the EPP. Syntax 5: 167–218.			
Chomsky, No	oam			
1991	Some notes on economy of derivation and representation. In <i>Principles and parameters in comparative grammar</i> , R. Freidin (ed.).			
	Cambridge, MA: MIT Press.			
1995	The Minimalist program. Cambridge, MA: The MIT Press.			
2000	Minimalist inquiries: the framework. In <i>Step by Step: Essays on</i> <i>Minimalist Syntax in Honor of Howard Lasnik</i> , R. Martin, D. Michaels and J. Uriagereka (eds.). Cambridge, MA: MIT Press.			
2001	Derivation by phase. In <i>Ken Hale: A Life in Language</i> , M. Kensto- wicz (ed.). Cambridge, MA: MIT Press.			
2004	Beyond explanatory adequacy. In <i>The cartography of syntactic struc-</i> <i>tures. Vol.3, Structures and beyond</i> , Adriana Belletti (ed.). Oxford: Oxford University Press.			
2005a	Three Factors in Language Design. <i>Linguistic Inquiry</i> 36(1): 1–22.			
2005b	On phases. To appear in <i>Foundational Issues in Linguistic Theory</i> , C. P. Otero et. al. (eds.). Cambridge, MA: MIT Press.			
2007	Approachng UG from Below. In <i>Interfaces</i> + <i>Recursion</i> = <i>Language?:</i> <i>Chomsky's Minimalism and the View from Syntax-Semantics</i> , U. Sauerland and HM. Gärtner (eds.) 1–29. Berlin/New York: Mouton de Gruyter			
Corbett Grey	ville G			
1998	Morphology and Agreement. In <i>A Handbook of Morphology</i> , Arnold Zwicky and Andrew Spencer (eds.), 191–205. Oxford: Blackwell.			
Embick, D. a	nd Rolf Noyer			
2001	Movement After Syntax. Linguistic Inquiry 32(4): 555–595.			
Epstein, S. D	., E. Groat, R. Kawashima and H. Kitahara			
1998	A Derivational Approach to Syntactic Relations. Oxford: Oxford University Press.			
Epstein, S. D	. and N. Hornstein (eds.)			
1999	Working Minimalism. Cambridge, MA: MIT Press.			
Epstein, S. D	., A. Pires and T. D. Seely			
2005	EPP in T: More Controversial Subjects. Syntax 8(1): 65-80.			
Epstein, S. D. and T. D. Seely				
2006	<i>Transformations and Derivations</i> . Cambridge: Cambridge University Press.			
Epstein, S. D. and T. D. Seely (eds.)				
2002	Derivation and explanation in the Minimalist Program. Oxford: Blackwell.			

Frampton, J. and S. Guttman

1999 Cyclic Computation, a Computationally Efficient Minimalist Syntax. *Syntax*, 2, 1-27.

Hiraiwa, Ken

2001 Multiple Agree and the Defective Intervention Constraint in Japanese. MIT Working Papers in Linguistics 40: 67–80. Cambridge, MA: MIT Press.

Kayne, R.

2003 Pronouns and Their Antecedents. In *Derivation and Explanation in the Minimalist Program*, S. Epstein and D. Seely (eds.), 133–158. Oxford: Blackwell Publishing.

Ouali, Hamid

2006 *Unifying Agreement Relations: A Minimalist Analysis of Berber.* Ph.D. dissertation, University of Michigan, Ann Arbor, Michigan.

Ouali, Hamid and Acrisio Pires

to appear Complex Tenses, Agreement, and Wh-extraction. *Berkeley Linguistics Society Proceedings*. Berkeley, California.

Ouhalla, Jamal

- 1988b *The Syntax of Head Movement: a study of Berber.* Ph.D. dissertation, University of College London.
- 1989c Clitic Movement and The ECP: Evidence from Berber and Romance languages. *Lingua* 79: 165–215.
- 1993 Subject-Extraction, Negation and the Anti-Agreement Effect. *Natural Language and Linguistic Theory* 11: 477–518.
- 2005a Clitic-Placement, Grammaticalization and Reanalysis in Berber. In *The handbook of comparative syntax*, G. Cinque and R. Kayne (eds.), 607–638. Oxford/New York: Oxford University Press.
- 2005b Agreement features, Agreement and Antiagreement. *Natural Language and Linguistic Theory*.

Richards, Norvin

2001 *Movement in language: Interactions and architectures.* Oxford: Oxford University Press.

Quirky Expletives

Marc D. Richards

1. Overview

This paper offers a minimalist reinvestigation into the PCC-like effect that obtains in Icelandic dative-nominative constructions, where first- and second-person nominative objects are banned in the domain of quirky subjects (see Sigurðsson 1990, 1996, Boeckx 2000, Anagnostopoulou 2003, 2005, Rezac 2004 and many others). Both the nature of the dative intervention effect induced by the quirky subject and the source of the obligatory thirdperson agreement on the finite verb are reconsidered from the perspective of current minimalist Case theory. I argue that Icelandic PCC and partial agreement effects with nominative objects are, essentially, the same phenomenon as definiteness effects in (English) existential constructions and in the genitive of negation in Russian, in that they all reduce to Case Filter violations under incomplete matching (i.e. partial Agree with a defective φ probe). The long-observed but previously poorly understood commonalities in behaviour between quirky subjects and expletives are explained and formalized via the notion of a minimal unit of activeness – a cased default phi-set, which I dub a quirky expletive and which serves to reactivate an inherently case-marked, syntactically-inert DP for Agree with a higher probe.

I proceed as follows. Section 2 puts forward a strong hypothesis about feature visibility that provides a firm conceptual basis for Case features under the Strong Minimalist Thesis (SMT). This hypothesis, which renders defective (inactive) intervention untenable, implies that dative interveners must be syntactically active, leading to a new analysis of the source of thirdperson agreement in the Icelandic construction (section 3). The Icelandic PCC effect and its 'pure Expl' counterpart, which I argue to be the classical definiteness restriction on existential constructions in languages like English, are then given a unified analysis in section 4 in terms of Agree with a partially deactivated (defectivized) probe. Finally, in section 5, the Russian genitive of negation is likewise shown to fall into line with Icelandic PCC as a Case effect arising from partial Agree with a defective probe. In short, the notions of partial Agree and defective probes render it possible for a purely uninterpretable feature (Case) to yield interpretive effects in the form of (person-sensitive) definiteness effects – an interesting outcome that simply follows from a full exploitation of the Probe-Goal system.

2. Background: Case, Agree, and Defective Intervention

As is well known, the role played by (abstract/structural) Case in the Probe-Goal-Agree system of feature checking (Chomsky $MI^1 \ et \ seq.$) is distinctly marginal: Case is a purely uninterpretable feature (that is, it lacks an interpretable counterpart) that serves only to activate goals for Agree, rendering interpretable φ -sets visible to probes. As such, Case implements the Activity Condition on Agree. As conceived in MI/DbP/BEA, Agree establishes a feature-valuing relation between heads, such that uninterpretable features of a *probe* seek a matching set of interpretable (lexically valued) features on a *goal*. This Agree operation, which replaces the spec-head configurations of earlier versions of checking theory and thus the need for movement to feed agreement, is subject to numerous conditions on its application; the composite definition in (1) pulls together these various conditions from MI and DbP.

- (1) Definition: **Agree**(**P**[robe],**G**[oal]) if
 - a. P c-commands G
 - b. P and G are *active* (DbP:(3a))
 - c. P matches G for feature F (where Match = nondistinctness)
 - d. G is interpretable (= valued) for F (DbP:6) ... with the result that...
 - e. P values and deletes uF on G (if P is φ -complete, i.e. full Match); G values and deletes uF on P

Of central importance to the current paper are the conditions in (1b) and (1e). As will become relevant in section 3, (1e) is the condition that complete match between the features of probe and goal is required for valuation to obtain. This 'maximization principle' (DbP: 15, 45) implies that a defective (incomplete) probe cannot value a goal unless that goal is similarly defective. Condition (1b) is the Activity Condition (AC), the requirement that probe and goal be active (visible) for Agree. Probes are active by virtue of being, by definition, unvalued features; goals, on the other hand, are sets of interpretable features (cf. (1d)) and must therefore be rendered active/visible for Agree by means of designated activation features (Case features, for the φ -system).

In this way, the AC captures, directly, the idea that Case and φ -agreement are two sides of the same coin (cf. Schütze 1997:126, Martin 1999: 16, Boeckx 2003, Rezac 2004: ch. V, and many others) – the one cannot be valued without valuation of the other. This yields so-called *Inverse Case Filter* (ICF) effects (cf. Bošković 2002, Rezac 2004), i.e. derivations that crash due to the requirements of the *probe* going fatally unsatisfied (unvalued) when the *goal* has already been Case-valued (and is thus deactivated ('frozen') for further Agree, under AC). As illustrated in (2), such ICF-violating configurations arise where the would-be goal has already been valued by a closer probe (P₁), as in (2a–c), or where that would-be goal is inactive for independent reasons (e.g. it has inherent or lexical case, as in (2d)).²

- (2) 'Inverse Case Filter' (ICF) = $*P_{(2)} \dots (\sqrt{P_{(1)}}) \dots \sqrt{G}$
 - a. * It seems [t was told Mary [that Bill is a liar]]
 - b. * A lot of people seem [t are intelligent]
 - c. * There seem [that a lot of people are intelligent]
 - d. * There seems to a strange man [that it is raining outside]

As (2c–d) show, these effects occur irrespective of movement, obtaining equally with 'pure' (long-distance) Agree, and so cannot be reduced to the (independent) EPP requirement on T.

Equally, AC also yields the effects of the Case Filter 'proper', i.e. the requirement that an argumental DP must be assigned Case (or, in present terms, have its Case valued) – cf. Bošković (1997: 140ff.). These Case Filter (CF) effects arise where the requirements of the *goal* go fatally unsatisfied (unvalued) when the *probe* has already been fully valued and is thus inactive for further Agree. This is illustrated in (3), where a single probe (T) attempts to value two distinct goals; these sentences thus crash due to an unvalued Case feature.

- (3) <u>'Case Filter</u>' (CF) = $\sqrt{P} \dots \sqrt{G_{(1)}} \dots *G_{(2)}$
 - a. *John is afraid Mary
 - b. *It arrived a man
 - c. *It seems John to be happy
 - d. *It was told John that Mary left

The AC in (1b) thus yields both ICF and CF effects with a single device – the Case/activation feature. Therefore, despite the marginalization of Case features to mere activating diacritics on interpretable φ -sets in the current,

AC-based Agree system, these features, and indeed the AC itself, seem empirically well motivated, and perhaps indispensable (contra numerous recent attempts to eliminate Case features and/or AC; see, e.g., Nevins 2004, Rezac 2004^3). Nevertheless, from the minimalist perspective (i.e. SMT), it is still necessary to ask why Case features (and thus the effects in (2)–(3)) should exist at all.

In addressing this long-standing question from the fresh perspective of Probe-Goal Agree, Chomsky (DbP: 4 (2c), BEA: 14 (10ii)) offers the following rationale: Case is necessary for identifying and determining goals, without which probes could not be valued. In order for this rationale to go through, however, it would have to be true that goal DPs are completely invisible to the syntax (i.e. to probes) in the absence of unvalued Case features. That is, Case features conform to SMT by the above rationale only if we assume (4), which elevates AC to the status of an interface condition (see Richards 2004, 2006):

(4) Feature visibility (syntax) / 'Strong Activity Condition'
 Only unvalued features are visible to the syntax (Probe-Goal etc.)

Clearly, though, (4) is not what Chomsky assumes. Interpretable and uninterpretable formal features alike have always played a role in syntactic computation under standard minimalist assumptions. In this connection, perhaps the greatest challenge to (4) in the current theory is Chomsky's (MI) mechanism of defective intervention (DI), an independent innovation which allows inactive elements to intervene for Agree. As defined in (5), DI severely undermines our SMT-conforming rationale for Case in (4) by weakening the activating role of Case – deactivated (Case-valued) φ -sets remain syntactically visible. That is, DI provides for intervention by inactive DPs, so that valued features intervene without themselves being a potential goal for Agree (i.e. without themselves being able to value the probe in question).

(5) <u>Defective intervention</u> (MI: 123 (42), 129; DbP; Chomsky 2005; Rezac 2004; Hiraiwa 2005) In structure $\alpha > \beta > \gamma$, where > is c-command and β and γ both match probe α , inactive β blocks matching (and thus Agree) between α and γ .

The conceptual problem raised by (5)/DI is that, by compromising (4), it deprives us of a necessary role for Case. Under DI, Case is a departure

from SMT, since goals (interpretable φ -sets) are visible to probes irrespective of whether they have unvalued Case or not. The question thus arises as to why the system would have Case/activeness at all. That is, why bother to render DPs active if active and inactive DPs alike are visible to probes anyway?

Perhaps, then, DI is better motivated from the empirical angle. Chomsky offers just three empirical arguments for DI. Firstly, it yields superraising and (certain) MLC effects (cf. MI: 128f. (47)): in (6a), Agree(T, *John*) is blocked by the inactive intervener *it*; similarly, in (6b), Agree(C, *what*) is blocked by the inactive intervener *who*. Secondly, DI provides an empirical argument for the claim that T (unlike C and v^*) is not a phase head (see BEA: 21f., Chomsky 2005: 18), since if it were, then the copy of *what* in outer spec-*v* in (7) should defectively intervene for Agree(T, *John*). Only if C is the phase, and thus operations on the C-T probe cycles 'simultaneous' at this higher phase level, can the relevant DI effect be obviated. Finally, DI yields the lack of long-distance nominative agreement across in-situ quirky subjects in Icelandic (cf. MI: 130f. (51)), as illustrated in (8), where (number-) agreement between matrix T and the embedded nominative DP is blocked by the inactive intervener in (8b) but not in (8a), where the intervener is displaced out of the way.

- (6) a. * John T seems [CP that it is likely [Tdef t_{John} to win]]
 b. * What C do [TP you wonder [CP who [TP t_{who} fixed t_{what}]]]
- (7) [CP What did [TP John T [$_{vP}$ t_{what} [$_{vP}$ t_{John} [VP read t_{what}]]]]]
- (8) a. $M\acute{e}r$ $p\acute{o}ttu$ T t_{mér} [pær vera duglegar] Me-DAT thought-3PL they-NOM to-be industrious
 - b. Pað finnst/*finnast T [einhverjum stúdent Expl find-3SG/*3PL some-DAT student-DAT tölvurnar ljótar] the-computers-NOM ugly-NOM (Holmberg & Hróarsdóttir 2003:1000(13))

The empirical validity of the original DI proposal, then, hinges on just these three cases. In order to maintain (4) and thus the simplest explanation of (2)/(3) (i.e. the explanation in terms of (1b)/AC), we have to eliminate DI, which means that we need to find plausible alternative explanations of (6)–(8).

As far as the MLC effects in (6) are concerned, these can arguably be reduced to Chomsky's (MI/DbP) *Phase Impenetrability Condition* (PIC)

once we recognize passive/unaccusative (defective) v as a ('strong') phase (see Legate 2003, Richards 2004 on the status of v_{def} as a phase):

(9) a. * John T seems [CP that it is [vP ... [AP likely [Tdef t_{John} to win]]]]
b. * What C do [TP you [vP wonder [CP who [TP t_{who} [vP fixed t_{what}]]]]]

Two (or more) phase heads now intervene between the relevant probe and goal, so that Agree is blocked by phase boundaries rather than by inactive interveners. Essentially, then, the intervention effect in (6)/(9) is one of absolute rather than relativized minimality.

The lack of the supposed intervention effect in (7) falls away if we simply abandon the DI hypothesis, i.e. the assumption that inactive nominals intervene, replacing it instead with (4), i.e. the assumption that only active (unvalued) elements should be visible to probes and thus act as interveners. The absence of intervention by what in (7) then becomes trivial, as nonintervention is precisely what we expect if there is no such thing as DI: the copy of what in spec-v is simply inactive (having received accusative Case via Agree(v, who)) and is thus invisible to any further φ -probing from above. By renouncing DI, then, the AC/(1b) can simply do the job that it was designed to do, in line with (4).⁴ The system thus attained would seem conceptually simpler than one that invokes DI, since now either a feature is visible (i.e. active) as a potential goal or it is not; any further distinctions (such as 'visible for Match but not for Agree/Value', e.g. it in (6a), and 'visible for Match and Move but not for Agree/Value', e.g. the quirky subject in (8a))⁵ are departures from this arguably optimal state of affairs and can now be eliminated.

This leaves the Icelandic anti-agreement effects in (8), in which inherent dative subjects intervene for Agree with nominative objects, still unaccounted for. Indeed, these would seem to present the strongest case for DI in the literature, as discussed and elaborated in the DI-based analyses of Holmberg & Hróarsdóttir (2003), Rezac (2004), Sigurðsson & Holmberg (this volume) and others. In the following section, I propose an alternative, DI-less analysis of the basic Icelandic paradigm which strengthens the case for Case not only by eliminating DI, but also by reducing a further property of the Icelandic paradigm – the PCC-like agreement restriction against first- and second-person nominative objects – to a Case Filter effect akin to that in (3). That is, the Icelandic 'PCC' emerges as the result of a terminally unvalued Case feature (along much the same lines as the analysis of Anagnostopoulou (2003)). This analysis will then be shown in sections 4–5 to extend straightforwardly to cover a range of seemingly disparate phenomena outside of Icelandic and PCC effects.

3. Partial Agree: Expl as the source of 3rd person

The patterns of verbal agreement in a subset of Icelandic quirky-subject (QS) constructions, namely those in which QS appears with a nominative object, have received much attention in the literature since they were first described and analysed by Sigurðsson in the early nineties (see, especially, Sigurðsson 1996, Taraldsen 1995, and Boeckx 2000). The paradigm is illustrated in (10)–(12), showing the three types of syntactic environment in which DAT-NOM structures occur: those where QS is the dative-experiencer argument of unaccusatives (the 'psych verbs' of Belletti & Rizzi 1988), as in (10), and of raising predicates, as in (11), and those where QS is the passivized dative subject of ditransitives, as in (12). In such environments, where a dative subject occurs with a nominative object (or embedded nominative subject) such that both are licensed by matrix T (hence nominative on the second argument), three agreement restrictions famously occur (cf. Sigurðsson 1990, 1996, 2001; Taraldsen 1995; Boeckx 2000; Anagnostopoulou 2003; Rezac 2004; Sigurðsson & Holmberg, this volume; and many others). These are given in (13).

- (10) a. *Henni leiddust strákarnir / þeir* Her-DAT bored-3PL the-boys-NOM/ they-NOM
 - b. **Henni leiddumst við* Her-DAT bored-1PL we-NOM
 - c. **Henni leiddust við* Her-DAT bored-3PL we-NOM
 - d. **Henni leiddist við* Her-DAT bored-3SG we-NOM
- (11) a. *Mér höfðu fundist þær vinna vel* Me-DAT had-3PL found they-NOM to-work well
 - b. **Mér höfðum fundist við vinna vel* Me-DAT had-1PL found we-NOM to-work well
- (12) a. *Henni voru sýndir þeir* Her-DAT were-3PL shown they-NOM
 - b. **Henni vorum sýndir við* Her-DAT were-1PL shown we-NOM

- (13) Agreement restrictions in Icelandic DAT-NOM configurations
 - a. The nominative object can only be third person.
 - b. Agreement with the nominative object is *partial* (number only).
 - c. T's [uPerson] is always valued to $\{3\}$.⁶

Thus, in addition to the syntactic restrictions (13a-b) on nominative objects in the domain of QS, there is an additional restriction (13c) on the morphological agreement that may be realized on T: only third-person agreement is possible, irrespective of the person value of the dative QS (e.g. first-person *mér* in (11)).

Boeckx (2000) equates (13a) with the Person-Case-Constraint (PCC; cf. Bonet 1991, 1994), as illustrated by the familiar French example in (14a). The PCC would seem to be a robust fact about UG, appearing (with minor modifications) in Romance (Boeckx 2000), Basque, Greek (Anagnostopoulou 2003), Breton and Finnish (Rezac 2004), amongst many other languages; even English exhibits such effects, as in (14b–c), insofar as the pronouns are realized weak.

(14)	a.	Jean le /* me lui a recommandé	(French)
		Jean it / me him has recommended	
	1.	II 1	

- b. *He showed them it/*you/*me*
- c. *He showed you me

Following Anagnostopoulou 2003, Rezac 2004, I take the PCC to be a colicensing constraint that arises where two arguments (goals) relate to the same functional head/probe (T in the case of the Icelandic DAT-NOM construction), such that where a single head/probe relates to two DPs, the second DP cannot be first- or second-person. That is, the PCC obtains in the multiple Agree configuration in (15).⁷

(15) PCC: single probe, multiple goals $[P \dots G_{DAT} \dots G_{NOM/ACC]} \rightarrow *NOM/ACC-_{1/2}$

Recent minimalist analyses of these phenomena, including MI, Anagnostopoulou (2003), Rezac (2004), attribute the Icelandic PCC effect to QSinduced partial Agree (with or without DI – see below). The relevant derivations all proceed along much the same lines: T first relates to the higher argument (dative QS), as a result of which T's person probe [uPerson] is 'knocked out', defaulting to third person; T's remaining probe [uNumber] then continues probing, agreeing with the nominative DP, hence (13b) (i.e. Agree with the nominative DP is only for number – if at all: see Sigurðsson & Holmberg (this volume) for a compelling survey and analysis of dialectal variation in the availability of number agreement across Icelandic. The present paper has nothing to say about the number-intervention effect induced by QS in varieties B and C of Sigurðsson & Holmberg's typology).

For Chomsky and Rezac, QS is a defective intervener that blocks full Agree between T and the nominative object (it is inactive by virtue of its inherent dative case). In support of this analysis, Chomsky (MI: 149, note 90) observes that the same agreement restriction obtains in certain expletive (Expl) constructions in English, namely "list readings":

(16) Q: Who's still here?

A: There is/*am only me There remains/*remain only me There is/are only us

Here again, only number agreement is possible with the associate, and person agreement is always third-person. Expl, then, appears to trigger the same partial-Agree effect as a 'defective intervener': it knocks out T's person probe, yielding default third-person agreement and allowing only number agreement with the associate.

This analysis, and the connection it draws with expletives, is certainly an insightful one; however, there are a number of stipulations that render it less than fully transparent. Firstly, (13c) lacks a principled explanation: it remains unclear where the third-person agreement on T actually comes from. Why should the T-QS (and Expl-T) relation always result in third-person agreement, even when QS is first- or second-person? The authors claim that QS, as a defective intervener, cannot value T itself (it is visible only for Match, not Agree). Instead, it triggers the 'absorption' of T's person probe, and it is this 'Absorb' relation between T and the (displaced) QS that is claimed to yield a default valuation of T's person to {3}. Not only does this Absorb operation seem ad hoc and somewhat ill-defined (it is something more than Match but less than Agree), but it must further be stipulated only to result in the suppression of T's *person* feature (i.e., number remains unaffected). It would be preferable to derive this result, if possible.⁸

Secondly, the analyses fall short of deriving (13a), i.e. the PCC-like restriction to third-person nominative objects. To yield this result, the assumption is made that third-person is 'absence' of person. It follows that only 'personless' (i.e. third-person) DPs are able to match T's remaining probe [uNumber] and thus be Case-valued (by (1e)): first-/second-person DPs fail to fully match T's probe, and so Case on such DPs remains unvalued due to failed Agree. The PCC effect/(13a) thus reduces to CF. Whilst this reduction of Icelandic PCC to CF is surely along the right lines (the analysis proposed below makes the same claim), the notion that third-person is lack of person (on all DPs) seems too strong a claim – see Nevins (2007) for recent criticism, and below for a refinement of this claim.

Finally, there is the question of why QS and Expl should pattern together in this way. QS and Expl do not constitute anything like a natural class on the assumptions of the MI system. Chomsky (MI) characterizes Expl as a minimal, defective probe ([uPerson]) that merges directly into spec-TP and probes T for a value; QS, on the other hand, merges as a φ complete argument within T's domain and relates to T as a defective intervener, not as a probe.

To address these potential weaknesses, we might wish to explore an alternative approach with the following properties: (i) third-person on T is not a default probe-value resulting from DI, but rather the result of transparent, canonical Agree with a default *goal*; (ii) third-person is only the absence of person where this value is independently predictable (and thus properly subject to underspecification) – namely on *indefinites*, which are always (interpreted as) third-person (i.e., there are no semantically first- or second-person indefinites, thus a third-person specification on indefinite DPs would seem genuinely redundant); (iii) Expl merges low, in the same position as QS (i.e. spec-v), and thus relates to T in the same way that QS does – as T's *goal*.

Starting with point (iii), there are in fact independent reasons for assuming a low merge-site for TP-Expl in the Probe-Goal system of MI/DbP/ BEA. It is already clear that Expl must be able to raise to spec-T in at least some cases, namely in raising constructions such as There seem [(there) to have been caught several fish] (though see Bošković (2002) for a dissenting view). For this reason, Chomsky MI: 125 proposes that Expl is a simple head with a defective and uninterpretable φ -set, perhaps simply [uPerson], as noted above (see also BEA: 12), thus rendering it active for probing and raising from embedded TP in the complement of raising predicates, such as in the present example. However, as discussed in Richards (2004), Richards & Biberauer (2005), this view of Expl as probe raises a number of technical issues that Chomsky leaves unresolved. Most pressingly, we might ask how Expl's [uPerson] is valued from the spec-T position. Any Agree operation initiated by Expl in this position is countercyclic (Expl is not the root node; it does not project), and should fail due to the lack of an active and/or interpretable goal (see Richards 2004 for details). Further, under the assumptions

of OP, only phase heads may act as probes, and Expl is not assumed to be a phase head.

The simplest solution to these problems is to treat Expl as T's (defective) *goal* rather than as a (defective) probe. That is, Expl is a defective interpretable φ -set merged low in spec- ν (where it can be probed and valued by T like any other EPP-satisfying category) and rendered active by a Case feature like any other nominal relating to T. Expl then raises to T on the back of a proper Agree operation. Thus Expl is not a probe [uPerson] but rather a goal [iPerson]_{Case}, the minimal goal necessary for agreeing with T. As such, we may assume that its person specification is the default, unmarked value, i.e. third-person (cf. *it*). Expl, then, can be characterized as in (17).

(17) $Expl = [3Person]_{Case}$

The agreement restriction (anti-person-agreement) in (16) now follows without the problem of the previous analyses mentioned above. T's person is no longer 'absorbed' or forced to default to third-person via Agree with [uPerson]; rather, its specification as third-person is the result of full, canonical Agree with (17), i.e. with the interpretable [3person] on Expl.

With (17) in place, we can now return to the Icelandic QS/PCC effects, since (17) also provides the key to answering the question of where T's 'default' third-person comes from in (10)–(12). Let us take as our starting point Chomsky's conjecture that quirky case is inherent case plus structural Case, as in (18).

(18) Chomsky's claim (MI: 127; DbP: 43, note 8):

Quirky case is "inherent case with an additional structural Case feature"

Given a system that embraces DI, (18) makes very little sense, for the same reason that Case features in general are deprived of a rationale under DI (see previous section). In other words, why would a structural Case feature be added to an inherently Case-marked DP if the latter remains visible to the syntax anyway (i.e. for Match/DI-driven movement, as in (8a))? The additional Case feature (and thus the very existence of quirky subjects) is thus unmotivated under DI, contributing no extra effect at the interface (in violation of Full Interpretation and interface economy, cf. Reinhart 1995, Fox 2000, DbP: 34).

However, if we maintain the strong activeness hypothesis in (4) and thus reject DI, then the addition of structural Case to an inherently Case-marked DP makes full sense. Given (4), inherently Case-marked DPs are expected

to be completely syntactically inert (inactive, invisible) by dint of lacking an unvalued Case feature; this is attested by (19a). The inertness of English inherent case (the PP-experiencer) thus contrasts with the visibility (for Match/Move) of the equivalent Icelandic QS in (19b).

(19)	a.	* <i>Her seems (to) t</i> _{her} [<i>John to like horses</i>]	
	b.	Henni virðist t _{henni} [Jóni líka hestarnir]	(Icelandic)

Since QS may be the only DP available to satisfy (value) T's morphological requirements ($[u\phi]/EPP$), as in (20), it follows that inactive dative experiencers/QS have to be rendered T-active in order to ensure Full Interpretation can be met.

(20)	a.	Mér leið	ð vel		(Icelandic)	
		Me-DAT felt-3SG well				
	b.	Stelpunum	var	hjálpað		
		The-girls-DA	T was-38	G helped		

It follows, then, that structural Case must be added to inherent case in order to *reactivate* an inherently-case-marked DP for probing by finite T (and thus raising for T's EPP), resulting in QS. This may seem an obvious conclusion, but it is one that only follows from the premises (i.e. the inactiveness of inherent DPs, and the need to satisfy T's morphological requirements) if there is no such thing as DI.

Summarizing, QS may indeed be sensibly viewed as inherent case with an added structural Case feature, in line with Chomsky's conjecture in (18). The added structural Case feature is sanctioned at the interface, in conformance with Full Interpretation, in that it makes a computational difference: it allows an otherwise unavailable Agree relation to obtain between QS and T. This result follows only if we abandon DI and think of the T-QS relation as one of canonical Agree, so that QS needs reactivating. Since DPs are rendered active by Case/activation features, the reactivation of QS must involve the addition of a structural Case feature.

However, a problem arises at this point. Case features have no independent status under current minimalist assumptions: Case is not a probing feature (it does not drive operations or participate in Agree independently of φ -checking, cf. (2)–(3)). Rather, Case is simply the reflex of an uninterpretable φ -set (cf. Kawashima & Kitahara 2004: 209) on probes, and an activating diacritic on goals (interpretable φ -sets). This Case-agreement relation is captured via AC/(1b): there is a maximum of one Case feature per φ -

set (hence the ICF effects in (2)), and there can be no Case-checking without φ -checking (hence the CF effects in (3)). In short, Case features *cannot be added in isolation*; rather, they come part-and-parcel with φ -sets. Therefore, in order to reactivate the inherently case-marked QS with a structural Case feature (cf. (18)), the latter cannot simply be attached to QS's existing, previously deactivated φ -set. Rather, it must be attached to its own φ set. Minimally, this dummy φ -substrate will be a defective and default φ set: [3Person].

We thus derive a *minimal unit of activation for goals* – a Cased, default (i.e. third-person) φ -substrate:

(21) Minimal unit of goal-activeness/goalhood: [3Person]_{Case}

Reactivation of QS, then, proceeds via the addition of (21). We may thus characterize QS as in (22), a refinement of Chomsky's claim in (18).

(22) QS = inherent case + [3Person]_{Case}

We can now make an interesting observation. As is readily apparent by inspection of (17), the Case feature added in (22) is *formally identical to an expletive*, the minimal possible goal. We thus arrive at (23).

(23) QS = inherent case + Expl

Our minimalist chain of reasoning, then, has deduced that QS contains a 'hidden' expletive: QS is an inherently case-marked DP rendered active by an expletive 'shell'. Let us call this QS-reactivating Expl a *quirky expletive*. The quirky expletive is the 'quirk' that makes QS quirky, providing an immediate and transparent explanation for the previously obscure commonalities in the behaviour of Expl and QS (cf. (13b) and (16)) - they behave so similarly simply because they are both identical, i.e. 'Expl', for the purposes of T and the T-initiated Agree relation into which they enter. The partial agreement restriction induced by this relation is now similarly transparent. There is no need to stipulate that QS has an invisible ('defective') φ -set (i.e. that it lacks number); rather, it is simply its activating shell (the quirky expletive) that does, which follows from AC (unlike DI) if the above argumentation is along the right lines. The 'default' third-person agreement in (10)-(12) now reduces to the same partial Agree effect that obtains with Expl in (16): T's person is not forced to default to third-person via Match/ Absorb with a defectively intervening QS; rather, its specification as thirdperson is the result of full, transparent Agree with interpretable [3person] on QS's quirky expletive. Third-person agreement, then, results from the added reactivating Case-feature. If correct, then this third-person agreement can be taken to provide direct, overt evidence (in the form of partial agreement effects) that QS is indeed as characterized in (18), i.e. inherent + structural Case.

In sum, by rejecting DI and maintaining the strong AC in (4), we arrive at a logical basis for (18) and a principled explanation of (13b–c), one which enables a unified account of the partial-agreement restriction that obtains both in Icelandic DAT-NOM constructions (10)–(12) and English expletive list constructions (16).

Having dealt with (13b–c), we can now turn to (13a), i.e. the PCC-like ban on first- and second-person nominative objects. In the next section, I show how Icelandic PCC now reduces to a 'Case effect' (cf. (3)) in much the same way as in Anagnostopoulou (2003, 2005), and that the present analysis is further supported by a pervasive phenomenon that falls into line as the pure-Expl equivalent of Icelandic PCC, namely the definiteness restriction on existential expletive constructions.

4. Partial-Agree-induced Case Filter violations

4.1. Icelandic PCC effects

Consider (24), which represents the derivation of (10a).



The closest accessible active goal to the T-probe in (24) is the quirky expletive on QS in spec- ν , which values T's person as {3} via a transparent, legitimate Agree operation (see previous section). T's φ -set thus becomes

{Pers=3, Num=ø} at this stage. The PCC effect now follows simply from *nondistinctness* ("Match is non-distinctness rather than identity", BEA: 13), rather than from the purported 'personlessness' of third-person (cf. previous section). An object with a lexical value of first- or second-person is distinct from the T-probe's third-person, and therefore fails to be matched by T. As a consequence, the object DP fails to enter Agree with T, by (1e), and Case on the object goes unvalued, yielding crash as a CF effect, like (3), albeit one which is induced by partial Agree (i.e. incomplete Match by a partially deactivated probe).

4.2. Definiteness effects as the 'pure-Expl' counterpart of Icelandic PCC

The above analysis of Icelandic PCC as a CF effect can be distinguished from similar analyses (such as Anagnostopoulou 2003) by virtue of the quirky expletive. The postulation of this reactivating shell on QS makes the unique prediction that there should be a 'pure-Expl' counterpart of (24), i.e. an equivalent structure involving Expl/(17) rather than QS/(23). We have already seen in (16) the pure-Expl equivalent of the Icelandic agreement restriction (13b), i.e. the restriction to number-agreement with the associate DP in expletive list constructions. I would like to propose that the pure-Expl equivalent of (13a), i.e. the restriction to third-person direct objects (QS PCC effects), is simply the familiar, common-or-garden definiteness restriction on associate DPs in existential and presentational expletive-associate constructions in languages like English, illustrated in (25).

- (25) a. There arrived a / *the man
 - b. *There arose a / *the problem*
 - c. There appeared a / *the face at the window
 - d. There was heard an / *the almighty explosion
 - e. There seems to be a / *the man in the garden

The definiteness restriction in (25) can thus be given a formal syntactic explanation along the same lines as (24). That is, it too reduces to a Case Filter effect, with Case going unvalued under partial Agree between a reduced (defectivized) probe and a definite object. The relevant structure is given in (26b).



Recall from section 3 our claim that a person specification is redundant on indefinites, since these are invariably interpreted as third-person. First- and second-person indefinites appear not to exist, which is perhaps unsurprising given the discourse function of first- and second-person in identifying salient participants (speaker, addressee, etc.). Thus, it seems reasonable to assume that person is a lexically specified property only on definite DPs, where it is not independently predictable (indeed, only personal pronouns may realize these values). That is, I would like to suggest that we modify the claim that third person is the absence of person (as insightfully criticized in Nevins 2007) to the weaker claim in (27).

(27) Third-person is indeed absence of Person (cf. Kayne 2000; Sigurðsson 2001; Anagnostopoulou 2003, 2005), but only on (nonspecific) <u>indefinites</u> (contra these authors).

Syntactically, (27) may simply translate to the difference between the categories N and D, with person a property of the latter but not former category. If nonspecific indefinites, bare nouns and bare plurals are NPs rather than DPs (i.e. lack a D-layer; cf. Chomsky 1995: 337), then they will lack a person value. The definiteness effect in (26a) now follows in the same way as the PCC-effect in (24), i.e. as a CF effect, if we make one further assumption:

(28) English differs from Icelandic in that valued probes are individually deactivated and so do not count for matching in subsequent Agree operations.⁹

If (28) holds, then the remaining [uNumber] probe on T continues to probe separately from person after the latter is valued to {3} by Agree(T, Expl). It follows that only indefinite DPs will be a full match for the surviving [uNumber] probe, since definites, unlike indefinites, have a person value which will fail to be matched by [uNumber] alone. The defectivized T-probe thus fails to value Case on a definite (Person-bearing) goal, by (1e). We thus reduce the definiteness effect in (25) to another instance of a CF violation, as in (3); specifically, it is a partial-Agree-induced CF violation, as in (24).¹⁰ Icelandic PCC/(24), on this approach, can thus be viewed as a person-sensitive 'definiteness' effect.¹¹

The quirky expletive analysis thus unifies definiteness and Icelandic PCC effects in a novel way, throwing considerable light on the previously obscure commonalities in behaviour between Expl and Icelandic QS. Both constructions involve an anti-Person agreement restriction (cf. (13b), (16)); both constructions exhibit an interpretive restriction (the ban on definite associates in English and the ban on first-/second-person nominative objects in Icelandic); and, perhaps most notably (though this seems to have been overlooked in the literature), both constructions share an identical distribution: the environments of definiteness effects with English existentials are identical to those of Icelandic PCC effects with quirky subjects, namely unaccusative, passive and raising configurations (cf. (10)-(12), (25)). These shared properties all stem from the identical underlying syntactic configuration – both Icelandic PCC and English expletive-associate constructions involve a single probe (T) entering multiple Agree with two goals (cf. (15)).

In the final section, I attempt to subsume a further apparently unrelated phenomenon under the banner of CF effects arising from Agree with a partially inactive probe, namely the Russian genitive of negation (GN). Like (24)/(26), GN involves an unexpected case form on internal arguments (genitive, cf. the nominative of (24)) associated with an unexpected semantic restriction on their interpretation (indefiniteness/nonreferentiality, as in (26)). Defective probes and partial Agree again provide the key to the analysis.

5. Russian Genitive of Negation

Russian famously exhibits genitive case alternations on underlying internal arguments in the presence of sentential negation (see, e.g., Babby 1980; Pesetsky 1982; Franks 1995; Abels 2002; Harves 2001, 2002, 2004, 2005; and many others). The genitive of negation (GN) thus picks out the direct

object of transitives (yielding a genitive-accusative alternation) and the subject of passives and unaccusatives (yielding a genitive-nominative alternation), as in (29)-(31), but fails to obtain on true external arguments (i.e. the subject of transitives and unergatives) or on lexically/inherently case-marked objects, cf. (32)-(34). In this way, GN has the somewhat anomalous property of being a structural case that is preserved in raising-to-subject environments, sharing the distribution of absolutive case in ergative systems in apparent violation of Burzio's Generalization.

- (29) Mal'čik ne čitaet knigi / knigu
 boy not reads book-GEN / book-ACC
 'The boy isn't reading a book / the book.'
- (30) a. Otveta ne prišlo answer-GEN not came-3NS¹² 'There was no answer.'
 - b. *Otvet ne prišel* answer-NOM not came-3MS 'The answer didn't come.'
- (31) a. *Ne bylo polučeno gazet* not was-3NS received-3NS newspapers-GEN 'No newspapers were received.'

(Brown 1999: 47)

- b. *Gazeta ne byla polučena* newspaper-NOM not was-FS received-FS 'The newspaper wasn't received.'
- (32) **Mal'čika ne čital / čitalo knigu* boy-GEN not read / read-3NS book-ACC
- (33) *Ni odnogo mal'čika ne rabotalo not one-GEN boy-GEN not worked-3NS
 'Not a single boy was working.' (Neidle 1988: 75)
- (34) Ja ne zvonil moej sestre /*moej sestry
 I not called [my sister]-DAT/ [my sister]-GEN
 'I didn't call my sister.' (Brown 1999: 3)

Further, as indicated in the glosses for (29)-(31), GN correlates with an indefinite, nonreferential and/or existential reading of the GN-marked argument, signalling a denial of its existence. This contrasts with the respective nominative/accusative alternants, which are associated with definite, referential and/or presuppositional semantics, signalling an existential presupposition of the argument (or its "individuation" in terms of Timberlake 1975, 1986; see also Pereltsvaig 1999, Harves 2001, Richards 2001 for discussion).

Interestingly, although this construction would seem unrelated to those investigated in the previous sections, there are in fact striking parallels between them all. Like Icelandic PCC, GN is an unexpected Case form on internal arguments, and like existential expletive-associate constructions, it is associated with an unexpected interpretive restriction (indefiniteness/nonreferentiality). This suggests that a novel unification might be attainable.

The interpretive restriction on GN-marked objects is traditionally captured by the claim that these arguments are interpreted within the *scope of negation* (cf. Babby 1980 and many others), as corroborated by the scopal relations among quantified objects: GN-marking correlates with narrow scope $(\neg ...\forall)$ in (35a), and accusative-marking with wide scope $(\forall ... \neg)$ in (35b).

- (35) a. On ne rešil vsex zadač
 He not solved [all problems]-GEN.PL
 'He didn't solve all the problems.'
 [= At least one problem remained unsolved]
 - b. On ne rešil vse zadači
 He not solved [all problems]-ACC.PL
 'He solved none of the problems.'
 [= No problem was solved] (Neidle

(Neidle 1988: 39-40)

Generative analyses have formalized this 'high' interpretation of accusatives in various ways. Thus Franks 1995 postulates quantifier raising of accusative-marked objects at LF, whilst Brown (1999) and Harves (2001) suggest that the syntactic licensing of accusative DPs occurs in a higher functional domain than their genitive counterparts (for Brown, accusative-licensing takes place outside the domain of 'negative closure', roughly equated with VP, whilst Harves assumes a high scopal projection, RefP, in which accusatives are checked).

One potential problem of such approaches, however, is that they all require a Case-sensitive syntax: Case is matched to particular positions, yielding particular interpretations. This sits uneasily with the current minimalist conception of Case as an unvalued, uninterpretable, and syntactically undifferentiated feature in the Probe-Goal-Agree system of MI/DbP. On such a view, the narrow syntax cannot be sensitive to the accusative-genitive distinction (since no such distinction exists within the syntax), thus denying us Case-differentiated landing sites and Case-sensitive QR, and Case cannot have direct interpretive effects (such as the direct association of structural accusative with an inherent existential presupposition; see Pereltsvaig (1999) for a similar approach). Rather, under current assumptions, we are forced to treat interpretive differences as the *effect*, rather than the cause, of syntactic operations (Move and Agree). Thus, for example, the similar interpretive restriction on scrambled (shifted) objects in Germanic can be viewed as the interpretive effect of optional movement (or rather, of the optional EPP-features that drive this movement) – see Richards (2004) for discussion and references. However, unlike Germanic Object Shift/Scrambling, we cannot attribute the referential/presuppositional semantics of GN to the interpretive effect of optional movement, since accusatives may remain in situ (see also Harves 2001 for a similar point). Compare German (36) with Russian (37).

(36)	a.	Er hat oft ein/?das Buch gelesen	(German)
		He has often a / the book read	
		'He often read a (non-specific) / the book.'	
	b.	Er hat ein / das Buch oft gelesen	
		'He often read a (particular) / the book.'	

(Russian)

(37) a. On ne čital knig_(GEN) / knigu_(ACC) 'He didn't read any books / the book.'

b. On knigu_(ACC) /?knig_(GEN) ne čital
'He didn't read the book / any books.'

Since the specific/definite interpretation of accusative objects is not a function of movement/scrambling in Russian (unlike German), the Russian definiteness(-like) effect with GN objects must therefore have a different source – if not Move, then it must be Agree. This would be as expected under current assumptions since interpretation of GN correlates with structural Case, which is a property of Agree and not Move.

Agree, then, would seem to be the natural place to look for an explanation of Case-sensitive semantic effects. As we saw with the English definiteness effects in expletive-associate constructions (section 4.2), such interpretive effects may indeed arise under (partial) Agree. Let us then attempt an analysis of GN in terms of partial Agree, with a view to unifying the GN case alternation itself (the valuing of genitive under negation) with the definiteness restriction that characterizes this alternation.¹³ 5.1. Associating structural genitive with semantic effects: Defective heads and partial Agree

The key question at the heart of the GN problem is why the object's Case is valued to genitive in Russian (29)–(31) instead of to the expected accusative or nominative. One possible approach that has been pursued in the literature is to postulate a NegP projection in negative clauses. This NegP, headed by *ne* ('not'), is located somewhere between TP and *v*P; in current minimalist terms, *ne* is then assumed to be a probe that values genitive (cf. Harves 2001, 2002; Richardson 2005).

Amongst the problems faced by such an account are the following. Firstly, what happens to the Neg probe when the object is valued to accusative by transitive v, or to nominative by T? Similarly, what happens to v's unvalued φ -probe in those cases where Neg values the object to genitive? In both cases, a probe would remain unvalued, inducing crash at LF to such an extent that no negative clause could converge. Further, if Neg alone is sufficient to value genitive, then it is no longer possible to restrict GN to internal arguments (except by stipulation). Assuming a VP-internal mergesite for external arguments, the subject in (32)–(33) falls inside Neg's c-command domain and should therefore be probed by Neg and valued to genitive. Such an approach might also lead us to expect GN to obtain equally with constituent negation, as in (38), which is famously not the case.

- (38) a. *Ne on /*ego zvonil Ivana* [..., *a Anna*] Not he-NOM / he-GEN called Ivan [..., but Anna-NOM] 'It wasn't he who called Ivan, but Anna (did).'
 - b. On čitaet ne knigu /*knigi [..., a gazetu]
 He reads not book-ACC/ book-GEN [..., but newspaper-ACC]
 'He's not reading a/the book but a/the newspaper.'

For these and other reasons, Neidle (1988), Franks (1995), Brown (1999), Abels (2002) and others assume that it must be the entire [Neg + V/v] complex that is responsible for genitive licensing. In effect, Neg must affect the case-assignment property of v (rather than having its own, independent case-assigning property) in such a way that v values genitive instead of accusative. In terms of the Probe-Goal system, in which Case is valued as part of φ -Agree, a different Case form implies a different probe. That is, Neg must affect v's case property *indirectly*, by affecting its probe/ φ -set. Following Rezac (2004), let us assume that a partially deactivated (and thus defectivized) probe values a different case from its full (φ -complete) counterpart. Specifically, we make the following proposal.

(39) Defective *v* values genitive in Russian.

In other words, we propose that genitive is a defective(ly assigned) Case in Russian. This yields the following Case-valuation profile for the Russian functional system:

(40)	a.	T_{comp}	\rightarrow	nominative
	b.	$v_{\rm comp}$	\rightarrow	accusative
	c.	v_{def}	\rightarrow	genitive

This would seem to be all that we need to say. Since both types of v (defective and φ -complete) may appear under sentential negation, Neg must be able to select for either a defective or a φ -complete v as its complement (clearly, this is true of all languages, not just Russian). Then, due to (39)/(40c), selection of the former (v_{def}) yields a genitive object; due to (40b), selection of the latter (v_{comp}) yields an accusative object.¹⁴

A perennial problem for existing GN analyses (including Richards 2001; Lavine & Freidin 2002; Harves 2002, 2004) is their inability to exclude illicit accusative alternants with unaccusatives, as in (41).

(41) **Sašu* (*ne*) prišel /prišlo (Brown 1999: 82) Sasha-ACC (not) came-3MS/came-3NS 'Sasha didn't come.'

Although the present analysis, based on (39), would seem to imply that GN is parasitic on structural accusative (i.e. the availability of a nondefective counterpart to v_{def} as an optional alternant), this is only true at the level of the grammar; the parasiticity of v_{def} on v_{comp} is not forced for all types of predicate. Therefore, we can solve the problem represented by (41) by simply assuming a lexical restriction such that inherently unaccusative predicates (i.e. those that do not have a transitive counterpart) are obligatorily (lexically) v_{def} , with no possibility of the nondefective, φ -complete v_{comp} alternant (and hence no possibility of accusative). In other words, the selection of an optional v_{def} alternant by negation (what we might call 'selectional defectivization') is not involved when GN obtains with these (as in, e.g., (30a)).

Independent support for (39) is provided by Russian 'adversity impersonals', in which accusative case, like GN in (30a) and (31a), is preserved in passive/unaccusative environments (see especially Lavine & Freidin 2002; examples in (42) are from Harves 2004):

- (42) a. Rabočego ubilo oskolkom plity worker-ACC killed-3NS shard-INSTR concrete-GEN 'A worker was killed by a piece of concrete.'
 - b. *Mašu tošnilo* Masha-ACC nauseated-3NS 'Masha felt nauseous.'
 - c. Nogu naterlo sapogom foot-ACC rubbed-3NS boot-INSTR
 'A boot irritated his/her foot.'

Lavine & Freidin (2002) assign these constructions a $T_{def} - v_{comp}$ clause structure. That is, v Agrees with the internal argument and values it accusative, as in standard transitives, whilst T gets default valuation (3NS). This accounts for the anti-Burzio property of this construction: it is the lower, rather than higher, head that values Case in these constructions.¹⁵ We can now characterize the GN structures in (30)–(31), i.e. those involving genitive-nominative alternations, as the negation-defectivized counterpart of this v_{comp} . That is, we have the structure $T_{def} - v_{def}$, with GN valued by v_{def} (see Harves 2005 for a very similar proposal).¹⁶

(43) a. Gen-Acc alternations, cf. (29) $T_{comp} - v_{def}$ b. Gen-Nom alternations, cf. (30)–(31)¹⁷ $T_{def} - v_{def}$

In this way, we attain a minimal and transparent account of the source of genitive across the full range of Russian GN alternations.

We have yet to account for the interpretive restriction on GN arguments, however. It is telling, in this connection, that defective v, as things stand, should not in fact be able to value Case (genitive or otherwise) on the internal argument. This is because of condition (1e), which restricts Case-valuation to full (complete) Match between probe and goal. I would like to suggest that these two issues – the valuing of (genitive) Case by v_{def} in (43) and the concomitant interpretive restrictions (definiteness effects) – are, in fact, causally linked, precisely because of (1e). That is, (43) instantiates the same syntactic scenario as the English expletive-associate configurations in section 4.2 (albeit with valuation by v instead of T), inducing the same CF effect. The following subsection elaborates.

5.2. A unified account of Russian GN: How Case can yield interpretive effects

The definiteness (/specificity/referentiality) restriction on Russian GN falls into place as another Case Filter effect, as follows. Since the negation-defectivized v head lacks [uPerson] (i.e. it is v_{def}), it can only partially Agree with the direct object, for number only (cf. agreement restriction (13b) in Icelandic). Therefore, only those DPs that lack a lexical person specification (i.e. nonspecific DPs; see section 4.2) can be fully matched and thus Casevalued (deactivated) by the defective GN probe; definite and/or specific (person-bearing) objects require a φ -complete probe for convergence, i.e. T_{comp} or v_{comp} , yielding nominative (cf. (30)–(31)) and accusative (cf. (29)), respectively. The relevant stage of the derivation is given in (44).



The unexpected case form and interpretive restriction on the internal argument thus fall together once again as two sides of a single coin.¹⁸

To summarize, this section has attempted to develop a minimal(ist) theory of the core properties of the Russian genitive of negation construction, namely: (i) genitive-accusative alternations with negated transitive predicates; (ii) genitive-nominative alternations with negated unaccusative predicates; and (iii) the semantic (definiteness) restriction associated with the genitive alternants in (i) and (ii).¹⁹ These are the three core properties which a complete theory of Russian GN must account for; ideally, the minimal theory of these properties will be a unified one that reduces them all to a single mechanism. That ideal is simply and transparently achieved by the mechanism of partial Agree, i.e. the only kind of Agree that is possible with defective (or defectivized) heads, in accordance with (1e). Just as we saw in section 4.2, the assumption that defective heads can only value (fully match) a defective argument (i.e. one that lacks a person specification, namely indefinites) implies that defective heads will have the effect of forcing particular semantic/interpretive restrictions on their goals (indefiniteness, nonreferentiality, or related notions). Thus, by invoking the twin mechanisms of defective heads and partial Agree, we obtain the interesting result that Case can yield interpretive effects at the interface (albeit indirectly) despite its status as a purely uninterpretable feature.

6. Conclusion

This paper has argued for the indispensability of abstract, structural Case by identifying a new class of Case Filter violations, extending beyond (3) the range of configurations in which the only reason for nonconvergence is a Case feature going fatally unvalued. To this class belong: the ban on firstand second-person nominative objects in the domain of Icelandic quirky subjects, as equated by Boeckx (2000) and others with the Person-Case Constraint; English definiteness effects in existential expletive constructions; and the Russian genitive of negation. The novel unification of this seemingly disparate set of phenomena accounts for the numerous properties that these constructions share: in particular, all three involve an unexpected Case form on the internal argument and/or an unexpected interpretive restriction on that argument, be it the PCC restriction or the definiteness/referentiality restriction. Central to this unification is the notion of valuation by defective or defectivized (partially deactivated) probes – where this fails, a Case crash is induced. In this way, the agreement restrictions associated with partial probes go hand-in-hand with interpretive restrictions on the goals targeted by these defective probes. In the case of Icelandic PCC, the relevant probe (T) is rendered defective by a quirky expletive, which I have argued to be a reactivating shell on inherent dative DPs. In the case of the existential definiteness restriction, the relevant probe (T) is rendered defective by a pure (bare, non-quirky) expletive. In the case of Russian GN, the probe is selected (by negation) as defective, an option that is arguably made available to Russian on account of its default T-agreement strategy.

In sum, the notion of defectiveness renders it possible for a purely uninterpretable feature (Case) to affect interpretation in the form of (personsensitive) definiteness effects (with attendant restrictions on agreement). Case is thus nonredundant, with pervasive syntactic, morphological and semantic effects that come to the fore in a system without defective intervention.

Acknowledgements

For helpful comments and questions on the material presented in this paper, I would like to thank Aniko Csirmaz, Marcel den Dikken, Anders Holmberg, Richard Kayne, Luis López, Gereon Müller, Halldór Sigurðsson, as well as the editors of this volume and an anonymous reviewer.

Notes

- 1. For convenience, key minimalist texts by Chomsky are abbreviated as follows: MP = Chomsky 1995, MI = Chomsky 2000, DbP = Chomsky 2001, BEA = Chomsky 2004, OP = Chomsky 2005.
- 2. In the original formulation of ICF, it was Case features on the functional head (probe) that were at stake (rather than an unvalued φ -set, as in the above reformulation); hence the name. Clearly, under the assumptions of Probe-Goal Agree (where Case is not a probing feature), it is no longer Case *per se* that is directly at stake, though the facts in (2) of course remain. To yield (2), all that matters is that something forces the probe to enter an Agree relation where formerly this could be Case itself, now it is simply the unvalued φ -set; the empirical effect is the same.
- 3. Eliminating Case would make two false predictions: firstly, DPs would remain permanently active, which is amply belied by ICF effects (i.e. (2)); secondly, there would be no cases where the only reason for nonconvergence is unvalued Case (i.e. these approaches renounce Case as a source of crashing), yet this is belied by CF effects as in (3) (and also, if correct, by the analysis of PCC and other effects in sections 3–5 below). While these authors propose alternative explanations for ICF/(2)-type effects (Rezac invokes 'Case shells'; Nevins appeals to PIC and/or a 'Single Case' PF-constraint), CF/(3)-type effects remain unaccounted for in these works.
- 4. Of course, if we abandon DI, then we lose the empirical argument for T's non-phasal status provided by (7). There are, however, stronger, conceptual arguments that T cannot be a phase head; these stem from the logic of Chomsky's (OP) feature-inheritance mechanism see Chomsky (2007), Richards (2007) for details.
- 5. See Richards 2004: Chapter Four (section 4.3.2.1) for fuller discussion of the subdistinctions characterizing inactive DPs in Chomsky's MI system.
- 6. Note that the 'morphological' PCC effect in (13c) is logically distinct from the 'syntactic' PCC restriction in (13a). We could imagine a purely morphological PCC in which it is just (the expression of) clashing first-/second-person agreement in the morphology that is barred, so that default third-person morphology shows up with first- and second-person nominative objects, with the latter fully licensed in the syntax. As (10d) attests, however, default (third-person
singular) agreement cannot rescue the first-/second-person object in Icelandic, suggesting that the restriction underlying the PCC is not only on the (PF-realized) agreement, but also on the formal, syntactic licensing of the object itself. (There is, in fact, dialectal variation as to the availability of default third-person singular agreement across the structures in (10)-(12) and its rescuing effect on first-/second-person objects, and default morphology is generally more accessible in the biclausal (raising) structures of the kind in (11) than in the simplex (passive, ditransitive) structures of (10) and (12) – see Sigurðsson 1996, Sigurðsson & Holmberg 2008 [this volume] for details.)

- 7. To be sure, there are numerous differences between (Romance-style) PCC and the third-person constraint on Icelandic nominative objects in (13a). For one, the latter is not restricted to ditransitive environments, as (10)–(11) illustrate; for another, there are varieties of Romance PCC in which sequences of first-and second-person arguments of the form DAT₁-ACC₂ are admitted (see Anagnostopoulou 2005 and Nevins 2007 for recent overviews and analyses of the typology of 'strong' and 'weak' PCC effects). Nevertheless, the crucial property for our purposes is that in (15), which is common to the Icelandic and Romance paradigms.
- 8. These stipulations are also present, albeit in a different form, in Anagnostopoulou's (2003) analysis, which states that QS is 'number-defective' in the sense that its number, but not person, feature is invisible to the T probe, and that QS therefore cannot value first- or second-person (which, following Taraldsen 1995, requires number to be present).
- 9. This presumably parametric difference between Icelandic and English in terms of the visibility of valued probes remains underived as yet. It would of course be desirable to relate it to an independent difference between the two languages, such as the obligatory EPP property of English T or the differing expletive inventories of the two languages (Icelandic has CP-Expl rather than TP-Expl; cf. Bowers 2002, Richards & Biberauer 2005). I leave this issue for future research.
- 10. This is essentially the same account as Anagnostopoulou (2003) gives for the Icelandic PCC effects, albeit with the differences already noted regarding the source of T's third-person value.
- 11. Luis López (p.c.) and an anonymous reviewer ask how the first- and secondperson associates are possible in (16), given that we are now ruling out all but indefinite (third-person) associates in such 'quirky' structures (cf. (26b)). The point is well taken; clearly, the agreement restriction in (16) must be of a different kind from those discussed in this section. However, this is tangential to the validity of the present proposal: My claim is simply that the English equivalent of the Icelandic PCC/quirky-subject restrictions is actually definiteness effects (rather than the lack of person agreement in 'list constructions' of the (16) kind). How number agreement alone is able to value the objective forms *us, me*, etc. in (16) is thus a separate (albeit very valid) question. Possibly, the objective case form on the associate in the list construction is not assigned/

valued by T but by v; if so, then (16) does not instantiate the one-to-many environment in (15), hence the absence of Case Filter (definiteness) effects and agreement restrictions that obtain when both Expl and the associate are valued by the same head (T), as in (24)/(26). See López (2004) for extensive discussion of related issues.

- 12. 3NS = third-person neuter singular. Similarly, MS = masculine singular, FS = feminine singular, etc.
- 13. Such a unification has proved elusive in previous analyses (e.g. Brown 1999; Pereltsvaig 1999; Harves 2001, 2002; Richards 2001; Lavine & Freidin 2002), where the syntax and semantics of GN have had to be analysed separately, with at best an indirect or stipulated relation between the two. See also note 18.
- 14. Note that (39) is not tied to negation in any direct way. Therefore, the alternations in question should equally arise in affirmative clauses, with T exhibiting the same selectional freedom as Neg. This might yield the Russian partitive genitive, which freely alternates with accusative (in felicitous contexts). See Franks (1995), Richards (2001) for discussion of the partitive genitive, which I leave here for further investigation.
- 15. I assume that the possibility of low deactivation of the lone argument is made possible in Russian (as opposed to Burzio-conforming languages like English) by the independent availability of default values (3NS) for T in this language. This default strategy rescues the ICF violation that would otherwise be incurred by T's unvalued φ-probe (and which accounts for Burzio's Generalization in languages lacking such a strategy – see Richards 2004 for further discussion).
- 16. Lavine & Freidin claim that $T_{def} v_{def}$ structures are excluded on the grounds that no case-valuing head is present for licensing the argument. However, the postulation of (39) (and, more generally, Rezac's (2004) idea that partial probes can value Case, cf. above) disarms this objection. It should be noted in this connection that Harves (2002, 2004, 2005) also proposes a $T_{def} v_{def}$ structure (i.e. (43b)) for unaccusative impersonals like (30), (31) and (42). However, it is unclear how she would extend this insight to the GN arguments of transitive verbs, as in (29).
- 17. We might, in fact, dispense with (43b) and attribute the same structure ($T_{comp} v_{def}$) to both the genitive-accusative and genitive-nominative alternations, since the 'defective' nature of T_{def} in (43b), carried over from Lavine & Freidin 2002, is questionable. Lavine & Freidin, along with Harves 2004, take default agreement to be *lack* of agreement and thus to indicate defectiveness of the functional head in question. However, this is by no means a necessary conclusion: default values could simply be supplied to a *non*defective (i.e. φ -complete) head in the absence of an agreeing goal, yielding the same morphological forms on the surface. Indeed, since a defective head should, by definition, lack φ -probes for person, number and/or gender, default values for any of these are actually unexpected and incompatible with the notion of defectiveness as stan-

dardly understood. For present purposes, we can set this aside, interpreting the 'def' in T_{def} in (43b) as 'default' rather than 'defective' *per se*, though T_{comp} is arguably more accurate. (Default agreement in (30)/(31)/(43b) is then triggered by the lack of an active goal for T whenever $Agree(v_{def}, DP)$, and thus GN, obtains, bleeding Agree(T, DP) by AC (see section 2 and also note 15 above).)

- 18. A reviewer asks how the analysis is able to account for the fact, mentioned above, that GN-objects are always interpreted in the scope of negation (cf. (35)), since indefinites are scopally ambiguous. The existential interpretation of genitive objects follows from their status as defective (Person-less) goals in accordance with (27): it is *non-specific* indefinites that lack a person specification. Those indefinites which receive a wide-scope reading, i.e. specific indefinites, are thus those with a person specification (cf. (27)), which can only be valued by nondefective v, yielding accusative. Those indefinites, are those that lack a person specification, i.e. non-specific indefinites, are those that lack a person specification, and which are therefore valued by defective v, yielding genitive. Scope effects thus fall into line with the other interpretive effects on defective goals (definiteness, PCC): namely, as Case Filter effects.
- 19. As pointed out by a reviewer, there are additional semantic restrictions conditioning the acceptability of GN, such as perfectivity of the predicate (GN is preferred with imperfective verbs, whereas perfectives prefer accusative objects), telicity, genericity, etc. However, as insightfully discussed by Pereltsvaig (1999), such semantic factors are just *tendencies* (perfectives may take GN objects in certain contexts, and imperfectives may freely take accusative objects), and so should not be built into any syntactic 'rule' of formal GN-licensing. In terms of the current proposal, the valuation of genitive by v_{def} (i.e. (39)) is what renders GN possible at all in the Russian grammar; the mitigating factors of aspect, telicity, genericity and the like are then best viewed as interface (semantic) conditions on the felicity of applying GN (i.e. selecting v_{def} over v_{comp}) in any given derivation (depending on the predicate chosen and/or the intended meaning Pereltsvaig suggests affectedness vs. effectedness of the object is crucial in perfective contexts), rather than as determinants of formal convergence.

References

Abels, Klaus
2002 Expletive (?) Negation. In *Proceedings of FASL* 10.
Anagnostopoulou, Elena
2003 *The Syntax of Ditransitives. Evidence from Clitics.* Berlin/New York: Mouton de Gruyter.

2005 Strong and Weak Person Restrictions: a Feature-Checking analysis. In *Clitic and Affix Combinations*, Lorie Heggie & Francisco Ordóñez (eds). Amsterdam: Benjamins.

Babby, Leona	ard H.
1980	Existential Sentences and Negation in Russian. Ann Arbor: Karoma.
Belletti, Adria	ana and Luigi Rizzi
1988	Psych-Verbs and θ -Theory. <i>Natural Language and Linguistic Theory</i>
	6: 291–352.
Boeckx, Cedr	ic
2000	Quirky Agreement. Studia Linguistica 54: 354-80.
2003	Islands and Chains: Resumption as Stranding. Amsterdam: Benjamins.
Bonet, Eulàlia	a
1991	Morphology after syntax: Pronominal clitics in Romance. Ph.D. dissertation, MIT.
1994	The Person-Case Constraint: a morphological approach. In <i>The morphology-syntax connection</i> (MITWPL 22), Heidi Harley and Colin Philling (eds.) 33–52. Cambridge MA: MIT Pross
Ročković Žo	Finnips (eds.), 55–52. Cambridge, MA. MIT Fless.
1997	JNO The Syntax of Nonfinite Complementation An Economy Approach
1777	Cambridge MA: MIT Press
2001	A-Movement and the FPP Syntax 5: 167–218
Bowers John	r novolient and the Err. Synax 5. 107 210.
2002	Transitivity, Linguistic Inquiry 33: 183–224.
Brown, Sue	
1999	The Syntax of Negation in Russian: A Minimalist Approach. Stanford: CSLI.
Chomsky, No	bam
1995	The Minimalist Program. Cambridge, MA: MIT Press.
2000	Minimalist Inquiries: the Framework. In <i>Step by step: Essays on Minimalist Syntax in Honor of Howard Lasnik</i> , Roger Martin, David Michaels and Juan Uriagereka (eds.), 89–156. Cambridge, MA: MIT Press.
2001	Derivation by Phase. In <i>Ken Hale: A Life in Language</i> , Michael Kenstowicz (ed.), 1–52. Cambridge, MA: MIT Press.
2004	Beyond Explanatory Adequacy. In <i>Structures and Beyond. The Car- tography of Syntactic Structures</i> (Vol. 3), Adriana Belletti (ed.). Ox- ford: Oxford University Press.
2005	On Phases. Ms.: MIT. To appear in <i>Foundational Issues in Linguistic Theory</i> , Robert Freidin, Carlos P. Otero and María-Luisa Zubizaretta (eds.). Cambridge, MA: MIT Press.
2007	Approaching UG from Below. In <i>Interfaces</i> + <i>Recursion</i> = <i>Language</i> ?: <i>Chomsky's Minimalism and the View from Syntax-Semantics</i> , U. Sauerland and HM. Gärtner (eds.) 1–29. Berlin/New York: Mouton de Gruyter.
Fox, Danny	
2000	

2000 Economy and Semantic Interpretation. Cambridge, MA: MIT Press.

Franks, Steve	en							
1995 <i>Parameters of Slavic Morphosyntax.</i> New York: Oxford University Press.								
Harves, Step	hanie A.							
2001	Genitive of negation and the syntax of scope. In <i>Proceedings of</i>							
2002	Where have all the <i>Phases</i> gone? (Non-)defective categories and Case alternations in Russian In <i>Proceedings of FASL 10</i>							
2004	Unaccusativity and non-agreement in Russian. Handout: Paper pre-							
2005	Non-agreement, Unaccusativity, and the External Argument Con- straint, Paper presented at FASL 14, May 2005.							
Hiraiwa. Ker	1							
2005	Dimensions of Symmetry in Syntax: Agreement and Clausal Archi- tecture. Ph.D. dissertation, MIT.							
Holmberg, A	nders and Þorbjörg Hróarsdóttir							
2000	Agreement and movement in Icelandic raising constructions. <i>Lingua</i> 113: 997–1019.							
Kawashima,	Ruriko and Hisatsugu Kitahara							
2004	Phonological Content and Syntactic Visibility. In <i>Triggers</i> , Anne Breitbarth and Henk van Riemsdijk (eds.), 205–230. Berlin/New York: Mouton de Gruyter.							
Kavne, Rich	ard							
2000	Parameters and Universals. Oxford: Oxford University Press.							
Lavine, Jame	es E. and Robert Freidin							
2002	The Subject of Defective T(ense) in Slavic. <i>Journal of Slavic Linguistics</i> 10: 253–289.							
Legate, Julie	Ă.							
2003	Some Interface Properties of the Phase. <i>Linguistic Inquiry</i> 34: 506–516.							
López, Luis								
2004	A-Dependencies. Ms., University of Illinois at Chicago.							
Martin, Roge	er e							
1999	Case, the Extended Projection Principle, and Minimalism. In <i>Working Minimalism</i> , Samuel D. Epstein and Norbert Hornstein (eds.), 1–25. Cambridge MA: MIT Press							
Neidle Carol								
1988	The Role of Case in Russian Syntax. Dordrecht: Kluwer.							
Nevins. And	rew							

2004 Derivations without the Activity Condition. In *Proceedings of the EPP/Phase Workshop* (MITWPL), Martha McGinnis and Norvin Richards (eds.).

2007	The Representation of Third Person and ist Consequences for Person- Case effects. <i>Natural Language and Linguistic Theory</i> 25: 273–313									
Pereltsvaig Asya										
1999	1999 The Genitive of Negation and Aspect in Russian. <i>McGill Working</i>									
	Papers in Linguistics 14: 111–40.									
Pesetsky, David										
1982	1982 Paths and Categories. Ph.D. dissertation, MIT.									
Reinhart, Ta	nya									
1995	Interface Strategies. In OTS Working Papers in Linguistics, Utrecht.									
Rezac, Milar	1									
2003	The Fine Structure of Cyclic Agree. Syntax 6: 156–182.									
2004	Elements of Cyclic Syntax: Agree and Merge. Ph.D. dissertation, Uni-									
	versity of Toronto.									
Richards, Ma	arc D.									
2001	Russian Genitives Laid Bare: An Alternative Approach to Case Alter-									
	nations. M.A. dissertation, University College London.									
2004	Object Shift and Scrambling in North and West Germanic: A Case									
	Study in Symmetrical Syntax. Ph.D. dissertation, University of Cam-									
	bridge.									
2006	Internal Pair-Merge: The missing mode of movement. Ms., University									
	of Cambridge.									
2007	On feature-inheritance: An argument from the Phase Impenetrability									
	Condition. <i>Linguistic Inquiry</i> 38(3): 563–572.									
Richards, Marc D. and M. Theresa Biberauer										
2005	Explaining Expl. In The Function of Function Words and Functional									
	Categories, M. den Dikken and C. Tortora (eds.), 115–153. Amster-									
	dam: Benjamins.									
Richardson,	Kylie									
2005	Why Quirky Case is not so Quirky in Russian. Paper presented at									
0.1	LingSoc, University of Cambridge.									
Schutze, Car	son I.									
1997	INFL in child and adult language: Agreement, Case, and Licensing.									
C:X	Ph.D. dissertation, MIT.									
Sigurosson, I	Halldor Armann									
1996	Senten 57:1 46									
2001	Syntax 5/: 1-40.									
2001	Case: abstract vs. morphological. <i>working Papers in Scanamavian</i>									
Sigurðagon	Synux 04: 105–151. Halldár Ármann and Andara Halmhara									
2009 Loolon die Detive Interventiere Deven end Neuel en en end										
2008	This volume									
	This volume.									

Taraldsen, Knut Tarald

1995 On agreement and nominative objects in Icelandic. In *Studies in Comparative Germanic Syntax*, Hubert Haider, Susan Olsen and Sten Vikner (eds.), 307–327. Dordrecht: Kluwer.

Timberlake, Alan

1975 Hierarchies in the Genitive of Negation. In *Case in Slavic*, 1986, Richard Brecht and James Levine (eds.), 338–360. Columbus: Slavica.

Oblique subjects and person restrictions in Spanish: A morphological approach

María Luisa Rivero

1. Introduction¹

In Spanish (Spa), most unaccusative constructions with psych verbs and dative subjects are unrestricted in person, but some disallow 1/2 nominative objects (Rivero 2004b, also Rivero and Geber 2003 on Romanian): (1) vs. (2).

- (1) a. *A Ana le apetecen ellos*. Ann.DAT 3SG.DAT yearn.3PL they.NOM 'Ann yearns for them. They appeal to Ann.'
 - b. *A Ana le apetecemos nosotros.* Ann.DAT 3SG.DAT yearn.1PL we.NOM 'Ann yearns for us. We appeal to Ann.'
- (2) a. A Ana se le antojan ellos. Ann.DAT 3REF 3SG.DAT fancy.3PL they.NOM 'Ann fancies them.'
 - b. *A Ana nos le antojamos nosotros. Ann.DAT 1PL.REF 3SG.DAT fancy.1PL we.NOM '*Ann fancies us.'

The unaccusative prohibition in (2b) dubbed 'Quirky Person Restriction' (**QPR**) from now on brings to mind referential hierarchies whereby 1, 2 outrank 3, and the (logical) object cannot outrank the (logical) subject (Nichols 2001; Bianchi 2005; Anagnostopoulou 2005; a.o.). It also combines characteristics of two person conflicts that have attracted considerable attention. On the one hand, QPRs resemble the Icelandic limitation to 3 nominatives in agreement with V in the presence of dative subjects (Sigurðsson 1991 and later): (3). On the other hand, QPRs recall ditransitive Person-Case Constraint (PCC) effects (Bonet 1991, 1994): French (4a) vs. (4b). That is, Spa unaccusative patterns with the morphology of ditransitives are fine with a dative and a 3 accusative reflexive, (2a), not with a 1 reflexive, (2b).

In addition, Spa unaccusatives with just one clitic are fine, similar to French ditransitives of type (4b).

(3)	*ég veit [að honum líkum við]. I know [that he DAT like 1PL we NOM]	Icelandic
	"I know that he likes us."	
(4)	a. * <i>Paul me lui présentera.</i> Paul 1SG.ACC 3SG.DAT will.introduce '*Paul will introduce me to him.'	French
	b. <i>Paul me présentera à lui.</i> Paul 1SG.ACC will.introduce to him	

'Paul will introduce me to him.'

Bonet (1991, 1994) accounts for PCC effects of type (4a) in postsyntactic morphology. Recent minimalist views, however, locate person restrictions in syntax (Adger and Harbour 2005; Anagnostopoulou 2003, 2005; Bianchi 2005; Bejar and Rezac 2003; Chomsky 2001; Hiraiwa 2005; Nichols 2001; Ormazábal and Romero 2007; Sigurðsson 2002, 2004; Sigurðsson and Holmberg 2006; Stepanov 2003; Taraldsen 1995; a. o.), and also dispense with person hierarchies. Unlike PCC and Icelandic phenomena, however, Spa QPRs await precise analyses. In this paper, I adopt Distributed Morphology (DM) (Bonet 1991, 1995; Halle and Marantz 1993, 1994; Harley and Noyer 1999; Marantz 1997; a. o.), and I argue that QPRs are best captured in post-syntactic morphology via features in adjacent clitics. My proposals on QPRs, then, share the spirit of Bonet's PCC. They also resemble recent syntactic views on restrictions, in so far as they omit hierarchies.

One noteworthy aspect of QPRs I explore here is that they lack repairs, unlike other person conflicts in the literature. Icelandic Vs in default form escape person restrictions. By contrast, I show in §3 that Spa infinitive Vs lack person/number, and finite Vs need not agree with nominatives in person/number, but QPRs exist in both contexts. In my view, this supports that QPRs are unlike Icelandic restrictions, and are due to clitic conflicts in the morphological cluster, not syntactic clashes between nominatives, datives, and phi-features in I/T. Using a strong pronoun for a clitic avoids PCC violations, as in (4b). By contrast, dative clitics are obligatory in QPR constructions, which I attribute to their features, so may double strong pronouns, but cannot be substituted by them. Impoverishing clitics can eliminate conflicts, as when 3 datives turn into *se* next to accusatives in Spa ditransitives: **Le lo dió* =*Se lo dió*. '(He/she) gave it to him'. However, QPR datives

cannot be deleted or impoverished in view of their features (see §4). Without repairs, there are no licit versions for (2b) in Spa. The only way to avoid a QPR violation is via Gapping in PF. By targetting Vs and adjacent clitics, Gapping prevents Vocabulary Insertion, and eliminates conflicts. This also supports that QPRs reside in postsyntactic morphology.

A new aspect of QPRs addressed in this paper is number. In the Castilian variety, combinations of 1/2 plural clitics such as (5a) are extremely deviant. By contrast, combinations of 1/2 singulars of type (5b) are well formed like in other varieties (Gutiérrez-Bravo 2005 on Mexican Spa). Those with singular and plural clitics of type (5c) are also well formed.

- (5) a. *A nosotros os nos antojasteis vosotros.
 We.DAT 2PL.ACC 1PL.DAT took a fancy to you.PL.NOM '*We fancied you (Plural).'
 - b. *A mí te me antojaste tú*. 1SG.DAT 2SG.ACC 1SG.DAT fancied you.SG.NOM 'I fancied you (Singular).'
 - c. *A nosotros te nos antojaste tú*. We.DAT 2SG.ACC 1PL.DAT fancied you.SG.NOM 'We fancied you (Singular).'

The contrasts in (5) could suggest that the two versions of the PCC in (6) and (7) are both at work in Spa. Recall that (6) imposes a 3P requirement on direct objects in French ditransitives such as (4a), and (7) allows combinations of 1/2 clitics in Spa ditransitives such as (8).

- (6) Strong PCC: 'In a combination of a weak direct object and an indirect object [clitic, agreement marker or weak pronoun], the direct object has to be third person.' (Bonet 1991: 182)
- (7) Weak PCC: 'In a combination of a weak direct object and an indirect object [clitic, agreement marker or weak pronoun], if there is a third person it has to be the direct object.' (Bonet 1991: 182)
- (8) Te me presentaron.
 2SG 1SG introduced.3PL
 'They introduced me to you.' or 'They introduced you to me.'

If the two versions of the PCC applied to QPR sentences in Spa, the strong one would accommodate those with one clitic, (1), and rule out deviant 1/2 plural combinations in varieties with (familiar) 2 plural pronouns, such as

Castilian Spa. The weak version would suit 1/2 singular combinations, and 1/2 singulars and plurals. In this paper, I relate the phenomena in (5) to markedness, not the PCC. Castilian Spa 2PL/1PL combinations are deviant in QPR constructions such as (5a) (and, we see later, PCC ditransitives), because such clitics have a rich feature content and count as marked. Without repairs, then, markedness can be a source of deviance (and see Arregi and Nevins, this volume, for markedness-driven repairs in Basque).

With this background in mind, the paper is organized as follows. In §2, I divorce QPRs from semantic/syntactic roles for nominative and dative phrases and relate them to morphological marking. That is, I establish two main patterns with restrictions that differ in syntax and semantics, but share morphology: (1) psych constructions, and (2) inchoatives. Since the idea that person restrictions belong in syntax is now prevalent, in my search for a morphological solution for QPRs, I first bring to light in §3 characteristics of Spa that pose problems when syntactic proposals based on Icelandic and PCC restrictions are applied to them. In §4, I propose three morphological conditions on person behind QPRs, solving difficulties identified in §3. First, I assume that Spa se is unspecified for person, so does not enter into QPR (or PCC) conflicts with adjacent clitics, which accounts for the contrast between (2a) vs. (2b). Second, Castilian Spa 2PL/1PL combinations are deviant in QPR (and PCC) constructions, because such clitics have too rich a feature content, which poses problems when adjacent in the cluster. The third proposal for the unaccusative conflict in (2b) reminiscent of both Icelandic and PCC restrictions is that experiencers/involuntary human causer clitics must be marked in syntax with the feature [m] for mental state. In morphology such a feature comes into conflict with a [+Participant] feature elsewhere in the cluster, making sequences such as nos le illicit.

2. Two syntactic families of constructions with QPRs

The first step in my argument that QPRs are morphological consists in distinguishing between two main classes of constructions with such restrictions. The first is based on a dative experiencer and a psych V similar to Italian *piacere*, and the second on a V in an inchoative frame and a dative participant with a less traditional role, without counterpart in Italian. On the one hand, I show that psych constructions that share argument structure and syntactic properties divide into two classes with respect to morphology (presence/absence of a reflexive clitic) and QPRs. On the other hand, I show that inchoatives with datives differ from psych constructions in interpretation, argument structure, and arguably syntactic structure. In spite of such differences, inchoatives share morphology and QPRs with the subset of psych constructions with reflexives. In sum, all constructions with QPRs have identical morphological marking, but may differ in syntax and semantics.

2.1. Psych constructions

As noted in §1, the psych constructions in (1) do not display person restrictions, while those in (2) do. Vs with the properties of (2) include *ocurrirse* 'imagine' and *olvidarse* 'forget' (Rivero 2004b). Sentences with complex predicates that consist of a V and a complement mimic the contrast between those with simple Vs in (1)–(2), as in (9a–b) vs. (10a–b).

- (9) a. A Ana le cayeron en gracia ellos. Ann.DAT 3SG.DAT fall.3PL in grace they.NOM Lit. They fell in grace to Ann. 'They appealed to Ann.'
 - b. *A Ana le caímos en gracia nosotros.* Ann.DAT 3SG.DAT fall.1PL in grace we.NOM 'We appealed to Ann.'
- (10) a. *A Ana se le pasaron por la cabeza ellos*. Ann.DAT 3REF 3SG.DAT pass.3PL by the head they.NOM 'Ann thought of them. They went through Ann's mind.'
 - b. **A Ana nos le pasamos por la cabeza nosotros*. Ann.DAT 1PL.REF 3SG.DAT came.1PL by the head we.NOM '*Ann thought of us. We went through Ann's mind.'

In my view, the above constructions have similar semantics and syntax. (a) Their Vs belong to the class Belletti and Rizzi (1988) and Landau (2003) dub 'III'. Namely, they are unaccusative, with a dative experiencer and a nominative theme. (b) Their experiencer must be encoded in a clitic, which may double a dative phrase, and has 'quirky subject' properties seen below. (c) If present, the dative phrase may share phi-features with the clitic, but Unagreement (Hurtado 1985) is possible (see §3.3). (d) Their nominative is a Subject Matter/ Target of Emotion (Pesetsky 1995), with 'quirky object' properties seen below. (e) If overt, such a nominative often shares phi-features with V, but Unagreement is possible (see §3.3). (f) Unmarked word order is with preverbal dative and postverbal nominative in both.

Masullo (1992, 1993), Cuervo (1999), and Fernández Soriano (1999a–b) list properties of Spa 'quirky' subjects and objects, which also apply to our datives and nominatives. To illustrate, datives front along similar lines with raising Vs: (11a) is the complement without restrictions, and (11b) one subject to QPRs. Datives antecede nominatives in quantifier-binding relations in both: (12a–b). Nominatives as 'quirky objects' usually agree with finite Vs (but see §3.3): (11–12). They can be bare NPs, an'object symptom' in Spa, (13a–b), and cannot bind into the dative (not illustrated).

- (11) a. A Ana parecen gustar+le las flores. Ann.DAT seem.3PL like+3DAT the flowers.NOM 'Ann seems to like the flowers.'
 - b. *A Ana* parecen olvidar+se+le las flores. Ann.DAT seem.3PL forget+3REF+3DAT the flowers.NOM 'Ann seems to forget the flowers.'
- (12) a. A cada niño le gustaron sus juguetes. Each child.DAT 3DAT liked.3PL his toys.NOM 'Each child_i liked his_i toys.'
 - b. A cada niño se le olvidaron sus juguetes. Each child.DAT 3REF 3DAT forgot.3PL his toys.NOM 'Each child_i forgot his_i toys.'
- (13) a. *A Ana le apetecen tonterías*. Ann.DAT 3DAT like.3PL stupid.things 'Ann yearns for stupid things.'
 - b. *A Ana se le antojan tonterías*. Ann.DAT 3REF 3DAT fancy.3PL stupid.things 'Ann fancies stupid things.'

In sum, psych constructions with and without restrictions share similar argument structure, subjects, and objects. The most noticeable difference is a (not always obligatory) 'inherent' reflexive in those with QPRs: a lexical property. When predicates can appear without reflexive, constructions are free of QPRs, as with *venir* (*se*) *a la memoria* Lit. come (Refl) to the memory 'come to mind'. That is, those with a reflexive display QPRs, (14b), and those without do not: (15b).

- (14) a. *A Ana se le vinieron ellos a la memoria*. Ann.DAT 3REF 3SG.DAT came.3PL they.NOM to the memory 'Ann remembered them.'
 - b. *A Ana nos le vinimos nosotros a la memoria. A.DAT 1PL.REFL 3SG.DAT came.1PL we.NOM to the memory '*Ann remembered us.'
- (15) a. *A Ana le vinieron ellos a la memoria*. Ann.DAT 3SG.DAT came.3PL they.Nom to the memory 'Ann remembered them.'
 - b. A Ana le vinimos nosotros a la memoria. A.DAT 3SG.DAT came.1PL we.NOM to the memory 'Ann remembered us.'
- 2.2. Inchoative constructions with datives

A less familiar unaccusative construction with (so far unnoticed) QPRs is related to inchoatives, as in (16). It contains (a) a V that participates in the causative alternation in a (reflexive) inchoative frame, (b) a nominative theme that can undergo a change of state and agrees with V (but see \$3.3), and (c) a dative clitic as 'involuntary agent/human causer', or 'affected participant', which can but need not double a dative phrase.

(16) *A Ana se le quemaron los boquerones*. Ann.DAT 3REF 3SG.DAT burned.3PL the smelts.NOM 'Ann burned the smelts (accidentally).'

Absent in Italian, (16) has Slavic and Balkan counterparts (Kallulli 1999, 2006; Rivero 2003, 2004a; Rivero and Sheppard 2003; a. o.), and South Asian equivalents (Verma and Mohanan 1991; Bhaskararao and Subbarao 2004; a. o.). As (17) illustrates, Spa inchoatives with datives display the same QPRs as the psych constructions with reflexives in §2.1.

(17) a. Por desgracia, a Ana se le quemaron las niñas Unfortunately, Ann.DAT 3REF 3SG.DAT burned.3PL the girls al bañar+las. at.the bathe.INF+3PL.ACC
'Unfortunately, Ann (accidentally) burned the girls when bathing them '

- b. *A Ana se le quemaron ellas*. Ann.DAT 3REF 3SG.DAT burned.3PL they.NOM 'Ann burned them accidentally.'
- c. *A Ana nos le quemamos nosotros. Ann.DAT 1PL.REF 3SG.DAT burned.1PL we.NOM '*Ann burned us accidentally.'
- d. *A nosotros os nos quemasteis vosotros. 1PL.DAT 2PL.REF 1PL.DAT burned.2PL you.PL.NOM '*We burned you accidentally.'
- e. **A vosotros os nos quemamos nosotros.* 2PL.DAT 2PL.DAT 1PL.REF burned.1PL we.NOM 'You (Plural) burned us accidentally.'

The paradigm in (17) illustrates that inchoative containing combinations of 1 nominatives/reflexives with 3 datives are deviant – (17c) –, and so are combinations of 1/2 plurals: (17d–e). This brings to mind both the Icelandic restriction on nominatives and the strong PCC restriction on French ditransitives. However, inchoatives with 1/2 singulars are well formed, (18), reminiscent this time of weak PCC effects in Spa, not French.

(18) A mí sólo te me quemaste tú.
1SG.DAT only 2SG.REF 1SG.DAT burned.2SG you.NOM
'I only burned you (accidentally).'

Unaccusatives that do not participate in the causative alternation, so lack a reflexive, do not display QPRs when combined with datives. To illustrate, with *florecer* 'bloom' used to refer to a good teacher, the nominative can be in any person, (19). This is like psych Vs with datives and no reflexive.

 (19) A ese maestro le florecemos incluso nosotros. That teacher.DAT 3SG.DAT flourish.1PL even we.NOM 'We even flourish with that teacher.'

Different views exist on the above inchoatives (Cuervo 2003; Kallulli 2006; Rivero 2003, 2004a). However, there is agreement that they are unlike psych constructions. Since they do not exist in Italian, they cannot be identical to *piacere* constructions. A contrast between the two is the role of datives (experiencer vs. human causer/ affected participant) and nominatives (Subject Matter with psych Vs, not inchoatives). A second difference rests on reflex-

ive clitics. With psych Vs, such clitics are a lexical property. By contrast, with action Vs in inchoative frames, reflexive clitics are taken to signal the suppression of volitional agents. Last, Cuervo (2003) argues that in both constructions datives are Applicative Phrases with 'quirky subject properties', but the two nevertheless differ in syntactic structure.

To sum up, presence/absence of a reflexive clitic determines QPRs in psych constructions that share syntax and semantics. Reflexive clitics also determine QPRs in inchoative constructions with dative clitics that differ in syntax and semantics. This supports that QPRs result from illicit combinations of two adjacent morphological markers/clitics, regardless of interpretation, syntactic derivation, or grammatical function.

3. QPRs in the light of syntactic approaches to person restrictions

Section 3 highlights characteristics of QPRs that pose problems when syntactic proposals on person restrictions now in the literature are applied to them.

Bonet assigns the PCC to morphology, but most minimalist proposals with the exception of Boeckx (2000) place person restrictions in syntax (Adger and Harbour 2005; Anagnostopoulou 2003, 2005; Bianchi 2005; Bejar and Rezac 2003; Chomsky 2001; Hiraiwa 2005; Ormazábal and Romero 2007; Nichols 2001; Sigurðsson 2002, 2004; Stepanov 2003; Taraldsen 1995; a. o.). Syntactic accounts, then, are very prevalent, so it seems important to first ask if they can be successfully applied to QPRs. In the following section, I briefly recall in an oversimplified form three analyses that locate person restrictions in syntax with different philosophies, and argue that they encounter problems if extended to QPRs.

3.1. Some current syntactic views on person restrictions

In a line of work dating back to (Sigurðsson 1991), Sigurðsson (2002, 2004) proposes an account of the Icelandic restriction based on the Minimal Link Condition. He assumes the clause structure in (20), where DAT raises to the edge of NumP and silently agrees with Person, as shown by 3=non-person on V. Since Person cannot access NOM because DAT intervenes between the two, 1/2 patterns are deviant, as in (3): *(ég veit að) honum líkum við. '*(I know that) he likes us'. By contrast, German *Ihm gefällst du* 'He likes you' with 2 on NOM is grammatical because in this language

DAT raises to Person, and both Person and Number can access NOM (and see most recently Sigurðsson and Holmberg 2006).

(20) [PerP Person [NumP Number ... [VP DAT ... NOM]]]

Taking a different intervention approach, Stepanov (2003) assumes the clause structure in (21) for Icelandic: Person is conflated with Tense, and Number with Aspect. DAT checks person with the Tense/Person projection, and NOM checks number with the Number/Aspect projection, so is restricted to nonperson = 3. In German, Aspect is inoperative – not an intervener-, so NOM is always licensed by Tense/Person, resulting in the absence of restrictions comparable to those of Icelandic.

(21) [{Person/Tense}...[{Number/Aspect}...[_{vP} DAT ... NOM]]]

A third view (Anagnostopoulou 2003, 2005) based on a general ban on Multiple Agree unifies restrictions in Icelandic with strong PCC effects in languages like French. The proposal for Icelandic is that in (22), DAT establishes a first Agree relation with T, which licenses person. Given the ban on Multiple Agree, when NOM establishes a second relation with T, person is no longer available, so NOM is restricted to nonperson= 3.

(22) $[_{TP} T(ense) [_{Person, Number}] \dots [_{vP} DAT \dots NOM]].$

For Anagnostopoulou, languages with strong PCC effects resemble Icelandic because they also ban multiple Agree, but in VP. That is, in the ditransitive VP in (23), DAT enters into a checking relation with transitive v first, denuding it of person. When ACC establishes a second relation with v, the ban on Multiple Agree restricts it to nonperson = 3 (also Bejar and Rezac 2003, a. o.).

(23) [_{vP} v DAT ... ACC]

Weak PCC languages differ from strong PCC languages in allowing Multiple Agree in VP. On this view, in languages like Spa, 1/2 combinations such as *Te me presentaron* 'They introduced me to you' are grammatical, because both DAT *te* and ACC *me* can check person simultaneously against v in (23). However, combinations of 1/2 ACC with 3 DAT such as **Te le presentaron* 'They introduced you to him' are excluded because Multiple Agree imposes compatibility. The process is possible only if the two pronouns do not have conflicting feature specifications. Since 2 *te* is [+Person] and 3 DAT *le* is [-Person], they are incompatible for Multiple Agree, leading to deviance. In sum, Icelandic restrictions result from a ban against Multiple Agree in constructions without external argument, when two arguments check features against T in (22). In strong PCC languages, restrictions result from a ban in VP in constructions with an external argument, when datives and accusatives check features against transitive v in (23). In weak PCC languages, restrictions arise when Multiple Agree applies in VP in (23), and the features simultaneously checked by dative and accusative against transitive v are not compatible.

The above analyses face problems if applied to QPRs. A first difficulty discussed in §3.2 is due to QPRs in adjunct infinitive/gerund clauses with Vs without person/number. A second difficulty in §3.3 is due to QPRs in finite clauses with Unagreement – nominatives and finite Vs that do not match in person and/or number. In §4, I propose morphological conditions on person that apply postsyntactically and avoid such difficulties.

3.2. Nonfinite clauses

The first problem if QPRs are syntactic is that they are found in subject/ adjunct infinitives and gerunds whose Vs lack person and number. This is illustrated in (24)–(25) with infinitive psych Vs. Gerunds and nonfinite inchoatives with datives behave similarly (and see Rivero and Geber (2003) for parallel facts in Romanian).

- (24) a. Al gustar+le ellos a Ana, protestamos. At.the like.INF+3SG.DAT they.NOM Ann.DAT complained.1PL 'Given that Ann liked them, we complained.'
 - b. *Al gustar+le nosotros a Ana, protestaron.* At.the like.INF+3SG.DAT we.NOM Ann.DAT, complained.3PL 'Given that Ann liked us, they complained.'
 - c. *Al gustar+os nosotros a vosotros, protestaron.* At.the like.INF+2PL.DAT we.NOM you.DAT, complained.3PL 'Given that you.Pl liked us, they complained.'
- (25) a. Al antojar+se+le ellos a Ana, protestamos. At.the fancy.INF+3R+3DAT they.NOM Ann.DAT, comp.1PL 'Given that Ann fancied them, we complained.'

- b. **Al* antojar+nos+le nosotros a Ana, protestaron. At.the fancy.INF+1REF+3DAT we.NOM Ann.DAT, comp.3PL '*Given that Ann fancied us, they complained.'
- c. **Al* antojar+os+nos vosotros a nosotros, protestaron. At.the fancy.INF+2REF+1DAT you.NOM we.DAT, comp.3PL '*Given that we fancied you.Pl, they complained.'

The adjuncts in (25b–c) share with their well formed counterparts in (24) (a) nominative themes, (b) dative experiencer clitics with doubling phrases, and (c), **crucially**, numberless/personless nonfinite Vs. In addition, the offending sentences all contain a reflexive clitic.

Such adjuncts pose problems if QPRs reside in syntax, as I show next beginning with analyses inspired by Icelandic. OPRs exist in nonfinite adjuncts with personless/numberless Vs in contrast with Icelandic nominative restrictions. QPRs, then, cannot be due to blocking effects between number, person in/around finite T (or alternative heads) and nominative arguments, the core idea behind proposals for Icelandic. Regarding intervention, we could adopt Stepanov's approach, considering Spa reflexive clitics aspectual markers (Nishida 1994; Zagona 1996; Sanz 1999, 2000; De Miguel and Fernández Lagunilla 2000; among others; D'Alessandro 2004 on Italian). As aspectual markers, reflexive clitics could head Aspect in (21), and interrupt the needed syntactic relation between some abstract Person and the nominative. The problem for this idea is Unagreement in §3.3; psych and inchoatives with datives and nominatives that differ in overt person/number from finite Vs are well formed in Spa. Given such a disconnection between nominatives and overt person in T, QPRs are not due to intervention effects between a higher (abstract) Person as probe and a structurally lower nominative as goal. The alternative view in (22) with person conflicts in Icelandic due to a ban on Multiple Agree between nominatives, datives, and person in T is inapplicable to nonfinite adjunct clauses with QPRs since their T lacks phi-features (and see fn 3 for problems with Bianchi (2005)). In sum, nonfinite adjuncts indicate that QPRs do not involve conflicts around phi-features in I/T, a conclusion extended to finite clauses in §3.3.

If QPRs do not arise from phi-features in TP, they could be signs of illicit syntactic relations in VP, like PCC restrictions. On this view, the ditransitive proposal of Anagnostopoulou in (23) could serve for psych and inchoative unaccusatives. QPRs would then result from Multiple Agree applying to dative and reflexive clitics, when they check incompatible features against little v in VP.

The proposal just sketched has a morphological flavor, and runs into problems in both QPR unaccusatives and PCC ditransitives. A general problem made clear in §3.3 is that Multiple Agree based on person/number does not seem to apply in Spa. Another problem is that if Multiple Agree is at work, two syntactic classes of unaccusatives need to be distinguished, which does not add to our understanding of restrictions. Anagnostopoulou assumes that unaccusatives have an intransitive little v that does not check case, and lacks phi-features; this seems suitable for psych Vs without restrictions such as *gustar* 'like'. However, if QPRs signal Multiple Agree, psych Vs such as *antojarse* 'fancy' and inchoatives must activate the transitive v of (23), so as to check person against the dative and the reflexive clitics simultaneously. Vs that participate in QPR constructions look hybrid, without standard external argument like in Icelandic, and the clitic morphology of ditransitive Vs with external arguments in Romance.

If Multiple Agree is assumed, unaccusative and ditransitive constructions both pose problems for (in)compatibility. The first problem comes from combinations with clitic *se*, which seems compatible with any other clitic. French is mentioned to conclude that Romance *se* patterns with person forms (Bonet 1991; Kayne 1975, 2000; a. o.). On this view, French (4a) partially repeated as (26a) and the ditransitive with the reflexive in (26b) both violate the PCC because *se* in (b) is formally equivalent to *me* in (a).

- (26) a. **Paul me lui présentera*. *Paul will introduce me to him.'
 - b. **Elle se lui est donnée entièrement*. She REFL 3SG.DAT is given completely '*She has completely given herself to him'.

Anagnostopoulou (2005) tells us that *se* resembles person forms, is thus compatible with 1/2 clitics, and can combine with them in Multiple Agree contexts in weak PCC languages. The problem is that Spa *se* combines with the complete paradigm of dative clitics both in PCC ditransitives, (27), and in QPR unaccusatives, (28), which leads to a contradiction.

- (27) a. Ella se nos entregó en cuerpo y alma.
 She 3REFL 1PL.DAT gave in body and soul
 'She gave herself to us in body and soul.'
 - b. *Ella se le entregó en cuerpo y alma*. She 3REFL 3SG.DAT gave in body and soul 'She gave herself to him in body and soul.'

- (28) a. (A nosotros) se nos antoja Pedro. (We.DAT) 3.REFL 1PL.DAT fancy.3SG Peter.NOM 'We fancy Pedro.'
 - b. (*A tí*) se te antoja Pedro. (You.DAT) 3.REFL 2SG.DAT fancy.3SG Peter.NOM 'You fancy Pedro.'
 - c. (*A Juan*) se le antoja Pedro. (John.DAT) 3.REFL 3SG.DAT fancy.3SG Peter.NOM 'He fancies Pedro.'

Let us see the contradiction. For Anagnostopoulou, dative clitics such as le in (27b) are [-person]. Then, if se resembles 1/2 and is [+person], it should not be compatible with *le*. However, if *se* is [-person] and compatible with le, it should be incompatible with [+person] nos in (27a). In passing, I noted (Rivero 2004b) that Spa differs from French, so reflexive combinations of type (27a-b) are a problem for the PCC in (Bonet 1991, 1994). Recall that the strong PCC restricts accusatives to 3, so if Spa se is [+person], it should be illicit in (27a). The weak PCC requires that if 3 is present, it should be on the direct object. Thus, if se is equivalent to 1/2 and thus [+person], it should also be illicit in (27b), where dative le is 3 (Bonet 1995). Unaccusatives of type (28) differ from ditransitives, with a se usually called 'inherent' not 'reflexive', but the two se's behave alike. In §4, I argue that Spa se can be adjacent to any clitic in the morphological cluster because it is unspecified for person. However, with se unspecified, Multiple Agree will not apply to any sequence with this clitic. This suggests that such a marked process is not needed in Spa, and adds to the challenges of Unagreement in §3.3.

The second problem for compatibility under Multiple Agree comes from combinations of 2PL and 1PL clitics, which should not be incompatible. Such sequences are the worst in QPR unaccusatives of type (29a). Ditransitives with them such as (29b) sound equally bad to my ear, but I have not seen them mentioned, since examples in the literature are limited to singular clitics.

- (29) a. *A vosotros os nos antojamos nosotros.
 We 2PL 1PL fancied you.familiar.PL
 '*You fancied us.'
 - b. *Ellos os nos presentaron.
 They 2PL 1PL introduced.3PL
 '*They introduced you to us.' or '*They introduced us to you.'

The clitics in (29a–b) are [+Person], so should be compatible under Multiple Agree. In §4, I argue that (29a–b) are deviant due to markedness. The intuition is that *os* and *nos* differ from *se* in having the richest combination of features in the clitic paradigm, and clash when adjacent.

Let us summarize §3.2 on adjuncts with a nonfinite T. Adopting an Icelandic perspective, I concluded that QPRs are not due to a syntactic conflict involving phi-features in T(P), and differ from the nominative prohibition in this language. Adopting a Multiple Agree perspective for weak PCC effects, I noticed two problems. One is that such a process does not seem to operate in the Spa TP or VP, which becomes clear in §3.3. The second problem is that combinations of *se*, *nos*, and *os* in QPR unaccusatives and PCC ditransitives pose problems for (in)compatibility requirements in Multiple Agree.

3.3. The scope of Unagreement in Spanish

This section mentions difficulties due to Unagreement if QPRs are syntactic. Unagreement is a label first coined by Hurtado (1985) for mainly person mismatches between 3Pl nominative subjects and any type of finite V with 1/2 Pl inflection, as in (30) (Jaeggli 1986; Taraldsen 1995; Torrego 1998).²

- (30) a. Los españoles hablamos varios idiomas. The Spaniards speak.1PL several languages 'We Spaniards speak several languages.'
 - b. Ayer llegamos los españoles. Yesterday arrived.1PL the Spaniards 'Yesterday we Spaniards arrived.'
 - c. Los españoles fuimos criticados duramente. The Spaniards were.1PL criticized strongly 'We Spaniards were strongly criticized.'
 - d. *A Ana le gustamos los españoles*. Ann.DAT 3SG.DAT like.1PL the Spaniards 'Ann likes us Spaniards.'

Person Unagreement distinguishes Spa from major Romance null and nonnull subjects languages, but the scope of the phenomenon is larger than (30) suggests. As (31) illustrates, Unagreement can involve number with collective Ns and quantifiers, which has attracted no attention in the theoretical literature, but is noted in descriptive works. Note that nominative Unagreement seems like the mirror image of so-called Antiagreement in Berber, where Vs without phi-features occur with 1/2 subjects (Ouali, this volume and references therein).

- (31) a. La gente mayor no hablamos muchos idiomas. The people older NEG speak.1PL many languages
 'We, older people, do not speak many languages
 - b. *Ninguno hablamos varios idiomas.* No one.SG speak.1PL several languages 'No one of us speak(s) several languages.'
 - c. *A Ana no le gustamos ninguno*. Ann.DAT NEG 3DAT like.1PL no one.SG 'Ann does not like any of us.'

Unagreement in person/number is interesting for the recurring debate on whether nominatives are licensed by phi features or tense (Chomsky 1981, 2000; George and Kornfilt 1981, a. o. vs. Iatridou 1993; Chomsky 1995, 2001, 2004, a. o.). I take Unagreement in (30) and (31) to indicate that person and number on finite T are interpretable, and in no need of valuing in Spa. This supports that case licensing should be divorced from phi features, with valuation dependent on a complete tense domain (pace Alboiu 2006; Pesetsky and Torrego 2001, 2004a,b; a. o.). Once I incorporate the polite system to Unagreement, I return to this aspect.

Nominative Unagreement has complex properties in need of future study. In passing, I mention two adding to the idea that QPRs are morphological. First, Unagreement is possible under long distance Wh-extraction, as in (32) (contra Richards 2005).

(32) Insisten en ver a los que María cree que trabajamos. Insist.3PL in see CM those that Mary thinks that work.1PL 'They insist on seeing those of us who Mary thinks work.'

Richards (2005) reports the opposite judgment on a slightly garbled example. However, speakers I consulted find (32) ordinary, fitting my own intuition. Richards relates Unagreement and multiple Agree, proposing that DPs extracted long distance enter a multiple relation that restricts them to nonperson 3. That is, movement across clausal boundaries such as relativization in (32) involves a first Agree relation with the embedded clause, which makes person on the Probe inaccessible to further checking as in (Anagnostopoulou 2003). This is followed by a second Agree with the moving XP – the relative –, triggering a nonperson=3 restriction. My idea is that in (32), the embedded 1PL inflection contains an interpretable person feature, and the moving relative does not check person against it. Thus, Unagreement fails to participate in multiple Agree chains (even if there is multiple Agree in Spa).

A second aspect of Unagreement supporting markedness views in morphology in this paper is when 1/2 inflectional markers and clitics function as bound variables, (33), not as deictics or indexicals.

(33) Cada candidato al puesto incluído tú tuvimos una pregunta Each candidate to.the position including you had.1PL a question que comprendimos.

that understood.1PL

'Each candidate to the position including you, we all/each had a question we understood.'

The embedded 1Pl inflection in (33) has a bound variable use (Rullman 2004; Kratzer 2006, a. o.), and stands for a salient plurality over individuals or pluralities that does not exclude the hearer.³ Semantics is beyond the scope of this paper, but (33) indicates that plurals contain an inclusive feature, are rich in content, and can thus count as marked. This adds indirect support to the view in §4 that markedness is a problem when 1/2 plural clitics combine.

The Spa polite system is not viewed as Unagreement, but I see it as the mirror image of the nominative type above. To this effect, consider (34), where a semantically 2 polite pronoun cooccurs with a 3 V.

(34) Ustedes hablan. you.Polite.PL speak.3PL 'You (Polite plural) speak.'

The polite system illustrated in (34) establishes a second contrast with Romance. In French, for instance, polite forms are 2PL and appear with 2PL Vs: *Vous parlez*. If the polite system indicates Unagreement, as I propose, we can hypothesize that Spa person features are always interpretable, in no need of valuing, and their position in the clause may vary. When such features reside in T, they give rise to nominative Unagreement, and when they reside in D=N, there is polite Unagreement as in (34).

To unify polite and nominative Unagreement divorces nominative licensing from phi-features in finite clauses. If Unagreement indicates that there is no Agree relation based on person/number between finite inflection and nominatives, Tense must be the fundamental licensing item for them. The received view is that Icelandic restrictions involve a syntactic conflict between nominatives, datives, and phi-features in finite T. If Unagreement disconnects nominatives from phi-features in this type of T, then syntactic analyses for Icelandic cannot be extended to QPRs in finite clauses. We saw in §3.2. that such analyses are unsuitable for OPRs in nonfinite adjuncts, which can be unified with finite clauses because they count as complete tense domains with nominatives licensed by T (in the absence of phi-features) (and see Rigau 1995; Mensching 2000 a.o., on overt infinitive subjects). In sum, in Spa nominatives in finite clauses need not share person/ number with T, and they can also appear in clauses whose T lacks person/ number. An Agree relation with Tense, not phi features, then, systematically licenses nominatives. QPRs are found in both finite clauses with Unagreement and in nonfinite clauses, so they are always independent from person in T

Now let us examine Unagreement in nonnominatives and their impact on QPRs. Unagreement can involve accusative and dative clitics and their doubles, with properties already noted for nominatives. Unagreement with doubling plural DPs, quantifiers, or singular collectives is illustrated for direct object clitics in (35a), indirect object clitics in (35b), and experiencer clitics in (35c).

- (35) a. No nos criticaron a {los españoles / ninguno / NEG 1PL.ACC criticized.3PL CM {the Spaniards / no one / ambos / la gente mayor}.
 both / the people older}
 'They did not criticize {us Spaniards / any of us / both of us / us the older people}.'
 - b. *No nos dieron libros a {los españoles / ninguno, etc.}*. NEG 1PL.DAT gave.3PL books to {the Spaniards / no one, etc.} 'They did not give books to {us Spaniards/any of us, etc.}.'
 - c. A {ninguno/los españoles, etc.} nos gusta el café. None.SG / the Spaniards etc. 1PL.DAT like.3SG the coffee '{None of us/us Spaniards, etc.} like(s) coffee.'

Unagreement with an experiencer clitic and long distance Wh-extraction is in (36a). Unagreement with a 1PL accusative in a bound variable use in the most deeply embedded clause is in (36b).

(36) a. Insisten en ver a quienes María cree que se nos Insist.3PL in see CM who.3PL Mary thinks that 3.REFL 1PL.DAT olvidó Juan. forgot.3SG John.NOM
'They insist on seeing those of us who Mary thinks forgot John.'

b. A cada candidato al puesto incluído tú nos dieron To each candidate to.the position including you we.DAT gave una pregunta que nos irritó.
a question that we.ACC irritated.
'They gave to each of us candidates to the position including you, a question that irritated us.'

Unagreements can combine, as with nominatives and datives and a psych V in (37). Here, dative and nominative quantifiers are singular, inflection is familiar (Castilian) 2PL, and the clitic experiencer is 1PL.

(37) A ninguno nos gustais ninguno.
 None.SG.DAT 1PL.DAT like.2PL no one.SG.NOM
 'None of us likes any of you.'

Unagreements have no effect on QPRs. That is, unaccusative constructions without reflexives of type (38) are free of restrictions, and those with reflexives of type (39) are restricted in the ways discussed above. Nominative Unagreement is in (38b) and (39b), and nominative and dative Unagreements combined are in (38c) and (39c).

- (38) a. *A Ana no le gusta ninguno*. Ann.DAT NEG 3DAT like.3SG no one 'Ana does not like any(one).'
 - b. *A Ana no le gustamos ninguno*. Ann.DAT NEG 3DAT like.1PL no one 'Ana does not like any of us.'
 - c. Al grupo no os gustamos ninguno. The group.DAT NEG 2PL.DAT like.1PL no one 'Your group does not like any of us.'
- (39) a. *A Ana no se le antoja ninguno*. Ann.DAT NEG 3.REFL 3DAT fancy.3SG no one 'Ana does not fancy any(one).'

- b. **A Ana no nos le antojamos ninguno*. Ann.DAT NEG 1PL.REF 3DAT fancy.1PL no one '* Ann does not fancy any of us.'
- c. **Al grupo no os nos antojamos ninguno*. The group.DAT NEG 2PL.DAT 1PL.REF fancy.1PL no one '*Your group does not fancy any of us.'

Before concluding, I take a last look at the hypothesis that Spa has Multiple Agree in VP, in view of Unagreement. Regarding nominatives, I already stated that an Agree relation with Tense, not phi features, licenses them. Regarding accusatives, I know of no independence evidence to support that transitive v establishes an Agree relation with them based on person. Unagreement between datives and accusatives and doubles indirectly suggests the opposite, namely that person (or number) plays no particular role in the syntactic relations entertained by those categories. Thus, it is plausible that accusatives are licensed via an Agree relation with a T-type category in little v, as in (Pesetsky and Torrego 2004b). On this view, Multiple Agree based on person does not operate in TP or VP in Spa.

In conclusion, finite clauses with Vs with person/number that do not agree with nominatives in person/number make syntactic proposals for restrictions in Icelandic inapplicable to QPRs in Spa. Nonnominative Unagreement is another challenge for Multiple Agree based on person/number in Spa.

4. QPRs and Morphological constraints on person

In this section I adopt Distributed Morphology (DM), and propose postsyntactic morphological principles on person to capture QPRs.

In DM, syntax generates structures by combining morphosyntactic features. In the case of pronominal clitics, fully specified syntactic feature matrices are mapped onto morphological structures in morphology, and phonological expression of syntactic terminals is provided trough vocabulary insertion in the mapping to PF. I adopt such a view for the three phenomena that posed problems in §3. One is that all sequences with *se* are grammatical in both QPR unaccusatives and PCC ditransitives. Another is that Castilian Spa sequences of 2PL and 1PL clitics are ungrammatical in unaccusatives and ditransitives. The third issue is that sequences with 3 dative clitics and 1/2 reflexives are ungrammatical in QPR unaccusatives (but fine in PCC ditransitives in some variants, as we shall see). We saw in §3.3 that *se* does not participate in person restrictions in unaccusatives and ditransitives. To recap, in the psych and inchoative constructions in §2, *se* combines with dative clitics for experiencers, human involuntary causers, or affected participants in any person, as in (40) (nonfinite adjuncts are similar).

(40)		a.	те	
		b.	te	
	Se	c.	le/les	{antojó/ olvidó/ perdió/quemó } Pedro.
		d.	nos	
		e.	os	
	3ref		DAT	{fancied/forgot/lost/burned.3SG} Peter.NOM
	'I/you	u.se	G/he/sh	ne/they/we/you.PL {fancied/lost/forgot/burned} Peter.'

Likewise, with ditransitive Vs, *se* combines with goal indirect objects in any person, as in (41) (nonfinite adjuncts are similar).

(41)			a.	me	
			b.	te	
	Pedro	se	c.	le/les	entregó en cuerpo y alma.
			d.	nos	
			e.	os	
	Peter.NOM	3ref		DAT	gave.3SG in body and soul
	'Peter gave	e himse	lf to	o me/v	ou/him/them/us/vou.PL in body and soul.

Spa *se*, then, does not enter into person conflicts, so I propose that it does not clash with adjacent clitics in the morphological cluster due to its poor feature content. That Spa *se* is unspecified is not a new idea (see García 1975, a.o.), but I stress its lack of person specification, which establishes the relevant contrast with earlier views on the PCC that pair it with 1 and 2. For concreteness, I implement this hypothesis by adopting the system in (Nevins 2007) (also Halle 1997; Silverstein 1986 and references), where [+Auth,+Part] identifies first person, [-Auth,+Part] identifies second person, and [-Auth, -Part] identifies third person. I call *se* a 'zero' person, in so far as it differs from 1, 2, and 3 because it lacks the two mentioned features.⁴ This proposal accounts in a unified way for the absence of QPR effects with experiencer/involuntary causers in (40), and PCC effects with goals in ditransitives: (41). We see next that this hypothesis can also distinguish between licit *se le* ditransitive sequences in *leísta* varieties, and illicit QPR combinations such as * *me/nos le* etc. in all variants.

Continuing with plural persons, recall that in varieties with familiar 2PL *vosotros/os*, combinations of 2PL and 1PL are (extremely) deviant in both QPR unaccusatives and PCC ditransitives. By contrast 2SG/1SG combinations are well formed in all varieties, as far as I can tell. The contrast is now illustrated in (42) and (43).

- (42) a. *Os nos {antojamos, olvidamos, perdimos, quemamos}.
 2.PL we.ACC {fancied.1PL, forgot.1PL, lost.1PL, burned.1PL} '*You.PL {fancied, forgot, lost, burned} us.'
 - b. *Os nos {antojasteis, etc.}. 2.PL we.DAT {fancied.2PL, etc.} '*We fancied you.PL, etc.'
 - c. *Te me antojé*, etc. 'You fancied me.'
 - d. *Te me antojaste*, etc. 'I fancied you.'
- (43) a. *Os nos {entregamos/entregasteis} en cuerpo y alma. You.PL we gave.1PL/2PL in body and soul
 'We/you gave ourselves/yourselves to you.PL/us in body and soul.'
 - b. *Te me entregué/entregaste en cuerpo y alma*. You/I you/me gave.2SG/1SG in body and soul 'You/I gave yourself/myself to me/you in body and soul.'

In §1, I mentioned that (42a), (42b) and (43a) could (surprisingly) suggest that the strong PCC is at work in Spa, while (42c), (42d), and (43b) obey the (expected) weak PCC. In my view, such contrasts are not due to the PCC, but to markedness. The syntactic function of clitics plays no role in (42)– (43) since 'true' reflexives in ditransitives and 'inherent'/'inchoative' reflexives in unaccusatives are equally deviant. *Os* and *nos* are syncretic forms for accusative and dative, but this cannot be the problem in (42a), (42b) and (43a) because syncretic singular forms cooccur in (42c), (42d) and (43b). We know since at least (Perlmutter 1971) that person organizes the Spanish clitic template, with 2 preceding 1, which precedes 3. As a consequence, *te* as first item in the cluster stands for an accusative reflexive in (42c), and a dative goal in ditransitive *Te me entregué* 'I gave myself to you', and an accusative reflexive in *Te me entregaste* 'You gave yourself to me'⁵. If case/syntactic function plays no role when mapping clitics into the morphological template,

alignment cannot be the problem in (42a-b) and (43a). Last, such combinations are not deviant due to phonology; a similar (archaic) sequence with subject *vos* 'you' and object *nos* 'us' is used in high ecclesiastical speech: *Vos nos bendecís.* 'You are blessing us'.

1PL/2PL clitics, however, have the most complex feature content in the paradigm. My idea is that they cannot combine due to markedness, which is thus a source of deviance in the absence of repairs. In this paper, it suffices that 1 and 2 carry the marked feature [+Participant], and that Plurals contain a marked number feature. Since Plural persons have an additional inclusive feature mentioned for bound variable uses in §3.3, there could be possibilities I do not explore. In sum, 1PL and 2PL are the most complex clitics in the Spa paradigm, and markedness prevents them from combining in a clitic cluster defined by person, with case and syntactic function irrelevant.

The last restriction I examine is reminiscent of Icelandic and Romance at the same time, and prevents 1/2 accusatives with 3 datives in QPR unaccusatives such as (44) repeating (2b),.

(44) *A Ana nos le antojamos nosotros. Ann.DAT 1PL.REFL 3SG.DAT fancy.1PL we.NOM '*Ann fancies us.'

I propose a general prohibition against combining *le/les* as experiencer/involuntary agent clitics with 1/(2) in psych and inchoative constructions of type (44). However, I do no think there is a strict restriction against combining *le/les per se* with 1/2, as I show by examining *leísta* Spanish. The contrast proves significant for the idea that a successful account of QPRs must take into consideration features in *le*-clitics inherited from syntax. In particular, I argue next that [m] for mental state in {experiencer/involuntary agent} clitics is important for person restrictions.

To develop my argument, I begin with standard Spa (45), relevant because it combines **accusative** *la* as Theme with **dative** so-called aspectual *se* (see Nishida 1994; Zagona 1996; Sanz 1999, 2000; a. o).

(45) *A Caperucita el lobo se la comió viva*. CM Little.Red.Riding.Hood the wolf 3REF.DAT 3SG.ACC ate alive 'As to Little Red Riding Hood, the wolf gobbled her up alive.'

Leísta Spa is a variant that uses the forms le/les homophonous with dative clitics for accusative 3 human/animate (preferably masculine) Themes. In this variant, standard (46a), which combines the aspectual dative *se* of (45)

with accusative *lo* for a Theme, has a well-formed alternative in (46b), which combines the aspectual dative with *le* for a Theme.

(46)	a.	Α	Juan,	el	lobo	se	lo	comió vivo.	Standard Spa
		СМ	John,	the	wolf	3ref	lo	ate.up alive	
	b.	Α	Juan,	el	lobo	se	le	comió vivo.	Leísta Spa
		CM	John,	the	wolf	3ref	le	ate.up alive	
		'As	to Joh	n, th	e wol	f gob	ble	d him up while he was	alive.'

In psych and inchoative constructions, *nos le* combinations are deviant, as we saw in (44). Thus, it seems intriguing that in *leísta* Spa the apparently similar combination in (47) is well formed. This describes a cannibalistic intention or, more likely, a wish to demolish John, and the difference with deviant (44) is that its *le* stands for an object not a 'subject'. Thus, the QPR prohibition affecting (44) is sensitive to the character of *le* as experiencer, which justifies that *le* in this sentence is marked [+m] for mental state, while *le* in (47) is not.

(47) A Juan, (nosotros) nos le comeremos vivo. Leísta Spa John.ACC, we lREF le will.eat.up alive 'As to John, we are going to eat him alive.'

I just concluded that *leísta* variants make a difference between *le* as 'quirky subject' in psych constructions and *le* as 'object' in ditransitives with external arguments. The difference between 'subject' *le* and 'object' *le* receives further support from the behavior of *olvidar* 'forget' in such variants. *Olvidar* participates in several frames, including the one with dative experiencer and nominative theme in (48), or another one with nominative experiencer, dative aspectual reflexive, and accusative theme in (49a–b). With this V, then, experiencers can be dative or nominative.

- (48) Al niño se le olvidaron los profesores. The child.DAT 3REFL 3DAT forgot.3PL the teachers.NOM 'The child forgot the teachers.'
- (49) a. Ana se olvidó a las niñas.
 Ann.NOM 3REFL.DAT forgot.3SG the girls
 'Ann forgot/left the girls behind.'
 - b. *Ana* se las olvidó (a ellas). Ann.NOM 3REFL.DAT 3PL.FEM.ACC forgot.3SG 'Ann forgot them/left them behind.'

In standard Spa, (48) is unambiguous: *le* as dative stands for the experiencer with the indicated reading. In *leísta* Spa, however, (48) has two readings because the frames in (48) and (49b) can have identical morphology, since *le* can stand for an experiencer/quirky subject, as in the standard, or a theme/accusative object, in contrast with the standard. When *le* stands for a standard 'subject', the meaning of (48) is as shown. When *le* stands for the nonstandard theme/accusative object, the nominative is an experiencer and *se* is an aspectual reflexive. In the last case, the reading is 'The teachers forgot the child' similar to standard *Al niño se lo olvidaron los profesores* with *lo* as Theme. The two readings of (48) have contrasting truth conditions, so when confronted with such patterns, *leísta* informants (including the present writer) can switch from one to the other in endless confusion: Is it the child who forgot the teachers, or is it the teachers who forgot the child?

However, in contrast with (48) as far as I could ascertain, psych combinations of le with 1 (or 2) such as (50) have only one interpretation in leistavariants: with the nominative (not the dative) as experiencer. That is, dative le in (50) cannot be interpreted as an experiencer/'quirky subject' because such a reading would imply a QPR violation: namely, an experiencer clitic cannot combine with a 1/2 theme, as (44) clearly shows.

Leísta Spa

(50) A Juan nos le olvidamos nosotros.
John 1REF le forgot.1PL we.NOM
Only possible reading: 'We forgot John.'
Impossible/ungrammatical reading: *'John forgot us.'

That (50) is limited to one reading with *le* as 'object' supports that *leísta* Spa discriminates between 'subject' *le* and 'object' *le*. If *le* in (50) is interpreted as an object functioning as theme as in 'We forgot him', no QPR (or PCC) violation arises. In conclusion, Spa has a general ban against combining 3 clitics that stand for experiencers/involuntary causers/affected participants with 1/2 accusative clitics that stand for themes. However, in certain varieties it is possible to combine 1/2 with 3 datives that are not experiencers. This shows that syntactic features encoded in clitics in the morphological cluster are involved in QPRs.

How can we account for the above contrasts? Dative clitics must be present, or are obligatory, in both psych constructions and inchoatives. Thus, I propose that they function as the only obligatory formal sign of experiencers/involuntary human causers. As such, they must be the elements in the syntactic construction that are assigned a mental state feature embodying theta-role relations in the sense of Reinhart (2002). Dative clitics in QPR constructions, then, must be marked in syntax with the feature [+m] for mental state. When mapped to morphology, such clitics must carry and preserve the [m] feature, whose content is unrecoverable. By contrast, based on (47), I concluded that patient/theme clitics are not marked with a similar [m] feature, even in those *leísta* varieties where they can be homophonous with experiencer clitics. There is also a difference between homophonous clitic experiencers and clitic goals in ditransitives, which is that the first cannot be modified through morphological operations, while the second may. I attribute such a difference to the [+m] feature in experiencer/involuntary agents, which, as stated, is a content that is not recoverable if manipulated in morphology.

To account for the ban on 3 datives and 1/2 accusatives in QPR constructions, I propose as a first step the preliminary morphological constraint in (51) for *le* marked with [+m] in the clitic cluster⁶.

(51) *Le* marked [+m] is ungrammatical in the presence of a [+Participant] feature elsewhere in the clitic cluster.

Given (51), we expect no person restrictions in constructions with only a dative clitic of the relevant type, such as the psych kind without reflexive (*gustar*), or the unaccusative kind with a dative and a V that does not participate in the inchoative alternation in \$2 (*florecer*). Second, there are no problems in constructions that combine *le* with *se*, which is unspecified for person, so lacks a [Participant] feature. Third, constructions with reflexives that are inherently 1 or 2 should be deviant because they carry an offending [+Participant] feature elsewhere in the cluster.

In QPR constructions, however, other dative clitics besides le can be marked [+m]. For instance, we saw that combinations of 1/2 clitics such as *Te me antojaste* 'I fancied you' are fine; this is a case where the [+m] clitic carries a [+Participant] feature, and there is another [+Participant] feature elsewhere in the cluster. This suggests that (51) hides a more general condition that requires that the [Participant] feature in [+m] clitics have a value compatible with another [Participant] feature in the cluster, as in (52).

(52) The value of [Participant] in [+m] clitics must be compatible with a value for [Participant] elsewhere in the clitic cluster.

Due to markedness, combinations of 2PL and 1PL clitics are generally excluded in all constructions including ditransitives, so irrespective of their [+m] and [Participant] features, they are impossible in QPR constructions.

I just proposed that *se* is unspecified for person, and *nos* and *os* cannot combine due to markedness. Given such proposals, a reviewer suggests that QPRs could be unified with the (remnants of the) PCC if (52) did not mention [m], but made reference instead to some morphological feature present in both experiencer and goal clitics (perhaps [dative]) and absent in themes. On this view, the [m] feature contained in experiencer/involuntary agent clitics would come into play for repair mechanisms, distinguishing between experiencers from goals (but see fn. 6). As I show next, dative experiencer clitics cannot be manipulated or undergo repairs in morphology, which is not the case for dative goal clitics, so the two differ.

As way of conclusion, I examine the role of the [m] feature in disallowing repairs for QPRs, which distinguishes them from other person restrictions in the literature. When Icelandic Vs are in default form, there are no person restrictions. In (53a) adapted from Sigurðsson (1996: 30), the nominative cannot be 1 since it agrees with the (matrix) V. In (53b), by contrast, the nominative can be 1 because V shows no agreement, i.e. default 3SG.

(53)	a.	*Þeim	höfum	alltaf	fundist	við	vinna	vel.			
		They.DAT	have.1PL	always	found	we.NOM	work	well			
	b.	Þeim	hefur	alltaf	fundist	við	vinna	vel.			
		They.DAT	have.3SG	always	found	we.NOM	work	well			
		'They have always found we work well.'									

In Spa, there is no situation for QPRs equivalent to (53b). In §3.2, we saw that infinitives and gerunds without person/number do not agree with nominatives in phi-features, but display QPRs. In §3.3, we saw that nominatives in finite clauses need not agree with V in person/number, but there are QPRs. Since QPRs do not reside in T, they cannot be affected by manipulations of T.

QPRs reside in clitic clusters, so repair mechanisms for such items seem more relevant. A strategy to avoid PCC violations in ditransitives is to use a strong pronoun instead of a clitic (Bonet 1994). In QPR constructions, however, clitics never allow substitution by strong pronouns, and are obligatory except for a lexical exception (i.e. we saw that some psych Vs can appear with/without reflexive for unclear reasons). Dative clitics in QPR patterns may double strong pronouns, but they can never be substituted by them. I attribute obligatoriness to [+m]: if the dative clitic were absent, [+m] would be unrecoverable.

Impoverishment is a familiar repair strategy, and can affect dative clitics. In Catalan, for instance, dative clitic li as goal is empoverished and turns

into *hi*, which is a way to avoid a PCC violation (Bonet this volume). The 'Spurious *se* rule' of Spa is well known (Perlmutter 1971; Bonet 1991, 1994; Nevins 2007; a. o.). In ditransitives, it changes 3 dative goals next to accusatives into *se*, thus turning deviant **Le lo dio* into well formed *Se lo dio*. '(He/she) gave it to him'. This procedure looks particularly relevant for QPRs, since dative experiencer le(s) runs into difficulties when it combines with 1/2 clitics in cases like (2b) now repeated in (54a). However, there is no version of the *Se*-rule for dative le(s) in QPR constructions. If, for the sake of the argument, offending *le* in (54a) is disguised as *se* and mapped into the initial position in the cluster, the result is nonsensical (54b), which only a linguist could construct.

- (54) a. (*A Ana) nos le antojamos (nosotros). Ann.DAT 1PL.REFL 3SG.DAT fancy.1PL we.NOM '*Ann fancies us.'
 - b. **Se nos antojamos. *She/he fancies us.*

If quirky le(s) is marked [+m] in QPR unaccusatives, such a feature should prevent it from being impoverished, or otherwise manipulated in postsyntactic morphology, because, to repeat, the content of such a feature is unrecoverable.

In the absence of any syntactic or morphological repair, Gapping is the only way to circumvent QPRs. Gapping is a process targeting finite Vs as in (55a), or nonfinite Vs (not illustrated), and must affect clitics that accompany the verb, as in (55b).

- (55) a. *Yo hablé con María y tú hablaste con Juan*. I spoke with Mary and you spoke with John
 - b. *Juan se comió toda la tarta y yo me comí todo el helado.* John 3REF ate all the cake and I 2REF ate all the ice-cream 'John ate up the whole cake and I ate up all the ice-cream.'

When Gapping applies to a V with offending clitics in a QPR construction, the result is always grammatical (and the content is recoverable). Thus, differences between constructions free of restrictions and those with QPRs disappear under Gapping, as they are all well formed. This is illustrated in (56a) with a construction without restrictions, and in (56b) with Gapping of a portion with QPRs. Infinitives and gerunds (not illustrated) behave along parallel lines.
- (56) a. A Ana le gustaron sus compañeros y a Pedro Ann.DAT 3.DAT liked.3PL her pals and Peter.DAT *le gustamos* nosotros.
 3.DAT.CLLIKED.1PL we.NOM
 'Ann liked her pals and Peter (liked) us.'
 - b. A Ana se le antojaron sus compañeros Ann.DAT 3.REFL 3.DAT.CL fancied.3PL her pals y a Pedro nos le antojamos nosotros. and Peter.DAT 1PL.REFL.3DAT.fancied.1PL we.NOM 'Ann fancied her pals and Peter (fancied) us.'

In DM, phonological content for morphosyntactic features is provided postsyntactically in PF. On this view, we can reinterpret the traditional idea that Gapping is a 'deletion' process as the situation where the syntactic feature matrices of V and clitics do not undergo Vocabulary Insertion in the mapping to morphology, making such features invisible for person restrictions. That Gapping eliminates violations, then, suggests that QPRs do not result from illicit syntactic derivations. Restrictions are due to morphological conflicts that fail to materialize if the clitics are not spelled out by Vocabulary Insertion, that is, 'late' in the morphological component.

5. Conclusion

In this paper, I developed a morphological account of person restrictions in Spa unaccusative constructions with 'quirky' subjects and objects, based on three ideas. (1) In the general case, *se* is unspecified for person, so QPR-like unaccusatives and PCC-like ditransitives are well formed along parallel lines, when they contain combinations with this clitic. (2) In the general case, 1PL and 2PL clitics cannot combine due to markedness, so both QPR unaccusatives and PCC ditransitives that contain such combinations are deviant along parallel lines. (3) Dative clitics for experiencers/involuntary causers are special in so far as they carry a [+m] feature. This feature prevents them from being manipulated in morphology, and can trigger a clash with a [Participant] feature elsewhere in the clitic cluster. The clash disappears under Gapping, which prevents Vocabulary Insertion of V and clitics in PF.

Notes

- Research for this paper was partially subsidized by the Social and Humanities Research Council of Canada under Research Grants 410-2003-0167 and 410-2006-0150. Preliminary versions were presented at the Montreal-Ottawa-Toronto (MOT) Phonology Meeting, Ottawa, February 2004, the 14 Colloquium in Generative Grammar, Porto, Portugal, April 2004, The Role of Morphology in Argument Expression and Interpretation Workshop, Vienna, Austria, June 2005, and graduate seminars at the Instituto Ortega y Gasset, Madrid, Spain, March 2006, and the University of Ottawa, Fall 2006. I thank the students in the seminars most particularly, the audiences of the conferences, two anonymous reviewers, and the editors of this volume for many useful comments.
- 2. Hurtado (1985) suggests that nominative phrases are dislocated adjuncts, and a null pronoun with person sits in argument position. Torrego (1998) suggests a similar analysis for Unagreement in objects. However, Unagreement involves quantifiers that cannot be dislocated or appear in a syntactic A-bar position. Den Dikken (2001) treats some instances of quirky agreement in English with phrases in apposition to empty pronouns with person/number, as in *We the people*. Another option is with empty pronouns in partitive structures such as *None of us*. However, these options do not provide plausible sources for some complex examples of Unagreement such as (33) later in the paper.
- 3. Bianchi (2005) develops a relativized minimality approach for PCC and inverse systems. PCC effects result from intervention when direct and indirect object as deictic pronouns are licensed by person categories in the Finiteness left periphery of the clause anchored in discourse. I see two problems for this approach. One is that it does not contemplate that pronouns can also be used as bound variables. The other is that infinitive and gerund adjuncts are syntactic islands, so their pronominal categories should be barred from accessing person projections in the main clause, which makes it impossible to differentiate between adjuncts with QPRs and those without.
- 4. An anonymous reviewer suggests that *se* is unspecified for number, so can occur with both Sg. and PL NPs, but is incompatible with 1: **Yo se amo* '*I love myself'. In my view, deviance in this type of sequence could indicate incompatibility between [+Participant] in finite T, and *se* as zero person. By contrast, in *La gente nos amamos* 'We people (SG) love (1PL) ourselves' and *La gente se ama* 'People (SG) love (3SG) themselves', [-Participant] in T is compatible with *se*, regardless of number in NP. On this view, [-Participant] in T is equivalent to an unspecified or absent feature.
- 5. A common assumption in the syntactic literature is that datives are structurally higher than accusatives. In Spa, *te me* sequences such as (43b) and (42c–d) are ambiguous between a DAT-ACC interpretation and an ACC-DAT interpretation. Given such ambiguity, morphological metathesis rules as in (Harris and Halle

2005) could be at work in 1/2 syntactic combinations, when mapping them into a clitic cluster.

- 6. A second case where [m] plays a role in restrictions is in (Rivero 2005) for Bulgarian, under a different terminology. In (Rivero 2004b), I showed that constructions comparable to those with QPRs in Spa do not have restrictions in Bulgarian. I attributed the difference to the invariable/unspecified *se* standing for all persons in Slavic. In (Rivero 2005), I noted restrictions on nominatives in another family of constructions in Bulgarian known as 'feel like' (Rivero 2003, 2004a), as in (i).
 - (i) a. *Na Ivan mu se zeluvaxa devojki*. Bulgarian Ivan.DAT 3SG.DAT REF kissed.3PL girls.NOM 'Ivan felt like kissing girls.'
 - b. **Na Ivan mu se zeluvaxme nie*. Ivan.DAT 3SG.DAT REF kissed.1PL we.NOM '*Ivan felt like kissing us.'

As (i.a) illustrates, 'feel like' constructions combine dative experiencers and nominative themes with reflexive and dative clitics; both dative and nominative phrases may be absent, but the two clitics are obligatory. 'Feel like' constructions are well formed with a 3 nominative, (i.a), not with a 1 (or 2) nominative, (i.b). The reflexive in 'feel like' constructions is also *se* but I proposed (Rivero 2005) that it is related to the experiencer through what I then dubbed 'Control' (*se* is the signal of the external argument of V bound by the dative). Using the ideas of this paper, the idea is that in Bulgarian *se* inherits [+m] in 'feel like' constructions, not in ordinary psych constructions. The restriction in (i.b) could then be that T marked [+Participant] is incompatible with *se* marked [+m] (or vice versa).

References

Adger, David	and Daniel Harbour
2005	The Syntax and Syncretisms of the Person Case Constraint. MIT
	Working Papers in Linguistics 50: 1–36.
Alboiu, Gabr	iela
2006	Are we in Agreement? In Agreement Systems, C. Boeckx (ed.), 13-39.
	Amsterdam: Benjamins.
Anagnostopo	ulou, Elena
2003	The syntax of ditransitives: evidence from clitics. Berlin/New York:
	Mouton De Gruyter.
2005	Strong and Weak Person Restrictions: a Feature Checking analysis.
	In Clitics and affixation, L. Heggie and F. Ordoñez (eds.), 199-235.
	Amsterdam: Benjamins.

Arregi	Karlos	and	Andrew	Nevins
Anogi,	1741103	anu	Andrew	1 VC VIIIS

- 2008 *Agreement Restrictions and their realization in Basque morphology.* This volume.
- Bhaskararao, Peri and Karumuri Venkata Subbarao (eds.)

2004 Non-nominative Subjects. Amsterdam: Benjamins.

Belletti, Adriana and Luigi Rizzi

- 1988 Psych verbs and Theta-theory. *Natural Language and Linguistic Theory* 6: 291–352.
- Bejar, Susana and Milan Rezac
 - 2003 Person licensing and the derivation of PCC effects. In *Romance Linguistics: Theory and Acquisition*, A. Pérez-Leroux and I. Roberge (eds.), 49–62. Amsterdam: Benjamins.

Bianchi, Valentina

2005 On the syntax of personal arguments. To appear in *Lingua*.

Boeckx, Cedric

2000 Quirky Agreement. *Studia Linguistica* 54: 354–380.

Bonet, Eulalia

1991	Morphology after Syntax: Pronominal Clitics in Romance Languages.
	Unpublished Doctoral Dissertation, MIT, Cambridge, MA.

- 1994 The Person-Case Constraint: A Morphological Approach. In *The Morphology-Syntax Connection*, H. Harley and C. Phillips (eds.), 33–52. Cambridge, MA: MIT Press.
- 1995 Feature structure of Romance clitics. *Natural Language and Linguistic Theory* 13: 607–647.

2008 The Person-Case Constraint and repair strategies. This volume.

Chomsky, Noam

1981 *Lectures on Government and Binding*. Dordrecht: Foris.

- 1995 The Minimalist Program. Cambridge, MA: MIT Press.
- 2001 Derivation by Phase. In *Ken Hale: A Life in Language*, M. Kenstowicz (ed.) 1–52. Cambridge, MA: MIT Press.
- 2004 On Phases. Ms. MIT.

Cuervo, María Cristina

- 1999 Quirky but not eccentric: Dative Subjects in Spanish. *MIT Working Papers in Linguistics* 34: 213–227.
- 2003 *Datives at Large*. Unpublished Ph.D. dissertation, MIT, Cambridge, MA.
- D'Alessandro, Roberta
 - 2004 *Impersonal si constructions in Italian: Agreement and Interpretation.* Unpublished PhD Dissertation, Universität Stuttgart.
- De Miguel, Elena and Marina Fernández Lagunilla
- 2000 El operador aspectual *se. Revista Española de Lingüística* 30: 13–43. Dikken, Marcel Den
 - 2001 "Pluringulars" plurals and quirky agreement. *The Linguistic Review* 18: 19–41.

Fernández So	oriano, Olga				
1999a	Two Types of Impersonal Sentences in Spanish: Locative and Dative				
	Subjects. Syntax 2(2), 101–140.				
1999b	Datives in Constructions with Unaccusative SE. Catalan Working				
	Papers in Linguistics 7: 89–105.				
García, Erica					
1975	The Role of Theory in Linguistic Analysis: The Spanish Pronoun				
	System. Amsterdam: North-Holland.				
George, Lela	nd and Jaklin Kornfilt				
1981	Finiteness and boundedness in Turkish. In Binding and Filtering, F.				
	Heny (ed.), 105–127. Cambridge, MA: MIT Press.				
Gutiérrez-Bra	ivo, R.				
2005	A Reinterpretation of Quirky Subjects and Related Phenomena in				
	Spanish. To appear in New Perspectives in Romance Linguistics, J.				
	P. Montreuil and K. Nishida (eds.). Amsterdam: Benjamins.				
Halle, Morris					
1997	Impoverishment and Fission. PF: Papers at the Interface. <i>MIT Work</i> -				
	ing Papers in Linguistics 24: 425–450.				
Halle, Morris	and Alec Marantz				
1993	Distributed Morphology and the Pieces of Inflection. In The View				
	from Building 20, K. Hale and S. J. Keyser (eds.), 111–176. Cambridge.				
	MA: MIT Press.				
1994	Some key features of Distributed Morphology, MIT Working Papers				
	in Linguistics 21: 275–288.				
Harley, Heidi	and Rolf Nover				
1999	Distributed Morphology, GLOT 4(4): 1–34.				
Harris, James	and Morris Halle				
2005	Unexpected Plural Inflections in Spanish: Reduplication and Meta-				
2000	thesis Linguistic Inquiry 36: 192–222				
Hiraiwa, Ken					
2005	Dimensions of symmetry in syntax. Agreement and clausal architec-				
2000	ture Unpublished Doctoral Dissertation MIT Cambridge MA				
Hurtado Alfr	redo				
1985	The Unagreement hypothesis In Selected Papers from the Thirteenth				
1705	Linguistic Symposium on Romance Languages L. King and C. Maley				
	(eds.) 187-211 Amsterdam: Benjamins				
Iatridou Sabi	ne				
1993	On Nominative Case Assignment and a Few Related Things <i>MIT</i>				
1770	Working Paners in Linguistics 19: 175–198				
Izegoli Osva	Ido				
1986	Arbitrary plural pronominals, Natural Language and Linguistic The-				
1700	ory 4: 43–76				

Kallulli, Dalina

- 1999 Non-active morphology in Albanian and event (de)composition. In *Crossing Boundaries*, I. Kenesei (ed.), 263–292. Amsterdam: Benjamins.
- 2006 Unaccusatives with dative causers and experiencers: a unified account. In *Datives and Other Cases*, D. Hole, A. Meinunger and W. Abraham (eds.), 271–301. Amsterdam: Benjamins.

Kayne, Richard S.

- 1975 French Syntax. Cambridge, MA: MIT Press.
- 2000 Parameters and Universals. Oxford: Oxford University Press.

Kratzer, Angelika

2006 *Minimal Pronouns*. Ms., www.semanticsarchive.net.

Landau. Idan

2003 The locative syntax of experiencers. Ms., Ben Gurion University.

Marantz, Alec

1997 No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. *Penn Working Papers in Linguistics* 4(2): 201–225.

Mensching, Guido

2000. *Infinitive constructions with Specified Subjects*. New York: Oxford University Press.

Masullo, Pascual

- 1992 Incorporation and Case Theory in Spanish. A crosslinguistic perspective. Unpublished Doctoral Dissertation, University of Washington, Seattle.
- 1993 Two types of Quirky Subjects: Spanish versus Icelandic. *NELS* 23: 303–317.

Nevins, Andrew

2007 The Representation of Third Person and ist Consequences for Person-Case effects. *Natural Language and Linguistic Theory* 25: 273–313.

Nichols, Lynn

2001 The syntactic basis of referential hierarchy phenomena: clues from languages with and without morphological case. *Lingua* 111: 515–537.

Nishida, Chiyo

1994. The Spanish reflexive clitic *se* as an aspectual class marker. *Linguistics* 32: 425–458.

Ouali, Hamid

2008 On C-to-T phi-feature Transfer: The Nature of Agreement and Anti-Agreement in Berber. This volume.

Ormazábal, Javier and Juan Romero

2007 The Object Agreement Constraint. *Natural Language and Linguistic Theory* 25(2): 315–347.

Perlmutter, David

1971 *Deep and Surface Structure Constraints in Syntax.* New York: Rinehart and Winston.

Pesetsky, David

1995 Zero Syntax: Experiencers and Cascades. Cambridge, MA: MIT Press. Pesetsky, David and Esther Torrego

- 2001 T-to-C movement: Causes and consequences. In M. Kenstowicz (ed.) *Ken Hale: A life in language*, 355–426. Cambridge, MA: MIT Press.
- 2004a Tense, case, and the nature of syntactic categories. In J. Gueron and J. Lecarme (eds.) *The syntax of time*. Cambridge, MA: MIT Press.
- 2004b The syntax of valuation and the interpretability of features. To appear in *Clever and Right: A Festschrift for Joe Emonds*, S. Karimi, V. Samiian and W. Wilkins (eds.).

Reinhart, Tanya

2002 The Theta System, An overview. *Theoretical Linguistics* 28(3): 229–290.

Richards, Norvin

2005 Person-Case effects in Tagalog and the nature of Long Distance Extraction. Ms., MIT. To appear in *Natural Language and Linguistic Theory*.

Rigau, Gemma

1995 Temporal infinitive constructions in Catalan and Spanish. *Probus* 7(3): 279–301.

Rivero, María Luisa

- 2003 Reflexive clitic constructions with datives: syntax and semantics. *Formal Approaches to Slavic Linguistics* 11: 469–494.
- 2004a Datives and the Non-Active Voice / Reflexive Clitic in Balkan Languages. In *Balkan Syntax and Semantics*, O. Tomić (ed.), 237–267. New York: Benjamins.
- 2004b Spanish Quirky Subjects, Person Restrictions, and the Person-Case Constraint. *Linguistic Inquiry* 35: 494–502.
- 2005 Topics in Bulgarian morphology and syntax: a minimalist perspective. *Lingua* 115: 1083–1128.

Rivero, María Luisa and Dana Geber

2003 Quirky Subjects and Person Restrictions in Romance: Rumanian and Spanish. *Cahiers Linguistiques d'Ottawa* 31: 20–53.

Rivero, María Luisa and Milena Milojević Sheppard

2003 Indefinite Reflexive Clitics in Slavic:Polish and Slovenian. *Natural Language and Linguistic Theory* 21: 89–155.

Rullmann, Hotze

2004 First and second person pronouns as bound variables. *Linguistic Inquiry* 35: 159–168.

Sanz, Montserrat

- 1999 Aktionsart and Transivity Phrases. In Semantic Issues in Romance Syntax, E. Treviño and J. Lema (eds.), 247–261. Amsterdam: Benjamins.
- 2000 Events and Predication. Amsterdam: Benjamins.

Sigurðsson, Halldór A.

- 1991 Icelandic case-marked PRO and the licensing of lexical arguments. *Natural Language and Linguistic Theory* 9: 327–363.
- 1996 Icelandic Finite Verb Agreement. Working Papers in Scandinavian Syntax 57: 1–46.
- 2002 Agree and Agreement. Evidence from Germanic. *Working Papers in Scandinavian Syntax* 70: 101–156.
- 2004 Icelandic non-nominative Subjects. In Non-Nominative Subjects, Vol. 2, P. Bhaskarao and K.V. Subbarao (eds.), 137–159. Amsterdam: Benjamins.

Sigurðsson, Halldór A. and Anders Holmberg

- 2008 Icelandic Dative Intervention: Person and Number as separate probes. This volume.
- Silverstein, Michael
 - 1986 Hierarchy of features and ergativity. In *Features and Projections*, P. Muysken and H. van Riemsdijk (eds.), 163–232. Amsterdam: Foris.

Stepanov, Arthur

2003 On the 'quirky' difference Icelandic vs. German: a note of doubt. *Working papers in Scandinavian syntax* 71: 1–32.

Taraldsen, Tarald

1995 On agreement and nominative objects in Icelandic. In *Studies in Comparative Germanic Syntax*, H. Haider, S. Olsen and S. Vikner (eds.), 307–327.Dordrecht: Kluwer.

Torrego, Esther

- 1998 The dependencies of objects. Cambridge, MA: MIT Press.
- Verma, Manindra K. and K. P. Mohanan (eds.)
 - 1991 Experiencer Subjects in South Asian Languages. CSLI, Stanford.

Zagona, Karen

1996 Compositionality of Aspect: Evidence from Spanish Aspectual se. In Aspects of Romance Linguistics, C. Parodi, C. Quicoli, M. Saltarelli and M. L. Zubizarreta (eds.), 475–488. Washington, DC: Georgetown University Press.

Icelandic Dative Intervention: Person and Number are separate probes

Halldór Ármann Sigurðsson and Anders Holmberg

Icelandic DAT-NOM constructions generally observe the Person Restriction, allowing only 3rd person NOM to control agreement. This can be illustrated with English glosses:

- (1) a. /him.DAT <u>have.3PL</u> always liked they.NOM/
 = 'He has always liked them.'
 */him DAT have 1PL always liked me NOM/
 - b. */him.DAT <u>have.1PL</u> always liked **we**.NOM/

In addition, however, there is variation within the 3^{rd} person, one variety (Icelandic C) allowing only the default 3SG form of the verb (i.e., generally disallowing agreement), another variety (Icelandic B) generally disallowing 3^{rd} person agreement with NOM *across an overtly intervening DAT*, and a third variety (Icelandic A), allowing many but not all instances of 3^{rd} person agreement across DAT. Thus, we find the pattern in (2a) in Icelandic A but the pattern in (2b) in Icelandic B and C:

(2)	a.	/there <u>have.3PL</u> /?has.3SG only one linguist.DAT liked these ideas .NOM/	A
	b.	/there *have.3PL/ <u>has.3SG</u> only one linguist.DAT liked these ideas .NOM/	B/C

However, when the dative raises outside of the probing domain of the finite verb, three patterns can be discerned: Preferable 3PL agreement in Icelandic A, optional agreement in Icelandic B and agreement blocking (default 3SG) in Icelandic C:

(3)	a.	/him.DAT have. <u>3PL</u> /?has.3SG always liked they .NOM/	Α
	b.	/him.DAT <u>have.3PL</u> / <u>has.3SG</u> always liked they .NOM/	В
	c.	/him.DAT??have.3PL/ <u>has.3SG</u> always liked they .NOM/	С

We develop a unified analysis of the Person Restriction, blocking 1^{st} and 2^{nd} person agreement in cases like (1b), and the 3^{rd} person agreement variation

in (2) and (3) (and elsewhere in the language). The analysis is based on the hypothesis that interpretable (but unvalued) Person and Number are *separate probes* ('heads') in the clausal structure.

1. Introduction

There are two histories behind this article. First, as has been widely discussed in the generative literature on agreement, since Sigurðsson (1991, 1996) and Taraldsen (1995, 1996), Icelandic DAT-NOM constructions show an unusual PERSON RESTRICTION, allowing *only* 3rd *person* NOM to control agreement.¹ Second, however, even for 3rd person agreement, DATIVE IN-TERVENTION may arise, such that DAT blocks the verb from agreeing with NOM if it intervenes between the two. This intervention effect was first reported by Holmberg and Hróarsdóttir (2003, 2004), henceforth H&H, and has since been discussed by many (e.g., Hiraiwa 2005, Nomura 2005, Chomsky 2005). H&H discussed a variety of Icelandic where the facts in (4) hold true:

- (4) a. *Henni virðast myndirnar vera ljótar.* her.DAT seem.3PL paintings.the.NOM be ugly 'It seems to her that the paintings are ugly.'
 - b. *Það virðist/*virðast einhverri konu* EXPL seems.3SG/3PL some woman.DAT *myndirnar vera ljótar*.
 paintings.the.NOM be ugly
 - c. *Hvaða konu finnst/??finnast* what woman.DAT finds.3SG/3PL *myndirnar vera ljótar?* paintings.the.NOM be ugly 'Which woman finds the paintings ugly?'

The DAT argument of a *seem*-type verb usually raises out of the probing (ccommanding) domain of the verb, as in (4a), in which case T may agree with the lower NOM argument.² However, if DAT remains in a low position, as in (4b), it blocks agreement between the verb and NOM, apparently a case of defective intervention. If DAT *wh*-moves, as in (4c), agreement is still blocked. H&H drew the conclusion that the *wh*-DAT must move directly to SpecCP, since if it moved via SpecTP, as in (4a), it would thereby have moved out of the probing domain of the verb, thus not intervening for agreement between T and NOM, contrary to fact. Chomsky (2005) took this to provide evidence for his theory of parallel movement, whereby the dative argument in (4c) moves to SpecTP and SpecCP by two parallel movements, creating two disjoint chains, an A and an A-bar chain.

However, soon after the publication of H&H, it became clear that the intuitions reported there are not shared by all native speakers. Since Sigurðsson's description (1991) and analysis (1996) of the Person Restriction was to a large extent based on an informant survey, we found it appropriate to make a similar survey on the H&H intervention effect.³ This survey revealed that there are basically three varieties of Icelandic with respect to the H&H intervention effect, one that does not generally have it (Icelandic A), one that has it, as described in H&H (Icelandic B), and one that disallows agreement in DAT-NOM constructions, regardless of overt intervention (Icelandic C).⁴ In the first variety (A), number agreement (in the third person) is stronger than in the H&H variety (B), in the sense that it may apply across a dative argument, as in (4b), or across a wh-trace, as in (4c). In the third variety (C), number agreement is, trivially, still weaker than it is in the H&H variety. There are reasons to believe that the strongest number agreement variety is the oldest one and that the no agreement variety is the most recent one, that is, there seems to be an ongoing change from A to B to C:⁵

Icelandic A	>	Icelandic B (H&H)	>	Icelandic C
Agreement		Intervention		No agreement

In contrast to Dative Intervention, the Person Restriction holds across all three varieties. However, we will show that both phenomena can be accounted for if *Person and Number are separate probes*. Given that assumption, the Person Restriction can be explained as another effect of intervention by the Dative argument. This will also account for certain other puzzling facts regarding Icelandic agreement, including 'half agreement', that is, when the verb agrees with the number but not unambiguously with the person of the $(1^{st} \text{ or } 2^{nd} \text{ person})$ object.

2. The Person Restriction: the central facts

DAT-NOM constructions where NOM is the sole, unrestricted agreement controller are cross-linguistically common, found in German, Russian, Romance varieties,⁶ South-Asian languages, Hungarian, etc. This is illustrated for the *Simplex DAT-NOM Construction* in German in (5):

(5)	a.	<i>Ihm</i> him.DAT 'He woul	<i>würden</i> would.1/3PL d have liked	<i>wir</i> we.NOM us.'	g <i>efallen</i> liked	<i>haben</i> . have	^{ok} 1P AGR
	b.	<i>Ihm</i> him.DAT	<i>würdet</i> would.2pL	<i>ihr</i> you.NOM.PL	<i>gefallen</i> liked	<i>haben</i> . have	^{ok} 2P AGR
	c.	<i>Ihm</i> him.DAT	<i>würden</i> would.1/3PL	<i>sie</i> they.NOM	<i>gefallen</i> liked	<i>haben.</i> have	^{ok} 3P AGR

In contrast, Icelandic is known to observe the Person Restriction in (6):⁷

(6) In DAT-NOM constructions, *only* 3^{rd} *person* NOM may control agreement

Let us begin by describing the facts for Icelandic A, the strongest agreement variety. As illustrated in (7)–(8), it observes the Person Restriction in both active and passive constructions:

(7)	a.	* <i>Honum</i> him.DAT	<i>líkum like1PL</i>	við. we.NOM	*1P AGR
	b.	* <i>Honum</i> him.DAT	<i>líkið like.2pL</i>	þið . you.NOM.PL	*2P AGR
	c.	<i>Honum</i> him.DAT 'He likes	<i>líka</i> like.3PL them.'	<i>þeir</i> . they.NOM	^{ok} 3P AGR
(8)	a.	* <i>Henni</i> her.DAT	<i>vorum</i> were.1PI	<i>sýndir við.</i> 2 shown we.NOM	*1P AGR
	b.	* <i>Henni</i> her.DAT	<i>voruð</i> were.2PI	<i>sýndir þið - shown you.NOM.PL</i>	*2P AGR
	c.	<i>Henni</i> her.DAT 'They we	<i>voru</i> were.3PI ere shown	<i>sýndir þeir.</i> shown they.NOM to her.'	^{ok} 3P AGR

In addition to this Simplex DAT-NOM Construction, Icelandic has a *Complex ECM DAT-NOM Construction*, with the raising verbs in (9):

(9)	finnast 'think, feel, find, consider'	sýnast 'seem (to see/look)'
	virðast 'seem'	<i>þykja</i> 'find, seem, think (that)'
	heyrast '(seem to) hear', 'sound as if'	reynast 'prove (to be)'
	skiljast '(get to) understand'	

As in the simplex construction, $1^{st}/2^{nd}$ person agreement is generally excluded in the complex ECM-like construction, whereas third person agreement is generally grammatical in Icelandic A, as illustrated in (10):

(10)	a.	*Honum	mund um	virðast	við	vera	hæfir.	*1P AGR
		him.DAT	would.1PL	seem	we.NOM	be	compete	nt
	b.	*Honum	mund uð	virðast	þið	vera	hæfir.	*2P AGR
		him.DAT	would.2PL	seem	you.NOM	be	compete	nt
	c.	Honum	mund u	virðast	þeir	vera	hæfir.	^{ok} 3P AGR
		him.DAT	would.3PL	seem	they.NOM	be	compete	nt
'They would seem competent to him.'								

However, if the finite verb does not agree with the nominative downstairs subject, instead showing up in the default 3SG (here *mundi*), all persons are allowed in the nominative argument:

(11)	a.	<i>Honum</i> him	<i>mundi</i> would	<i>virðast</i> seem	<i>við</i> we	<i>vera</i> be	<i>hæfir</i> . competent	^{ok} 3SG verb – 1PL NOM
	b.	Honum	mund i v	virðast þ	við v	era h	æfir.	ok 3SG verb – 2PL NOM
	c.	Honum	mund i v	virðast þ	eir	vera h	ıæfir.	^{ok} 3SG verb – 3PL NOM

In this case, the verb evidently does not probe NOM, presumably probing the whole infinitival complement instead. We assume that NOM has undergone Short Raising out of the infinitival TP in cases like (10c) (see section 4 below; see also Schütze 2003: 297, fn. 2).

In the simple, monoclausal construction, on the other hand, probing NOM is the only option, hence we expect default or non-agreeing 3SG to be degraded. This is borne out for Icelandic A (glosses: him would have liked we/you/they):

(12)	a.	*Honum	mund i	hafa	líkað	við.	*3SG verb – 1PL NOM
	b.	*Honum	mund i	hafa	líkað	þið.	*3SG verb – 2PL NOM
	c.	?Honum	mund i	hafa	líkað	þeir.	?3SG verb – 3PL NOM

In the examples in (7)–(12) there is no overt DAT intervention, i.e., the relevant order of elements is DAT-<u>verb</u>-NOM (and not X-verb-DAT-NOM). In such structures, Icelandic B differs only minimally from Icelandic A, such that the default 3SG in (12c) is just as acceptable as the 3PL agreement in (7c). In Icelandic C, on the other hand, default 3SG is preferable in examples like (12c) (and not sharply unacceptable in (12a,b)). This is accounted for if DAT in Icelandic C intervenes between the verb and NOM at the derivational stage where number agreement takes place. See the analysis in (24) vs. (24)' below.

3. High Intervention

In (7)-(12) above, DAT has raised out of the c-commanding or probing domain of the finite verb, that is, there is no overt DAT-intervention between the finite verb and NOM:

(13) **DAT** would *DAT* like/seem/... NOM ...

As we just mentioned, Icelandic A and Icelandic B differ only minimally in structures like (13). However, if DAT *remains in the verb's probing domain*, variation arises between Icelandic A and Icelandic B/C, but, importantly, this pertains only to clauses where the *NOM* argument is in the 3rd *person*, that is:

(14) a. ^{ok}X would.AGR **DAT** like/seem/... **NOM.3P** ... Icelandic A
b. *X would.AGR **DAT** like/seem/... **NOM.3P** ... Icelandic B/C
$$\uparrow$$

X = an adverbial or the expletive *bað* 'there, it'

The fact that Icelandic A allows agreement across the dative is illustrated for the simplex construction in (15a) and for the complex one in (15b):⁸

Icelandic A:

(15) a. *Það líkuðu* einum málfræðingi *þessar hugmyndir*. EXPL liked.3PL one linguist.DAT these ideas.NOM
b. *Það þóttu* einum málfræðingi *þessi rök* EXPL thought.3PL/3SG one linguist.DAT these arguments.NOM *sterk*. strong

In Icelandic B, on the other hand, agreement is blocked by intervention, and in Icelandic C agreement is generally unacceptable in DAT-NOM construc-

tions. This is illustrated for the simplex construction in (16a) and for the complex one in (16b):

Icelandic B/C:

- (16) a. *Það líkaði/*líkuðu einum málfræðingi þessar hugmyndir*. EXPL liked.3SG/3PL one linguist.DAT these ideas.NOM
 - b. *Það þótti/*þóttu einum málfræðingi þessi rök* EXPL thought.3SG/3PL one linguist.DAT these arguments.NOM *sterk.* strong

For 1^{st} and 2^{nd} person NOM, on the other hand, (full morphological) agreement is generally unacceptable, in all three varieties, regardless of the position of the dative.⁹ This is sketched in (17) and exemplified (for the 2^{nd} person plural) in (18):

Icelandic A, B & C:

- (17) a. *DAT would.1/2AGR DAT like/seem/... NOM ... b. *X would.1/2AGR DAT like/seem/... NOM ... X = an adverbial or the expletive $pa\delta$ 'there, it'
- (18) a. **Einhverjum <u>hafið</u> alltaf líkað/virst þið... some.DAT.SG/PL have.2PL always liked/seemed you.NOM.PL*
 - b. **Það <u>hafið</u> einhverjum alltaf líkað/virst þið... EXPL have.2PL some.DAT.SG/PL always liked/seemed you.NOM.PL*

In descriptive terms, then, we are dealing with three phenomena:

- (19) a. The PERSON RESTRICTION in Icelandic A, B and C, *blocking* 1^{st} and 2^{nd} person NOM from controlling agreement in both the simplex and the complex DAT-NOM constructions, regardless of the position of DAT.
 - b. Overt DATIVE INTERVENTION in Icelandic B, *blocking* 3rd *person NOM* from controlling number agreement across DAT in both the simplex and the complex DAT-NOM constructions.
 - c. General agreement blocking in DAT-NOM constructions in Icelandic C.

However, we will argue that both the Person Restriction and the general agreement blocking in Icelandic C are actually due to (covert or overt) inter-

vention, and that all three phenomena or patterns in (19) thus can and should get a unified account. Such an account can be developed if *Person and Number are separate probes*.

4. Split Person/Number probing

The Person Restriction suggests that Person probing and Number probing are distinct phenomena. Adopting the approach pursued by Sigurðsson (2004a, 2006a,b), we assume the order of elements in (20), where not only T and C-type features like Fin(iteness) and Top(ic), but also **Pn** (=Person) and **Nr** (=Number) are clausal heads, the basic assumption being that any clausal head is a single feature (cf. Sigurðsson 2000, and, e.g., Cardinaletti 2003):¹⁰

(20) [_{CP} ... Top ... Fin ... [_{TP} ... Pn ... Nr ... T ... v ... DAT ... NOM]]¹¹

Another important factor is that DAT moves out of vP, thus complying with the generalization (Alexiadou and Anagnostopoulou 2001) that the subject always has to raise from a 'full verb phrase', containing both a subject and an object (parallel facts hold for Icelandic nominative subjects):

(21)	a. Það mundi	alltaf	einhverjum	n stúdent	hafa
	EXPL would	always	some	student.DAT	have
	[virst	[prófin	órét	ttlát]].	
	[seemed	[exams.t	he.NOM unfa	air]]	
	b. *Það mundi	alltaf h	afa [einhve	erjum stúdent	
	EXPL would	always h	ave [some	student.I	DAT
	virst [prój	fin	<i>óréttlá</i> t]].		
	seemed [exa	ms.the.NC	M unfair]]		

As is well known, Icelandic also has a higher subject position ('SpecIP'), preceding all sentence adverbs, that is, one has to distinguish between the Low Subject Raising in (21a) and regular High Subject Raising.¹²

Given that Pn and Nr attract T to two different positions, and given this Low Subject Raising out of vP, we can account for the observed agreement variation. Reconsider Icelandic A, with no intervention effect: Icelandic A:

(22) Það þótti/þóttu einum málfræðingi þessi rök
 EXPL thought.3SG/3PL one linguist.DAT these arguments.NOM sterk.
 strong

The derivation of (22) is as follows, where, however, we do not show optional Short Raising of NOM out of the infinitival TP, yielding optional agreement in the third person (for simplicity also, we show the structure as if everything was merged at once and do not show V-raising to T; 'TP' indicates the infinitival TP, not the matrix TP):

(23)	(EXPL)	Pn		Nr	Т	$[_{vP} \text{ DAT } V]_{TP} \text{ NOM } \dots$
(24)	(EXPL)	Pn	DAT	Nr	Т	$[_{vP} DAT V [_{TP} NOM (Low Subject Raising)$
(25)	(EXPL)	Pn	DAT	T/Nr	Ŧ	$[_{vP} DAT V [_{TP} NOM (T raising to Nr)^{13}$
(26)	(EXPL)	T/Nr/Pn	DAT	T/Nr	Ŧ	$[_{vP} DAT V [_{TP} NOM (T/Nr-raising to Pn)$

As indicated by the initial dots, we do not show V2 raising of the finite verb (to 'C'), nor do we show potential topicalization of DAT to the high left edge ('SpecCP'), as these processes do not generally affect agreement.¹⁴

N and Pn probing is activated by T-raising, that is, T cannot probe for DP number/person unless it has joined Nr and Pn. Also, we assume, Nr and Pn probing must take place immediately after T-raising to Nr and T/Nr-raising to Pn, respectively. Notice, in passing, that this roll-up type of T-movement yields the order of tense, number and person markers in morphology (e.g., $lar-\delta$ -u-m = learn-PAST-PL-1P '(we) learned', cf. Sigurðsson 2006a: 228f.).

Number agreement with NOM is established in (25), T having joined Nr, and DAT having raised 'out of the way'. If NOM undergoes optional Short Raising out of TP, number agreement is obligatory, but if it does not raise, T/Nr probes the infinitival TP as a whole, in which case only the default singular is available, cf. the optional number agreement in (22), and in (10c)/(11c) above. Person agreement is established in (26), but since DAT intervenes, the verb cannot reach NOM, instead probing DAT, which yields default 3SG (cf. Boeckx 2000, but see section 7 for a slight reformulation). Hence the Person Restriction ('true' person excluded). High Subject Raising to the low left edge ('SpecIP'), as in (27), generally has no effects upon agreement, taking place too late for that:¹⁵

(27) ... DAT T/Nr/Pn DAT T/Nr T [vP DAT V [TP NOM ... (High Subject Raising)

Now, consider *Icelandic C* ((28) = (16b) above):

(28) Það <u>bótti/*þóttu</u> einum málfræðingi **þessi rök** EXPL thought.3SG/3PL one linguist.DAT these arguments.NOM sterk.
 strong

Suppose that the derivation in Icelandic C differs from the derivation in Icelandic A in only one, minimal respect, T-raising to Nr taking place prior to Low Subject Raising out of vP. If so, the derivation of (28) is as sketched below:

(23)	(EXPL)	Pn		Nr	Т	$[_{vP} DAT V]_{TP} NOM \dots$
(24)'	(EXPL)	Pn		T/Nr	Ŧ	$[_{vP} DAT V [_{TP} NOM (T raising to Nr)$
(25)'	(EXPL)	Pn	DAT	T/Nr	Ŧ	$[_{vP} DAT V [_{TP} NOM (Low Subject Raising)$
(26)	(EXPL)	T/Nr/Pn	DAT	T/Nr	Ŧ	[vP DAT V [TP NOM (T/Nr-raising to Pn)

As in Icelandic A, number probing takes place immediately after T-raising to Nr, here in (24)', but since this happens prior to Low Subject Raising in Icelandic C, DAT will inevitably induce an intervention effect, blocking plural agreement. As in Icelandic A (and generally), person cannot be probed until after T/Nr-raising to Pn, hence the same Person Restriction as in Icelandic A ('true' 1st and 2nd person agreement excluded). Thus, DAT always intervenes in Icelandic C (overtly or covertly), regardless of where it is situated in surface structure.

Icelandic B is a kind of a hybrid between Icelandic A and C. When DAT remains low the result is the same as in Icelandic C, agreement being blocked. However, when DAT undergoes High Subject Raising to the edge ('SpecIP'), as in (27), Icelandic B behaves either as Icelandic A or as Icelandic C. This is illustrated in (29) for the simplex DAT-NOM construction:

							Agr	–Agr
(29)	a.	аð	henni	lík uðu /?lík aði	þeir.	Icelandic A	ok	?
	b.	аð	henni	lík uðu /lík aði	þeir.	Icelandic B	ok	ok
	c.	аð	henni	??líkuðu/líkaði	þeir.	Icelandic C	??	ok
		that	her.DAT	liked.3PL/3SG	they.NOM			

The default 3SG alternative $lika\delta i$ in (29b) can be analyzed as a regular Cgrammar derivation (as above). On the other hand, we do not have any obvious account of the agreeing alternative $liku\delta u$. Reconsider (27) (the relevant structure for (29)): (27) ... DAT T/Nr/Pn DAT T/Nr T [vP DAT V [TPNOM ... (High Subject Raising)

The position taken by DAT in (29)/(27) is the canonical (post-C) subject position ('Spec,IP'), alternatively filled by an expletive or a stylistically fronted element (see Holmberg 2000; Sigurðsson 2004a: 230ff.), that is, the raising of the dative subject is arguably EPP-driven (see below).¹⁶ It is suprising that this raising removes the intervention effect of the dative with respect to *only* number and *not* also with respect to person:

Icelandic B:

(30)	a.	*Honum	lík um	við.
		him.DAT	like.1PL	we.NOM
	b.	* <i>Honum</i> him DAT	<i>líkið like 2</i> pi	þið . vou NOM PI
	c.	Honum	líka/líka	r <i>þeir</i> .
		him.DAT 'He likes	like.3PL/ them.'	3SG they.NOM

As for German, on the other hand, one could account for the unrestricted agreement in examples of this sort (see (5) above) if both person and number agreement is established in a structure like (27). Alternatively, and perhaps more plausibly, German NOM has scrambled into a higher position than DAT at the derivational stage when full person and number agreement takes place (DAT being raised to the edge later on in the derivation):

(31) a. Pn T/Nr *T* ... NOM ... DAT *NOM* Number agreement b. T/Nr/Pn *T/Nr T* ... NOM ... DAT *NOM* Person agreement

In contrast, the fact that High Subject Raising of DAT removes or circumvents the intervention effect with respect to only number in Icelandic B does not get any satisfactory account under the present approach. However, we have at least been able to identify the problem. To our knowledge, it has not been noticed previously.

Since Icelandic B seems to be historically intermediate between Icelandic A and C one could hypothesize that it is an amalgam of the two, most commonly applying Icelandic C grammar but resorting to Icelandic A grammar in the case of High Subject Raising. If so, this would be a case of so-called Grammar Competition, advocated by Kroch (1989) and others as an account of the seemingly chaotic progress of grammar change. We leave the issue at that, noticing however that if this is the case, then the intervention effect of Icelandic B is an epiphenomenon, arising not because of the properties of "grammar B" but because Icelandic B resorts to two different grammars, neither of which has exactly the B-type intervention effect.

Not all overt arguments induce intervention in Icelandic, as illustrated by *Reverse Predicate Agreement*, RPA (see Sigurðsson 1996, 2004b), in clauses with demonstrative *betta* 'this' and *bað* 'it, that' as a subject:¹⁷

- (32) a. *Það/Þetta erum (bara) við*. it/this are.1PL (only) we.NOM 'It/This is (only) us.'
 - b. *Pað/Petta eruð* (*bara*) *þið*. it/this are.2PL (only) you.NOM.PL 'It/This is (only) you.'
- (33) a. Líklega höfum það þá (bara) verið við.
 probably have.1PL it then (only) been we.NOM
 'Probably, it has then (only) been us.'
 - b. *Voruð þetta þá ekki (bara) þið?* were.2PL this then not (only) you.NOM.PL 'Wasn't this (only) you, then?'

Evidently, *bað* and *betta* are devoid of ϕ -features, like expletive *bað* 'there, it' (these elements being interpreted as default 3SG.NEUT in morphology). Unlike the expletive, however, demonstrative *bað* and *betta* are genuine subjects, as for instance suggested by the fact that they invert with the finite verb in V2 and V1 contexts. RPA is strictly confined to clauses with demonstrative *betta* 'this' and *bað* 'it, that' as a subject:

- (34) a. *Þetta höfum/?*hefur líklega bara verið við*. RPA this have.1PL/3SG probably only been we.NOM 'This has probably only been us.'
 - b. *Pessir menn* hafa/*höfum Subject Agreement these men.NOM have.3PL/1PL líklega bara verið við. probably only been we.NOM

To be a visible intervener with respect to person and number probing an element has to have active ϕ -features itself, suggesting Relativized Minimality with respect to *individual features*. In the following sections we will discuss some further complications that arise and also some further evidence in favor of the approach taken here. Before doing so, however, we need to briefly address some of the general issues that arise under the present analysis. Let us take another look at the Icelandic A derivation:

(23)	 (EXPL)	Pn		Nr	Т	$[_{vP}DAT$	V	[_{TP} NOM
(24)	 (EXPL)	Pn	DAT	Nr	Т	[_{vP} DAT	V	[TP NOM (Low Subject Raising)
(25)	 (EXPL)	Pn	DAT	T/Nr	Ŧ	[_{vP} DAT	V	$[_{TP} NOM \dots (T raising to Nr)$
(26)	 (EXPL)	T/Nr/Pn	DAT	<i>T/№</i>	Ŧ	[_{vP} DAT	V	[TP NOM (T/Nr-raising to Pn)
(27)	 DAT	T/Nr/Pn	ÐAŦ	<i>T/№</i>	Ŧ	[_{vP} DAT	v	[TP NOM (High Subject Raising)

The derivation is compatible with the approach to movement taken in Sigurðsson (2004a, 2006a), where there are no specifiers, Move instead tucking in to the right of a probe. On this approach both expletive insertion and (alternative) High Subject Raising into the low left edge ('SpecIP'), as in (27), is driven by a silent EPP feature of the CP domain (identified as 'Fin(ite)' or 'Speech Location' in Sigurðsson 2004a: 228 ff.), whereas subject topicalization to the high left edge ('SpecCP') is driven by Top (or speaker/hearer features, not shown in (20) above, but see below). On the other hand, Low Subject Raising out of vP, as in (24), remains unexplained, as in other approaches.¹⁸

An important aspect of the analysis is that Pn and Nr are *interpretable* features or heads in the clausal structure, that is, they are not a split 'AgrS' in disguise. Consider this for Pn. Many languages, including Amharic, Donno So, Navajo, Kannada, Tamil, Hindi, Kurdish, Persian and Punjabi, show *person shift* in regular subordinated clauses (much as seen in direct speech in languages like English, but without the quotation force):

(35) $/\underline{he_1}$ said to $\underline{me_2}$ [that I_1 wrote to you_2]/ 'He said to me that he wrote to me.'

This person shift is accounted for if any clause contains silent speaker/ hearer features in its CP domain, the logophoric agent and the logophoric patient in the terminology of Sigurðsson (2004a), Λ_A and Λ_P for short.¹⁹ These features may be thought of as either the actual or the represented (or intended) speaker vs hearer. Most commonly, the lambda values are kept constant, as identical with the actual, overall speaker/hearer, but if they are shifted from the actual to the represented speaker/hearer (the arguments of the matrix clause in cases like (35)), the reference of the person values changes accordingly. This is sketched in (36), where *i* and *k* are the indexes of the actual speaker and hearer and where *j* and *l* are the indexes of the logophoric features in the subordinate CP domain, inherited from the matrix arguments:

(36) $[_{CP}.. \{\Lambda_A\}_{i}.. \{\Lambda_P\}_{k}.. [_{IP}.. \mathbf{he}_{j}.. \mathbf{me}_{l}.. [_{CP}.. \{\Lambda_A\}_{j}.. \{\Lambda_P\}_{l}.. [_{IP}.. I_{j}.. you_{l}..$

Evidently, person values are not given in the numeration but computed in syntax.

A predication like *write* (*x*, *y*) or *write* (θ_1 , θ_2), can of course be expressed as in (37):

(37) writer writes (to) writee

However, this is not how language typically works. Rather, any argument must match a Pn head as being either +Pn or -Pn, +Pn arguments in turn entering into a further matching relation, \leftrightarrow , with the lambda features of the CP domain, with this second (and higher) matching yielding the actual person values of a pronoun:

(38)
$$\theta \leftrightarrow \pm -Pn$$

a. +Pn	\leftrightarrow	$+\Lambda_{\rm A}, -\Lambda_{\rm P}$	=	1P by computation
b. +Pn	\leftrightarrow	$-\Lambda_{\rm A}, +\Lambda_{\rm P}$	=	2P by computation
c. +Pn	\leftrightarrow	$-\Lambda_A, -\Lambda_P$	=	3P by computation
d. –Pn:			=	3P by default
	a. +Pn b. +Pn c. +Pn dPn:	$\begin{array}{rrrr} a. & +Pn & \leftrightarrow \\ b. & +Pn & \leftrightarrow \\ c. & +Pn & \leftrightarrow \\ d. & -Pn : \end{array}$	$\begin{array}{rrrrr} a. & +Pn & \leftrightarrow & +\Lambda_{A}, -\Lambda_{P} \\ b. & +Pn & \leftrightarrow & -\Lambda_{A}, +\Lambda_{P} \\ c. & +Pn & \leftrightarrow & -\Lambda_{A}, -\Lambda_{P} \\ d. & -Pn : \end{array}$	a. $+Pn \leftrightarrow +\Lambda_A, -\Lambda_P =$ b. $+Pn \leftrightarrow -\Lambda_A, +\Lambda_P =$ c. $+Pn \leftrightarrow -\Lambda_A, -\Lambda_P =$ d. $-Pn: =$

Generally, it seems to hold that event features, like event participants, θ , and event time, \mathbf{E}_{T} , are matched against grammatical features like **Pn** and **T**, which in turn are matched against contextual or speech event features of the CP domain, like **Top, Fin**, the logophoric features, Λ_A/Λ_P , and the speech time, \mathbf{S}_T .

We cannot go any further into these complex issues here, and must instead refer the reader to previous work by Sigurðsson (2004a, 2006a, 2006b, etc.) as well as to recent work by a number of other researchers (e.g., Bianchi 2003; Schlenker 2003; Di Domenico 2004; Speas 2004; Tenny 2006). What matters for our purposes is that Pn and Nr are interpretable (but unvalued) features or heads in the clausal structure, present and active regardless of morphological verb agreement, hence just as real in Chinese as in Italian or Icelandic. Uninterpretable verbal person/number agreement, on the other hand, is a distinct, secondary phenomenon, a PF reflection or interpretation of the underlying syntactic relations (see further below).

We now proceed, illustrating how our split person/number probing approach accounts for some further recalcitrant facts.

5. Low Intervention

In the cases we have been looking at so far, the intervening element is in a relatively high position, in a main clause, like the underlined datives in (40):

(40) a. *Þess vegna mundi/*mundum <u>henni</u> líklega virðast við* that for would.3SG/1PL her.DAT probably seem we.NOM *vera hæfir.*be competent 'Therefore, we would probably seem competent to her.'

b. *Pess vegna mundi/%mundu <u>henni</u> líklega virðast þeir* that for would.3SG/3PL her.DAT probably seem they.NOM *vera hæfir.*be competent 'Therefore, they would probably seem competent to her.'

However, intervention may also be 'low', induced by a dative in the subject position of the infinitive, as in (41) (from Sigurðsson 2000: 99):

- (41) a. Okkur virtist/*virtust <u>henni</u> hafa leiðst **peir**. us.DAT seemed.3SG/3PL her.DAT have found-boring they.NOM
 - b. *Okkur sýndist/*sýndust <u>honum</u> hafa hentað pennarnir vel. us.DAT appeared.3SG/3PL him.DAT have suited pens.the.NOM well*

In DAT-NOM passives, the participle agrees in case, number and gender with NOM:

(42)	a.	Henni	voru	sýnd ir	hestarnir.
		her.DAT	were.3PL	shown.MASC.PL.NOM	horses.the.MASC.PL.NOM
	b.	Henni	voru	sýnd ar	bækurnar.
		her.DAT	were.3PL	shown.FEM.PL.NOM	books.the.FEM.PL.NOM

Having raised, the dative does not induce an intervention effect between the participle and the NOM object. Simultaneously, however, it can be an intervener for a finite matrix verb:

 (43) Mér virtist/%virtust henni hafa verið sýndir me.DAT seemed.3SG/3PL her.DAT have been shown hestarnir. horses.the.MASC.PL.NOM

As indicated by the percent sign some speakers find verb agreement possible in (43) or at least clearly better than in (41), that is, the number agreement of the participle enhances finite verb agreement, it seems. We do not have any account of this curious fact, and thus we only analyze the variety where verb agreement is unacceptable in (43) as well as in (41).

As far as we have been able to determine, there is no dialectal variation with regard to the low intervention in (41). This is what we predict, since the dative argument cannot, in this case, raise out of the probing domain of the matrix Nr. The relevant structure is sketched in (44):

(44) $[_{CP} \dots Pn \quad Nr \quad T \quad [_{vP} DAT \quad V \quad [_{TP} \quad DAT \quad \dots \quad NOM \quad \dots$

The higher DAT subsequently raises across Nr, as we have seen, but the lower one is locked within the vP phase.²⁰

An alternative account of the variation between Icelandic A and Icelandic B/C would ascribe the difference to a property of dative case, such that dative case is transparent to agreement in Icelandic A, but blocks agreement in Icelandic B/C. However, the fact that both Icelandic A and Icelandic B/C observe an intervention effect in (41) suggests that the present approach is more to the point, and so does the fact that all three varieties respect the Person Restriction (if we are right that it is just a subcase of Dative Intervention). We will see more evidence of that in the next section.

6. Wh-movement and agreement

In the approach pursued by H&H, not only the overt DAT in (45) (which has undergone Low Subject Raising) but also the *wh*-copy in structures like (46) induces an intervention effect.²¹

- (45) Líklega mundi/*mundum henni þá henni virðast probably would.3SG/1PL her.DAT then DAT seem [við vera hæfir].
 we.NOM be competent
- (46) Hverjum mundi/*mundum þá WH virðast whom.DAT would.3SG/1PL then DAT seem [við vera hæfir]?
 we.NOM be competent

In (46), however, NOM can undergo 'Long Raising', a scrambling-like movement, across the *wh*-copy. In this case, intervention is circumvented, as the embedded nominative subject moves to a position higher than the (copy of) the otherwise intervening dative argument:²²

(47) Hverjum *mundi/mundum við þá WH virðast whom.DAT would.3SG/1PL we.NOM then DAT seem [við vera hæfir]?
NOM be competent
'Who would we then seem competent to?'

Notice that agreement is obligatory if the nominative scrambles, otherwise it is excluded.²³

These facts confirm that the Person Restriction is indeed caused by intervention: When neither a dative argument nor a clause boundary intervenes between T/Nr/Pn and the nominative argument, then person as well as number agreement has to apply. Also, this further confirms that agreement restrictions in Icelandic DAT-NOM constructions are structural, hence not a consequence of some special inherent property of the Icelandic dative (in contrast to the prevailing view since at least Boeckx 2000, shared by, e.g., Sigurðsson 2006a, 2006b).²⁴

The scrambling of the embedded nominative subject is possible only if the dative has *wh*-moved. This is illustrated by the echo-questions in (48), where the underlined *wh*-DAT remains in situ:

- (48) a. *Þá mundi/*mundum <u>hverjum</u> virðast* [**við** vera hæfir]? then would.3SG/3PL who.DAT seem we.NOM be competent
 - b.**Pá mundi/mundum* við <u>hverjum</u> virðast [við vera hæfir]? then would.3SG/3PL we.NOM who.DAT seem *NOM* be competent

Thus, an overt *wh*-phrase blocks scrambling, wheras a *wh*-copy does not.²⁵

Now, reconsider the type of examples in Icelandic B that lead H&H to conclude that *wh*-elements move directly to SpecCP:

Icelandic B:

(49) Hvaða knapa mundi/*mundu þá finnast þessir what jockey.DAT would.3SG/3PL then find.INF these hestar vera fljótir? horses.NOM be fast

In the framework of H&H the failure of plural agreement here meant that the DAT *whP* must move directly to SpecCP, since, if it moved through the low left edge (their SpecTP), it would, at that point, not intervene between T and the NOM argument.²⁶

In Icelandic A, however, plural agreement is perfectly fine in this construction:

(50) *Hvaða knapa mundi/mundu þá finnast þessir* what jockey.DAT would.3SG/3PL then find.INF these *hestar vera fljótir?* horses.NOM be fast

In the present framework this follows if DAT undergoes Low Subject Raising, to the left of Nr, prior to *wh*-movement. If so, the DAT argument (here a *wh*P) doesn't intervene between Nr and the NOM argument, which means that we get number agreement in Icelandic A. But in Icelandic B, where number agreement happens before DAT-raising to the left of Nr, DAT still intervenes.

That is to say, we cannot maintain Chomsky's (2005) disjunction of A and A-bar chains. In particular in the case of Icelandic A, we have to assume that DAT, whether it is a whP or not, first undergoes movement to the left of Nr, and then undergoes wh-movement to SpecCP.

7. 'Half-agreement' and invisible double Person agreement

Reconsider Icelandic A:

(22) *Það þótti/þóttu einum málfræðingi þessi rök sterk.* EXPL thought.3SG/3PL one linguist.DAT these arguments.NOM strong (23) ... (EXPL) Pn Nr T [$_{vP}$ DAT V [$_{TP}$ NOM ... (24) ... (EXPL) Pn DAT Nr T [$_{vP}$ DAT V [$_{TP}$ NOM ... (Low Subject Raising) (25) ... (EXPL) Pn DAT T/Nr \mathcal{F} [$_{vP}$ \mathcal{DAF} V [$_{TP}$ NOM ... (T raising to Nr)¹³ (26) ... (EXPL) T/Nr/Pn DAT $\mathcal{T}/Nr \mathcal{F}$ [$_{vP}$ \mathcal{DAF} V [$_{TP}$ NOM ... (T/Nr-raising to Pn)

If NOM undergoes Short Raising out of its minimal TP, number agreement is obligatory, otherwise excluded, hence the optionality in (22). In the simplex DAT-NOM construction, however, NOM is not 'protected' by any local TP boundary and hence we would expect number agreement in the 3rd person to be obligatory. However, the common or average judgements of our A informants are the following:

(51)	a.	Henni líkuð u /?líkaði ekki þessar hugmyndir.
		her.DAT liked.3PL/3SG not these ideas.NOM
		'She did not like these ideas.'
	b.	Það líkuð u /(?)líkað i bara einum málfræðingi þessar
		EXPL liked.3PL/3SG only one linguist.DAT these
		hugmyndir.
		ideas.NOM
		'Only one linguist liked these ideas.'

The default 3SG in examples like (51) is a 'half-agreement' of sorts, violating or disobeying only number agreement, but not person agreement.

Now, notice that it should be possible to establish number agreement in (25), regardless of person, that is, the present analysis would seem to wrongly predict that 3PL agreement with 1PL and 2PL NOM should be possible. Such 'half-agreement' is indeed slightly better than full agreement (also involving person), but it is nonetheless quite awkward and clearly worse than default 3SG:

(52) Henni ?mundi/?*munduð hafa leiðst þið.
her.DAT would.3SG/3PL/2PL have found-boring you.NOM.PL
'She would have found you boring.'

This half-agreement problem is 'solved' in Sigurðsson (2006a, 2006b), but our informant survey provides evidence that it should not, as it were, be solved, namely: In case a verb form in the 2PL is homophonous with the 3PL form, plural agreement becomes better than elsewhere (that is, better than for other inflectional paradigms, where there is no such 2–3PL syncretism). Most of our informants had the following judgements:²⁷

- (53) a. *Henni virtist/virtust pið* eitthvað einkennilegir. her.DAT seemed.3SG/2–3PL you.NOM.PL somewhat strange 'You seemed somewhat strange to her.'
 - b. *Henni virtist/?*virtust/*virtumst við eitthvað einkennilegir.* her.DAT seemed.3SG/2–3PL/1PL we.NOM somewhat strange
- (54) a. Henni þótti/??þóttu/*þóttuð þið eitthvað einkennilegir. her.DAT thought.3SG/3PL/2PL you.NOM.PL somewhat strange 'She found you somewhat strange.'
 - b. *Henni þótti/??þóttu/*þóttum við eitthvað einkennilegir.* her.DAT thought.3SG/3PL/2PL we.NOM somewhat strange

As expected, the default 3SG is possible in all cases in (53)-(54), whereas the plural forms in (53b) and (54) are impossible or degraded. Very interestingly, however, the plural form *virtust* in (53a) is acceptable to most of our informants, and the reason is presumably that it can be interpreted *as agreeing with the 2P.PL NOM, without unambiguously agreeing with it in person.* That is, speakers can "both eat their cake and have it too" (Sigurðsson 1996: 35). This is not possible for *þykja* in (54), but 3PL is nonetheless slightly better than fully, unambiguously person agreeing forms.

The same effect is seen in the singular for so-called 'medio-passive' verbs, formed with an *-st* suffix, since these verbs never show any person distinction in the singular.²⁸ Thus, many speakers find examples like (55a) either fully grammatical or fairly acceptable. In contrast, speakers who accept (55a) generally find (55b), with unambiguous person morphology (1PL), impossible (see Sigurðsson (1996: 33):

- (55) a. *Henni leiddist ég/þú*. her.DAT found-boring.1–2–3SG I/you.NOM.SG 'She found me/you boring.'
 - b. **Henni leiddumst við*. her.DAT found-boring.1PL we.NOM

The facts in (55) are well-known since Sigurðsson (1991, 1996). In contrast, it is new knowledge that morphological syncretism can lead to grammaticality in the plural as well, as in (53a) above. This new knowledge is important, because it shows that what matters here is not the defaultness of 3SG but absence of *person* agreement as such, as distinct from number agreement. Thus, this is one further piece of evidence that person and number agreement are separate phenomena. Agreement that does *not* involve or show *unambiguous person* agreement, then, is evidently acceptable to many speakers. Similarly, many 1^{st} and 2^{nd} person NOM objects gain in acceptability in infinitival constructions. Thus, while most speakers find (56) impossible, some speakers find (57) quite acceptable:²⁹

(56)	a. * <i>Henni</i>	höfð um	leiðst	við.	
	her.DAT	had.1PL	found-	boring we.NOM	
	b. * <i>Henni</i>	höfð uð	leiðst	þið.	
	her.DAT	had.2PL	found-	boring you.NOM	1.PL
(57)	?Hún vonaði	st auðvit	að til	að leiðast	við/þið/þeii
	she hoped	of-cou	rse for	to find-boring.	INF we/vou/the

she hoped of-course for to find-boring.INF we/you/they.NOM *ekki mikið*.
not much
'She of course hoped not to find us/you/them very boring.'

Schütze (2003:299) suggests that the 'repairing effect' of morphological syncretism is accounted for if the finite verb must agree in person *and* number **1**) with the subject, AND **2**) with NOM, if there is any – but this would exclude the plural agreement in (53a) and make wrong predictions for reverse predicate agreement, intervention and agreement feeding of NOM-scrambling (as in (47) above). Inspired by Schütze's proposal, however, we suggest that T/Nr/Pn in the structure in (26), repeated below, probes for *person* (but crucially *not* number) in both DAT and NOM, in case this does not lead to a morphological clash:

(26) (EXPL) T/Nr/Pn DAT T/Nr T [VP DAT V [TP NOM ...

Recall that Nr and Pn probing must take place immediately after T-raising to Nr and T/Nr-raising to Pn, respectively. Hence, Nr probing cannot take place after T/Nr raising to Pn, whereas Pn probing has to take place precisely then.

Person probing of DAT always yields third person (cf. Sigurðsson 1996; Boeckx 2000), and NOM is ruled in as long as person probing of NOM neither leads to a 'non-third' person form (which would be incompatible with person probing of DAT) nor to a form that contradicts the person of NOM. In (53a) and (55a), then, T/Nr probes NOM, yielding plural in (53a) and singular in (55a); subsequently, T/Nr/Pn probes both DAT and NOM for (only) person, and since this yields a form that is compatible with the person requirements of *both* DAT and NOM, the derivation converges. Otherwise, it crashes, as in (55b) and in, e.g., the 'half-agreement' version of (53b) (with *virtust*.2–3PL, but 1PL NOM). Once again, then, it is evident that Pn and Nr probing are distinct phenomena, Pn probing applying later in the derivation than Nr probing.³⁰

The relevant descriptive generalization, call it the SYNCRETISM GENER-ALIZATION, is stated in (58):

(58) For most speakers, no Person Restriction arises in DAT-NOM constructions if, for morphological (paradigmatic) reasons, the 'would be' first or second person agreeing form is homophonous with the third person form (in the same number).

The Person Restriction is just a special case of Dative Intervention (DAT intervening between T/Nr/Pn and NOM), so it is evident from this that intervention is affected by purely morphological, non-syntactic factors. This is not surprising if much of 'syntax' in the traditional sense is actually morphosyntax or 'PF-syntax', operating in a 'syntactic fashion' with abstract features and feature matching but crucially taking place after transfer to PF (including morphology), hence out of sight for the semantic interface (Sigurðsson 2006a, 2006c; Sigurðsson and Maling 2006). If so, it is no wonder that agreement morphology is generally semantically vacuous or uninterpretable (Chomsky 1995 and subsequent work).

8. Conclusion

In this paper we have shown that there are three varieties of Icelandic which differ with respect to number agreement with a postverbal NOM object in the presence of a DAT subject. All varieties are, however, subject to the Person Restriction prohibiting person agreement with the same NOM object.

Absence of number agreement is caused by intervention of the DAT argument, as argued by H&H, among others. A new claim made here is that the Person Restriction is also caused by ordinary DAT intervention, instead of being due to some special property of the Icelandic dative (*pace* Boeckx 2000; Sigurðsson 2006a, 2006b). This follows if:

- (a) Person (Pn) and number (Nr) are separate probes
- (b) Number agreement in the variety that permits it (Icelandic A) is possible since the DAT argument moves out of the intervening position between Nr and the NOM object before Nr probes

(c) In no variety does DAT move high enough/early enough to avoid intervening between Pn and the NOM object

The theory is supported by the observation that when DAT movement is prevented, number agreement is excluded even in Icelandic A, and by the observation that when the NOM object is able to raise above the dative, number and person agreement is possible. The separation of Pn and Nr is also supported by the possibility of half-agreement, under certain restricted circumstances, that is when the verb agrees with a 1st or 2nd person NOM object in number without unambiguously agreeing (or 'disagreeing') with it in person.

Acknowledgements

We are grateful to two thorough and helpful reviewers, although they admittedly had more questions than we can answer or even address here. For valuable discussions and comments we also thank Noam Chomsky, Thorbjörg Hróarsdóttir, Ian Roberts, Gunnar Hrafn Hrafnbjargarson and the audience at GLOW 29 in Barcelona. They are not responsible for any conclusions we have drawn from their comments or advice. The research for this paper was supported by a grant from the Swedish Research Council to Halldór Sigurðsson for the project 'Grammatical categories in Germanic and Romance: on the relation between interpretation and morphology' and by a grant from AHRC to Anders Holmberg for the project 'Null subjects and the structure of parametric theory'.

Notes

- 1. Schütze (1997, 2003), Boeckx (2000), Hrafnbjargarson (2001), Anagnostopoulou (2003), d'Alessandro (2004), Hiraiwa (2005), Nomura (2005), among many.
- 2. The relevant situation arises before the verb raises to C (see below). Verb raising to C does not generally affect any of the processes discussed here.
- 3. Our knowledge of the variation, then, is mainly based on two surveys, a 1990 survey on agreement in the simplex DAT-NOM construction (9 informants), reported in Sigurðsson 1991 and 1996, and a 2005 survey on agreement in the ECM DAT-NOM construction (9 informants, 4 of which also participated 1990, including Sigurðsson). Many thanks to our informants: Eiríkur Rögnvaldsson, Gunnar Hrafn Hrafnbjargarson, Höskuldur Thráinsson, Jóhanna Barðdal, Jóhannes Gísli Jónsson, Jón Friðjónsson, Theódóra Torfadóttir and Thórhallur

Eythórsson. In addition, Gunnar Hrafn, Jóhanna, Theódóra, Thórhallur, and Thorbjörg Hróarsdóttir, kindly filled in for us the 1990 survey on the simplex construction.

- 4. However, 'Icelandic A', 'Icelandic B' and 'Icelandic C' are to a certain extent idealizations, since we mostly take only the clearest extremes into account. There is considerable variation 'in between' these extremes, to which we cannot do any justice here, although we mention some of it.
- 5. We cannot make a claim to this effect on the basis of our limited informant survey. However, our oldest informants are Icelandic A speakers, whereas the youngest ones are speakers of Icelandic C.
- 6. But on an Icelandic-like variety of Spanish, see Rivero 2004.
- 7. Since Boeckx 2000, this restriction has commonly been assumed to be closely related to the Person Case Constraint in, e.g., Romance and Slavic languages (Anagnostopoulou 2003; D'Alessandro 2004, etc.). In our view, the two phenomena are unrelated, but, for reasons of space, we cannot discuss the issue here.
- 8. *Þóttu* in (15b) is a past tense form of *þykja*, one of the verbs listed in (9) above. We assume that NOM in (15b) has undergone Short Raising out of the infinitival TP (see section 4).
- 9. As a matter of fact, though, one (and only one) of our A-informants preferred person agreement in the complex construction, as opposed to the simplex construction. We have not developed any analysis of this interesting, but, to our knowledge, exceptional grammar.
- 10. Apart from the case labels, we assume that the features in (20) are universal (but their linearization in individual languages, other than Icelandic, is unimportant for the purposes of this article). The Fin feature is identified as 'Speech Location' in Sigurðsson (2004a: 228ff.) The general approach to clausal architecture assumed here is discussed in considerable detail in Sigurðsson (2004a, 2004b and 2006a) (Sigurðsson 2006b assumes a more complex structure, distinguishing between subject vs object Pn and Nr, but we abstract away from that here).
- 11. Assuming that Pn and Nr are merely distinct features located on a single head in some sort of a feature geometry is less attractive (in fact impossible in our view). It would call for a number of non-innocent assumptions: 1) That such complex heads are for some reasons parts of grammar in the first place calling for a theory of how they come into being and of why they are differently complex in different languages; 2) that the individual features nonetheless act as independent probes; 3) that they should be able to c-command out of the complex head; 4) that they probe in a certain order; 5) that their 'probing results' are differently affected by movement of arguments around the putative complex head.
- 12. In addition, the subject may be topicalized into a still higher position ('SpecCP'). Since we adopt a tucking in approach to movement (see below),

we do not assume any specifier positions, instead using the notions *high left edge* ('SpecCP') and the *low left edge* ('SpecIP'), the former targeted by topicalization and the latter by High Subject Raising. We do not have any term for the position targeted by Low Subject Raising (but in a Spec approach the term would have been 'SpecNr').

- 13. We do not have an account of why T-raising to Nr takes place *after* Low Subject Raising of DAT (perhaps, it takes place for morphological purposes only). Either, we have to allow local phase-internal repairing processes of this kind or the derivation is more complex than we assume here. Possibly, DAT probes T, raising it across Nr, but we will not pursue the issue here.
- 14. However, one of our informants shows vague agreement-sensitivity to DATraising to the high left edge.
- 15. Since it takes place later than T-raising to Nr and T/Nr-raising to Pn (recall that Nr and Pn probing must take place immediately after T-raising to Nr and T/Nr-raising to Pn).
- 16. As has been widely discussed, the Icelandic expletive $pa\delta$ 'there, it' is confined to clause initial position in both main and subordinate clauses (see Sigurðsson 2004a and the numerous references cited there). On the assumption that $pa\delta$ (negatively) matches the speech event features discussed below under distant Agree, it can be analyzed as staying in 'Spec,IP' even in main clauses (blocking the finite verb and other elements from moving into the CP domain).
- 17. These facts seem to apply to Icelandic in general (i.e., we did not find any differences here between Icelandic A, B and C). Often (but not necessarily), examples of this sort contain a focalizing element like *bara* 'only, just'.
- 18. In Sigurðsson (2006a,b) it was assumed that (subject-) Pn attracted DAT (the dative tucking in to the right of Pn), but that analysis is not available in the present approach (where intervention does not boil down to special inherent properties of quirky DAT). Another possibility is that DAT is attracted by some little v or a CAUSE/VOICE head (in the spirit of Svenonius 2005), merged right below Pn, but we will not pursue the issue here.
- 19. Lambda in line with 'theta' and 'phi'; capital lambda in order to avoid confusion with lambda calculus.
- 20. The (good) question of why this fact is a fact is irrelevant for our present purposes. It could be made to follow from PIC or from the property that makes the left edge of ECM infinitives a 'freezing' position, but we do not wish to pursue the issue here.
- 21. However, H&H only discussed structures of this sort with third person nominatives. As in many other respects, *wh*-copies are evidently 'stronger' in some sense than A-copies, thus inducing an intervention effect like overt arguments but unlike A-copies. We don't know why this is the case, nor does anyone else, as far as we know.
- 22. See H&H, who suggested that this was a Stylistic Fronting type of movement (in the sence of Holmberg 2000), while noting that it has a number of properties

which are unlike Stylistic Fronting. A clear difference is, for instance, that the fronted nominative has to be emphatic.

- 23. We have not done any informant survey on the interaction of agreement and wh-movement, so the present description is based solely on Sigurðsson's Icelandic A intuitions. They are partly different from the Icelandic B judgements in H&H, where agreement in structures like (47) was reported to be only optional (with third person nominatives; H&H did not consider first and second person nominatives). The main reason why we did not include wh-movement structures in our informant survey is that it is extremely difficult to retain stable and reliable intutions in these structures. Thus, we opted for narrowing down our study here to the one grammar we have constant and unlimited access to. It follows that we have no information on agreement in Icelandic C in the constructions under discussion.
- 24. An alternative account of the Person Restriction would be that person agreement, for some reason, requires a spec-head relation (cf. Hrafnbjargarson 2001; Koopman 2006). However, (47), and, in particular, the Reverse Predicate Agreement in (32) and (33), show that this is not the case.
- 25. Another question, discussed by H&H, albeit only inconclusively so, is why regular NP-movement does not 'open the gates' for NOM-scrambling, as opposed to *wh*-movement. We will not discuss this here.
- 26. Direct *wh*-movement to SpecCP was argued for already by Rögnvaldsson and Thráinsson 1990, albeit on different grounds.
- 27. The 2PL form *virtust* in (53a) was fully acceptable to five of our nine informants and was given a question mark by further two informants (including Sigurðsson). Two B/C-informants found it quite unacceptable (two question marks and a star).
- 28. Thus, it is probably not a coincidence that so many DAT-NOM verbs are -st verbs (see, e.g., the lists of quirky subject constructions in Jónsson 1998, 2005). For these verbs, a morphological person agreement clash between DAT and the NOM can never arise in the singular.
- 29. The question mark in (57) reflects Sigurðsson's intuitions. It might be due to minor problems with control into some quirky PRO infinitives. *Líka* 'like' would be impossible in the infinitive in (57) with 1^{st} and 2^{nd} person NOM, as it only allows non-human (or, rather, 'non-personal') NOM, see Maling and Jónsson (1995) (in contrast to Dative Intervention, this 'Human Factor' is probably related to the Romance and Slavic type of Person Case Constraint, an issue that we shall however not discuss here).
- 30. Notice that this account suggests that Nr probing of NOM from T/Nr across DAT should be possible in structures like (24)' above in Icelandic B and C, as long as this does not lead to a morphological mismatch (i.e., in case DAT and NOM are in the same number, either both singular or both plural). Our data are not extensive enough to allow any firm conclusions here, but they indicate, albeit vaguely, that this might be correct for at least some Icelandic B speakers.

The same is suggested by some of the judgements in H&H, e.g., the contrast between their (13b) and (14b) (see also the contrast between their (15b) and (16b)).

References

Alexiadou, A	Artemis and Elena Anagnostopoulou
2001	The subject-in-situ generalization and the role of case in driving com-
	putations. Linguistic Inquiry 32: 193–231.
Anagnostop	pulou, Elena
2003	The Syntax of Ditransitives: Evidence from Clitics. Berlin/New York:
	Mouton de Gruyter.
Bianchi, Val	entina
2003	On finiteness as logophoric anchoring. In Temps et point de vue/
	Tansa and Point of View Jacqueline Guaron and Liliane Tasmovski

point de vue/ Tense and Point of View, Jacqueline Guéron and Liliane Tasmovski (eds.), 213–246. Université Paris X.

Boeckx, Cedric

2000	Quirky agreement.	Studia Linguistica	54: 354–380.
------	-------------------	--------------------	--------------

Cardinaletti. Anna

2003 Stylistic Fronting in Italian. In Grammatik i fokus / Grammar in Focus. Festschrift for Christer Platzack 18 Nov. 2003, Lars-Olof Delsing, Cecilia Falk, Gunlög Josefsson and Halldór Ármann Sigurðsson (eds.), Vol. II: 47-55. Lund: Department of Scandinavian Languages.

Chomsky, Noam

1995 The Minimalist Program. Cambridge, MA: 1	MIT Press
---	-----------

- 2000 Minimalist inquiries: the framework. In Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik, Roger Martin, David Michaels and Juan Uriagareka (eds.), 89-155. Cambridge: MIT Press.
- 2005 On Phases. To appear in Foundational Issues in Linguistic Theory, Robert Freidin, Carlos P. Otero and Maria Luisa Zubizarreta (eds.). Cambridge, MA: MIT Press.

D'Alessandro, Roberta Anna Grazia

2004 Impersonal si constructions: Agreement and interpretation. Ph.D. dissertation, University of Stuttgart.

Di Domenico, Elisa

2004 Placed, non-placed and anaphorically placed expressions. Italian Journal of Linguistics / Rivista di Linguistica 16: 63–105.

Hiraiwa, Ken

Dimensions of Symmetry in Syntax: Agreement and Clausal Archi-2005 tecture. Ph.D dissertation. MIT.

Holmberg, Anders

2000 Scandinavian Stylistic Fronting: how any category can become an expletive. Linguistic Inquiry 31: 445-483.

Holmberg, A	nders and Thorbjörg Hróarsdóttir (=H&H)		
2003	Agreement and movement in Icelandic raising constructions. <i>Lingua</i> 113: 997–1019		
Holmberg A	nders, and Thorbiörg Hróarsdóttir $(=H\&H)$		
2004	Agreement and movement in Icelandic raising constructions <i>Lingua</i>		
2001	114: 651_673		
Hrafnhiargars	son Gunnar Hrafn		
2001	An Optimality Theory analysis of agreement in Icelandic DAT-NOM		
2001	constructions. Working Papers in Scandinavian Syntax 68: 15–47.		
Jónsson, Jóhannes Gísli			
1998	Sagnir með aukafallsfrumlagi [Verbs with a quirky subject]. Islenskt		
	mál og almenn málfræði 19–20: 11–43.		
Jónsson, Jóhannes Gísli			
2005	Merkingarhlutverk, rökliðir og fallmörkun [Thematic roles, arguments		
	and case-marking]. In Íslensk tunga III: Setningar, Höskuldur Þráins-		
	son (ed.), 350–409. Reykjavík: Almenna bókafélagið.		
Koopman, Hilda			
2006	Agreement configurations: In defence of "Spec head". In Agreement		
	Systems, Cedric Boeckx (ed.), 159-199. Amsterdam/Philadelphia:		
	John Benjamins.		
Kroch, Anthony			
1989	Reflexes of grammar in patterns of language change. Journal of Lan-		
	guage Variation and Change 1: 199–244.		
Maling, Joan and Jóhannes Gísli Jónsson			
1995	On nominative objects in Icelandic and the feature [+human]. Work-		
	ing Papers in Scandinavian Syntax 56: 71–79.		
Nomura, Masashi			
2005	Nominative Case and AGREE(ment). Ph.D dissertation, UConn.		
Rivero, Maria-Louisa			
2004	Spanish quirky subjects, person restrictions, and the Person-Case		
	Constraint. Linguistic Inquiry 35: 494–502.		
Rögnvaldsson, Eiríkur and Höskuldur Thráinsson			
1990	On Icelandic word order once more. In Modern Icelandic Syntax, Joan		
	Maling and Annie Zaenen (eds.), 3–40. San Diego: Academic Press.		
Schlenker, Ph	ilippe		
2003	A plea for monsters. Linguistics and Philosophy 26: 29–120.		
Schütze, Cars	on T.		
1997	Infl in Child and Adult Language: Agreement, Case and Licensing.		
	Doctoral dissertation, MIT.		
2003	Syncretism and double agreement with Icelandic nominative objects.		
	In Grammatik i fokus / Grammar in Focus. Festschrift for Christer		
	Platzack 18 November 2003, Vol. II, Lars-Olof Delsing, Cecilia Falk,		
	Gunlög Josefsson and Halldór Ármann Sigurðsson (eds.), 295-303.		
	Lund: Department of Scandinavian Languages.		
Sigurðsson, Halldór Ármann

- 1991 Beygingarsamræmi [Agreement]. Íslenskt mál og almenn málfræði 12–13: 31–77.
- 1996 Icelandic finite verb agreement. *Working Papers in Scandinavian Syntax* 57: 1–46 [see also: http://ling.auf.net/lingBuzz/000305].
- 2000 The locus of case and agreement. *Working Papers in Scandinavian* Syntax 65: 65–108.
- 2004a The syntax of Person, Tense, and speech features. *Italian Journal of Linguistics / Rivista di Linguistica* 16: 219–251.
- 2004b Agree and agreement: evidence from Germanic. In *Focus on Germanic Typology*, Werner Abraham (ed.), 61–103. Berlin: Akademie Verlag.
- 2006a Agree in syntax, agreement in signs. In *Agreement Systems*, Cedric Boeckx (ed.), 201–237. Amsterdam/Philadelphia: John Benjamins.
- 2006b The Nominative Puzzle and the Low Nominative Hypothesis. *Linguistic Inquiry* 37: 289–308.
- 2006c Remarks on features. To appear in *Explorations of Phase Theory: Features and Arguments*. (Interface Explorations), Kleanthes Grohman (ed.). Berlin/New York: Mouton de Gruyter.
- Sigurðsson, Halldór Ármann and Joan Maling
 - 2006 Argument drop and the Empty Left Edge Condition (ELEC). To appear in *Working Papers in Scandinavian Syntax* 81 [see also: http://ling.auf.net/lingBuzz/000313].

Speas, Margaret

2004 Evidentiality, logophoricity and the syntactic representation of pragmatic features. *Lingua* 114(3): 255–276.

Svenonius, Peter

2005 The nanosyntax of the Icelandic passive. Paper presented at the Lund Grammar Colloquium, May 26, 2005.

Taraldsen, Knut Tarald

- 1995 On agreement and nominative objects in Icelandic. In *Studies in Comparative Germanic Syntax*, Hubert Haider, Susan Olsen and Sten Vikner (eds.), 307–327. Dordrecht: Kluwer.
- 1996 Reflexives, pronouns, and subject/V agreement in Icelandic and Faroese. In *Microparametric Syntax and Dialect Variation*, James Black and Virginia Motapanyane (eds.), 189–212. Amsterdam: John Benjamins.

Tenny, Carol L.

2006 Evidentiality, experiencers, and the syntax of sentience in Japanese. Journal of East Asian Linguistics 15: 245–288.

Person-hierarchy effects without a person-hierarchy

Martina Wiltschko

1. Introduction

It is a pervasive property of natural languages that they display agreement between predicates and their arguments, henceforth *predicate-argument agreement*. Descriptively, predicate-argument agreement holds if certain features of an independent argument DP are marked on the predicate. While predicate-argument agreement is generally an obligatory and productive morphological process, many languages display restrictions to the effect that certain agreement markers are banned in certain environments. Here I will discuss two such agreement restrictions found in Halkomelem Salish. Both restrictions appear to be sensitive to the grammatical person of the argument.

- i) Intransitive subjects do not trigger 3rd person agreement. This suggests that Halkomelem displays *split ergativity* which is sensitive to *person*;
- ii) 3rd person subject agreement cannot co-occur with 2nd person object agreement. This suggests that Halkomelem has *transitive gaps* that are sensitive to *person*.

Both types of agreement restrictions are found in many languages of the world and have been argued to be the result of the so called *person-hier-archy* (Silverstein 1976; Dixon 1994). According to a person-hierarchy approach, agreement restrictions of the type introduced above arise because certain persons are higher ranked than others and higher ranked persons naturally align with higher ranked arguments. This type of analysis is especially prominent in functional typological approaches (including Optimality Theory).

The status of the person-hierarchy is however not clear in a formal framework such as the principles and parameters framework (Chomsky 1981) and its minimalist incarnations (Chomsky 1995 and subsequent work). However successful the person-hierarchy is at a descriptive level, it is not clear where and how it operates in the grammar. Researchers within this framework generally agree that the person-hierarchy is not a primitive of

the grammar (Newmeyer 1998) and consequently they attempt to derive person-hierarchy effects from independently established principles of the grammar (Jelinek 1993; Alexiadou and Anagnostopoulou 2002; Jelinek and Carnie 2003).

The main objective of this paper is to show that the apparent personhierarchy effects of Halkomelem Salish (discussed in detail in section 2) are not the result of the person-hierarchy. I show that the relevant restrictions should not even be described in terms of the person-hierarchy since the sensitivity to person is only apparent (section 3). Consequently, any approach that seeks to analyze the Halkomelem agreement restrictions in terms of a person-hierarchy will not achieve descriptive adequacy. This holds for approaches which take the person-hierarchy to be a primitive of the grammar (as in OT-approaches such as Aissen 1999a,b) but also for approaches which seek to directly build the person-hierarchy into the functional hierarchy (as in Jelinek & Carnie 2003). Instead I show that the apparent person-hierarchy effects are the result of the morpho-syntax of agreement morphology and the existence of certain (partly arbitrary) paradigmatic gaps. This holds for both types of restrictions. I discuss apparent split ergativity in section 4 and transitive gaps in section 5. In section 6 I conclude.

2. The facts: two apparent person-hierarchy effects in Halkomelem Salish

Halkomelem is a Central Coast Salish language spoken on the West coast of British Columbia (Canada).¹ Like most languages of the North West coast, Halkomelem is a head-marking language: full DP-arguments are optional and we find a rich agreement system which marks the person and number of a given argument directly on the predicate. In this section I will introduce the Halkomelem agreement system (2.1) and the two types of agreement restrictions that appear to be due to a person-hierarchy: person sensitive split ergativity (2.2) and person sensitive transitive gaps (2.3).

2.1. Agreement in Halkomelem

Predicate-argument agreement in Halkomelem is a complex system. As illustrated in (1), the (verbal) predicate bears two morphemes that indicate the person and number of the two arguments involved: the object marker -ox and the subject marker -es. The corresponding full DP-arguments are optional.

(1) *kw'éts-l-óx-es* (*te swiyeqe*) (*te-e'elthe*) see-trans-1SG.O-3S DET man DET-1SG.INDEP 'The man saw me.'

If we restrict ourselves to matrix, transitive clauses without an auxiliary, the predicate-argument agreement pattern of Halkomelem can be described as follows. There are two full paradigms: one for object and one for subject agreement (table 1). Object agreement always appears closer to the verb and thus precedes subject agreement (table 2).

		object agreement	subject agreement
1	SG	ox	tsel
	PL	oxw	tset
2	SG	ome	chexw
	PL	ole	chap
3		Ø	es

Table 1. Predicate-argument agreement paradigms (to be revised)

Table 2.	Predicate-argument agreement template (to be revised)
Table 2.	Predicate-argument agreement template (to be revised)

V-transitive object agreement su	subject agreement
----------------------------------	-------------------

Everything else being equal, we might expect that we can now predict the form of all clauses. That is, once we know the inventory of predicate-argument agreement (i.e. the paradigms) and the linear order holding between two co-occurring agreement endings we should be able to generate the predicate-argument agreement patterns of all clauses. As it turns out, this is not the case. Rather, there are a number of restrictions on predicate-argument agreement which complicate matters.

2.2. Agreement restriction #1: 3rd agreement is restricted to transitive subjects

Subject-predicate agreement is sensitive to the transitivity of the predicate. As illustrated below, only transitive but not intransitive subjects trigger the occurrence of the 3^{rd} person agreement ending (*-es*). This transitive split is however sensitive to person features: only 3^{rd} but not 1^{st} or 2^{nd} person sub-

ject agreement differs depending on the transitivity of the clause as shown in the examples (2) and (3).

(2)	TRANSITIVE VERB	INTRANSITIVE VERB		
	máy-t-*(e s)	í:mex-(* e s)		
	help-trans-3s	walk.CONT-3S		
	He/she helps him.'	'He/she is/was walking.'		
		(Galloway 1980: 126)		
(3)	TRANSITIVE VERB	INTRANSITIVE VERB		
	a. <i>máy-t-tsel</i>	í:mex-tsel		
	help-TRANS-1SG.S	walk.CONT-1SG.S		
	'I help him.'	'I'm walking.'		
	b. <i>máy-t-chexw</i>	í:mex-chexw		
	help-TRANS-2SG.S	walk.CONT -2SG.S		
	'You help him.'	'You are walking.'		
	c. máy-t-tset	í:mex-tset		
	help-TRANS-1PL.S	walk.CONT-1PL.S		
	'We help him.'	'We are walking.'		
	d. <i>máy-t-chap</i>	í:mex-chap		
	help-TRANS-2PL.S	walk.CONT-2PL.S		
	'You folks help him.'	'You folks are walking.'		
		(Galloway 1980: 126)		

Accordingly, we need to revise the predicate-argument agreement paradigms to reflect the sensitivity to the transitivity of the predicate:

		object agreement	transitive subject agr.	intransitive subject agr.
1	SG	ox	tsel	
	PL	<i>oxw</i>	tset	
2	SG	ome	chexy	N
	PL	ole	chap)
3	SG	Ø	es	Ø

Table 3. Predicate-argument agreement is sensitive to transitivity

2.3. Agreement restriction #2: 3rd subject and 2nd object cannot co-occur

Another restriction on predicate-argument agreement manifests itself in a different way. Observe in (4) that not all logically possible person combinations in transitive clauses are possible. In particular, transitive clauses with 3^{rd} subjects and 2^{nd} objects (both singular and plural) are ill-formed (4n), while all other combinations are well-formed.

(4)	a.	<i>máy-th-óx-tsel</i> help-TRANS-1SG.O-1SG.S 'I help myself.'	<i>máy-t-óxw-tsel</i> help-TRANS-1PL.O-1SG.S 'I help us.'	[1>1] ²
	b.	<i>máy-th-óx-tset</i> help-TRANS-1SG.O-1PL.S 'We help myself.'	<i>máy-t-óxw-tset</i> help-TRANS-1PL.O-1PL.S 'We help us.'	
	c.	<i>máy-th-óme-tsel</i> help-TRANS-2SG.O-1SG.S 'I help you.'	<i>máy-t-óle-tsel</i> help-TRANS-2PL.O-1SG.S 'I help you guys.'	[1>2]
	d.	<i>máy-th-óme-tset</i> help-TRANS-2SG.O-1PL.S 'We help you.'	<i>máy-t-óle-tset</i> help-TRANS-2PL.O-1PL.S 'We help you guys.'	
	e.	<i>máy-t-tsel</i> help-TRANS-1SG.S 'I help him.'		[1>3]
	f.	<i>máy-t-tset</i> help-TRANS-1PL.S 'We help him.'		
	g.	<i>máy-th-óx-chexw</i> help-TRANS-1SG.O-2SG.S 'You help me.'	<i>máy-t-óxw-chexw</i> help-TRANS-1PL.O-2SG.S 'You help us.'	[2>1]
	h.	<i>máy-th-óx-chap</i> help-TRANS-1SG.O-2PL.S 'You guys help me.'	<i>máy-t-óxw-chap</i> help-TRANS-1PL.O-2PL.S 'You guys help us.'	
	i.	<i>máy-th-óme-chexw</i> help-TRANS-2SG.O-2SG.S 'You help yourself.'	<i>máy-t-óle-chexw</i> help-TRANS-2PL.O-2SG.S 'You help you guys.'	[2>2]
	j.	<i>máy-th-óme-chap</i> help-TRANS-2SG.O-2PL.S 'You guys help you.'	<i>máy-t-óle-chap</i> help-TRANS-2PL.O-2PL.S 'You guys help yourselves.'	

k. <i>máy-t-chexw</i> help-TRANS-2SG.S 'You help him.'	[2>3]
 <i>máy-t-chap</i> help-TRANS-2PL.S 'You folks help him.' 	
m. <i>máy-th-óx-es</i> help-TRANS-1SG.OBJ-3S 'He helps me.'	<i>máy-t-óxw-es</i> [3>1] help-TRANS-1PL.OBJ-3S 'He helps us.'
n. * <i>máy-th-óme-s</i> help-TRANS-2SG.S-3S 'He/she helps you.'	* <i>máy-t-óle-s</i> *[3>2] help-TRANS-2PL.S-3S 'He/she helps you folks.'
0. <i>máy-t-es</i>	[3>3]
'He helps him.'	(Galloway 1993: 177f.)

To make up for this gap in the transitive paradigm (henceforth *[3>2]) speakers of Halkomelem can instead use a passive form as illustrated in (5).

(5)	a.	máy-th-ò:m	(te	swíyeqe)
		help-trans-2sg.pass	DET	man
		'You were helped (by	the m	an).'

b. *máy-t-òlèm* (*te swíyeqe*) help-TRANS-2PL. PASS DET man 'You folks were helped (by the man).'

3. Agreement restrictions and the person-hierarchy

We have seen two types of agreement restrictions found in Halkomelem:

i)	3 rd person subject agreement is restricted to transitive clauses; and
ii)	sentences with 3 rd person subject and 2 nd person objects are ruled out.

The question we are faced with then is how these restrictions are to be analyzed and whether or not they can receive a unified analysis. Since both type of agreement restrictions have in common that they involve a certain sensitivity to person, previous analyses have treated them as the effects of the person-hierarchy (Jelinek and Demers 1983; Gerdts 1988a; Aissen 1999a,b).

3.1. How the person-hierarchy accounts for the agreement restrictions

For reasons of space I will only discuss in detail person-hierarchy approaches which take the person-hierarchy to be a primitive of the grammar. All problems I identify for these approaches carry over to analyses that seek to derive the person-hierarchy because – as I will show – person-hierarchy accounts already fail at the descriptive level.

According to any person-hierarchy account á la Silverstein (1976), natural languages make use of a (semantically grounded) hierarchy of potential (nominal) agents in transitive sentences. The core insight of all personhierarchy analyses is that the higher the nominal on the hierarchy, the more likely it is to serve as the agent of the event. If the argument is more likely to be an AGENT the better suited it is to function as the subject of the clause. In other words, in the unmarked case, a nominal which is higher on the person-hierarchy in (6) is mapped onto the grammatical function which is higher on an independently motivated argument-hierarchy as in (7): subjects are structurally higher than objects, for example.

(6) Local
$$(1^{st}/2^{nd}) > 3^{rd}$$
 Pron > Proper N > Human N > Anim N > Inanim N
(Silverstein 1976)

(7)
$$Subj(ect) > Obj(ect) > Obl(ique)$$

While the insight of the person-hierarchy account remains constant across different person-hierarchy effects, there are nevertheless further assumptions we need in order to derive the agreement restrictions under consideration.

Let us start with the question as to how person-based split ergativity is derived. There are two ways in which the person-hierarchy plays a role here: first, it defines the types of nominals which pattern in an ergative way as summarized in (8).

(8) Local $(1^{st}/2^{nd}) > 3^{rd}$ Pron > Proper N > Human N > Anim N > Inanim N NOM/ACC $\rightarrow \longleftarrow$ ERG/ABS

Moreover, the ergative pattern itself can be viewed as the result of alignment constraints between nominal types and arguments which regulate the morphological marking of 3^{rd} person arguments. In particular, if the argument realization is well-aligned such that the lower ranked 3^{rd} person is realized as the lower ranked object, then the 3^{rd} person argument is unmarked. If, on the other hand, the argument realization is ill-aligned such that the lower

ranked 3^{rd} person is realized as the higher ranked subject, then the 3^{rd} person argument is morphologically marked:

This derives only part of the ergative pattern, however. The alignment constraints are mute regarding the morphological marking of intransitive subjects. To account for the fact that intransitive subjects pattern with transitive objects (i.e., that they are unmarked), person-hierarchy accounts typically assume that an intransitive subject does not need to be contrasted with another argument and therefore it does not need to be morphologically marked.

Next, we turn to the person-hierarchy account for transitive gaps. Here the person-hierarchy regulates which combinations are ill-formed (and not which argument-realizations are marked). In particular, according to a person-hierarchy account gaps can arise if the argument realization is ill-aligned. For example, when a clause contains both a 2^{nd} and a 3^{rd} person argument, the higher ranked person (2^{nd}) is realized as the higher ranked argument (the subject). The inverse alignment where the 3^{rd} person functions as the subject and the 3^{rd} person functions as the object is ill-aligned and thus ruled out.

3.2. Problems with a person-hierarchy account

I now turn to problems a person-hierarchy account faces in light of the specific agreement restrictions of Halkomelem introduced in section 2. There are three general problems I identify:

- i) Split ergativity and transitive gaps should not receive a unified analysis.
- ii) Halkomelem does not really display an ergative pattern.
- iii) Transitive gaps are ruled out on the basis of agreement combinations, not person combinations

3.2.1. Against a unified analysis for split ergativity and transitive gaps

According to the account based on the person-hierarchy outlined above there is a common source for both split ergativity and transitive gaps: both phenomena are sensitive to person and thus they have been argued to be the result of the workings of the person-hierarchy. On closer inspection however, we observe that there are a number of non-trivial differences between these agreement restrictions which cast doubt on the empirical validity of a unified analysis.

First, we observe that in Halkomelem the relevant rankings needed to derive the right results differ across the two types of agreement restrictions. While for split ergativity, 1^{st} and 2^{nd} person pattern together in accordance with the original Silverstein hierarchy, for transitive gaps 2^{nd} person differs from 1^{st} person. A well-behaved language would rule out both [3>2] sentences *and* [3>1] sentences. Note that the closely related language Lummi (on which the Jelinek & Demers 1993 analysis is based) displays exactly this pattern:

(11)	a.	*xči-t-oŋə-əs
		know-1sG.O-3s
		'He knows me.'

 b. *xä-t-oŋəs-əs know-2SG.O-3S 'He knows you.'

(Jelinek and Demers 1983: 1, ex. c1)

The existing analyses acknowledge that the Halkomelem transitive gaps do not quite accord with the Silverstein hierarchy. Consequently such analyses assume either a different (language-specific) ranking of the person-hierarchy such that 1^{st} person is simply not ranked (Jelinek and Demers 1983); alternatively they assume various language specific rankings of individual alignment constraints (such that *[3>2] is ranked above *[3>1] as in Aissen 1999a,b). While this might be possible, it results in a non-unified analysis for the two types of agreement restrictions: not only do we have to assume a language-specific person-hierarchy for Halkomelem (with 1^{st} person unranked), we also have to assume that this language-specific ranking is relativized to the two different agreement restrictions.

Another problem for a unified account has to do with the fact that the effects of the two types of agreement restrictions differ in non-trivial ways. For split ergativity, the person-hierarchy regulates whether or not a given alignment requires morphological marking. In contrast, for transitive gaps the person-hierarchy regulates which alignments are ruled out and which ones are ruled in.

Finally, the two phenomena differ in whether the person-hierarchy effects are absolute or relative to other arguments in the clause. The morphological marking of 3^{rd} person transitive subjects is independent of other arguments in the clause. That is, even if the object argument is also 3^{rd} person – in which case the alignment is not really ill-aligned – 3^{rd} person subjects must be marked:

(12) $kw' \dot{a}ts - et^*(es)$ (13) 3 = 3see-TRANS-3S Subj > Obj 'S/he saw him/her.'

In contrast, transitive gaps are determined relative to the other person. That is, a 3^{rd} person subject is only ruled out in the presence of a 2^{nd} person object but not in the presence of a 1^{st} or 3^{rd} person object.

These differences between split ergativity and transitive gaps (summarized in table 4) cast serious doubt on the empirical adequacy of any approach which seeks to account for these agreement restrictions in a unified fashion.

	split ergativity	transitive gaps
Relevant Person-hierarchy	1/2 > 3	2 > 3
Has effect on grammaticality?	no	yes
Has effect on morphological marking?	yes	no
Effect is relative to other arguments?	no	yes

Table 4. Differences between the two person-based agreement-restrictions in Halkomelem

Even if a unified account is untenable, it might still be the case that either one of the two agreement restrictions is best explained by means of a personhierarchy. In the remainder of this section I show that neither split ergativity nor transitive gaps should be viewed as the result of a person-hierarchy.

3.2.2. Halkomelem is not really ergative

Most descriptions of Halkomelem treat the pattern of 3^{rd} person agreement as essentially ergative (Gerdts 1988b): transitive subjects are associated with a dedicated overt agreement marker (*-es*) while intransitive subjects have in common with transitive objects that they are unmarked (or rather marked with a zero morpheme). This means that – like in other ergative systems – intransitive subjects pattern with transitive objects (see Table 5).

Table 5.	3 rd	person	agreement	is	ergative
----------	-----------------	--------	-----------	----	----------

object	intransitive subject	transitive subject
3	Ø	es

On closer inspection, it turns out that (in certain environments) Halkomelem has an overt 3^{rd} person object marker, which sets it apart from the 3^{rd} person intransitive marker which is always \emptyset (Wiltschko 2003). This suggests that object agreement, but not intransitive subject agreement has allomorphic variants. This allomorphy is morphologically conditioned and depends on the choice of the transitive suffix. That is, Halkomelem has three fully productive transitivizing suffixes: -(e)t/-(e)th which indicates full control of the agent over the event, -l which indicates limited or no control of the agent over the event, and -st/-sth which indicates a causative construal:

(14)	a.	<i>kw'áts-eth-òmè-tsel</i> see-TRANS-2SG.O-1SG.S 'I look at you.'	b.	<i>kw'áts-et-òlè-tsel</i> see-TRANS-2PL.O-1SG.S 'I look at you folks.'
(15)	a.	<i>kw'éts-l-òmè-tsel</i> see-TRANS-2SG.O-1SG.S 'I see you.'	b.	<i>kw'éts-I-òlè-tsel</i> see-TRANS-2PL.O-1SG.S 'I see you folks.'
(16)	a.	<i>ímex-sth-òmè-tsel</i> walk-CAUS-2SG.O-1SG.S 'I make vou walk.'	b.	<i>ímex-st-òlè-tsel</i> walk-CAUS-2 <i>PL.O1SG.S</i> 'I make vou folks walk.'

In the context of the transitivizers -l and -st a 3^{rd} person object is marked with the suffix -exw. Only the transitivizer -t occurs with \emptyset object agreement.

(17) a. kw'áts-**et**-Ø-tsel see-TRANS-30-1SG.S 'I look at him.'

- c. ímex-**st-exw**-tsel walk-CAUS-3O-1SG.S 'I make him walk.'
- b. kw'éts-l-exw-tsel see-TRANS-30-1SG.S 'I see him.'

If we accept this analysis of *-exw* as an allomorph of 3^{rd} person object marking³, then Halkomelem no longer fits the description of an ergative language: intransitive subjects do not pattern with transitive objects. Rather, we are dealing with a pattern where all three arguments are distinctly marked, at least in the context of two transitivizers (see table 6).

Table 6. 3rd person agreement is not ergative

	Object	intransitive subject	transitive subject
3	Ø/exw	Ø	es

This pattern of 3rd person agreement in Halkomelem casts doubt on the validity of the analysis in terms of a person-hierarchy. Recall the essence of the person-hierarchy account of (split) ergativity: 3rd person arguments only need to be marked if they are found in an ill-aligned configuration. If however a 3rd person argument is realized as an object it is well-aligned and thus should not require marking (the relevant alignments are repeated below for convenience).

(18)	a.	1/2	>	3	b	3	<	1/2
		Subj	>	Obj		<u>Subj</u>	>	Obj
		well-	alig	gned: 3 rd unmarked		ill-ali	gne	d: 3 rd marked

According to this analysis then, it is quite unexpected that 3^{rd} person objects are marked as well. What remains to be accounted for, however, is why there is a person-based split that is sensitive to the transitivity of the predicate (see section 4). Table 7 shows the revised paradigm of Halkomelem agreement. We observe that only 3^{rd} person (but not 1^{st} or 2^{nd} person) agreement varies with the transitivity of the predicate: transitive subjects are marked with *-es* while intransitive subjects appear unmarked.

Table 7. Predicate-argument agreement is sensitive to transitivity

		object agreement	transitive subject agr.	intransitive subject agr.
1	SG	ox	ts	sel
	PL	oxw	ts	set
2	SG	ome	che	exw
	PL	ole	ch	pap
3		Ø/exw	es	Ø

3.2.3. Transitive gaps are agreement restrictions not person restrictions

We now turn to the second apparent person-hierarchy effect: the *[3<2] constraint. I show that this constraint cannot be properly understood as a person-based constraint either. Instead, I argue that it is a constraint on a particular combination of agreement endings (see Brown, Koch and Wiltschko 2004, 2007; Wiltschko and Burton 2004). The central evidence stems from the fact that in context where the 3rd person subject agreement is absent, a [3<2] sentence is well-formed.

In the context of subject A'-movement (both wh-questions and relative clauses), 3rd person transitive agreement is lost as illustrated in (19) (Gerdts 1988a; Kroeber 1999). In such context 3/2 clauses are well-formed (20):

- (19) a. tewát kw'e xwmékwàth-et te Martina who COMP kiss-TRANS DET Martina 'Who kissed Martina?'
 - b. John te swíyeqe kw'éts-l-exw te Mali John DET man see-TRANS-30 DET Mary 'John is the man who saw Mary.'
- (20) a. tewát kw'e le lhéts'-l-òmè
 who COMP AUX cut-TRANS-2SG.0
 'Who cut you?'
 (Galloway 1993: 453)
 - b. *lí-chexw théthel-met te xwmékwàthe-th-ome* AUX-2SG.S admire-TRANS DET kiss-TRANS-2SG.O 'Are you admiring the one who is kissing you?'

This provides us with evidence that it is not the person combination that is ruled out, but instead the combination of 3^{rd} person subject- and 2^{nd} person object agreement. A striking minimal pair is given in (21). In the canonical VSO order, a 3<2 sentence is ungrammatical while in the marked SVO order, arguably derived via subject A'-movement, a 3<2 sentence is well-formed.

- (21) a. **kw'éts-l-óme-s te swíyeqe* see-TRANS-2SG.O-3S DET man 'The man saw you.'
 - b. *te swíyeqe kw'éts-l-òmè* DET man see-TRANS-2SG.O 'The man saw you.'

In all these cases, the difference between the ill-formed and the well-formed sentences does not lie in the person combination but in the morpheme combination: [3<2] sentences are only ruled out if each of the arguments is associated with an agreement marker on the predicate.

The second environment where we find well-formed [3<2] sentences is passive. Passive sentences in Halkomelem are impersonal constructions (Kroeber 1999) where the underlying object remains in object position and the subject position is occupied by en empty 3^{rd} person (possibly expletive) element (Wiltschko 2001).⁴ Evidence that they are indeed impersonal constructions stems from the fact that agreement with the underlying object in passives is still object agreement (Galloway 1993, Gerdts 1989). Furthermore, in subjunctive environments we find an overt 3^{rd} person subject agreement co-occurring with a 1^{st} or 2^{nd} person passive object agreement:

(22)	éwe	<i>í-s</i>	xwemékwath-eth -àl -em
	NEG	AUX-3SS	kiss-trans-1sg.o-pass
	'Nobc	dy kissed me	e.'/'I wasn't' kissed.'

Given this analysis, it follows that in case of passive sentences with a 2^{nd} person underlying object, we are in fact dealing with a 3^{rd} person subject cooccurring with a 2^{nd} person object. Note that in this environment, where we find a 3^{rd} person subject which does not trigger 3^{rd} person transitive agreement, [3<2] sentences are perfectly well-formed:

(23)	éwe	lí-s	xwemékwath-eth -òm	
	NEG	AUX-3SS	kiss-trans-2sg.o.pass	
	'Nob	ody kissed	d you.'/'You weren't kissed.'	(Wiltschko 2001: 6)

Finally, there is one more environment where the ban on [3<2] sentences is lifted and again it is a context where the two agreement morphemes do not co-occur. In this case it is the object agreement that is missing rather than the subject agreement (see Wiltschko and Burton 2004). To see this, we need to look at the independent (emphatic) pronouns of Halkomelem (table 8).

	SG	PL
1	ta'áltha/ta'á'altha	talhlímelh
2	taléwe	talhwélep/talhléwep
3	tútl'∂/thútl'∂	tutl'ó:lem/thutl'ó:lem/yutl'ó:lem

Table 8. Halkomelem independent pronouns (Galloway 1980: 27)

In many respects these independent pronouns behave like full DPs (Wiltschko 2002). One property consistent with their behavior as full DPs, is the fact that (at least in certain environments) these pronouns do not trigger 1^{st} or 2^{nd} person agreement (cf. Hukari 1980, Kroeber 1999):

- (24) a. *ta-á'áltha q'óq'ey (*-tsel)* DET-1SG.INDEP sick 1SG.S 'I'm sick.'
 - b. *ta-léwe mímel* (*-*chexw*) DET-2SG.INDEP small 2SG.S 'You are small.'

(Wiltschko 2003: 43d)

In (24) we observe that the 1^{st} and 2^{nd} person independent pronoun does not co-occur with 1^{st} or 2^{nd} subject agreement. In this context, sentences with 3^{rd} person subjects and 2^{nd} person objects are well-formed:

- (25) a. tl'ó te-léwe kw'éts-l-exw-es 3 DET-2SG.INDEP see-TRANS-3O-3S 'You are the one he has seen.'
 - b. te-léwe i-lh kw'éts-l-exw-es DET-2SG.INDEP AUX-PAST see-TRANS-3O-3S 'It's you that he has seen.'

I conclude that the apparent person restriction of transitive gaps is indeed an agreement restriction, which cannot be straightforwardly accounted for as the result of the person-hierarchy.

3.3. Summary

In this section we have established three main points.

- i) The two person sensitive agreement restrictions of Halkomelem (apparent split ergativity and transitive gaps) should not receive a unified analysis
- ii) Halkomelem agreement does not really display ergative properties, and thus the person-hierarchy based account which seeks to derive personbased split ergativity cannot be maintained
- iii) The transitive gaps are not due to a specific (ill-aligned) combination of persons, but is instead a restriction on agreement

If however, the observed agreement restrictions are not due to the workings of a person-hierarchy (or however such a hierarchy is derived) the question remains as to how else we can account for these restrictions. In particular, we need to find an answer to two questions:

- i) What brings about the person-based sensitivity to transitivity such that only 3rd person agreement varies with the transitivity of the predicate?
- ii) What rules out the combination of 3rd person subject and 2nd person object agreement?

In what follows, I argue that both agreement restrictions come about as the result of the syntactic distribution of Halkomelem agreement morphology in combination with the existence of certain (arbitrary) paradigmatic gaps.

4. The person-based transitivity split

4.1. A morpho-syntactic account

Why is 3^{rd} person agreement but not 1^{st} and 2^{nd} person sensitive to the transitivity of the predicate? I propose that this follows from the fact that 3^{rd} person subject agreement occupies a different syntactic position than 1^{st} or 2^{nd} person subject agreement (Davis 2000; Jelinek and Carnie 2003). In particular, I propose that 1^{st} and 2^{nd} person subject agreement is associated with C while 3^{rd} person transitive subject agreement is associated with v:⁵

(26)
$$[_{C} C-1/2[_{I} INFL [_{v} v-3 [V]]]]$$

This means that subject agreement must be split into two paradigms: C-agreement and ν -agreement, where ν -agreement is only overt if ν is transitive.

		C-agr	v-agr
1	SG	tsel	
	PL	tset	—
2	SG	chexw	
	PL	chap	—
3			es/Ø

Table 9. C-agreement and v-agreement

This analysis allows us to understand why 3^{rd} person and only 3^{rd} person is sensitive to transitivity: information about transitivity is encoded in v. Therefore, only agreement in v, but not agreement in C is expected to be sensitive to transitivity. And further, given that agreement in v is restricted to 3^{rd} person it follows that only 3^{rd} person agreement is sensitive to transitivity.

In the remainder of this section I provide evidence for each of these claims. In section 4.1 I show that 1^{st} and 2^{nd} agreement are associated with C; in section 4.2., I show evidence that 3^{rd} person agreement is associated with v; and finally in section 4.3. I show cross-Salish evidence that the distribution of agreement across the different positions is indeed associated with (partly) arbitrary gaps.

4.2. Evidence for C-agreement

Evidence that 1^{st} and 2^{nd} person agreement associates with C stems from the following considerations: i) it appears in a position high up in the clause; ii) it is sensitive to clause-typing, a property typically associated with C (Cheng 1991); and iii) it is in complementary distribution with complementizers. I discuss each of these properties in turn.

The agreement markers I analyze as instantiating C-agreement are called subject clitics in the Salishan tradition. I argue that their "clitic-like" behavior stems from the fact that they are associated with a position high in the clausal structure (Davis 2000). I argue that these forms are attached to whatever element occupies C. Specifically, if there is an auxiliary, C-agreement will appear on the auxiliary (27a) and cannot appear on the verb (27b); in the absence of an auxiliary, C-agreement appears on the verb (27c).

(27)	a.	li-tsel	máy-t
		AUX-1SG.S	help-TRANS
		'I helped hi	m.'

 b. máy-t-tsel help-TRANS-1SG.S 'I help him.'

c. **li máy-t-tsel* AUX help-TRANS-1SG.S 'I helped him.'

This pattern is readily explained under the assumption that so called subject clitics occupy C. They attach to auxiliaries as a result of I-to-C movement (28a), and if there is no auxiliary, the verb itself can move up to C via I (28b).

(28)	a. [_C	AUX-1/2	[_I AUX	[_v V]]]
	b. [c	V-1/2	[_I ¥	[_ν ¥]]]

Evidence that the distribution of these subject clitics is not governed by phonological considerations, i.e., that we are not dealing with a 2nd position effect stems from the fact that in the absence of an overt auxiliary, the verb may but need not move to C.⁶ In this case the so called subject clitic appears in clause-initial position without being cliticized to any preceding host.

(29)	a.	tsel n	náy-t	b.	tset	máy-t
		1sg.s h	elp-TRANS		1PL.S	help-TRANS
		'I helped	l him.'		'We h	elped him.'
	c.	chexw n	náy-t	d.	chap	máy-t
		2sg.s h	elp-TRANS		2PL.S	help-TRANS
		'You he	lped him.'		'You _p	helped him.'
						(Galloway 1980: 126)

The pattern discussed thus far suggests that subject clitics are located in a position higher than V; but this position could in principle be either I or C (see Davis 2000 for the claim that the relevant position is I). I will now show evidence that they are indeed located in C, rather than I.

Subject clitics are sensitive to information encoded in C, namely clausetyping. In particular, subject clitics are restricted to matrix indicative clauses. The other clause-types (subjunctive and nominalized), are incompatible with subject clitics. While subjunctive clauses require special subjunctive agreement (30), nominalized clauses require possessive agreement (31):

(30)	a.	<i>we-lám-èl</i> COMP-go-1 'If I go'	SG.SS	b.	<i>we-lám-exw</i> COMP-go-2SG.SS 'If you go'	
	c.	<i>we-lám-et</i> COMP-go-1 'If we go'	PL.SS	d.	<i>we-lám-elep</i> COMP-go-2PL.SS 'If you guys go'	(Galloway 1993: 184)
(31)	a.	<i>skw'áy</i> impossible 'I can't see	[<i>kw'-el-s</i> [COMP-1S it.'	G.P	kw'éts-l OSS-NOM see-TRA	-exw NS-30
	b.	<i>skw'áy</i> impossible 'You can't	[<i>kw'-a-s</i> [COMP-2S see it.'	G.P	kw'éts-l OSS-NOM see-TRA	-exw NS-30

c.	skw'áy	[kw'-es	kw'éts-l-exw-tset
	impossible	[COMP-NOM	see-TRANS-30-1PL.POSS
	'We can't s	ee it.'	

d. *skw'áy* [*kw'-a-s kw'éts-l-exw-elep* impossible [COMP-2POSS-NOM see-TRANS-30-2PL.POSS 'You_{pl} can't see it.' (Galloway 1993: 181)

Assuming that subject clitics instantiate C-agreement, sensitivity to clausetyping is precisely what we expect. Finally, the above data also show that Cagreement is in complementary distribution with complementizers, another piece of evidence that we are indeed dealing with agreement in C.

4.3. Evidence for v-agreement

The distribution of 3^{rd} person transitive subject agreement is significantly different from the distribution of 1^{st} or 2^{nd} person subject agreement. I argue that the difference in distribution reflects a syntactic difference (see Davis 2000): while 1^{st} and 2^{nd} person agreement are associated with C, 3^{rd} person agreement is associated with ν . Evidence stems from the fact that 3^{rd} person transitive agreement is suffixed to the verb, even in the presence of an auxiliary:

- (32) a. q'ó:y-t-es te Strang te qwá:l kill-TRANS-3S DET Strang DET mosquito 'Strang killed the mosquito.'
 - b. *li q'ó:y-t-es te Strang te qwá:l* AUX kill-TRANS-3S DET Strang DET mosquito 'Strang killed the mosquito.'
 - c. **li-s q'ó:y-t te Strang te qwá:l* AUX-3S kill-TRANS DET Strang DET mosquito 'Strang killed the mosquito.'

This contrasts with 1^{st} and 2^{nd} person agreement which cannot remain attached to the verb in the presence of an auxiliary. This difference in distribution follows from the assumption that 3^{rd} person agreement is associated with v. Consequently, the verb does not have to move past I to associate with the agreement and thus the presence of an auxiliary has no effect on the position of 3^{rd} person agreement. (33) $[_{C} C \qquad [_{I} AUX \quad [_{v} v-3 \quad [V]]]]$

The second property that sets apart 3^{rd} person agreement in v from 1^{st} and 2^{nd} person agreement in C is that the former is not sensitive to clause-typing unlike the latter. In particular, 3^{rd} person transitive agreement appears in all types of clauses: matrix indicative, subjunctive and nominalized clauses.

- (34) a. (li) máy-t-**es** (AUX) help-TRANS-3S 'S/he helped him/her.'
 - b. skw'áy [kw'-s-es kw'éts-lexw-**es** impossible [COMP-NOM-3POSS see-TRANS-3S 'S/he can't see it.'
 - c. we li-s kw'ets-lexw-es COMP AUX-3SS see-TRANS-3SS 'If s/he goes...'

The data in (34) establish that the appearance of 3^{rd} person agreement is independent of the clause type. And moreover they show that 3^{rd} person transitive agreement can co-occur with other types of 3^{rd} person agreement, both of which are located higher up in the tree (i.e., INFL or C). That is, in embedded nominalized clauses, 3^{rd} person subject agreement is expressed twice if the verb is transitive: once as possessive agreement on the complementizer (*kw'-s-es*) and once on the verb (34b). Similarly, in a subjunctive transitive clause 3^{rd} person agreement occurs twice: once in the form of subjunctive agreement on the auxiliary (*li-s*) and once in the form of transitive agreement on the verb (34c). Furthermore, these examples show that 3^{rd} person agreement is not in complementary distribution with complementizers (unlike 1^{st} and 2^{nd} person subject clitics). This much establishes that transitive agreement has a distribution different from C-agreement (as well as subjunctive and possessive agreement) and that it occurs in a position lower than C-agreement.

We can now understand the fact that 3^{rd} person agreement is sensitive to transitivity: information about transitivity is encoded in v. Agreement is generally sensitive to information encoded in the head it associates with. We have seen that C-agreement is sensitive to clause-typing. Furthermore, subject/verb agreement in English is associated with I (which is instantiated as T(ENSE) in English), and consequently it is sensitive to tense. For example, in (35) we observe that 3^{rd} person singular agreement is restricted to

present and present perfect tense, but does not appear in past and past perfect tense which is always -(e)d independent of the person of the subject.

(35)	a.	The boy has played soccer.	b.	The boy plays soccer
(36)	a.	The boy ha d played soccer.	b.	The boys played soccer

For completeness, note that 3rd person subject agreement in Halkomelem is not sensitive to tense, as expected:⁷

- (37) a. q'ó:y-t-es te Strang te qwá:l
 kill-TRANS-3S DET Strang DET mosquito
 'Strang killed the mosquito.'/'Strang is killing the mosquito.'⁸
 - b. i-lh q'óy:t-es te Strang te qwá:l AUX-PAST kill-TRANS-3S DET Strang DET mosquito 'Strang killed the mosquito.'
 - c. q'oyt-**es-**cha te Strang te qwá:l kill-TRANS-3S-FUT DET Strang DET mosquito 'Strang will kill the mosquito.'

Finally, if 3^{rd} person subject agreement is associated with v we predict that agreement is thematically conditioned. That is, while subject verb agreement in English is associated with T and thus agrees with the grammatical subject in SpecTP, subject verb agreement in v is predicted to agree with the thematic subject. This prediction is borne out. 3^{rd} person transitive subject agreement is restricted to active sentences, but cannot occur in passive sentences (unlike English subject-verb agreement):

(38) máy-t-em te Konrad help-TRANS-PASS DET Konrad 'Somebody helped Konrad.'/'Konrad was helped.'

I thus conclude that 3^{rd} person subject agreement is associated with v which accounts for the sensitivity to transitivity.

4.4. Cross-Salish evidence

According to the proposed analysis, different agreement types are associated with different syntactic positions (see Davis 2000): C and v, respectively. This is however not the only difference between the two types of agree-

ment: v agreement is restricted to 3^{rd} person while C agreement is restricted to 1^{st} and 2^{nd} person. This is repeated below for convenience:

(39) $[_{C} C-1/2 \qquad [_{I} INFL \quad [_{\nu} \nu-3 \quad [V]]]]$

The present analysis has nothing to say about this pattern: the absence of 3rd person agreement in C and the absence of 1st and 2nd person agreement in v is purely accidental. In contrast, analyses which take this distribution to reflect the workings of the person-hierarchy would expect precisely this distribution. For example, Jelinek & Carnie 2003 suggest that a distribution of this type is semantically conditioned and follows from a particular mapping principle according to which presuppositional material is mapped to a position higher in the clause than non-presuppositional material (Diesing 1992). Accordingly, 1st and 2nd person as inherently presuppositional nominals are mapped to a position higher in the tree; in contrast 3rd person is not inherently presuppositional and is therefore mapped to a position lower in the tree. This appears to be an advantage of an analysis based on the person-hierarchy.

I will now show evidence that the present analysis is nevertheless on the right track. In particular, we will see evidence that paradigmatic gaps are indeed accidental and not semantically conditioned. In particular, v agreement is not restricted to 3^{rd} person across all Salish languages. In Shuswap v-agreement is restricted to transitive subjects but it has v-agreement across all persons. As a consequence, the system looks different: while intransitive subject agreement is marked with subject clitics ((40); C-agreement) transitive subject agreement is marked with so called subject suffixes ((41); v-agreement).

(40)	a.	<i>cút-kt</i> intend-1PL_S	b. <i>ci</i> in	<i>ít-k</i> itend-280	c. LS	<i>cút-∅</i> intend-3.8	
		'We intend.'	۲. ۲	You inter	nd.'	'S/he intends.'	
						(Kuipers 1974: 4	4)
(41)	a.	píc'-n-x		ł	o. lx-nt-	-és	
		squeeze-TRANS	-2sg.	S	squea	al.on-TRANS-3S	
		'You squeeze h	nim/he	r/it.'	'She	/he squeals on him/her.'	
						(Kuipers 1974: 4	8)

Note that this type of system is completely unexpected under a person-hierarchy account: here 1st and 2nd person agreement is not necessarily mapped onto a position high in the clause. The Shuswap system is consistent with the account developed here according to which paradigmatic gaps are accidental.

The Halkomelem system has developed out of the Proto-Salish system (as reconstructed by Davis 2000) in the following way. Proto-Salish had two full agreement paradigms (except that 3rd person C-agreement was always zero) as summarized in table 10 (based on Davis 2000).

		indicative clitic [=C-agreement]	subject suffix [=v-agreement]
1	SG	*=k an	*- <i>an</i>
	PL	*=k at	*- <i>at</i>
2	SG	*=k axw	*- <i>axw</i>
	PL	*=k ap	*- <i>ap</i>
3		*Ø	*- <i>as</i>

Table 10. From Proto-Salish to Halkomel	em
---	----

The Halkomelem system may have developed on the basis of the transparent morphological relation between v- and C-agreement (indicated by the bold part of C-agreement). Suppose that v-agreement was reanalyzed as being part of C-agreement. The only cell where this reanalysis cannot take place is 3^{rd} person because there is no 3^{rd} person C-agreement. By reanalyzing the v-agreement paradigm as part of the C-agreement paradigm, we arrive at the highly defective v-agreement system of Halkomelem and consequently at the apparent ergative system, which is split along $1^{st}/2^{nd}$ vs. 3^{rd} person. For completeness, note that 1^{st} and 2^{nd} person object agreement always occurs low in the tree (as evidenced by the fact that it always suffixes to the verb).

- (42) a. (*li*) may-th-óx-es (AUX) help-TRANS-1SG.O-3S 'He helps me.'
 - c. (*li*) may-th-**óme-**tsel (AUX) help-TRANS-2SG.O-1SG.S 'I help you.'
 - e. *máy-t-es* help-TRANS-3S 'He helps him.'

- b. (*li*) may-t-óxw-es (AUX) help-TRANS-1PL.O-3S 'He helps us.'
- d. (*li*) may-t-**óle**-tsel (AUX) help-TRANS-2SG.O-1SG.S 'I help you_{pl}.'

(Galloway 1980: 126)

If the high position of 1^{st} and 2^{nd} person subject clitics were indeed a consequence of the person-hierarchy and its mapping onto syntactic structure, it would be unclear as to why 1^{st} and 2^{nd} person objects do not have to be mapped to a higher position as well. I thus conclude that an analysis which is not based on the person-hierarchy is empirically more adequate and that we are indeed dealing with accidental gaps that are associated with each of the paradigms discussed in this section.

5. Person-based transitive gaps

I now turn to the second question we were left with at the end of section 3: What rules out the combination of 3^{rd} person subject and 2^{nd} person object agreement?

5.1. Arbitrary gaps with syntactic restrictions

We have seen that a person-hierarchy account does not adequately account for the facts. In this section, I argue that this gap is best analyzed as being partly restricted by the morpho-syntax of agreement but partly arbitrary (i.e., unpredictable; see Brown, Koch and Wiltschko 2007 for a detailed discussion). The systematic aspect of the attested gap concerns the type of agreement involved: object agreement and subject suffixes (but not subject clitics). I propose that this restriction on the transitive gap is syntactically conditioned: a gap can only arise when two agreement endings are associated with the same syntactic head, which in this case is v (see Branigan & Bobaljik 2004 for a similar constraint).

(43) $[_{C} C [_{I} INFL [_{\nu} \nu - obj-subj [V]]]]$

While the configuration illustrated in (43), where object and subject agreement are associate with the same syntactic head (v), is necessary for a transitive gap to arise, it does not constitute a sufficient condition. That is, in Halkomelem there are two agreement combinations of the type illustrated in (43) that are ill-formed (*20BJ.SG-3S; *20BJ.PL-3S) while all other combinations are well-formed.

In the remainder of this section I will show evidence for this proposal. In section 5.2, I present evidence for the claim that object agreement (along with subject suffixes) is associated with v. In section 5.3, I present evidence for the claim that gaps are restricted to combinations of the sorts illustrated in (43). And finally in section 5.4, I present cross-Salish evidence that the gaps are indeed arbitrary and not restricted by the person-hierarchy.

5.2. Evidence for object agreement in v

Recall that we have seen evidence to the effect that 3^{rd} person subject suffixes are associated with v (see section 4.3). Given that object agreement linearly precedes subject agreement (44), it follows that object agreement must be attached before subject agreement.

(44)	a.	may-th- óx-es	b.	may-t- óxw-es
		help-TRANS-1SG.OBJ-3S		help-TRANS-1PL.OBJ-3S
		'He helps me.'		'He helps us.'

Thus, object agreement must be associated either with v or with a position lower than v. I argue that object agreement is best analyzed as occupying v on the basis of its interaction with the argument it agrees with. Recall that subject agreement is tied to a particular theta-role: transitive AG(ENT). This follows from the assumption that subject agreement is associated with the very same head that introduces this thematic role, namely v:

(45) [_ν AG ν-obj-subj [V]]]]

In contrast, object agreement is not tied to a particular thematic role, instead it agrees with a grammatical role, namely the direct object. This can be seen by comparing a simple transitive construction with an applicative construction. In the transitive clause in (46a), it is the THEME, which triggers object agreement whereas in the applicative construction in (46b) the BENEFACTIVE argument is realized as the direct object and triggers object agreement (the original direct object must be realized as an oblique; see Gerdts 1988b; Galloway 1993):

(46)	a. yéqw-th- òx- chexw	b. yéqw- elhts -th- òx -chexw
	burn-TRANS-1SG.O-2SG.S	burn-APPL-TRANS-1SG.O-2SG.S
	'You burn me.'	'You burn it for me.'
		(Galloway 1993: 255 f.)

I assume that the TH(EME) argument is introduced as a sister to V while the BEN(EFACTIVE) argument is introduced by a semi-lexical head ν

(Pylkkänen 2002). Given that object agreement is not tied to a specific thematic role, I conclude that it must be associated with a head that is higher than BEN or TH, which leaves us with v, the head that introduces AG.

(47)	a. $[\nu A$	AG ν -obj- subj	$[\nu BEN \nu - elhts]$	[V TH]]]]
	b. [_ν A	AG ν -obj- subj		[V TH]]]]

Further evidence that object agreement is indeed associated with the v which introduces the AGENT argument stems from the fact that it regulates allomorphic variation in the realization of this v-head. In particular, the form of the transitive suffix *-t*, which I assume to instantiate v, depends on the following object agreement: it is realized as *-th* if followed by the singular 1^{st} and 2^{nd} object agreement *-ox* ("me") and *-ome* ("you.sg.") while it is realized as *-t* elsewhere (Galloway 1993):

(48)	a.	máy- th- óx-tsel	b.	máy- t -óle-tsel
		help-TRANS-1SG.O-1SG.S		help-TRANS-2SG.O-1SG.S
		'I help myself.'		'I help you.'

If we assume that such morphologically conditioned allomorphy is restricted to morphemes associated with the same syntactic head it follows that object agreement occupies v along with subject suffixes and transitive markers.

5.3. Evidence that the gaps are restricted to subject suffixes

I now show that the transitive gaps of Halkomelem as well as the ones found in the rest of the family are restricted to subject suffixes associated with v. No other subject agreement morphology triggers a gap. There are two cases to consider: subjunctive agreement and possessive agreement (briefly introduced in section 4.2) but here I will restrict the discussion to subjunctive agreement simply noting that possessive agreement displays a similar behavior.⁹

While we have not analyzed subjunctive agreement in terms of its syntactic position, for the purpose of the argument it suffices to establish that it is not associated with v. Instead, I show evidence that it is associated with a higher head (see Elouazizi & Wiltschko 2006 for an analysis). Evidence to this effect stems from three considerations: i) subjunctive agreement attaches to the verb only in the absence of an auxiliary (49); once an auxiliary is added, subjunctive agreement must attach to it (50).

- (49) a. *éwe-tsel t'ílem-el wáyeles* NEG-1SG.S sing-1SG.SS tomorrow 'I won't be singing tomorrow.'
 - b. éwe-chexw t'ílem-exw wáyeles NEG-2SG.S sing-2SG.SS tomorrow 'You won't be singing tomorrow'
 - c. *éwe t'ílem-es wáyeles*NEG sing-3SS tomorrow
 'He/they will not be singing tomorrow.'
 - d. *éwe-tset t'ilem-et wáyeles* NEG-1PL.S sing-1PL.SS tomorrow 'We won't be singing tomorrow.'
 - e. *éwe-chap t'ílem-ap wáyeles* NEG-2PL.S sing-2PL.SS tomorrow 'You folks won't be singing tomorrow.'
- (50) a. *éwe-tsel lí-l tl'íls-th-òmè* NEG-1SG.S AUX-1SG.SS want-TRANS-2SG.O 'I don't like you.'
 - b. *éwe-chexw lí-xw tl'íls-th-òx* NEG-2SG.S AUX-2SG.SS want-TRANS-1SG.O 'You don't like me.'
 - c. *éwe lí-s tl'íls-th-òx-es* NEG AUX-3.SS want-TRANS-1SG.3S 'He/They doesn't/don't like me.'
 - d. *éwe-tset* lí-**t** tl'íls-th-òmè NEG-1PL.S AUX-1PL.SS want-TRANS-2SG.O 'We don't like you.'
 - e. *éwe-chap lí-p tl'íls-th-òx* NEG-2SG.S AUX-2PL.SS want-TRANS-1SG.O 'You guys don't like me.' (Galloway 1993: 186)

ii) subjunctive agreement is not sensitive to the transitivity of the predicate; it can appear with transitive predicates as in (50) as well as with intransitive predicates as in (51).

(51) a. *éwe-tsel lí-l yó:ys* NEG-1SG.S AUX-1SG.SS work 'I don't work.'

- b. éwe-chexw lí-xw yó:ys
 NEG-2SG.S AUX-2SG.SS work
 'You don't work.'
- c. éwe lí-s yó:ys NEG AUX-3.SS work 'He does not work.'

iii) subjunctive agreement is not restricted to the thematic role AGENT but instead it also appears in the context of a passive predicates.

(52)	a.	éwe	í-s	xwemékwathe-th-àlem
		NEG	AUX-3SS	kiss-trans-1sg.pass
		'Nob	ody kissed	d me.'/'I wasn't' kissed.'
	b.	éwe	lí-s	xwemékwath-eth-òm
		NEG	AUX-3S	kiss-trans-1sg-2sg.pass
		'Nob	ody kissed	d you.'/'You weren't kissed.'

To establish that subjunctive agreement is not ruled out if it co-occurs with 2^{nd} person object agreement, we need to consider a clause where the subject has undergone A'-movement. We observe that in this case 3^{rd} person subject and 2^{nd} person object agreement can co-occur as shown below.

(53) *tsel lhq'élexw kw'e swíyeqe éwe lí-s xwemékwathe-th-óme* 1SG.S know DET man NEG AUX-3SS kiss-TRANS-20 'I know the man who kiss you.'

This much provides us with Halkomelem-internal evidence that the gap is indeed restricted to combinations of object agreement and subject suffixes (i.e. subject agreement in v). Moreover, Brown, Koch and Wiltschko (2004, 2007) show that all transitive gaps found across the Salish family are restricted in the same way: only subject suffixes, but not subject clitics can trigger a gap.

5.4. Evidence that the gaps are partly arbitrary

We have seen in the last subsection that transitive gaps are systematically restricted to a particular agreement configuration, namely one in which subject and object agreement are associated with the same syntactic head (v). This much constitutes a necessary condition for a gap to arise. In this sub-

section, I show that the particular gaps that do arise are indeed not predictable but instead arbitrary. In particular, they are not constraint by the personhierarchy. Up until this point, we have only seen that the person-hierarchy does not help us to define a necessary condition for a gap to arise. Most strikingly, [3<2] sentences are only ruled out if the 3rd person subject agreement instantiates v-agreement. Otherwise a [3<2] sentence is well-formed. It could however still be the case that the person-hierarchy is used to rule out particular instances of the relevant agreement configuration. We have already seen one piece of evidence that this cannot be on the right track: in Halkomelem [3<1] sentences are well-formed despite the fact that they i) instantiate the relevant agreement configuration and ii) they violate the person-hierarchy since a lower ranked person (3rd) is realized as a higher ranked argument (subject).

In this subsection, I show that a person-hierarchy violation is not even a necessary condition for a gap to arise. The evidence stems from gaps that arise in other Salish languages (see Brown, Koch and Wiltschko 2007 for detailed discussion). For example, Thompson River Salish has two gaps in its transitive paradigm: sentences with 1st person plural subjects and 3rd person objects *[1pl >3] are ill-formed and so are sentence with 2nd singular subjects and 1st person plural objects *[2pl:1sg]. All other logically possible combinations are well-formed in Thompson.

(54)	a.	*kÅn-t- Ø-ét	b. * k Ån-t-éy- x^w	
		help-TRANS-30-1PL.S	help-TRANS-1PL.O-2SC	G.S
		'We helped him/her/it.'	'You helped us.'	

These data illustrate that a gap can arise despite the fact that the sentences are well-aligned according to a person-hierarchy. For example, the 1st person argument in (54a) is higher ranked on the person-hierarchy and is realized as the higher ranked argument, namely the subject. This suggests that the gaps are not constraint by the person-hierarchy. Instead, I submit that they are partly arbitrary and therefore different languages have different gaps, some of which appear to be constraint by the person-hierarchy but others are not. Consequently, I conclude that the person-hierarchy plays no role at all in the grammar of Salish languages.

6. Conclusion

The main goal of this article was to investigate the determining factors of particular agreement restrictions found in Halkomelem Salish:

- i) Person-sensitive split ergativity: 3rd person agreement does not occur with intransitive subjects.
- ii) Person-sensitive transitive gaps: 3rd person subject agreement cannot cooccur with 2nd person object agreement.

Previous analyses have treated these restrictions as the result of the personhierarchy (in the sense of Silverstein 1976).

- i) 3rd person must be especially marked if it is realized as a transitive AGENT (because higher ranked persons are more likely to be AGENTS)
- ii) A higher ranked person must be mapped onto the higher ranked grammatical role, therefore sentences with 3rd person subjects and 2nd person objects are ruled out

Here I have shown that such accounts do not achieve empirical adequacy because the relevant generalizations are not to be defined in terms of personspecifications but instead in terms of their morpho-syntactic distribution:

- i) Only transitive AGENTS are marked with v-agreement, and v-agreement *can* be associated with all person specifications (Shuswap) but it *need not be* (Halkomelem).
- ii) Transitive gaps can only arise if two agreement markers that are associated with the same head (v) co-occur

While at first glance the person-hierarchy might appear to be at work, on closer inspection we cannot really build an empirically adequate generalization on it. Instead, adequate generalizations are all syntactically defined. Accidental paradigmatic gaps involve person-specifications, but they do not necessarily appeal to a person-hierarchy. And if arbitrary, they simply have to be learned.

I conclude that we should not import the person-hierarchy into formal grammar, at least not into the formal grammar of Halkomelem Salish. Consequently, I call into question whether the person-hierarchy is part of universal grammar at all. If apparently systematic person-hierarchy effects are always re-analyzable as generalizations over morpho-syntactic properties in interaction with partly arbitrary person feature specifications then no such person-hierarchy is needed. I take this to be a welcome result, in light of the inherent problems of a person-hierarchy for a formal framework.

Notes

- 1. There are three major dialects: Upriver (Stó:lo Halq'eméylem), Downriver (Musqueam), and Island (Cowichan). The data reported in this paper are from the Upriver dialect.
- 2. While Halkomelem has a special reflexive marker, its use is optional in reflexive environments (see Wiltschko 2004 for detailed discussion)
- 3. Other analyses of *-exw* treat it as part of the transitivizers and accordingly these analyses posit two allomorphors of the transitivizers: {*-l/lexw*} and {*-st/stexw*}, respectively. According to this analysis the allomorphy is morphologically conditioned such that *-lexw* and *-stexw* only occur in the context of 3rd person objects (see for example Hukari 1980). For arguments that *-exw* is best analyzed as a 3rd person object marker see Galloway (1993) and Wiltschko (2003).
- 4. Kroeber (1999) argues that passives are only morphologically impersonal but syntactically they behave more like passives (see also Gerdts 1989). See, however, Wiltschko (2001) for evidence that at least in Halkomelem, passives are impersonals both morphologically and syntactically.
- 5. See Davis (2000) for detailed arguments that there are various positions for agreement going back to Proto-Salish.
- 6. The absence of V to I to C movement can be taken as an indication that there is in fact an empty auxiliary (see Wiltschko 2006 for discussion).
- 7. This is however not surprising for independent grounds: there are reasons to believe that T is not a syntactic head in Halkomelem (Wiltschko 2003).
- 8. In Halkomelem, the marking of tense is optional and consequently the absence of a past tense marker can still result in a past tense interpretation in addition to a present interpretation.
- 9. Since subject clitics (i.e., C-agreement) do not have an overt 3rd person marker, it is impossible to test whether or not 2nd person objects co-occur with C-agreement. While [3<2] sentences are well-formed (if the subject suffix is missing) it is not clear whether there is a 3rd person agreement marker present or not.

References

Aissen, Judith

1999a	Agent focus and inverse in Tzotzil. Language 75: 451-485.
1999b	Markedness and subject choice in optimality theory. Natural Lan-
	guage and Linguistic Theory 17: 673–711.

Alexiadou, Artemis and Elena Anagnostopoulou

- 2002 Person and Animacy Splits: from hierarchies to features. GLOW Newsletter.
- Brown, Jason, Karsten Koch and Martina Wiltschko
 - 2004 The person-hierarchy primitive or epiphenomenal. Evidence from Halkomelem Salish, 147–162. *Proc. of NELS 34*, Stony Brook, NY.
 - 2007 Person based gaps are morpheme based. Ms.

Cheng, L.

- 1991 On the typology of wh-questions. Ph.D. thesis, MIT, Cambridge, MA. Chomsky, Noam
 - 1981 *Lectures on Government and Binding.* Dordrecht: Foris.
 - 1995 *The minimalist program.* Cambridge, MA: MIT Press.

Davis, Henry

- 2000 Remarks on Proto-Salish Subject Inflection. International Journal of American Linguistics 66: 499–520.
- Diesing, Molly
 - 1992 *Indefinites.* Cambridge, MA: MIT Press.
- Dixon, R. M. W.
 - 1994 Ergativity. Cambridge/New York: Cambridge University Press.
- Elouazizi, Noureddine; Martina Wiltschko
 - 2006 The categorial status of (anti-) (anti-) agreement. In *Proceedings of the* 25th West Coast Conference on Formal Linguistics 2006, Donald Baumer, David Montero and Michael Scanlon (eds.), 150–158. Somerville, MA: Cascadilla Press.

Galloway, Brent

- 1980 The Structure of Upriver Halkomelem, A Grammatical Sketch and Classified Word List for Upriver Halkomelem. Coqualeetza Education Training Center, Sardis, BC.
- 1993 *A Grammar of Upriver Halkomelem*. Berkeley/Los Angeles/London: University of California Press.

Gerdts, Donna. B.

1988a	A Nominal Hierarchy in Halkomelem Clausal Organization. Anthro-
	pological Linguistics 30: 20–36.

- 1988b Object and absolutive in Halkomelem Salish. New York: Garland
- 1989 Object agreement in the Halkomelem Salish passive: a morphological explanation. In *General and Amerindian Ethnolinguistics*, R. Key and H. Hoenigswald (eds.), 185–199. Berlin/New York: Mouton de Gruyter.

Hukari, Tom

1980 Subjects and objects in Cowichan. International Conference on Salish and Neighbouring Languages, Vancouver, BC.

Jelinek, Eloise

1993 Ergative "splits" and argument type. In *Papers on Case and Agreement.* J. Bobaljik and C. Philips (eds.), 15–42. MIT Working Papers in Linguistics Cambridge, MA. Jelinek, Eloise and Andrew Carnie

2003 Argument hierarchies and the mapping principle. In Formal approaches to Function in Grammar. In honor of Eloise Jelinek, A. Carnie, H. Harley and M. Willie (eds.), 265–296. Amsterdam: John Benjamis.

Jelinek, Eloise and Richard Demers

1983 An Agent Hierarchy and Voice in Some Coast Salish Languages. *International Journal of American Linguistics* 49: 167–185.

Kroeber, Paul D.

1999 *The Salish language family: reconstructing syntax.* Lincoln: University of Nebraska Press

Kuipers, Aert

1974 *The Shuswap language*. The Hague: Mouton.

Newmeyer, Frederick J.

1998. *Language form and language function.* Cambridge, MA: MIT Press. Pylkännen, Lina

2002. Introducing arguments. Ph.D. dissertation, MIT, Cambridge, MA.

Silverstein, Michael

1976 Hierarchy of features and ergativity. In *Grammatical categories in Australian languages*, R. M. W. Dixon (ed). 112–171. Canberra: Australian Institute of Aboriginal Studies and New Jersey Humanities Press.

Suttles, Wayne

2004 *Musqueam Reference Grammar*. Vancouver: UBC Press.

Wiltschko, Martina

- 2001 Passive in Halkomelem and Squamish. International Conference on Salish and Neighbouring Languages, Chilliwack, BC, UBC Working Papers in Linguistics.
- 2002 The syntax of pronouns. Evidence from Halkomelem Salish. *Natural Language and Linguistic Theory* 20: 157–195.
- 2003 -exw as 3rd person object agreement in Halkomelem. *International Journal of American Linguistics* 96(1): 76–91.
- 2003 On the interpretability of Tense on D and its consequences for Case Theory. *Lingua* 113(7): 659–696.
- 2006 Inlocatives in Halkomelem Salish. In Papers for the 41st Conference on Salish and Neighbouring Languages. Masaru Kiyota, James J. Thompson and Noriko Yamane-Tanaka (eds.). UBC Working Papers in Linguistics Vol. 18.

Wiltschko, Martina and Strang Burton

2004 On the sources of Person-hierarchy effects in Halkomelem Salish. *Canadian Journal of Linguistics* 49: 51–71.
Contributors

Elena Anagnostopoulou University of Crete elena@phl.uoc.gr

Karlos Arregi University of Illinois at Urbana-Champaign · karlos@uiuc.edu

Cedric Boeckx Harvard University cboeckx@fas.harvard.edu

Eulàlia Bonet Universitat Autònoma de Barcelona eulalia.bonet@uab.cat

Roberta D'Alessandro Universiteit Leiden r.dalessandro@let.leidenuniv.nl

Susann Fischer Universität Stuttgart sfisher@ifla.uni-stuttgart.de

Anders Holmberg Newcastle University anders.holmberg@ncl.ac.uk

Gunnar Hrafn Hrafnbjargarson CASTL/Universitetet i Tromsø gunnar.hrafn@hum.uit.no Luis López University of Illinois at Chicago luislope@uic.edu

Andrew Nevins Harvard University nevins@fas.harvard.edu

Hamid Ouali University of Wisconsin Milwaukee ouali@uwm.edu

Marc D. Richards Universität Leipzig richards@uni-leipzig.de

María Luisa Rivero University of Ottawa mrivero@uottawa.ca

Halldór Ármann Sigurðsson Lunds Universitet Halldor.Sigurdsson@nordlund.lu.se

Martina Wiltschko University of British Columbia wmartina@interchange.ubc.ca

Index of subjects

- Activity Condition (AC), 182–186, 192– 194, 209 Agree, 1, 5, 8, 10, 18–20, 30, 32, 41, 44, 49–50, 54, 66–68, 74, 76–77, 80, 90, 92-95, 112, 114, 118, 120-121, 131-132, 135-143, 146-147, 152, 159-162, 165-167, 169-170, 172, 174, 176, 178, 181–197, 200–201, 204-206, 209, 216, 220, 224-225, 227, 229-232, 234, 241, 252, 255, 271, 275, 281, 301 cyclic ~, 18, 44 multiple ~, 2, 4, 7-8, 18, 20, 30-31, 43-44, 88-89, 92, 97, 178, 188, 197, 224-231, 234 agreement, 1-11, 15-16, 21, 29, 43, 49-55, 57-59, 65-70, 73-80, 88-90, 92-96, 98, 103, 105, 111–116, 119–120, 123, 126, 129-131, 133-134, 136, 140, 144, 152-153, 159-165, 167-168, 171-172, 174, 177-178, 181-182, 185-189, 191, 193-195, 197, 204-209, 215, 217, 222, 241, 244, 251-262, 264, 266-274, 276, 281-311 anti-person ~, 191 ~ blocking, 251, 257 C-~, 171-176, 256, 296-297, 299-300, 302-303, 311 half ~, 253, 268-269, 272-273 multiple ~, 2, 4, 7, 88–89 multiple agreement constraint, 88 number ~, 8, 89, 98, 189, 195, 207, 253, 256–257, 259, 261, 265–270, 272-273 optional ~, 251, 259 partial ~, 7-8, 181, 193-194 participle ~, 94, 116, 126 reverse predicate ~, 262, 271, 276
- T-~, 167–168, 170–176, 205
- unrestricted ~, 5, 253, 261
- animacy, 4, 91–92, 107–108, 111–113, 115, 117–119, 122–123, 126 animate, 18, 24, 91–92, 106–107, 110– 113, 115, 117–120, 122–123, 125– 126, 237
 - inanimate, 106–113, 115, 118, 121– 123, 126
- Anti-Agreement Effect (AAE), 3, 9, 159– 160, 163–164, 166–167, 170–171, 177–178, 186
- Bare Phrase Structure, 139
- Burzio's Generalization, 95, 132, 143, 198, 208
- case, 1-2, 4, 6-10, 18, 20, 25, 36-37, 40, 43, 51-52, 54-56, 58-64, 67-69, 73-76, 78-81, 87-88, 90-95, 97-98, 105, 107, 109-111, 114-115, 117-119, 121-126, 129–132, 134–136, 138–143, 145-147, 151-153, 159-163, 165-167, 169–170, 173–178, 181–186, 188-209, 227, 230, 234, 236-237, 239-243, 245, 251-252, 255, 259, 261, 264–272, 274–276, 283, 287, 290, 294, 298, 304, 306, 308-309 abstract ~, 132, 140 inherent ~, 52, 92, 98, 191-193 quirky ~, 95, 191 structural ~, 92-93, 96, 98, 198 Case Filter, 8, 96, 181, 183, 186, 194– 195, 204-205, 208-209
 - inverse ~, 183
- chains, 8, 97, 231, 253, 268
- checking, 1, 7, 18–20, 32, 41, 43, 92–96, 115–117, 120–122, 124, 182, 224, 230

~ competition, 92 ~ relation, 92, 95-96, 122, 224 clitic cluster constraint, 88 clitics, 4-5, 10, 15-17, 20-21, 23, 27, 29, 38-41, 43, 49-50, 52-53, 55-66, 68-69, 74-77, 79-80, 88, 103-106, 110, 116, 118-119, 123-126, 138, 151, 216-218, 222-223, 226-229, 231-232, 234-237, 239-243, 245, 297-300, 302, 304, 308, 311 constraint on nominative objects, 89 DAT-NOM constructions, 6, 188, 194, 251-254, 256-257, 267, 272-273 complex ~, 257 simplex ~, 260, 269, 273 defectiveness, 123, 205, 208 definiteness, 8, 32, 124, 181-182, 194-197, 200, 203-205, 207-209 ~ restriction, 181, 194-195, 200, 205 dependency, 5, 130-132, 134, 137-138, 141-142, 144-145, 152 Agree ~, 136-137, 141, 146-147, 150-151 complex ~, 5, 130-131, 137-138, 140, 142-143, 152 open ~, 137-138, 152 simple ~, 130, 142, 147, 152 ditransitives, 6, 34, 98, 105–106, 117, 120, 122, 126, 187, 215–218, 222, 227-229, 234-236, 238, 240-243 domain, 8, 51, 76, 80, 96, 121, 146–147, 161, 172, 177, 181, 188, 190, 199, 205, 230, 252, 263-264, 275 c-command ~, 50, 68, 74, 140, 159, 201probing ~, 251–252, 256, 266 DONATE, 9, 160, 162–163, 165–166, 168-170, 173-177 Exceptional Case Marking (ECM), 93-94, 160, 254, 273, 275

exclusivity, 8, 87, 96

expletive, 8, 143, 181, 189, 193–195, 197, 205, 207, 256–257, 261–263, 275, 294 ~ insertion, 263 Extended Projection Principle (EPP), 87, 151, 178, 183, 192, 207, 263 extraction, 160–161, 163–165, 172, 176, 178

local ~, 160, 171

long-distance ~, 9, 160–161, 170–172, 176

feature, 1, 4–5, 7, 9–10, 18–21, 41, 50– 51, 61–62, 64, 66, 69, 73, 75, 80, 90, 93, 110, 112–113, 115–123, 125–126, 131–132, 136–140, 142, 146, 149– 152, 159, 161–163, 165–167, 169– 170, 175–178, 181–184, 186, 189, 191–193, 199, 205–207, 218, 225, 231, 234–235, 237, 239–244, 258, 263, 272, 274, 310 ~ inheritance, 9, 159, 206 ~ transfer, 159, 161 Fin(iteness), 5, 130, 143, 244, 258, 263– 264, 274 finiteness, 5, 130, 143, 244 Full Interpretation, 191–192

Full Sharing, 130, 136–138, 141–142, 152

genitive of negation (GN), 8, 181, 197, 198, 199, 200, 201, 202, 203, 204, 205, 208, 209

goals, 8, 15, 18, 35, 95, 97, 122, 126, 176, 182–185, 188, 192–193, 197, 205, 209, 235, 240–242

Government and Binding Theory, 87

grammar competition, 261

impersonal SE constructions, 4, 39, 129, 133, 151, 294

intervention, 2, 7–8, 49, 50–51, 56, 59, 74–77, 93, 95, 135, 148–149, 181, 184, 186, 224, 226, 244, 251–253, 255–258, 260–262, 265–267, 271– 272, 275–276

defective ~, 10, 49, 182, 184, 205, 252 islands, 87, 244

- KEEP, 9, 118, 160, 162–163, 167, 169– 170, 173–177
- language faculty, 88
- last resort, 9, 66, 142, 169-170, 177
- left edge, 259, 263, 268, 275
- licensing, 5, 55, 90, 93–95, 111, 115, 121, 130, 132–135, 143–145, 152–153, 187, 199, 201, 207–209, 230–234, 244
- locality, 1, 49–50, 68, 74, 137, 146, 161, 162, 178
- locative, 4, 39, 105–109, 113, 118, 122, 125
- logophoric agent, 263
- logophoric patient, 263
- Minimal Compliance, 141–142, 152
- Minimal Link Condition (MLC), 185, 223
- Minimalist Program, 10, 88-89, 97
- minimality effect, 93, 96, 134, 151
- Movement, 8, 22–24, 31, 33–37, 39, 40– 43, 52, 54, 64, 67–68, 90, 96, 116–117, 124, 148, 151, 178, 182–183, 191, 200, 230, 259, 263, 266–268, 273– 275, 297, 308, 311 A-~, 90, 148, 151 Clitic ~, 56, 67 DP-~, 147, 178 Head ~, 41, 54, 56 NP-~, 276 parallel ~, 36, 253 tucking in, 31, 34, 38–40, 42, 263, 274–275 Wackernagel ~, 23, 24, 43 Wh~, 266, 268, 276
 - XP-~, 41
- number, 2–3, 7–8, 18–20, 29–30, 32, 41, 44, 51, 61, 69, 76–78, 80, 89–90, 93–

- 94, 98, 109–110, 116, 118, 120, 122– 126, 131, 136, 140–141, 152–153, 185, 188–190, 193, 204, 207–208, 216–217, 224–227, 229–230, 232, 234, 237, 241, 244, 251–253, 256– 262, 264–276, 282–283, 289
- object, 2–8, 15–16, 18, 20, 24, 34, 38, 40, 52, 64, 88, 92–95, 97, 103, 105– 106, 108, 110–117, 119–123, 125– 126, 131–132, 134, 141–142, 144, 146–147, 149–150, 152, 160–161, 172–173, 176–177, 181, 186–189, 194–195, 198, 200–202, 207, 209, 215, 217, 219, 220, 237–239, 253, 258, 266, 272–274, 281–285, 287– 288, 290–294, 296, 303–306, 308, 310–311
 - ~ agreement constraint (OAC), 111– 112, 114–115
 - ~ animacy generalization, 111–112, 115, 122
 - direct ~, 3–4, 7, 15–20, 24–25, 34, 40, 43, 78, 88, 90–91, 103–104, 108, 112–126, 195, 204, 217, 228, 232, 305
 - indirect ~, 3–4, 15–18, 20, 24–25, 34– 35, 38, 40, 78, 88, 103, 105–108, 112–113, 115–217, 232, 235, 244
- person, 1–8, 10, 15–21, 25–29, 31–33, 39–44, 49–52, 55–58, 60–69, 71–74, 76–77, 79–80, 88–95, 103–104, 106, 109–119, 121–126, 129–134, 136, 140–143, 147, 151–152, 187–191, 193–194, 196–197, 204, 207–209, 215–219, 222–232, 234–237, 240– 241, 243–244, 251–276, 281–283, 285–297, 299–305, 308–311 ~ restriction, 2, 4–8, 15, 33, 125, 140, 143, 215–216, 218–219, 223, 235, 237, 240–241, 243, 251–254, 257– 260, 266–267, 272, 276, 293, 295 ~ values, 93, 264

Person Case Constraint (PCC), 2-4, 7-8, 10, 15, 18, 20-21, 25-31, 33-34, 38, 40, 42-43, 49-50, 55, 57-58, 62-63, 75-76, 79, 87-98, 103, 112, 117, 181, 186, 188, 190-191, 194-195, 197, 199, 205-207, 209, 215-218, 223, 226-229, 234-236, 239, 241-244, 274, 276 strong ~, 15, 17–18, 20, 26, 43–44, 98, 217, 222, 224-225, 228, 236 weak ~. 4, 15–18, 20, 29, 41, 43–44. 217, 222, 224-225, 227-229, 236 PF, 50, 97, 217, 234, 243, 265, 272 Phase Impenetrability Condition (PIC), 80, 185, 206, 275 probe/probing, 8, 18, 21, 30, 50, 68, 90, 92-93, 95-97, 137-139, 141-142, 146, 159, 161–162, 165–166, 169, 173-178, 181-186, 188-192, 195, 197, 201, 203-207, 226, 230, 251-252, 255-258, 260, 263, 271-272, 274-276 defective ~, 181, 190, 197, 205 number defective ~, 258, 260, 262, 265 person defective ~, 90, 188-189, 258, 271 quirky subject constructions, 89, 276 quirky subjects (QS), 8, 89-90, 93-94, 105, 130-133, 140, 143-145, 148-149, 152–153, 181, 185–195, 197, 205, 207, 219, 223, 238-239, 276 raising, 131-132, 134, 148-149, 160, 187, 190, 192, 197, 199, 207, 220, 254,

259–261, 263, 267, 269, 271, 273, 275 ~ verbs, 254 high subject ~, 258–261, 263, 275 low subject ~, 258–260, 263, 266, 268–269, 275

object ~. 146 short ~, 255, 259, 269, 274 Relativized minimality, 93, 186, 244, 262 repair strategy, 4, 9, 76, 103, 105-106, 114-115, 121, 166, 170, 241 scrambling, 24, 40, 43, 200, 267-268, 271SHARE, 7, 9, 40, 43, 125, 136, 160, 169-170, 172-177, 197, 205, 216, 218-220, 223, 226, 232 specifier, 24, 41, 52, 56, 68, 78, 95-96, 120, 263, 275 speech location, 263, 274 Strong Minimalist Thesis (SMT), 181, 184-185 subject, 1, 3-5, 7-10, 15, 21, 23-26, 30-31, 34, 36-37, 40, 43, 49, 61, 68, 88-90, 93-94, 111, 119-120, 125-126, 129-131, 134, 136, 138, 143-145, 147-153, 159-178, 181-182, 186-187, 190, 198, 201, 215, 219-220, 222, 225, 229-230, 232, 237-239, 243, 255, 258, 261-263, 265, 267, 271-275, 281-288, 290-306, 308-311 oblique ~, 5, 130–131, 215 quirky ~, 8, 89-90, 93-94, 105, 130-133, 140, 143-145, 148-149, 152-153, 181, 185–187, 191, 197, 205, 207, 219, 223, 238-239, 276 syncretism, 73, 77, 269-272 ~ generalization, 272 that-trace filter, 87 Top(ic), 1, 3, 10, 150, 258, 263-264

- T-raising, 259–260, 271, 275
- Wackernagel position, 4, 15, 22–23, 26, 29, 34–35, 38, 40, 43

Index of languages

Amharic, 263

Basque, 2, 9–11, 49–52, 54–63, 66, 69– 70, 73–74, 76–80, 88, 93, 98, 188, 218 Berber, 2, 9, 11, 159, 161, 163–165, 167, 171–172, 175, 230 Tamazight, 9, 163–165, 171, 175

Catalan, 3–4, 11, 16–17, 20, 39, 103–106, 115, 118, 121–126, 241 Chinese, 264

Donno So, 263

English, 4, 8, 21, 103, 119, 132, 151, 161– 162, 166, 174–175, 177, 181, 188– 189, 192, 194–197, 200, 203, 205, 207–208, 244, 251, 263, 300–301

- French, 16–17, 30, 39–40, 88, 92–93, 103, 144, 188, 215–217, 222, 224, 227–228, 231
- German, 4, 15, 21–22, 25–27, 29–31, 34– 44, 73, 123, 200, 223–224, 253, 261 Frankonian, 25 Swabian, 25, 43 Swiss ~, 4, 21, 27–29, 31–34, 39, 42, 123, 124 Greek, 15–17, 30, 38, 117–118, 188

Hindi, 263

Hungarian, 253

Icelandic, 2, 4–8, 76, 89–90, 93–95, 98, 105, 129–131, 133, 135, 143–147, 149, 152, 181, 185–192, 194–197,

199, 204–205, 207, 215–216, 218, 222-227, 229, 232, 234, 237, 241, 251-263, 265-268, 272-276 Italian, 4, 17, 20, 38, 43, 218, 221-222, 226.264 Japanese, 98 Kannada, 263 Korean, 91-92 Kurdish, 263 Navajo, 263 Persian, 263 Punjabi, 263 Romance, 3, 11, 38, 69, 103, 119, 126, 148, 188, 207, 227, 229, 231, 237, 253, 273–274, 276 Russian, 8, 38, 181, 197, 200–205, 208– 209, 253 Salish, 10-11, 57, 281-282, 302, 308-310 Halkomelem, 10, 281–283, 286, 288, 289-292, 294-296, 301, 303-304, 306, 309-311 Serbo-Croatian, 38, 98 Slavic, 221, 245, 274, 276 Spanish, 2, 4–5, 17, 43, 92, 103, 105, 110, 113, 117–118, 123, 125–126, 129-130, 132-133, 142-145, 147-153, 215, 229, 236-237, 274 Leísta dialects of ~, 110-112, 115, 117-118, 123, 126, 235, 237-240 Swedish, 27–29, 41–42, 273

Tamil, 263

Index of authors

Abels, Klaus, 197, 201 Adger, David, 5, 18, 98, 104-105, 110, 119-123, 216, 223 Aissen, Judith, 282, 286, 289 Albizu, Pablo, 53-54, 57, 63 Alboiu, Gabriela, 230 Alexiadou, Artemis, 94, 151, 258, 282 Anagnostopoulou, Elena, 2, 4–5, 7–8, 15, 18-20, 27, 30-32, 34, 38, 40-41, 68, 80, 89–90, 92–93, 98, 104–106, 110, 113, 115–120, 122–124, 130, 137, 141, 151, 181, 186-188, 194-196, 207, 215-216, 223-224, 226-228, 230, 258, 273-274, 282 Arregi, Karlos, 2-3, 9-10, 49, 51, 63, 66, 69, 78-80, 218 Azkue, Resurrección María, 57, 63 Babby, Leonard H., 197, 199 Bader, Markus, 140 Barbosa, Pilar, 151 Bayer, Josef, 140 Béjar, Susana, 21, 63, 90, 92, 216, 223-224 Belletti, Adriana, 146, 187, 219 Bhaskararao, Peri, 221 Bianchi, Valentina, 215–216, 223, 226, 244, 264 Biberauer, Teresa, 190, 207 Boeckx, Cedric, 2, 7–8, 87, 89–90, 92– 94, 96-98, 105, 131, 181, 183, 187-188, 205, 223, 259, 267, 271-274 Bonet, Eulália, 2-4, 15-18, 21, 27, 29-30, 38–39, 43, 57, 89, 98, 103–104, 109, 123, 125, 129, 188, 215-217, 223, 227-228, 241-242 Bossong, Georg, 63-64 Bowers, John, 207

Brown, Jason, 198-199, 201-202, 208, 293, 304, 308-309 Brown, Sue, 198–199, 201–202, 208, 293, 304, 308-309 Burton, Strang, 293–294 Burzio, Luigi, 95, 132, 143, 198, 208 Calabrese, Andrea, 51 Cardinaletti, Anna, 4, 21, 26, 30, 43, 258 Carnie, Andrew, 282, 296, 302 Casiellas, Eugenia, 149 Cheng, L., 297 Chomsky, Noam, 8-10, 18, 20, 50, 80, 95-96, 135, 137, 139, 144, 153, 159, 161–162, 165, 167, 177–178, 182, 184-185, 189-193, 196, 206, 216, 223, 230, 252–253, 268, 272–273, 281 Čitko, Barbara, 97 Contreras, Heles, 149 Corbett, Greville G., 179 Cuervo, María Cristina, 220, 222-223 D'Alessandro, Roberta, 4, 7, 226, 273, 274 Davis, Henry, 296-299, 301, 303, 311 De Miguel, Elena, 226 de Yrizar, Pedro, 78 Demers, Richard, 286, 289 Demonte, Violeta, 145, 146 Di Domenico, Elisa, 264 Diesing, Molly, 302 Dikken, Marcel den, 34, 43, 206, 244 Dixon, R. M. W., 281 Dobrovie-Sorin, Carmen, 155 Eguren, Luis, 63

Embick, David, 56, 59, 64

Epstein, Samuel D., 178 Eythórsson, Thórhallur, 95, 274 Fernández, Beatriz, 53-54, 63, 226 Fernández-Soriano, Olga, 129, 143, 149, 220 Fillmore, Charles, 119 Folli, Raffaella, 95 Fox, Danny, 191 Frampton, J., 180 Franks, Steven, 197, 199, 201, 208 Freidin, Robert, 202-203, 208 Galloway, Brent, 284, 286, 293–294, 298-299, 303, 305-307, 311 Gaminde, Iñaki, 50, 69, 78, 79, 80 García, Erica, 235 Geber, Dana, 215, 225 George, Leland, 230 Gerdts, Donna. B., 286, 290, 293-294, 305, 311 Gómez, Ricardo, 63, 78 Groat, E., 179 Grohmann, Kleanthes K., 8, 43, 96 Gutiérrez-Bravo, Rodriguo, 217 Guttman, S., 180 Hale, Kenneth, 78 Halle, Morris, 49, 51, 59, 61, 64, 216, 235, 244Harbour, Daniel, 5, 18, 98, 104–105, 110, 119-123, 216, 223 Harley, Heidi, 95, 216 Harris, James, 59, 64, 244 Harves, Stephanie A., 197, 199, 200–203, 208 Haspelmath, Martin, 4, 21, 123 Heath, Jeffrey, 79 Hiraiwa, Ken, 178, 184, 216, 223, 252, 273 Holguín, Justin, 52 Holmberg, Anders, 2, 6-7, 76, 89, 185-187, 189, 206–207, 216, 224, 251– 252, 261, 273, 275 Hornstein, Norbert, 1

Hrafnbjargarson, Gunnar Hrafn, 6–7, 105, 273, 276 Hualde, José Ignacio, 79, 125 Hukari, Tom, 295, 311 Hurtado, Alfredo, 219, 229, 244 Iatridou, Sabine, 230 Jackendoff, Ray, 95 Jaeggli, Osvaldo, 229 Jelinek, Eloise, 282, 286, 289, 296, 302 Jeong, Youngmi, 91-92 Jónsson, Jóhannes Gísli, 95, 131–132, 273, 276 Kallulli, Dalina, 221–222 Kawashima, Ruriko, 192 Kayne, Richard, 8, 18, 39–40, 56, 87, 97, 196, 206, 227 Keyser, Samuel Jay, 78 Kitahara, Hisatsugu, 192 Koch, Karsten, 293, 304, 308-309 Koopman, Hilda, 7, 276 Kornfilt, Jaklin, 230 Kratzer, Angelika, 231 Kroch, Anthony, 261 Kroeber, Paul D., 293–295, 311 Kuipers, Aert, 302 Lagunilla, Marina Fernández, 226 Laka, Itziar, 52–54, 57, 63, 78 Landau, Idan, 219 Larson, Richard, 78 Lavine, James E., 202–203, 208 Legate, Julie A., 186 López, Luis, 2, 4-5, 129, 146, 152, 206-207 - 208Maling, Joan, 95, 272, 276 Marantz, Alec, 49, 56, 59, 64, 78, 145, 216 Martin, Roger, 183 Mascaró, Joan, 109, 125 Masullo, Pascual, 129, 220

McGinnis, Martha, 41, 96

- McGinnis, MaryJo, 135 Mendikoetxea, Amaya, 132 Meng, Michael, 154 Mensching, Guido, 153, 232 Miller, Philip H., 104 Mohanan, K.P., 221 Montrul, Silvina, 153 Moro, Andrea, 97 Müller, Gereon, 22–24, 30, 34–37, 43, 73, 206
- Neidle, Carol, 198–199, 201
- Nevins, Andrew, 2–3, 9–10, 15, 18, 49, 51, 63, 66, 78–80, 104, 106, 184, 190, 196, 206–207, 218, 235, 242 Newmeyer, Frederick J., 282
- Nichols, Lynn, 215–216, 223
- Niinuma, Fumikazu, 98
- Nishida, Chiyo, 226, 237
- Nomura, Masashi, 252, 273
- Noyer, Rolf, 56, 59, 61, 64, 140, 216
- Nunes, Jairo, 97
- Ordóñez, Francisco, 146
- Ormazabal, Javier, 57, 92, 98
- Ortiz de Urbina, Jon, 53, 64, 79
- Ouali, Hamid, 2–3, 9, 159–160, 164, 167, 230
- Ouhalla, Jamal, 9, 159–160, 164, 167, 178 Oyhaçabal, Bernard, 80
- Pereltsvaig, Asya, 199–200, 208–209 Perlmutter, David, 39, 57, 87, 103, 236, 242 Pesetsky, David, 78, 119, 197, 219, 230, 234
- Pires, Acrisio, 164, 167
- Pylkkänen, Liina, 95, 306
- Raposo, Eduardo, 132
- Reinhart, Tanya, 191, 240
- Rezac, Milan, 49, 53–54, 57, 63, 79, 90– 93, 95, 97, 126, 181, 183–184, 186– 189, 201, 206, 208, 216, 223–224

Richards, Marc D., 2, 8–9, 181, 184, 186, 190, 199-200, 202, 206-208 Richards, Norvin, 31, 42, 96–98, 141, 164, 178, 230 Richardson, Kylie, 201 Rigau, Gemma, 106-109, 121-122, 125, 141,232 Rivero, María Luisa, 2, 5, 125, 129, 151, 215, 219, 221-222, 225, 228, 245, 274 Rizzi, Luigi, 97, 146, 187, 219 Rögnvaldsson, Eiríkur, 273, 276 Romero, Juan, 4, 57, 92, 104-105, 110-113, 115, 117, 119, 122, 125-126, 216, 223 Rullmann, Hotze, 249 Sag, Ivan A., 105 Sainz, Koldo, 63, 78 Sanz, Montserrat, 226, 237 Schlenker, Philippe, 264 Schütze, Carson T., 183, 255, 271, 273 Seely, T.D., 178 Sheppard, Milena Milojevic, 221 Sigurðsson, Halldór Ármann, 2, 5–7, 89, 94, 105, 129–132, 136, 139–140, 149, 152, 181, 186–189, 196, 206–207, 215-216, 223-224, 241, 251-253, 258-259, 261-265, 267, 269-276 Silverstein, Michael, 18, 235, 281, 287, 289,310 Speas, Margaret, 264 Sportiche, Dominique, 139 Stepanov, Arthur, 216, 223-224, 226 Stjepanović, Sandra, 98 Subbarao, Karumuri Venkata, 221 Suttles, Wayne, 313 Svenonius, Peter, 95, 275 Taraldsen, Knut Tarald, 18, 94, 105, 129–132, 141, 187, 207, 216, 223, 229, 252 Tenny, Carol L., 264 Thráinsson, Höskuldur, 130–131, 273, 276

Timberlake, Alan, 199 Toribio, Jacqueline Almeida, 144 Torrego, Esther, 55, 146, 148, 229–230, 234, 244 Travis, Lisa deMena, 54

Ura, Hiroyuki, 144 Uriagereka, Juan, 55, 132

Verma, Manindra K., 221 Viaplana, Joaquim, 109 Wiltschko, Martina, 3, 10, 57, 281, 291, 293–295, 304, 306, 308–309, 311 Woolford, Ellen, 52

Yip, Moira, 95

Zaenen, Annie, 131, 135 Zagona, Karen, 226, 237 Zubizarreta, María-Luisa, 133, 146