Clausal architecture and subject positions: impersonal constructions in the Germanic languages

Von der philosophisch-historischen Fakultät der Universität Stuttgart zur Erlangung der Würde eines Doktors der Philosophie (Dr. phil.) genehmigte Abhandlung

Vorgelegt von

Sabine Mohr

aus Waiblingen

Hauptberichter: Prof. Dr. Artemis Alexiadou

Mitberichter: Prof. Anders Holmberg PhD

Prof. Ian Roberts PhD

Tag der mündlichen Prüfung: 2. April 2004

Institut für Linguistik/Anglistik der Universität Stuttgart 2004

Table of contents

Acknowledgements							
Abb	reviatio	ns		7			
Deut	tsche Zu	ısammeı	nfassung	8			
I.	Introduction						
II.	Theoretical framework						
	1.	Subject positions and the EPP – the evolution of the two concepts					
		1.1.	From principle to feature – the history of the EPP in the works				
			of Chomsky	19			
		1.2.	From deconstruction to cartography – subject positions and				
			their features	28			
		1.3.	Universality reconsidered – the EPP as a parameter	41			
	2.	The E	The EPP and the Extension Condition				
		2.1.	The EPP-feature – the general idea	50			
			2.1.1. Some data	50			
			2.1.2. Different ways of realising head-positions	52			
		2.2.	Head-movement – is it syntactic or a PF-phenomenon or even				
			an illusion?	53			
			2.2.1. The Extension Condition and Chomsky's objections	53			
			2.2.2. Head-movement and the interfaces	55			
			2.2.3. Does head-movement exist after all?	57			
		2.3.	Head-movement and the Extension Condition – how can these				
			two be reconciled?	59			
	3.	Claus	Clause structure				
		3.1.	The projections of the C-system	65			
			3.1.1. Sentence-initial XPs in V2 clauses and their positions	65			
			3.1.2. Locality and why the finite verb in Fin can only be				
			preceded by one XP	71			
		3.2.	The projections of the I-system	76			
			3.2.1. Overview	76			
			3.2.2. TopP, FocP and Scrambling	77			

			3.2.3.	Two s	subject positions in the Mittelfeld	79	
			3.2.4.	RefP a	and the EPP	80	
		3.3.	3. The projections of the V-system				
	4.	Checking					
		4.1.	Types of features			86	
		4.2.	Matching features			87	
		4.3.	Check	Checking configurations			
			4.3.1.	Speci	fier-head configuration	88	
			4.3.2.	Check	ring in a head-head configuration and types of		
				V-mo	vement	92	
				A)	no V-movement	93	
				B)	short V-movement	94	
				C)	long V-movement	98	
				D)	morphologically triggered V-(stem-)movement	100	
			4.3.3.	Conse	equences of the restrictions on checking –		
				Scram	abling vs. Object Shift and a note on typology	104	
	5.	The "universal EPP" on T					
		5.1.	Feature checking on T			109	
			5.1.1.	Nomi	native Case	109	
			5.1.2.	T and	the Extension Condition	110	
		5.2.	The EPP-feature as a subject-of-predication feature?				
	6.	Sumn	nmary				
III.	Appli	plications					
	1.	Backg	ground			121	
		1.1.	The da	ata		121	
			1.1.1.	Presei	ntational sentences	121	
			1.1.2.	Imper	sonal passives	125	
		1.2.	Exple	tives		127	
			1.2.1.	Exple	tives everywhere	127	
			1.2.1.	Again	st non-overt expletives	131	
		1.3.	Locati	ives in S	Small Clauses	133	
		1.4.	1.4. Positions and movements involved in the derivation of TECs				
	2.	The derivation of presentational sentences and impersonal passives				139	
		2.1.	Not al	l of the	alleged expletives can be expletives	139	

		2.2.	Event arguments				
		2.3.	Comparing German and Dutch				
			2.3.1.	Presentational sentences and impersonal passives as			
				expletive constructions – German	142		
			2.3.2.	Event arguments mistaken for expletives – Dutch	149		
			2.3.3.	Some remarks on German 'da'	152		
		2.4.	Iceland	dic	156		
		2.5.	Mainla	and Scandinavian	159		
		2.6.	Englisl	h	164		
			2.6.1.	The 'there'-construction as a focus construction	164		
			2.6.2.	The Case of the subject DP	168		
			2.6.3.	Impersonal passives	169		
			2.6.4.	Locative Inversion	171		
	3.	Weat	eather verbs				
	3.1.		Prelim	inary remarks	174		
		3.2.	Germa	n, Dutch, MSc and English	174		
		3.3.	Iceland	dic	176		
	4.	Impe	rsonal psych verbs				
	5.	Sumr	mary				
IV.	Conc	clusion					
V.	References						
Erklä	irung				199		

Acknowledgements

At the end of writing this PhD dissertation comes the hardest part of all – to say thank-you to all those who have contributed to it in one way or another and, above all, not to forget anyone.

First of all I'd like to thank Ian Roberts for having aroused my interest in theoretical syntax, for having always supported me and my idea of writing this dissertation and above all for a lot of interesting, encouraging and helpful comments (though timing was sometimes a bit of a problem). A big thank-you goes to Artemis Alexiadou for having so naturally taken care of all the doctoral students who were stranded when Ian left for Cambridge, for creating such an agreeable atmosphere and fruitful environment at the department of English linguistics in Stuttgart, for her presence and last but not least for exerting a gentle pressure. Finally, I'd like to say thank-you to Anders Holmberg for his amazing support and encouragement — when I presented my dissertation proposal at the first meeting of the graduate school in July 2000 he naturally discussed the proposal with me though we had never met before. Ever since then, he has accompanied my work with great interest and lots of comments.

This study also benefited considerably from discussions with the following people either during their visits to the graduate school in Stuttgart or at conferences: Elena Anagnostopoulou, Adriana Belletti, Theresa Biberauer, Patricia Cabredo Hofherr, Anna Cardinaletti, Kleanthes Grohmann, Eric Haeberli, Richard Kayne, Gereon Müller, Henk van Riemsdijk, Halldór Ármann Sigurðsson, Tim Stowell, Peter Svenonius and Sten Vikner. In addition, I'd like to thank the audiences of my presentations at the graduate school, and those of the TiLT workshop in Utrecht in 2002, of the GGS conferences in Frankfurt in 2002 and in Cologne in 2003 and of the 18th workshop on Comparative Germanic Syntax in Durham in 2003 for their feedback.

I'm deeply indebted to Darcy Bruce Berry, Tim Cox, Jeroen van Craenenbroeck, Gunnar Hrafn Hrafnbjargarson, Hans Kamp, Arne Martinus Lindstad, Anna Mcnay and her friends, Jan-Wouter Zwart and my New Zealand friends and family. Without their help and patience this study would never have been a cross-linguistic one. My German fellow *Kollegiaten*, colleagues at the linguistic departments, friends and family helped out when I didn't trust my own judgements any more – thank you all.

A big thank-you also to Darcy Bruce Berry, Anna Erechko and Manuela Schönenberger for in-depth linguistic discussions just as well as hours of private conversation

- I'll never forget those Tuesday afternoons in Manuela's cosy office or outside in the bright sunshine. I had never thought that reading Chomsky's *Derivation by Phase* could be so much fun!

Artemis, Björn, Britta, Florian, Gunnar, Enyd, Inga, Matthias, Kirsten, Peter, Silke and Susann have contributed a lot to making my time in the graduate school and at the department of English linguistics an enjoyable one. Unfortunately, there were also times when the future looked rather bleak for linguistics in Stuttgart and I'm particularly grateful to Anna, Arne, Fabian, Manuela and Roberta for having always been such good friends.

Turning to a matter-of-fact point, I owe a lot to the *Deutsche Forschungsgemeinschaft* (*DFG*) because they financed my research as part of the project GRK 609/1.

Last but not least, I'd like to thank my parents Klaus and Birgit Mohr for their support and love.

Abbreviations

Acc Accusative Case

AspP Aspect Phrase

Dat Dative Case

DCE Dictionary of Contemporary English

DE Definiteness Effect

EPP Extended Projection Principle

MSc Mainland Scandinavian

Nom Nominative Case

OS Object Shift

Part Partitive Case

PRT particle

SC Small Clause

sop subject of predication

TEC Transitive Expletive Construction

V2 Verb Second

Deutsche Zusammenfassung

Hauptziel dieser Arbeit war, eine Analyse von Transitive Expletive Constructions (TECs), unpersönlichen Passiva, Witterungsverben und unpersönlichen psych verbs im Deutschen, Niederländischen, Isländischen, in den festlandsskandinavischen Sprachen und im Englischen im Rahmen des Minimalistischen Programms zu entwickeln. Geleitet von der Idee Kaynes (1994) einer einheitlichen Basisstruktur für alle Sprachen, sollte meiner Analyse eine Satzstruktur zugrunde liegen, die sowohl auf OV- wie auch auf VO-Sprachen anwendbar ist und damit ohne Kopf- und Lizensierungsrichtungsparameter auskommt. Des weiteren sollte die Analyse ohne die Annahme eines expletiven pro auskommen, da dieses konzeptionell erhebliche Probleme aufwirft. Zum einen fordert Chomsky (1995), daß eine Numeration nur Elemente enthält, die entweder einen PF- oder einen LF-Effekt aufweisen. Als Null-Element hat das expletive pro natürlich keinerlei Einfluß auf die PF, aber es führt auch zu keinem semantischen Effekt, wie z.B. zu einem Definitheitseffekt (cf. Alexiadou & Anagnostopoulou 1998), weshalb man keinerlei Beweise für seine Existenz hat. Zum anderen kann die Gegenwart eines expletiven pro zu Problemen beim Überprüfen der Nominativ-Kasusmerkmale führen – je nachdem, wie man den Prozeß der Merkmalsüberprüfung definiert. Kurzum, ich wollte gegen die z.B. von Cardinaletti (1990) und Vikner (1995) entwickelte, stark im G&B-System verhaftete (und daher inzwischen veraltete) Analyse von Beispielen wie in (1) argumentieren und statt dessen vorschlagen, daß auch im Deutschen eine kopfinitiale Struktur vorliegt und das Subjekt sich in SpecTP befindet.

- (1) a. ... daß ein Apfel gegessen wurde.
 - b. [CP daß [IP pro [VP ein Apfel gegessen] wurde]]

Insbesondere suchte ich auch Antworten auf folgende Fragen:

- (i) Wieviele Subjektspositionen gibt es mindestens und welche Positionen sind das? Wie wird das Kasusmerkmal "Nominativ" überprüft?
- (ii) Wie verhält es sich mit dem EPP in einem Ansatz, der von mehreren Subjektspositionen ausgeht? Gilt das EPP für alle Subjektspositionen? Oder gibt es nur eine ausgezeichnete Subjektsposition, die dem EPP unterworfen ist? Oder muß dem EPP genau einmal Genüge geleistet werden, wobei allerdings nicht festgelegt

ist, in welcher Position dies zu geschehen hat? Gibt es einen EPP-Parameter? Ist das EPP in Wahrheit nur ein Merkmal, das Bewegung auslöst?

Die Dissertation gliedert sich in zwei Hauptteile – einen theoretischen Teil und einen praktischen Teil, in dem meine theoretischen Annahmen auf unpersönliche Konstruktionen angewandt werden.

Als Einstieg in das Thema diente ein Überblick über die Entwicklung der Begriffe "Subjektsposition" und "EPP" in der Generativen Grammatik, wobei ich mich auf drei Entwicklungsstränge beschränkte. In den Arbeiten Chomskys blieb die Zahl der Subjektspositionen immer überschaubar, aber das EPP machte einen radikalen Wandel durch. Es entwickelte sich von einem Prinzip, das forderte, daß jeder Satz ein Subjekt hat, bzw. daß SpecIP immer gefüllt ist, zu einem generalisierten Bewegungsmerkmal. Der zweite Strang kann unter dem Begriff "kartographischer Ansatz" zusammengefaßt werden und wird hier von Kiss (1996), Bobaljik & Jonas (1996) und insbesondere Cardinaletti (2002) repräsentiert. Charakteristisch für diesen Ansatz ist, daß es eine Vielzahl von Subjektspositionen gibt, wobei jede durch ein ganz spezifisches Merkmal aus dem Bündel der Mermale, die ein Subjekt ausmachen, ausgezeichnet ist. Diese Merkmale sind sowohl formaler als auch semantischer Natur, so daß das EPP praktisch überflüssig ist, da eine Subjekts-DP eine bestimmte Position genau dann belegt/belegen muß, wenn sie das entsprechende Merkmal trägt. Der dritte Strang schließlich beschreibt verschiedene Ansätze, die davon ausgehen, daß das EPP parametrisiert ist. So schlagen Alexiadou & Anagnostopoulou (1998) vor, daß das EPP nicht nur durch Merge/Move einer XP, sondern auch durch Merge/Move eines Kopfes erfüllt werden kann. Roberts & Roussou (1998) und Roberts (2000) nehmen dazu noch an, daß das EPP entweder in der I- oder in der C-Domäne sitzen kann. Meine Analyse stützt sich nicht speziell auf einen dieser Ansätze, sondern verwendet Ideen aus allen drei Strängen.

Was die Ableitung von Verb-Zweit (V2)-Konstruktionen angeht, so folge ich der Ansicht, daß es sich bei V2 stets um Verb- (also Kopf-) Bewegung nach C bzw. Fin, gefolgt von XP-Bewegung nach SpecCP/SpecFinP, handelt. Aus diesem Grund zeige ich zunächst, daß Kopf-Bewegung existiert, und daß es sich bei ihr um ein syntaktisches Phänomen handelt (entgegen Annahmen von Kayne (1998 ff) bzw. Chomsky (1999)). Zentraler Punkt meiner Analyse ist eine neue Definition der *Extension Condition* (Chomsky 1993/95) – d.h. der Bedingung, daß syntaktische Operationen den Baum an der Wurzel erweitern – und eine Verknüpfung von Kopf-Bewegung, EPP und *Extension Condition*. Kopf-Bewegung muß nach dieser Definition sofort durch eine XP-Bewegung (oder durch *Merger* einer XP) ergänzt

werden. Wenn keinerlei sonstiges formales oder semantisches Merkmal die Bildung einer Spezifikatorposition fordert, übernimmt ein EPP-Merkmal diese Aufgabe. Zudem habe ich gezeigt, daß dieses EPP-Merkmal größtenteils einem Nominativ- oder einem Subjekt-der-Prädikation-Merkmal entspricht.

Des weiteren entwickelte ich eine universelle Satzstruktur, die sowohl den OV- als auch den VO-Sprachen zugrunde liegt. In dieser Struktur sind sowohl CP als auch IP und VP in zahlreiche Unterphrasen aufgespalten. V2-Konstruktionen realisieren dabei verschiedene Phrasen des C-Systems; im I-System befinden sich mindestens 2 Subjektspositionen, wobei definite Subjekte sich obligatorisch in die höhere, nämlich SpecRefP, bewegen müssen; und schließlich – eine ganz zentrale Annahme – werden alle direkten Objekte in SpecVP basisgeneriert. Verschiedene Wortstellungen sind das Ergebnis unterschiedlicher Kopf- und XP-Bewegungen im Zusammenspiel mit den Bedingungen, die für die Merkmalsüberprüfung gelten.

Die Merkmalsüberprüfung erfolgt entweder in Kopf-Kopf- oder in Spezifikator-Kopf-Beziehungen. Letztere müssen nicht unbedingt direkt sein, da es einem Kopf möglich ist, in seinen Spezifikator hineinzusehen, sofern in diesem keine aktive direkte Merkmalsüberprüfung in einer Spezifikator-Kopf-Beziehung besteht. Von zentraler Bedeutung ist hierbei die Überprüfung der verbalen Merkmale [v], T- und phi. In Sprachen mit relativ viel Endungen wie z.B. im Deutschen und Niederländischen, wird das Verb flektiert basisgeneriert und muß deshalb kein [v]-Merkmal überprüfen. Daher ist es immer die (Rest-)vP, die sich nach SpecTP bewegt, um das Nominativ-Merkmal des Subjekts per "looking into Spec" checken zu lassen, nachdem sich das finite Verb nach T bewegt hat und somit die Bildung von SpecTP erfordert. In Sprachen mit weniger Endungen muß dagegen das Verb erst als solches identifiziert werden, was mittels eines [v]-Merkmals in v geschieht und zur VO-Wortstellung führt. Wenn nun das Verb sich nicht wie z.B. in V2-Konstruktionen weiter nach T (und noch höher) bewegt, besteht eine aktive Beziehung zwischen SpecvP und v, so daß sich das Subjekt alleine nach SpecTP begeben muß, um sein Kasus-Merkmal überprüfen zu lassen. In V2-Konstruktionen ist allerdings auch in diesen Sprachen die Bewegung der RestvP nach SpecTP möglich. In den festlandsskandinavischen Sprachen führt diese Differenzierung zu den Wortstellungsvarianten, die oftmals unter dem Begriff Object Shift zusammengefaßt werden. Das Englische stellt einen Sonderfall dar, da es keine V2 Sprache ist und SpecTP daher auch gleichzeitig die Position für das Subjekt der Prädikation ist (in V2 Sprachen befindet sich letzteres in SpecFinP). Im Isländischen schließlich ist die Flexionsmorphologie so stark, daß die Endungen separat in T basisgeneriert werden. Somit wird T durch Merge

realisiert, was dazu führt, daß SpecTP nicht obligatorisch ist, da *Merge* die *Extension Condition* ohne Hilfsmittel erfüllt. Die Kopf-Bewegung des Verbstammes nach T, um das Affix zu binden, ist allein morphologisch bedingt.

Im zweiten Teil habe ich verschiedene unpersönliche Konstruktionen, vor allem aber TECs und unpersönliche Passiva, vor dem Hintergrund der im ersten Teil entwickten theoretischen Annahmen untersucht. Ich habe gezeigt, daß diese Konstruktionen, obwohl sie auf den ersten Blick sehr ähnlich aussehen, in den einzelnen Sprachen (sofern sie überhaupt möglich sind) äußerst unterschiedliche Ableitungen und vor allem unterschiedliche "expletive" Elemente aufweisen. Dabei umfaßt der traditionelle Begriff "Expletivum" neben echten Expletiva auch Ereignisargumente und Quasiargumente. Diese "Expletiva" unterscheiden sich durch die Art und Anzahl ihrer Merkmale, die auch bestimmen, wo ein solches "Expletivum" auftreten kann/muß. So haben echte Expletiva keinerlei Merkmal und können daher nur in der Position basisgeneriert werden, in der sie auch realisiert werden, da sie lediglich als Reparaturmechanismus dienen, wenn keine andere XP als Subjekt der Prädikation dienen kann, wie es z.B. in gewissen thetischen Konstruktionen der Fall ist. Ereignisargumente dagegen verankern ein Ereignis in Raum und Zeit und tragen daher das Merkmal [+ spezifisch] (cf. Kiss 1996) und müssen aus diesem Grund irgendwann im Laufe der Ableitung in SpecRefP auftreten. Quasiargumente tragen die meisten Merkmale (zusätzlich zum [+ spezifisch]-Merkmal auch noch ein Nominativ-Merkmal, das einen Zwischenstop in SpecTP erfordert) und werden wie "normale" externe Argumente in SpecvP basisgeneriert. Die unterschiedlichen Verteilungsmuster des "Expletivums" in unpersönlichen Passiva sind nun einzig und allein dadurch bestimmt, welchen Typ von "Expletivum" die jeweilige Sprache wählt. Die Tatsache, daß manche Sprachen einen Definitheitseffekt in thetischen Konstruktionen aufweisen, andere aber nicht, hängt wiederum von der Wahl des "Expletivums" ab. Besetzt es (zeitweilig) SpecRefP, kann ein definites Subjekt nicht lizensiert werden.

Aus den eingangs angeführten Gründen argumentiere ich außerdem gegen die Existenz nicht-overter Expletiva, wie *pro* sowie Spuren bzw. Kopien overter Expletiva, die sich in eine höhere Position bewegt haben. Da echte Expletiva sowieso nur da basisgeneriert werden können, wo sie letztendlich realisiert werden, ist die Existenz von Spuren bzw. Kopien echter Expletiva ausgeschlossen.

Gemäß meiner Analyse muß im Isländischen SpecTP nicht geschaffen werden, wenn kein Subjekt vorhanden ist, wie z.B. in Witterungsverb-Konstruktionen. Man könnte jedoch mit Cardinaletti (2002) annehmen, daß diese Position nichtsdestotrotz durch ein expletives

pro gefüllt wird, damit die subjektslosen Konstruktionen dieselbe Struktur haben wie Konstruktion mit einem Subjekt. Ich habe jedoch gezeigt, daß im Deutschen und Niederländischen stets die (Rest-)vP SpecTP belegt, so daß diese Position nicht für ein expletives pro zur Verfügung steht. Im übrigen erklärt diese Ableitung auch die "Zwittereigenschaften" von Subjekten, die sich scheinbar (nach traditionellen Analysen) relativ weit unten in der Baumstruktur befinden. Einerseits verhalten sie sich wie "normale" Subjekte, da sie in einer (indirekten) Spezifikator-Kopf-Position ihr Kasusmerkmal gegen T checken, andererseits befinden sie sich noch in der nach SpecTP bewegten vP, was die vP-internen Eigenschaften erklärt. Daneben besteht im Deutschen kein Definitheitseffekt in Bezug auf das Subjekt (siehe Beispiel (2)), so daß SpecRefP frei verfügbar sein muß, sprich nicht durch ein expletives pro belegt sein darf.

(2) ... daß gerade der letzte Tanz getanzt wurde, als der Strom ausfiel.

Somit wird ein expletives *pro* im Deutschen und Niederländischen nicht nur nicht gebraucht, es gibt vielmehr auch gar keine Position dafür. Angesichts der theoretischen und nun auch praktischen Probleme, die das expletive *pro* aufwirft, ist es höchst wahrscheinlich, daß dieses Element gar nicht existiert – auch nicht im Isländischen. Durch eine detailliertere Klassifikation ergibt sich im overten Bereich also ein breiteres Spektrum an "expletiven" Elementen, während die nicht-overten Formen komplett wegfallen.

Abschließend läßt sich sagen, daß ich in dieser Arbeit eine Analyse für verschiedene unpersönliche Konstruktionen in germanischen Sprachen vorgeschlagen habe, die auf einer universellen Satzstruktur und einer differenzierteren Einteilung der "expletiven" Elemente beruht.

I. Introduction

The aim of this thesis is to give a unified account of a range of impersonal constructions in several Germanic languages (with emphasis on German) within the Minimalist framework. Hence the aim is actually twofold. On the one hand, I will revisit the analyses of Transitive Expletive Constructions (TECs), other thetic constructions, impersonal passives, weather verbs and impersonal psych-verbs in German, Dutch, Icelandic, the Mainland Scandinavian languages and English¹. As this sample of languages, however, comprises both Verb Second (V2) languages and non-V2 languages, VO- and OV-languages and languages with verbmovement and languages without, it is desirable to develop – among other things – a uniform clausal skeleton in which a large part of cross-linguistic variation is attributed to different kinds of movement (inspired by Kayne's (1994) Universal Base Hypothesis), rather than having to cope with a directionality parameter, different ways of licensing arguments, etc. Therefore I divide this study into two parts entitled "Theoretical framework" and "Applications". In the first part I investigate several theoretical issues such as clause structure (esp. German clause structure), checking and above all the nature of the EPP. In the second part I analyse the various impersonal constructions mentioned above against the background of the framework worked out in the theoretical part.

In the first part, I develop a theoretical framework based on ideas that have been proposed within the framework of the Minimalist Program, amended with my own assumptions. Before I go into more detail, however, I sketch some advantages of the Minimalist Program in view of the shortcomings of previous theories.

Originally proposed in Chomsky (1993), the *Minimalist Program* (*MP*) has continuously been modified and revised by Chomsky himself (1995, 1998, 1999, 2001) and by the linguists working within this framework. Some revisions have become necessary because many proposals have proved untenable or at best questionable as, e.g., Chomsky's (1995) account of Transitive Expletive Constructions (TECs) in Icelandic.² Other modifications have been introduced to make the model methodologically more minimalist and "to reduce the computational burden" (Chomsky 1999). Striving for descriptive and explanatory adequacy, the Minimalist Program thus offers many research options.

¹ For reasons of space I do not consider Afrikaans, Faroese and Yiddish in this study.

² For a discussion of Chomsky's derivation I refer the reader to chapter III, 1.4.

The rigid system of Government & Binding Theory, which was developed from an Anglo-centric perspective, turned out to be rather problematic for comparative research. The comparison of VO- and OV-languages, for example, called for the assumption of a head- or directionality parameter. Explaining the "deviant" word order is directly correlated with the question of how arguments are licensed and assigned Case in OV-languages. Equally problematic (because of the EPP as it was then understood) was the observation that languages other than English obviously allow for the subject not to show up in SpecIP. This observation led to the postulation of an empty element in SpecIP (either *pro* or a trace) whenever this position is not overtly realised. Just like Case-assignment to the object in OV-languages, Case-assignment to subjects in "non-canonical" subject positions posed a problem and was usually assumed to be taken care of by chain formation. Thus more and more supplementary devices had to be introduced to account for cross-linguistic variation and still most languages did not seem to fit into the pattern.

In the Minimalist framework, comparative research encounters fewer problems since first of all, the underlying model of clause structure, bare phrase structure, is much less restrictive than X'-theory. For instance, bare phrase structure does not obligatorily force the presence of a specifier.³ Hence there is no need to assume an empty element in a specifier for which we do not have any overt evidence in a given language. On the other hand, later versions of the *MP* (from Chomsky 1995, chapter 4.10 on) allow for multiple specifiers where needed.⁴ Multiple specifiers, however, can pose a problem with respect to learnability as it might be hard to figure out whether a certain structure involves two single-specifier projections with an empty head in the higher projection or a single projection with two specifiers. Furthermore, Case-checking is no longer supposed to be restricted to one or two configurations but can be established via feature-movement, at long distance, via Agree, etc. (depending on the version one chooses). This shows that Minimalism is inherently much more flexible than the G&B framework and the above-mentioned fact that Minimalism does not constitute a rigid theory (yet) but a research programme offers many more possibilities of analysing certain phenomena.

The aim of this thesis is to exploit these advantages of the Minimalist framework to come up with a system that can capture the peculiarities of German clause structure. In particular, the two-base hypothesis (VO vs OV) is undesirable (Kayne 1994; Chomsky 1999)

³ More precisely, X'-theory itself does not force the presence of a specifier either as can be seen in bare NPs, for example. It is the G&B version of the EPP that requires IP to always have a specifier.

⁴ I explicitly do not adopt the idea of multiple specifiers.

Furthermore, I do not consider adjunction to be a potential instance of multiple specifiers in the G&B framework.

"Uniformity Principle"). Moreover, the postulation of an expletive *pro* in derivations like (1) is problematic because of economy considerations (do we need expletive *pro* despite the presence of a subject DP?), Nominative Case checking (if expletive *pro* checks Nominative Case what about the subject DP?), etc.

(1) ...daß [IPpro [VPjemand einen Apfel gegessen] hat].

that pro someone an apple eaten has

"... that someone has eaten an apple."

(German; adapted from Vikner 1995, p.189, (44a))

The example in (1) in a way also stands for the main questions to be investigated here. A major part of this study deals with possible subject positions and related questions such as 'which are the features associated with these subject positions?', 'how do we have to interpret the Extended Projection Principle (EPP)?', 'do we need expletive *pro*?' and 'how does (Nominative) Case get checked?'. Another issue to be discussed can be entitled "directionality". Sympathising with Kayne's (1994) idea that all languages have a "Universal Base", I suggest one possible clausal skeleton and show how OV- and VO-word orders (and phenomena probably related to this distinction) can be derived by means of different kinds of movement, such as short V-movement (i.e. V-movement within vP only), long V-movement (where V leaves the vP) or (remnant) vP-movement.

When revisiting German clause structure I was thus mainly guided by the following questions.

- (a) Is it possible to come up with a vP/VP-structure (and a "clausal skeleton" in general) that can satisfactorily be applied to both VO- and OV-languages? If yes, how can we derive the different word orders?
- (b) In which positions can subjects end up? If SpecvP is among them how does Nominative Case get checked in this position?
- (c) What about the EPP in a system with several subject positions? Do we need (empty) expletives to satisfy the EPP, e.g. in constructions with low subjects or in impersonal constructions, which do not have a subject DP at all?

The individual issues are addressed as follows within the "Theoretical framework". In chapter 1, I give an overview of the historical development of subject positions and the concept of the EPP. First of all, I take a look at the works of Chomsky (ch. 1.1.). Then I

discuss various approaches that can be summarised under the term "cartographical approach" and that exploit the idea that subjects go in different positions depending on which features they have to check (ch. 1.2.). Finally, I turn to proposals that the EPP is parametrised as suggested, e.g., by Alexiadou & Anagnostopoulou (1998) and Roberts & Roussou (1998) (ch. 1.3.).

In the second chapter, I take a closer look at the EPP. Following Alexiadou & Anagnostopoulou (1998) and Roberts (2000b), I suggest that heads that require realisation can be realised either by Merge or by Move (ch. 2.1.). As this idea crucially relies on the assumption that head-movement exists, I argue in favour of head-movement, discuss Chomsky's objections against head-movement (ch. 2.2.) and show how these objections can be overcome (ch. 2.3.). In particular, I correlate the EPP with the Extension Condition. More precisely, I redefine the Extension Condition in such a way that head-movement has to be immediately followed by an instance of XP-movement or merger of an XP so that the tree is extended in the end. I suggest that the EPP largely reduces to this need of amending head-movement with Merge/Move of an XP.

Based on German, but always testing it on the other Germanic languages as well, I develop a head-initial clause structure that is characterised by a Split-CP (following Rizzi 1997b), by an elaborate I-system with at least two subject positions and several positions associated with semantic features that serve as landing sites for scrambling and last but not least by the assumption that the internal argument is merged in SpecVP in all languages (ch. 3).

Chapter 4 introduces the assumptions and mechanisms that are necessary for being able to account for cross-linguistic variation. First, I present the types of features that I use, my conception of feature checking and, first and foremost, crucial assumptions about checking configurations. Then I extensively discuss the interaction of the various types of V-movement (no V-movement, short V-movement within vP, long V-movement that targets positions outside vP and morphologically triggered V-movement) with possible checking configurations (section 4.3.2.). In particular, I focus on the (im)possibility of having (remnant) vP-movement to SpecTP which not only determines basic word order facts but also correlates with the (im)possibility of Object Shift and scrambling (sections 4.3.2. and 4.3.3.).

In chapter 5, I come back to one of the earlier issues and address the problem of how the idea of the "universal EPP on T" can be accommodated in my system. On the one hand, I suggest that the EPP on T in many cases reduces to Nominative Case checking (ch. 5.1.). On the other hand, I propose that the remaining instances of an EPP-feature (both on T and on the

Fin-head) can be rephrased in terms of a subject-of-predication feature, an idea that has been inspired by Cardinaletti (2002) (ch. 5.2.).

In the second major part of this thesis, I apply these theoretical assumptions to the analysis of impersonal constructions in several of the Germanic languages. Comprehensive studies of impersonal constructions have, for example, been carried out by Cardinaletti (1990) for German and by Vikner (1995) for the Germanic languages. These studies, however, are based on the G&B framework and therefore rather obsolete nowadays. I particularly argue against the existence of empty expletive elements (such as expletive pro and traces/copies left by overt expletives that have raised to another position). Exploiting the framework developed in part one, I propose that the positions filled by these empty expletives are either absent from the structure (a possibility offered by bare phrase structure) or filled by other XPs. With respect to German and Dutch, for instance, I argue that SpecTP is always filled by the (remnant) vP and does not need to - in fact, cannot - be filled by an empty expletive. Moreover, I suggest that we need a finer-grained classification to distinguish between the various kinds of "expletive" elements, namely that there are expletives, event arguments and quasi-arguments. These "expletive" elements are mainly distinguished by the number and kind of features they are associated with and which determine in which position(s) they can show up.

To familiarise the reader with the topic, I give some examples of Transitive Expletive Constructions and impersonal passives in the various languages and introduce the main properties of these constructions and then present some earlier accounts that I either reject or elaborate later (ch. 1).

In chapter 2, I discuss TECs (and thetic constructions in general) and impersonal passives in all five languages and language groups, respectively. I suggest that these constructions despite their superficial cross-linguistic resemblances (provided the language in question allows for these constructions at all) involve rather different structures and especially different "expletive" elements in the individual languages. I argue, e.g., that the differences in the distribution of the "expletive" in the closely related languages German and Dutch can be put down to German featuring a true expletive, while Dutch employs an event argument (section 2.3.). The ungrammaticality of TECs and impersonal passives in English will not be explained with the fact that English is not a V2 language. Instead, I propose that those *there*-constructions that are available in English are focus constructions and subject to other (semantic) requirements than thetic constructions (section 2.6.).

In chapter 3, I sketch my account of weather verbs. There I claim that all languages, except for Icelandic, feature a quasi-argument in these constructions. Last but not least, I partly exploit my analysis of weather verb constructions to explain the derivation of impersonal psych verb constructions in German (ch. 4). I argue that the presence of (e)s in impersonal psych verb constructions is not optional but that most impersonal psych verbs come in two forms, one that selects a quasi-argument and one that does not. Chapter 5 finally concludes and summarises my analysis of impersonal constructions in the Germanic languages.

II. Theoretical framework

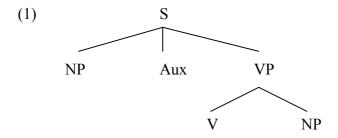
1. Subject positions and the EPP – the evolution of the two concepts

As generative theory has undergone several radical changes over the last few decades, it does not come as a surprise that the way subjects are viewed has changed as well. In this respect it is important to note that the notion "subject" does not exist as a primitive in Generative Grammar; instead, "subject" was defined in structural terms (Chomsky 1965, McCloskey 1997). Subjects, however, are not easily definable in any framework because subjecthood comprises several diverse properties. Subjects, for example, tend to carry particular thetaroles (Agent or Cause or more marginally Experiencer), are either morphologically marked and/or occupy a distinct position, are almost always nominals, usually take wider scope than the other arguments, etc. In addition to these properties, it has been claimed that every clause must have a subject.

McCloskey (op. cit.) gives an overview of the development of the notion "subject position" in Generative Grammar from the days of Phrase Structure (PS) rules till the early stages of Minimalism. He succinctly traces how the various properties of subjects have been taken to be encoded structurally but he does not show whether/how the requirement that every clause has a subject (the Extended Projection Principle or EPP, for short) has been adapted to the changing ideas about subject positions. The EPP, however, is closely interrelated with the notion of subject position(s) and therefore, as well as for independent reasons, has undergone several modifications. It is this relation between the EPP and the subject position(s) and the dissociation of the EPP from the subject position(s) that will be discussed in the following sections.

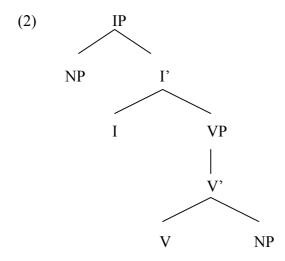
1.1. From principle to feature – the history of the EPP in the works of Chomsky

In the days of PS-rules (Chomsky 1965), a prototypical transitive sentence was generated by the PS-rules $S \rightarrow NP$ Aux VP and VP $\rightarrow V$ NP and had the structure in (1).



Chomsky (1965) defines the grammatical function "subject (of)" in this system as "the relation holding between the NP of a sentence of the form NP Aux VP and the whole sentence" (Chomsky 1965, p. 69). Thus the NP-daughter-of-S is what is traditionally called the subject of the sentence and from the way "subject of" is defined it is clear that there is always a subject, exactly one subject, and that this subject occupies the sentence-initial position. Chomsky (1981) explicitly states that the rule $S \rightarrow NP$ INFL VP implies the requirement that "clausal structures must have subjects" (Chomsky 1981, p. 131). This requirement has become known as the Extended Projection Principle (EPP)⁵.

In the 1980s, the model of PS-rules was replaced with a model of clause structure which conformed to X'-theory and where the clause was a projection of I/Infl, i.e. an IP, so that (1) was replaced with the structure in (2).



Although the structure in (2) does not look so much different from the one in (1) and although the NP-daughter-of-S was translated into SpecIP being the "canonical subject position", the application of X'-theory to the whole clause had far-reaching consequences. First of all, different from the PS-rules which postulated a rather fixed word order and which were very English-specific because they could not account for VSO and *pro*-drop languages, for

example, X'-theory (leaving Kayne's (1994) LCA aside) was much more flexible in allowing both head-complement and complement-head orders and specifier-X' and X'-specifier orders and therefore allowing for many different word orders. Second, the abolition of PS-rules had as a consequence that SpecIP did not necessarily have to be filled with an overt NP. The EPP just required SpecIP to be filled but in the absence of an overt subject NP (in this position) the EPP could be satisfied by referential *pro* (e.g. in *pro*-drop languages), PRO (in control constructions) or an expletive pronoun, such as *it* or *there* or expletive *pro* (e.g. in languages with "low" subjects). The latter option highlights the special character of SpecIP because SpecIP was the only A(rgument)-position that could be filled by an expletive, i.e. a non-argument. What remained unchanged, however, is the fact that there was exactly one subject position (as the name "canonical subject position" suggests) which was attributed all the features characteristic of subjecthood – the external theta-role was assigned to SpecIP (if assigned at all), the scopal properties were explained by the fact that the subject position c-commands the complement position of V and above all, the specifier-head relation between SpecIP and I accounted for Nominative Case assignment and subject-verb agreement.

In the late 1980s, the *deconstruction* of the subject position (McCloskey 1997) began and "this clustering of functions [was] broken up and each one associated with a distinct canonical position" (McCloskey 1997, p. 203). This deconstruction had a large impact on the EPP because the EPP originally stated that clauses must have subjects and implied that it is one specific position, SpecIP, that obligatorily has to be filled. If instead of one subject position we now have two, three or more subject positions what does the EPP require then? Is it enough for a clause to have a subject somewhere? If the EPP rather means that there is a "canonical subject position" which position is it? Or in other words – which specifier position has to be obligatorily filled? Is there just one such position or are there several of them?

The first step in this deconstruction was the postulation that subjects are base-generated in a position lower than SpecIP, to be more precise, in a position internal to VP, e.g. SpecVP (the VP-internal subject hypothesis; see among others Kuroda 1988, Koopman & Sportiche 1988, Sportiche 1988). According to this analysis, SpecVP is the thematic subject position, i.e. the position in which the subject receives its theta-role. The subject then moves

⁵ "I will henceforth refer to the Projection Principle along with the requirement that clauses have subjects as the *Extended Projection Principle.*" (Chomsky 1982, p. 10)

⁶ It has been debated whether clausal subjects and PPs that behave like subjects occupy SpecIP or some other position. I will not go into this discussion here. In ch. III, 2.6.4., however, I will touch on Locative Inversion in English. Furthermore, the discussion of the various types of sentence-initial XPs and their position in German (ch. II, 3.1.) also relates to this question.

22

up to SpecIP for reasons of Case (Nominative Case is assigned to SpecIP by finite I) and agreement and to satisfy the EPP. One of the arguments in favour of this analysis is the observation that floating quantifiers that are base-generated as part of the subject DP can be stranded in the lower subject position (Sportiche 1988).

- (3) a. All the children like chocolate.
 - b. The children all like chocolate.
 - c. $[IP[The children]_i I [VPall t_i like chocolate]]$

There are, however, cases in which the subject stays in its base-position and in which the SpecIP position therefore has to be filled either with an overt expletive or with expletive *pro* (see among others Cardinaletti 1990, Vikner 1995). According to Diesing (1992), in German embedded clauses for example, a subject that has an existential reading stays in SpecVP (4a = Diesing's (32a)), while a subject that has a generic reading moves to SpecIP (4b = Diesing's (32b)). This distribution becomes obvious if we take the particles to mark the left edge of VP.

(4) a. ... weil ja doch Linguisten Kammermusik spielen. (German)
... since PRT PRT linguists chamber music play
"... since there are linguists playing chamber music."
b. ... weil Linguisten ja doch Kammermusik spielen.
... since linguists PRT PRT chamber music play
"... since (in general) linguists play chamber music."

Just as the different properties of subjects have been attributed to different positions, it has been argued that the features united under the I-head, Tense and Agreement, should each project their own phrases, TP and AgrP (Pollock 1989, Belletti 1990)⁷. This Split-Infl hypothesis leads to the situation that instead of one single specifier we have two specifier positions, namely SpecTP and SpecAgrP, and we have to ask whether the EPP has been split as well, i.e. whether both SpecTP and SpecAgrP have to be filled and whether we have to have two canonical subject positions. Here the assumptions diverge. While Pollock (op. cit.) assumes that "subjects might be generated as specifiers of AgrP, later moved to the specifier

⁷ Pollock (1989) assumes that TP dominates AgrP while Belletti (1990) shows that the morphological facts of the Romance languages in combination with Baker's (1985) *Mirror Principle* argue for the opposite hierarchy where AgrP dominates TP. The latter order is the one generally adopted now, provided one adopts AgrP at all.

23

of Tense position by Move α " (Pollock 1989, p. 384), Belletti (op. cit.) obviously takes subjects to move directly from the VP-internal position to SpecAgrP because SpecTP is never mentioned in the derivations and left empty in the tree diagrams. As Pollock suggests that the specifier of one of the two functional projections might be the base position (the thematic position?) of the subject all the properties attributed to SpecIP are basically inherited by SpecTP, including the EPP. Belletti (op. cit.) in a similar way attributes the properties originally associated with SpecIP to SpecAgrP (given the name it is not surprising that agreement is licensed in the spec-head relation between SpecAgrP and Agr) and implies that SpecAgrP is the new canonical subject position. In view of the fact that Belletti assumes the subject to be base-generated VP-internally, it is, however, questionable how the subject can move directly to SpecAgrP (i.e. skipping SpecTP) without violating any locality requirements.

In Chomsky (1995), Chomsky suggests several answers to the problems raised by the Split-Infl hypothesis. As a kind of compromise between the conflicting, yet well-founded orders of AgrP and TP advocated by Pollock and Belletti, Chomsky (op. cit., ch. 1) says that in fact both might be right and that there are probably two AgrPs, one associated with subject agreement and Case (AgrSP) and one associated with object agreement and Case (AgrOP). In view of this distribution, AgrSP is likely to be fairly high in the structure, i.e. to precede TP, while AgrOP probably follows TP.

With respect to the EPP and the specifiers of the three functional categories things are unfortunately less clear. As far as AgrOP is concerned the structure is fine; the phrase projected by AgrS, however, often does not conform to X'-theory and to endocentricity in particular because AgrS is the head of IP (Chomsky 1995, chs 1 and 2). On the other hand, I/SpecIP/IP obviously does not always correspond to AgrS/SpecAgrSP/AgrSP but sometimes to T/SpecTP/TP or to the old, unsplit I/SpecIP/IP. This confusion and the constant modification of the analysis make it particularly hard to trace the development of the EPP in Chomsky's work. First, it seems as though AgrS and T in the end form one (complex) head again so that the EPP simply applies to SpecAgrSP.

We therefore assume that T raises to Agr_S , forming (3a), and V raises to Agr_O , forming (3b); the complex includes the ϕ -features of Agr and the Case feature provided by T, V.

$$\begin{array}{ccc} \text{(3)} & \text{ a. } & \left[_{\text{Agr}} \text{ T Agr}\right] \\ \text{ b. } & \left[_{\text{Agr}} \text{ V Agr}\right] \end{array}$$

⁸ "... the traditional S/IP is viewed as an AGRP with AGR taking a TP complement, in the sense of the X'-theory, and where the subject NP fills the position of Specifier of AGR." (Belletti 1990, p. 28)

(Chomsky 1995, ch. 3, p. 174)

The crucial and far more interesting option is only mentioned in the ensuing footnote where Chomsky considers "the possibility of NP-raising to [Spec, T] for Case assignment, then to [Spec, Agrs] for agreement" to be "a real option". In this case, both specifier positions should obligatorily be filled by the subject NP at some stage of the derivation. It is, however, not clear whether movement of the subject through SpecTP to SpecAgrSP is due to the EPP or whether it is triggered by the need to check Case and phi-features, respectively. When Chomsky (op. cit., ch. 3, p. 199) explicitly discusses the EPP he speculates that the EPP might reduce "to a morphological property of T: strong or weak NP-features" where a strong NPfeature means that SpecTP has to be filled prior to Spell-Out. 10 As he also speaks of strong and weak NP-features with respect to AgrSP and AgrOP, one has to conclude that the EPP holds for these categories as well. 11 In addition, Chomsky assumes that AgrSP and AgrOP are just two instantiations of the same element, so that whenever AgrS is associated with a strong NP-feature, AgrO must have one as well. The fact that AgrO can carry a strong NP-feature, and therefore be associated with the EPP, breaks the correlation between the EPP and the subject position(s). The EPP can no longer be seen as a requirement that clauses must have subjects, nor can it mean that the specifier that has to be filled is a subject position. Instead the EPP is generalised as a requirement that the phrase associated with it have a filled specifier and what is more, the EPP itself has turned into a feature. Being a feature it has to be checked during the derivation and is no longer a principle that syntactic representations are subject to. This interpretation of the EPP as a generalisable feature really marks the transition from a representational theory to a derivational one and from Government & Binding Theory to Minimalism.

Later, Chomsky (op. cit., ch. 4) refines this idea and says that the EPP probably corresponds to a D-feature on I. Then he first discusses the question raised above of whether it is actually the EPP/the D-feature that triggers movement of the DP¹² or rather the Case

⁹ In the following, Chomsky seems to tacitly assume that this is the correct derivation because when analysing TECs he makes use of two distinct subject positions – SpecAgrSP for the expletive and SpecTP for the subject.

¹⁰ In the text it actually says that "NP must raise to [Spec, [Agr T]]" (Chomsky op.cit., p. 199) and I wonder whether there is a typo in the description of the specifier or what the complex head is supposed to look like and how it is derived.

¹¹ To be more precise, the original EPP seems to correspond to a **strong** NP-feature because only a strong NP-feature makes sure that the respective specifier is filled prior to Spell-Out. If a head is associated with a weak feature, this feature will be checked only at LF and it will be checked by feature movement, not by pied-piping the whole NP to the spec position.

¹² In this historical overview I use NP or DP depending on which term is used in the work discussed; where I present my own research I will use the term DP – however, without making any assumptions about the internal structure of DPs.

feature, the respective other feature always being checked as a free rider. He comes to the conclusion that the D-feature must be the trigger because a DP moving successive cyclically can check several D-features but is frozen in place once Case is checked. It is only in chapter 4.10 that Chomsky (op. cit.) devotes some more time to the different functional categories that make up IP and to the question of the EPP. He points out that most constructions that have a subject and an object only realise two out of the three potential specifier positions of the Split-IP and that TECs (as analysed e.g. by Bobaljik & Jonas 1996) constitute the rare example of a construction that makes use of all three specifier positions with the expletive occupying SpecAgrSP, the (indefinite) subject SpecTP and the (object-shifted) object SpecAgrOP as in (5).

(5) [AgrSPþað lesa [TPmargir stúdentar [AgrOPbækur Chomskys (ekki)]]] (Icelandic)

Expl read many students books Chomsky's not

"Many students (do not) read Chomsky's books."

Having a closer look at this construction, Chomsky suggests that AgrS, since it hosts the expletive in its specifier, is associated with a D-feature while T is "only" associated with an N-feature, an assumption that would explain the Definiteness Effect (DE) with respect to the subject. In view of the parallelism between AgrSP and AgrOP, AgrO should carry a D-feature as well. This prediction is supported by the fact that definite objects seem to undergo Object Shift more readily than indefinite ones. If this analysis is correct, the EPP corresponds to either a D- or an N-feature depending on which category of the Split-IP you consider. In addition, if English is taken to have a strong "X-feature" only on T (cf. Chomsky op.cit., ch. 3, p. 199), one has to allow for category-internal variation between D- and N-features as well. Otherwise one would predict that English can only ever have indefinite subjects.

Chomsky very quickly rejects the above analysis of TECs so we do not have to dwell on it any longer. Based on the argument that (i) the AgrPs do not have any features of their own because both Case and phi-features are actually features of V and T, respectively and (ii) the AgrPs are only needed as landing sites, he (op. cit., ch. 4.10) suggests that AgrSP and AgrOP can be done away with and replaced with multiple specifiers of TP and VP. This modification implies that the "double EPP" configuration (Chomsky, op. cit., ch. 4.10, p. 350) does not refer to two categories, AgrS and T, each associated with the EPP but to a single category, namely T, that is subject to the EPP twice. This conception of the EPP as a

generalised specifier-creating feature is further developed in Chomsky (1998) where Chomsky resorts to calling this feature simply an EPP-feature. When speaking of specifiers, he says: "For T, the property is the Extended Projection Principle (EPP). By analogy, we can call the corresponding properties of C and \underline{v}^{14} EPP-features, determining positions not forced by the Projection Principle." (Chomsky 1998, p. 15) It is, however, worth noting that not all EPP-features are the same and that there is a residue of the old Extended Projection Principle in the EPP-feature on T because, according to Chomsky, the EPP-feature on T seems to be universal whereas other EPP-features are optional and subject to parametric variation.

The new aspect about the EPP here is that the EPP-feature is basically a pure movement feature. In the system developed in Chomsky (1998) checking does not require a spec-head relation, let alone a relation of government between the elements that enter into a checking relation. Instead, checking takes place between a probe and a goal which can stay in their respective base-positions and checking is established via the operation of Agree. In addition, it is now assumed that a syntactic derivation proceeds in several subderivations, the so-called phases – phases being CP and vP but not TP. Once a phase is completed, only elements at the edge (i.e. the highest specifier(s) and the highest head) of this phase are accessible to operations from outside. Hence the task of the EPP-feature is two-fold. First, we need an EPP-feature whenever a DP obviously gets pied-piped because we can no longer argue that a DP moves to establish a checking relation. Second, an EPP-feature is needed whenever a category has to get to the edge of a phase to be accessible for operations from outside. The latter case is reminiscent of and in some cases identical to successive cyclic movement as found, e.g. in Wh-movement.

In "Derivation by Phase", Chomsky (1999) refines the idea of phases and explicitly links it to the presence/absence of an EPP-feature. This correlation highlights the concept of the EPP as a movement feature that makes sure that phrases needed for later operations are shuffled to the edge of a phase before this phase is completed and the phrase stuck in a position where it cannot be reached anymore. However, Chomsky (op. cit.) formulates the mechanism in such a way that we are left with a host of questions.

¹³ In chapter III, 2.3.1. I will show that this analysis does not hold for German TECs. See also Vangsnes (2002) for a criticism of Chomsky's analysis.

 $[\]frac{14}{v}$ (just as v*) stands for transitive little v in Chomsky's papers. I will usually simply use v(P) for reasons that I will give later (ch. II, 3.3.).

¹⁵ Once a phase is spelt out, only elements at the edge are still accessible to operations. As a consequence, elements with unchecked features which have not been moved to the edge before Spell-Out will make a derivation crash.

Suppose, then, we take CP and vP [sic] to be phases. Nonetheless, there remains an important distinction between CP/v*P phases and others; call the former strong phases and the latter weak. The strong phases are potential targets for movement; C and v* may have an EPP-feature, which provides a position for XP-movement [...] (Chomsky 1999, p. 9)

As the EPP is the point of interest here, I leave aside the problems having to do with the definition of the various types of phases and focus on a vagueness which is very misleading. As it stands, the most readily available interpretation of the above lines is that only C and v* may ever have an EPP-feature. This interpretation, however, would be almost revolutionary because it implies that T, the prototypical host of an EPP-feature, being a weak phase (or a non-phase) cannot carry an EPP-feature anymore. Since it is fairly unlikely that this is what Chomsky has in mind, the citation has probably to be understood as follows. C and v* may have an EPP-feature while T must have one. The latter interpretation is supported by Chomsky's rather unmotivated condition that "in transitive constructions, something must escape the vP" (Chomsky 1999, p. 16). If something has to move out of the v*P there must be a trigger for this movement and also some landing site outside v*P. It is reasonable to assume that there is a standard landing site which is determined by some feature and if we now assume that this standard landing site is SpecTP this condition amounts to the old EPP. Even though it may remain a bit of a riddle where the EPP-feature can actually show up, one thing is clear: the EPP-feature is a movement feature and has nothing to do with Caseassignment or with checking of phi-features since Case-assignment is seen as a reflex of the operation Agree which allows for phi-features to be checked at a distance.

With respect to the EPP, Chomsky (2001) sticks to the ideas introduced in "Derivation by Phase" except for the fact that he renames the EPP-feature OCC, standing for "occurrence". This means that currently in Chomsky's system there is one head, namely T, that is obligatorily associated with an EPP-feature, while optional targets of movement, namely SpecCP and the outer Specv*P, are the result of C and v* optionally carrying an EPP-feature. As Case checking and phi-feature checking have been dissociated from movement, an EPP-feature is introduced whenever movement is required – be it for successive cyclic movement or for bringing an XP to the edge of a phase. This phase-based approach to the EPP, however, is also a step back as it reintroduces a representational view of the EPP. By triggering movement of an XP to an (outer) specifier position the EPP-feature makes sure that the representation, i.e. the phase, that is handed over to Spell-Out is well-formed and does not contain any material that is needed for later operations.

One aspect not touched upon so far is the fact that Chomsky (1999), although denying that semantic features trigger movement¹⁷, allows for interpretational requirements to be interwoven with syntactic derivation. He says that XPs may have different interpretations, "INT or its complement INT", depending on where they show up. Under INT, semantic "features" such as new information, specificity/definiteness and focus are subsumed and when discussing Object Shift Chomsky (op. cit.) stipulates that "the EPP position of v*P is assigned INT" (Chomsky 1999, p. 27) whereas XPs in their base-position are assigned INT'. Two things are important here. First, an EPP-feature is not only a feature triggering movement but can also serve as a semantic feature, or to be more precise as a feature that triggers an operation that has a semantic effect. 18 Second, probably in an attempt to avoid calling INT a semantic feature Chomsky says that INT is "assigned" when an XP in the outer Specv*P is interpreted as specific, focussed, etc. On the other hand, if Chomsky did allow for semantic features such as topic, focus, specificity, etc. another puzzling remark of his would not be puzzling anymore. In footnote 6, Chomsky (op. cit.) points out that "[f]or expository reasons, we [...] use T and C as cover terms for a richer array of functional categories". The AgrPs being dispensed with and semantic features such as topic, focus, specificity, etc. being banned from narrow syntax, it is hard to imagine which might be the functional categories Chomsky has in mind. If the above-mentioned semantic features were allowed in the system, CP, for example, could easily be understood as a cover term for TopP, FocP, etc. The existence of such phrases (and many more) has in fact been proposed by a number of linguists who have followed a different path than Chomsky after Pollock (1989) and Belletti (1990) proposed that IP should be split. This approach, which continues the deconstruction of the subject position, will be presented in the remainder of this chapter.

1.2. From deconstruction to cartography – subject positions and their features

Kiss (1996) directly builds on Diesing's (1992) observations that there are obviously two subject positions that are associated with different interpretations as in (4) repeated here as (6).

... weil ja doch Linguisten Kammermusik spielen. (German) (6) a.

For a motivation see Alexiadou & Anagnostopoulou (2001).
 An XP should be interpreted as focussed, topicalised, specific, etc. only as a result of checking some formal feature, i.e. as a by-product of a narrow syntactic operation.

¹⁸ "Optional operations can apply only if they have an effect on outcome: in the present case, v* may be assigned an EPP-feature to permit successive cyclic A'-movement or INT (under OS)." (Chomsky 1999, p. 28)

```
... since PRT PRT linguists chamber music play
"... since there are linguists playing chamber music."
b. ... weil Linguisten ja doch Kammermusik spielen.
... since linguists PRT PRT chamber music play
"... since (in general) linguists play chamber music."
```

Kiss, however, modifies Diesing's account in two important respects. First of all, she questions Diesing's assumption that the lower subject position corresponds to SpecVP because in SVO languages the subject of a clause containing an auxiliary clearly occupies SpecIP, whereas the VP-internal position of the subject in (S)OV languages and the corresponding [IP [VPSubj Obj V] AUX] order is simply stipulated and questionable if one strives for universality across the languages. Second, she points out that the difference in interpretation that correlates with the different positions can more appropriately be described in terms of specificity, with an NP in the higher subject position having a [+ specific] reading while an NP in the lower subject position is interpreted as [- specific]. In addition, describing the NPs as [± specific] does not contradict Diesing's observations because [+ specific] includes genericity and [- specific] the existential reading.

Kiss shows that the subjects of verbs like *kennen/know* and *geboren werden/be born* pattern exactly alike in German and English in so far that, e.g., bare plural subjects of verbs of the "know"-type have a generic reading and tend to be unstressed, whereas those of verbs of the "be born"-type have an existential interpretation and are stressed. In view of this parallelism, she assumes that both languages display two subject positions (apart from SpecVP), that these are the same positions in the two languages and that both positions are VP-external (due to the fact that in English even the lower subject can be shown to be VP-external). Following Stowell & Beghelli (1994), Kiss calls the higher phrase, the one which hosts specific subjects, RefP (Referential Phrase) and assumes that this phrase is projected between CP and IP. The lower subject position is simply SpecIP. ¹⁹

(i) a. ??Boys luckily were born. (Kiss' 1996 (16b)) b. Luckily boys were born. (Kiss' 1996 (16c))

The same holds for German.

-

¹⁹ Kiss shows that also the facts as regards placement of adverbials (remember that Diesing (1992) used the position of particles/adverbs as an indicator of the existential subject occupying a VP-internal position) is perfectly well compatible with her analysis. She equates IP with the predicate phrase PredP. Hence sentential adverbs, i.e. adverbs that have scope over the whole sentence, must be external to IP; a prediction that is borne out.

Having two subject positions above VP we are faced with the by now familiar question of how the EPP is dealt with in such a system. Although Kiss does not directly address this question in her paper, the situation is clear. When presenting evidence for her analysis, Kiss discusses constructions featuring a floating quantifier.

The children all will leave. (7)

With respect to these examples she says that the quantifier obviously occupies SpecIP and the subject SpecRefP. If we now adhere to the assumption that the quantifier is left behind when the subject moves on, Kiss' explanation implies that specific subjects move through SpecIP to SpecRefP. Non-specific subjects move to SpecIP anyway as this is their surface position. Provided these conclusions are right, SpecIP can be called the canonical subject position in Kiss' system and can therefore be associated with the (traditional) EPP. SpecRefP, on the other hand, is an optional subject position, targeted only by specific NPs. Hence (Spec)Ref(P) cannot be associated with the traditional EPP but very well with the EPP-feature that triggers optional movement as proposed in Chomsky (1999). However, we do not have to assume the presence of any EPP-feature on Ref because Kiss suggests that Ref carries the feature [+specific] and has to agree with a [+specific] NP in its specifier. Therefore movement to SpecRefP is triggered by the need to check a semantic feature.

With respect to the idea that each property related to subjecthood is encoded in a special position it is important to note that Kiss takes SpecRefP to be the position that realises the semantic function "subject-of-predication". As a consequence, she claims that RefP is only projected in categorical judgements, whereas thetic judgements, which do not feature a subject of predication, are only IPs. The question of the (non-)realisation of the subject of predication in thetic judgements will play a crucial role in part III of this thesis. Independent of whether Kiss' analysis of categorical vs thetic judgements is correct or not it is important to note that she assumes that a semantic projection like RefP can be completely absent from the structure if it is not needed and is not just inert in such a case.

Bobaljik & Jonas (1996) (henceforth B&J) argue for a structure that is similar to Kiss' (1996) in as far as they assume two subject positions above VP and that subjects which

"...that luckily boys are born."

⁽ii) *...daß Jungen glücklicherweise geboren werden. (German) a. ...that boys luckily born are

b. ...daß glücklicherweise Jungen geboren werden. ...that luckily boys born

Diesing (1992) analysed as VP-internal actually occupy SpecTP. Their structure, which is based on an account of TECs and object shift constructions in the Germanic languages, is, however, much more in line with Chomsky's (1995) system as B&J (op. cit.) do not resort to any semantic features but stick to strong and weak formal features, use the "traditional" Split-IP with the agreement projections AgrSP and AgrOP and heavily rely on the notion of equidistance. B&J's analysis crucially hinges on the question of whether a language licenses SpecTP, a question which is closely interrelated with the notions of Shortest Move and, again, equidistance, with verb movement and, above all, Object Shift (OS). 20, 21 Due to technical constraints, they argue, OS, i.e. movement of the object NP to SpecAgrOP, and TECs are only possible if a language has overt verb movement and thereby licenses SpecTP as a subject position. As the availability of SpecTP as a subject position is parametrised in this system, it is particularly interesting how B&J phrase the EPP. Just like Chomsky (1995, ch. 3), they assume that the EPP "can be reduced to strong N-features of T" (B&J, op.cit., p. 223) and this raises the question of how these strong N-features get checked. If a language licenses SpecTP, the subject NP has to move to SpecTP to check the strong N-features on T. German and Icelandic, for example, are languages that instantiate this option. If a language does not license SpecTP, T will "overtly" head-move to AgrS and the subject NP will move directly to SpecAgrSP and check the strong N-features on T in a Spec-head relation with the complex T-AgrS head. B&J argue that this is what happens in English.²²

B&J (op. cit.) show that in the languages that license SpecTP there is actually evidence for two subject positions above VP and they do so using Diesing's (1992) very examples, like (4) repeated here as (8).

(8) a. ... weil ja doch Linguisten Kammermusik spielen. (German)

... since PRT PRT linguists chamber music play

"... since there are linguists playing chamber music."

²⁰ B&J (op. cit.) created a powerful system which has a large empirical coverage. Unfortunately, their analysis heavily relies on equidistance, a mechanism that is very complicated and has long been dispensed with. That's why I try to describe their system without going too much into technical details.

²¹ Koster & Zwart (2000) further develop this idea that the availability of SpecTP as a subject position is correlated with the possibility for a language to have OS and TECs. They do so, however, without having recourse to equidistance. For a discussion of their approach see chapter III, 1.4.

²² To be more precise, languages that license SpecTP offer the following two options.

⁽i) Either the subject NP moves **through** SpecTP to SpecAgrSP

⁽ii) or the subject NP moves to SpecTP and SpecAgrSP is filled by an expletive. The latter option results in a TEC (if the sentence features a transitive verb).

Languages that do not license SpecTP also allow for two options.

⁽i) Either the subject NP directly moves to SpecAgrSP as described in the text

⁽ii) or the subject stays VP-internal and SpecAgrSP is filled by an expletive. According to B&J existential and unaccusative *there*-constructions instantiate this pattern.

```
b. ... weil Linguisten ja doch Kammermusik spielen.
... since linguists PRT PRT chamber music play
"... since (in general) linguists play chamber music."
```

32

They argue that the particles that Diesing analysed as marking the left edge of VP in fact occupy a position between AgrS and SpecTP. On the other hand, certain manner adverbs like *sorgfältig* 'carefully' that are more likely to be VP-adjoined have to follow the existential NP and therefore suggest that it has moved out of VP to SpecTP (9).

```
(9) ... weil ja doch Linguisten sorgfältig Kammermusik spielen. (German)
... since PRT PRT linguists carefully chamber music play
"... since there are linguists carefully playing chamber music."
```

Thus they conclude that definite and generic subjects go into SpecAgrSP while indefinite and existential subjects occupy SpecTP. This differentiation, however, is not possible in languages like English which do not license SpecTP as a subject position and therefore have only one subject position in the Split-IP at their disposal – clearly a disadvantage of B&J's approach. Even though both Kiss (1996) and B&J (1996) argue that there are two subject positions in the Split-IP, namely SpecRefP/SpecAgrSP and SpecTP, and that one of these positions might not always be realised, the two approaches vary considerably. Whereas Kiss (op. cit.) takes TP and SpecTP to be universal and the presence of (Spec)RefP to be dependent on the need to check a [+specific]-feature, B&J (op. cit.) assume that TP – but not SpecTP – and AgrSP are obligatorily present. The latter approach meets with several problems and is therefore inferior to Kiss'. First, as seen above the subject positions cannot universally be correlated with semantic properties such as specificity, (in)definiteness, etc. and second, the conception of the EPP is fairly suspicious. In view of the fact that in any approach discussed so far the EPP was understood as a device bearing on the specifier of the head (usually I/T) associated with the EPP (either requiring that it be filled or created), it is surprising that SpecTP of all specifiers must not be projected in languages like English, which do not have overt verb movement, and that nevertheless T is taken to carry strong N-features (in other words an EPP-feature) which can be transferred to AgrSP.²³ In addition, in the abstract to their paper B&J (op. cit.) claim

²³ These problems directly result from the fact that B&J (op. cit.) assume features to come in two values, strong and weak, and AgrSP and AgrOP to be two instantiations of a single AgrP and hence to have identical feature value. As English does not have overt verb movement, it does not license SpecTP and hence does not allow for OS. Not allowing OS is to be equated with AgrO having weak N-features. If AgrO has weak N-features, AgrS has to have weak N-features as well and therefore cannot trigger movement of the subject NP to SpecAgrSP.

that "transitive subjects may never remain internal to the VP at S-Structure in languages for which the Extended Projection Principle holds". This formulation implies that the EPP does not hold universally. All in all we are left with the awkward situation that, if at all, it is T which is associated with the EPP but that in fact SpecAgrSP seems to be the specifier that has to be obligatorily filled (i.e. is the canonical subject position) because all subjects have to occupy this position at LF at the latest.²⁴

The claim that in transitive constructions the subject has to move out of VP at S-structure is reminiscent of Chomsky's (1999) statement that "in transitive constructions, something must escape the $\underline{v}P$ " but while Chomsky simply requires **something** to leave VP (or vP in current terminology), B&J's system forces the **subject** to leave VP²⁵ – a fact which comes very close to the original EPP that singled out the subject of a sentence. Again, it is theory-internal constraints that lead B&J to phrasing the condition more strictly than Chomsky. However, as Alexiadou & Anagnostopoulou (2001) have extensively shown, the subject of transitive constructions can very well stay VP-internal as long as it is the only argument with an unchecked Case feature in VP. Hence B&J's theory seems to be too restrictive.

Despite the shortcomings of B&J's approach we now have good evidence – both formal, thanks to B&J, and semantic, thanks to Kiss (1996) – that there are at least three subject positions: the thematic subject position SpecVP (floating quantifiers can render this position "visible") and two subject positions in the functional domain of what used to be IP. Opinions, however, diverge as to which of the two functional subject positions is obligatory.

Cardinaletti (2002) applies the cartographic approach, i.e. the idea that functional categories are specified by a particular feature each (as developed among others by Belletti (2001a), Cinque (1999) and Rizzi (2002)), to subject positions. Therefore she argues that there are many more subject positions than has previously been assumed and that these subject positions are differentiated according to formal features (and semantic ones which

SpecTP, on the other hand is not licensed (due to lack of verb movement) despite T being associated with strong N-features (due to the EPP) that have to somehow get checked because otherwise the derivation crashes. Therefore movement of T to AgrS and indirect checking of the strong N-features via the subject NP that has moved to SpecAgrSP is the only way to save the derivation.

²⁴ It is not clear how B&J analyse sentences like (8a) in the text – whether they assume SpecAgrSP to be empty at S-structure or filled by an empty expletive.

²⁵ "As a first approximation, the nonlicensing of [Spec,TP] at LF would appear to force at least one argument to raise in the overt syntax. In fact, the consequence is even stronger. That [Spec, TP] is not available as an intermediate A-position at LF forces all transitive subjects to raise at S-Structure, regardless of whether or not the object raises overtly." (B&J 1996, p. 226)

34

derive from the formal features). Cardinaletti aims at decomposing "the subject position" so that each property associated with a "subject" is correlated with a particular position.

In one respect, however, Cardinaletti (op. cit.) restricts the range of subject positions. She clearly rejects analyses which claim that there is a subject position in the C-domain, such as SpecTopP or SpecFinP, and thus confines possible subject positions to the lexical domain of VP and to the functional domain of Split-IP. Cardinaletti does use the distinction between VP and Split-IP but her main partition is that into postverbal and preverbal subject positions and this partition renders her analysis extremely problematic. First of all, she never explicitly states whether 'post-/preverbal' refers to the position of the finite verb or of the lexical verb. With respect to the example in (10) (her (4)) she claims that the subject occupies SpecVP and says that "the linearly postverbal position of the subject is due to verb movement" and that "object movement across the subject must also be assumed" (Cardinaletti 2002, p. 5).

b. *There bought the newspaper John.

Considering the example, one has to conclude that verb movement – contrary to what is usually meant by verb movement – means movement of the participle here (in addition to movement of the auxiliary, of course), so that 'post-/preverbal' obviously always refers to the position of the lexical verb. This position, however, differs depending on whether the lexical verb is finite or non-finite and the examples in (11) (her (6)) cannot really be compared²⁶, even if we do not consider the possibility that different languages may vary as to the landing site of both verb- and participle movement.

(11) a. Ayer ganó Juan la lotería. (Spanish)
 yesterday won Juan the lottery
 b. *Ha letto Gianni il giornale. (Italian)

has read Gianni the newspaper

-

²⁶ The same objection applies to comparing the English example (10b) with the Italian one (10a). Although exchanging the simple tense for a compound tense in the English example does not have any effect on the grammaticality of the sentence, there are languages where it does matter whether we have a simple or a compound tense, e.g. in Icelandic where a simple tense triggers Object Shift.

If it is really the position of the participle that matters we are faced with the problem of determining the landing site of participle movement. In (10a) the participle can hardly be in AgrO because we also need a position for the moved object between the moved participle and SpecVP, the alleged position of the subject. If we assume that there is an AgrOP (plausible in view of the fact that Cardinaletti (op. cit.) uses AgrSP), the postulation of an outer SpecVP would be an undesirable move. Hence the participle should show up in some unspecified position higher than AgrO (perhaps in an AspP) leaving SpecAgrOP as a landing site for object movement. On the other hand, when discussing data from Spanish, Icelandic and Hebrew Cardinaletti admits that the scope of verb movement may vary and in addition, she seems to consider subjects that show up between the finite auxiliary and the participle to be postverbal subjects too. So perhaps, it is the finite verb that counts after all and our discussion has been in vain.²⁷

No matter how the postverbal domain is actually defined, Cardinaletti (op.cit.) comes up with three postverbal subject positions. One of these – the lowest – she identifies as SpecVP, the thematic subject position, and shows that only full DPs and strong pronouns can occupy this position. The other two subject positions, she claims, are found in the "middlefield" but as she only takes a cursory glance at postverbal subject positions and observes a lot of language variation with respect to these positions she does not commit herself to an exact location of these postverbal middlefield subject positions. She only points out that the lower (recursive!) position, just like SpecVP, seems to host full DPs and strong pronouns and in addition, predicative DPs, while the higher one hosts weak pronouns.

Cardinaletti (op. cit.) tentatively suggests that one of the postverbal middlefield subject positions is responsible for Nominative Case checking. This property is usually attributed to SpecTP. If we now assume that one of the postverbal middlefield subject

²⁷ Anna Cardinaletti (p.c.) says that in general, it is probably better to call the positions "post-/pre-INFL", thus referring to the position of the finite verb. In Italian, according to her, it does not really matter whether we consider the finite verb or the lexical verb as they both move, whereas in German, the "postverbal" subject positions are to be found between the finite verb and the participle which does not move. This view leaves us with several problems again.

⁽i) What does the "post-/pre-INFL" position refer to if INFL does not exist as such in the system? If it simply refers to the position of the finite verb it varies considerably depending on the language we look at.

⁽ii) Even though both finite verbs and participles move in Italian, they do not form a complex that cannot be broken up (see Cardinaletti 2002, (123) where adverbs intervene between the finite verb and the participle). So Italian too requires a more precise definition.

²⁸ I take it to be the case that Cardinaletti (op. cit.) borrows the term from German linguistics because there *Mittelfeld* covers all these vague and not very well understood positions to which DPs can scramble and which are usually assumed to be found somewhere in the Split-IP. The structural location of Cardinaletti's "middlefield" with respect to the finite verb and the participle, however, is completely inadaquate if it is meant to bear any relation to the German *Mittelfeld*.

36

positions is SpecTP, Cardinaletti's proposal mirrors Alexiadou & Anagostopoulou's (1998)²⁹ more theoretical approach to the identification of subject positions. A&A (op. cit.) argue that in languages that have verb movement to AgrS, among them the null subject languages Italian and Spanish which Cardinaletti focusses on, either SpecVP or SpecTP can serve as subject position, depending on whether the language in question licenses SpecTP. This difference in licensing might actually be an answer to the massive language variation observed by Cardinaletti and which makes her leave the postverbal domain for further research.

As regards the preverbal domain, Cardinaletti (op. cit.) clearly identifies two subject positions. She assumes that the lower of these positions is SpecAgrSP. Grammatical subjects have to move to or through SpecAgrSP and – as the name suggests – DPs check their phifeatures here and last but not least, subject-verb agreement is determined in the spec-head relation between SpecAgrSP and AgrS, which hosts the raised finite verb. Nominative Casechecking, however, remains a bit mysterious. On the one hand, Cardinaletti entertains the idea that Nominative Case is checked in one of the postverbal subject positions (see above), on the other hand, she says that "AgrSP is the projection where φ -features are checked on nominative DPs; this results in nominative case on the subject DP and verb agreement with the subject DP" (Cardinaletti, op. cit., p. 10).

The higher preverbal subject position which Cardinaletti calls SpecSubjP is associated with the notion of "subject of predication" and with the corresponding feature. This property allows for the position to be targeted by phrases such as Dative experiencers (DPs or PPs) or locatives that are not Nominative DPs but that display some characteristics typically associated with subjecthood. In addition, the two subject positions are differentiated with respect to the type of subjects they can host. While "weak subjects", which comprise weak pronouns and *pro*, and non-referential subjects typically show up in SpecAgrSP, strong subjects (full DPs, strong pronouns but optionally also weak pronouns) and referential subjects (which can also be found in SpecAgrSP) occupy SpecSubjP. This distribution is strongly reminiscent of Kiss' (1996) classification and it is easy to think of SpecSubjP as corresponding to Kiss' SpecRefP and SpecAgrSP to SpecIP.

Although the existence of these two subject positions is convincingly argued for and also supported by other analyses, even this fairly uncontroversial observation suffers from the fact that it hinges on verb movement whose landing site is anything but clear. This problem becomes obvious when Cardinaletti (op. cit.) discusses the position of subjects relative to adverbs of the Cinque (1999) hierarchy. She shows that SpecSubjP-subjects can immediately

²⁹ For a discussion of Alexiadou & Anagnostopoulou (1998) see chapter II, 1.3.

precede any of the adverbs above *già* and also shows that the position of the finite verb varies a lot as it is always possible to have at least one adverb between the subject and the finite verb. Therefore it is not only difficult to locate SubjP but it is also problematic to speak of preverbal and postverbal positions even when referring to only one language. Faced with the question of where SubjP sits, Cardinaletti suggests two possible answers. Either SubjP is a kind of "floating phrase" that can freely be generated above any of the projections that host adverbs or SubjP is recursive and we have a SubjP on top of each adverb-related XP –neither option seems particularly attractive, especially in view of the fact that the same problem arises with respect to SpecAgrSP-subjects and the same set of adverbs of the Cinque hierarchy. If both strong subjects (*Gianni*) and weak subjects (*tu*) can precede, say, *francamente* (12) it looks as though the two subject positions were not only recursive but could be collapsed at some point.

- (12) a. Gianni francamente si era formato una pessima opinione di voi.

 Gianni frankly Refl was formed a very bad opinion of you

 (Italian)
 - b. Crede che tu francamente abbia esagerato.

 thinks-he that you frankly have exaggerated

 (Italian; Cardinaletti's 2002, (128p))

Talking about the possibility of collapsing subject positions, one might wonder whether it would be implausible to say that the highest postverbal middlefield subject position and SpecAgrSP are actually one and the same position and that it only depends on the length of verb movement whether this position turns out to be postverbal or preverbal. A point in favour of this assumption would be that both positions host weak pronouns. Of course, Cardinaletti (op. cit.) associates SpecAgrSP but not the highest postverbal middlefield subject position with *pro*, but this fact is not an argument against collapsing the two positions. If we take *pro* to show up in the specifier of a head whose EPP-feature has been checked by verb raising (to phrase it along the lines of Alexiadou & Anagnostopoulou 1998), it is obvious that *pro* can only ever occur preverbally. Should this idea be correct (and forgetting about potential recursiveness) we would end up with a much simpler system which is not so different from the structures proposed in the other papers discussed here – in fact, it seems to be a combination of all these. In short, we would have SpecVP (thematic subject position and potential surface position), SpecTP (potential surface position; Nominative Case checking),

SpecAgrSP (potential subject position; phi-feature checking, subject-verb agreement) and SpecSubjP (potential subject position; checking of the "subject-of-predication"-feature).

As concerns the last position, Cardinaletti (op. cit.) claims that it is not situated in the C-domain but that SubjP is the highest projection in the I-domain. She argues, for example, that preverbal subjects are not necessarily topics as can be seen in out-of-the-blue sentences and answers to the question *What happened?* (13) (Cardinaletti's 2002, (94a)).³⁰

(13) A: Che è successo? (Italian)

what is happened

B: Gianni ha fatto piangere Maria.

Gianni has made cry Maria

However, saying that SpecSubjP is found in the C-domain does not necessarily imply that subjects occupying this position have to be topicalised. If we adopt a Split-CP following Rizzi (1997b), there is a designated position for topics, namely SpecTopP, but also a position that could very well host "neutral" subjects, namely SpecFinP. Second, she takes the position of SpecSubjP relative to speech act adverbs to be evidence in favour of an IP-analysis of SubjP.

[...] the highest SubjP occurs to the left of speech act adverbs (e.g. *francamente*). The speech act projection is taken by Cinque (1999: 84) to be the highest one in the Infl domain. Since IP-edge adverbs and SubjP can precede it [...], SubjP is the highest projection of the Infl domain.

(Cardinaletti 2002, p. 48)

Apart from the fact that the placement of adverbials has proven to constitute a problem for the location of subject positions anyway, the observation that SubjP marks the border³¹ between the C-domain and the I-domain does not tell us whether SubjP is the highest projection in the I-domain or the lowest in the C-domain.

Last but not least, English, French and German examples that feature parentheticals are taken to illustrate the different positions of strong and weak subjects – in the I-domain, of course. However, the German examples (and some of the grammaticality judgements) are

³⁰ I know that this argument is directed against proposals that preverbal subjects in null subject languages are different from preverbal subjects in non-null subject languages (see Cardinaletti 2002, p. 38 and references given there). But showing that preverbal subjects in null subject languages are not necessarily topics is not sufficient evidence that they do not occupy a position in the C-domain.

³¹ Unfortunately, Cardinaletti (2002) does not give an example that features both an IP-edge adverb and a subject in SpecSubjP which would allow us to determine whether SubjP is really an element of the Split-IP or not.

problematic (14) (Cardinaletti's 2002, (82)) and can also, or even better, be explained if they are analysed as activating the C-domain.

- (14) a. Hans/Er (soweit ich weiß) kommt morgen. (German)

 Hans/he as far as I know comes tomorrow
 - b. Es/Er (*soweit ich weiß) kostet zuviel.

 it/ it as far as I know costs too much
 - c. Es (*soweit ich weiß) hat viel geregnet.

 it as far as I know has much rained

According to Cardinaletti, *Hans* and *er* in (14a) show up in SpecSubjP and can therefore be separated from the finite verb in AgrS by the parenthetical. In (14b, c) the subjects, however, occupy SpecAgrSP and make the parenthetical impossible. Cardinaletti's analysis is questionable for two reasons. First of all, contrary to the judgement given in Cardinaletti (op. cit.) (14a) with *er* is only grammatical if *er* receives contrastive focus as in (14').

(14') ER (soweit ich weiß) kommt morgen. SIE schon heute.

HE as far as I know comes tomorrow SHE already today

Second, it is well known that German is a V2 language. This means that the sequence XP V_{fin} can be broken up only in very rare cases. If we now assume that, elaborating on Vikner (1995), in neutral German declarative main clauses XP and the finite verb occupy SpecFinP and Fin, respectively it becomes immediately clear why we cannot have a parenthetical in (14b, c). (14a) with *Hans* and (14'), however, can be analysed as featuring a focussed subject in SpecFocP which allows for a parenthetical to be placed between SpecFocP and Fin.

All in all, it is hard to determine the exact position of SubjP and there are arguments in favour of and against it being a projection of the I-domain. In view of this fact, it might even be reasonable to argue that there are two "SubjPs", one in the Split-CP and one in the Split-IP. This idea is supported by the observation that the papers that deal with subject positions under a more formal aspect (B&J 1996; A&A 1998 and Roberts & Roussou 1998³² – for a discussion of the latter papers see chapter II, 1.3.) come up with AgrSP and TP as projections that can host subjects, while Kiss' (1996) more semantic approach suggests that we have a RefP and IP. As Kiss does not use the Split-IP, it might very well be that her IP is really

_

 $^{^{\}rm 32}$ Roberts & Roussou (1998) has been published as Roberts & Roussou (2002).

composed of TP and AgrSP and therefore provides two subject positions as well. Assuming this to be the case, the non-cartographic approaches, too, end up with three potential subject positions in the I-domain – SpecTP, SpecAgrSP and SpecRefP, which we can also call SpecSubjP following Cardinaletti (op. cit.). If we now add the subject position of subject initial main clauses of V2 languages, which Roberts & Roussou (1998) and Roberts (2000b) locate in SpecFinP (i.e. in the C-domain), this can be evidence for another SubjP (or some XP having subjects in its specifier) in the Split-CP.

Having extensively discussed the topic of subject positions in Cardinaletti (op. cit.), we should remember that our original question was twofold – subject positions and the EPP. Let us turn to the EPP then. As far as the subject positions are concerned we can easily dispense with the EPP because thanks to the cartographic approach all subject positions are targeted in order to check a feature (Case, phi, subject-of-predication). However, people seem to be reluctant to drop the EPP and Cardinaletti has found a way of accommodating the EPP even in a cartographic system and considering the system, it is not surprising that she postulates the existence of an EPP-phrase between AgrSP and SubjP.³³ She argues that the EPP-phrase is found in thetic sentences, which do not have a subject of predication. In English, e.g., the EPP-phrase is easily detectable because the weak locative (not expletive!) *there* which serves as a location-goal argument realises SpecEPP-P (15).

(15) There arrived three men.

In Italian, however, this position is either realised by a null location-goal argument \emptyset_{LOC} (in thetic sentences featuring an unaccusative (16a)) or by movement of the closest argument, i.e. the subject (in thetic sentences that feature a transitive verb (16b)).

(16) a. \emptyset_{LOC} è arrivato Gianni. (Italian) is arrived Gianni

b. Gianni ha chiamato Piero.Gianni has called Piero

In Italian, however, the thetic sentences are homonymous with normal declarative clauses and one can assign different structures to them only for theory-internal reasons. In the same way it

³³ Assuming the existence of such an EPP-phrase and assuming that it is indeed located between AgrSP and SubjP, we could take this EPP-phrase as another piece of evidence that SubjP is a projection of the C-domain because in most "traditional" systems the EPP is associated with the highest head in the I-domain.

is impossible to distinguish \mathcal{O}_{LOC} from expletive *pro* (or \mathcal{O}_{NOM} , more precisely) which Cardinaletti (op. cit.) assumes to show up in preverbal position of the categorial sentence (16a). Independent of these difficulties which arise with respect to the EPP-phrase, it will be shown in chapter III, 2. that there is no need to postulate the existence of an independent EPP-phrase and that the facts can be captured in a reduced structure as well.

As (i) each of the proposed subject positions relates to the checking of a concrete feature associated with subjecthood, there is no need for an EPP-feature (except for the one in the alleged EPP-phrase) which in the absence of any overt checker has to be satisfied by an expletive pro. In addition, Cardinaletti (op. cit., p. 56) allows for covert or long distance feature checking by the postverbal subject. Hence there is no need to assume the presence of an expletive pro which checks formal features.³⁴ Therefore the postulation of the presence of expletive pro in null-subject languages more or less amounts to a question of belief. Cardinaletti justifies the use of pro by saying that thus we get the same preverbal subject positions in null subject languages and non-null subject languages and that this parallelism is desirable from a theoretical point of view. One might propose that other theoretical aspects, e.g. economy and the claim that all elements present in a structure should have an effect at PF or LF, argue against unnecessary specifier positions and against expletive pro but Cardinaletti would probably reply that she does "not see any advantage in denying the existence of a phonetically null pronoun" (Cardinaletti, op. cit., p. 26). In chapter III, 1.2.2. I will object to the claim that, to put it sloppily, the postulation of the presence of empty categories does not do any harm because we do not notice these elements. I will not only argue that expletive pro should be absent from the structure when it is not needed but also show that in several constructions that have been claimed to feature pro there is actually no position available for the expletive.

1.3. Universality reconsidered – the EPP as a parameter

In their seminal paper, Alexiadou & Anagnostopoulou (1998) (A&A for short) propose a completely different account of the EPP-checking mechanism that not only captures the OS

(i) pro è arrivato Gianni. (Italian) pro is arrived Gianni

We might, however, still need referential *pro* in cases where there is no overt subject whatsoever (cf. footnote 37).

³⁴ If these options were not given one could argue that in a sentence like (i) *pro* is needed to form a chain (*pro*, Gianni) which allows for feature checking.

and TEC facts observed by B&J (op. cit.) but also accounts for a range of properties as diverse as the availability of pro-drop, the presence/absence of a Definiteness Effect with respect to "low" subjects and verb movement, for example. A&A's analysis is based on two parameters. One parameter, which takes up B&J's ideas to some extent, determines whether SpecTP is available as a subject position or not and hence whether low subjects are VPexternal or VP-internal, respectively. The other parameter, which is the crucial one here, concerns checking of the EPP. Following Chomsky (1995), A&A assume that the EPP corresponds to a strong [D]-feature but differently from Chomsky, they argue that this strong [D]-feature is a feature of AgrS. The first parametric option corresponds to the traditional idea of the EPP because languages that choose this option require the EPP to be checked by move/merge of an XP, i.e. either the subject XP has to move to SpecAgrSP³⁵ or an expletive has to be merged in this position. A&A argue that this is what we find in the Germanic languages and as most of the other papers discussed so far focus on English and the other Germanic languages it is not surprising that the EPP has always been phrased along these lines. Languages that choose the other value of the parameter, among them Celtic languages, Arabic, Romance languages and Greek, allow for the EPP to be checked by move/merge of a head. According to A&A (op. cit.), the verbal agreement affixes of these languages are independent clitic-like pronominal elements that carry a [+ D]-feature and can therefore check the EPP. If these elements are free morphemes, we get subject clitics as in some Northern Italian dialects, which instantiate the case of checking the EPP via merger of a head. What seems to be the more wide-spread case is that the element is a true verbal affix which moves to AgrS together with the verb to which it is attached, thus checking the EPP via verb movement.

This proposal has a number of far-reaching and interesting consequences. As the strong [D]-feature on AgrS can not only be checked by an XP moving to SpecAgrSP but also by head-movement to (or merger of a head in) AgrS, the EPP is no longer a fill/create-specifier-of-XP requirement and no longer provides a canonical subject position. Since checking of the EPP no longer necessarily requires the projection of a specifier we can dispense with an empty element in SpecAgrSP in VSO structures. In the traditional system, we had to postulate that an expletive pronoun satisfies the EPP whenever the subject shows up

³⁵ With respect to Stylistic Fronting and Locative Inversion, A&A (op. cit.) discuss the possibility of XPs other than the subject checking the EPP and they tentatively suggest that predicate XPs may be potential candidates, but certainly not just any XP.

³⁶ As SpecAgrSP cannot be the canonical subject position (although AgrS is associated with the EPP) one might want to attribute this property to SpecTP but A&A (op. cit.) argue that in some VSO languages (e.g. Greek and

in a position lower than the one associated with the EPP and/or the construction does not feature an overt expletive, as e.g. in constructions with postverbal subjects in Greek (17) or in impersonal passives in German (18).

- (17) pro efige o Petros. (Greek; based on A&A 1998, (7a))

 pro left the Peter

 "Peter left."
- (18) Gestern wurde *pro* getanzt. (German)

 yesterday was pro danced

 "Yesterday there was dancing."

Apart from the fact that the empty expletive *pro* ceases to be needed for formal reasons, A&A (op. cit.) also show that the presence of such an element is fairly unlikely because it does not have any effect at the interfaces PF and LF and therefore should not be included in the numeration. One of the possible LF effects one could think of is that the presence of *pro* triggers a Definiteness Effect with respect to the low subject. As (17) shows, this prediction is not borne out. Hence A&A conclude that expletive *pro* does not exist.³⁷

A&A's approach of parametrising both SpecTP and SpecAgrSP considerably affects our array of subject positions and their status. SpecVP is still analysed as the thematic subject position but it also regains the status of a potential surface subject position in languages which instantiate the move/merge X° option of EPP-checking in AgrS and do not license SpecTP as a subject position. SpecTP and SpecAgrSP remain potential subject positions in the functional domain though neither is a universal or canonical subject position. Although A&A speak out for AgrS as the category associated with the EPP, SpecAgrSP can be missing from the structure due to the fact that they allow for verb raising to satisfy the EPP. However, as we lose SpecAgrSP as a canonical subject position we gain a completely new type of subject position, namely the head AgrS. At least in the cases where the EPP is checked by merger of a subject clitic in AgrS, AgrS turns into a subject position and one might want to argue that also in the cases where the verbal affix carries a [+ D]-feature the head has subject-like properties (for consequences of such an assumption see footnote 37 and A&A (op. cit.), p. 531-533).

Spanish) the subject can stay in its VP-internal position because the VS sequence can be interrupted by adverbials.

³⁷ With respect to the referential *pro* of Null Subject languages, A&A (op. cit.) remain undecided because the elimination of referential *pro*, though perhaps desirable from a theoretical point of view, would require a reformulation of theta-theory.

Roberts & Roussou (1998) (henceforth R&R) build on A&A's suggestions in as far as they adopt the proposal that the EPP can be checked either by an XP or by an X° but they extend the area of application of the EPP considerably because they argue for a unified account of the "subject requirement" of the IP domain and the "V2 requirement" found in the CP domain. They point out that the traditional EPP is not really a pure subject requirement because it can also be satisfied by merger of an expletive, which has no semantic content and is certainly not an argument selected by the verb. In addition, they attribute the fact that the EPP is always checked by a DP to SpecIP being an A-position. SpecCP, on the other hand, is an A'-position which allows for the "V2 requirement" to be satisfied by any type of XP, including expletives. Therefore R&R conclude that both phenomena can be subsumed under a requirement for the respective specifier position to be filled and that the nature of the specifier position will determine what kind of XP is a licit checker. They further suggest that the need to fill the specifier of a certain head is correlated with the overt realisation of the T-head and define the "new" EPP in a first attempt as "the head containing T must have a filled specifier" (R&R op. cit., p. 3). This definition correctly captures the facts that in English either SpecTP or SpecAgrSP has to obligatorily be filled (depending on whether one assumes T to be realised in its base position or to move to AgrS) and that in German declarative clauses only SpecCP, but not SpecAgrSP or SpecTP, is obligatory as the ungrammaticality of the expletive in (19b) illustrates.

- (19) a. Es wurde gestern getanzt. (German)

 Expl was yesterday danced.

 "There was dancing yesterday."
 - b. Gestern wurde (*es) getanzt.yesterday was Expl danced"Yesterday there was dancing."

This preliminary definition of the EPP, however, encounters several problems. Among other things, it cannot account for the fact that in German embedded clauses the expletive is ungrammatical although T does not move to C (20), nor can it explain why in MSc we always need an expletive in SpecT(?)P even when T has moved to C (21) and or why VSO languages can actually be V-initial.

- (20) ... daß (*es) getanzt wurde.
 ... that Expl danced was
 "... that there was dancing yesterday."
- (21) I går ble det danset. (Norwegian)

 yesterday was Expl danced

 "Yesterday there was dancing."

In order for their analysis to cover also the above-mentioned phenomena, R&R (op. cit.) introduce two modifications to their original proposal. First, they argue that the generalised EPP is not only sensitive to where T is realised but to the whole (C, T) dependency which actually includes AgrS as well, thus resulting in the dependency (C, AgrS, T). Second, they introduce the diacritic * which indicates that PF-realisation is required. Depending on the morphological means available in the language in question, this PF-realisation can be achieved either by Merge or by Move. More precisely, if a language has the possibility of realising a head F* by merging a lexical item it has to do so for reasons of economy. However, if a language does not feature such a lexical item, F* has to be checked by movement of a head to F*. The revised version of the generalised EPP exploits these two ideas and is phrased as follows (22).

(22) The highest F* in the dependency (C, AgrS, T) must have a filled specifier.³⁸
(R&R 1998, p. 9)

To illustrate how this system works let us consider the examples mentioned above. In (19a, b), we have the dependency (C*, AgrS, T) and as German does not provide any lexical item that can realise the C* of a declarative main clause we get verb movement (in fact, movement of a complex V-T-AgrS head) to C*. Since C* is the highest (and the only) head that requires PF-realisation SpecCP has to be filled, resulting in a V2 construction. In the case of embedded clauses (20) the situation is different because the complementiser $da\beta$ satisfies C* via Merge, thus obviating the need for a specifier. The MSc example in (21) is derived in exactly the same way as the German examples (19a, b) as far as V2 is concerned. The obligatory presence of an expletive in SpecAgrSP is explained by stipulating that the Tense-

_

³⁸ Crucially, as will be shown in my discussion of the examples and as is implied in R&R's (op. cit.) argumentation leading up to the definition of the EPP, it should read "the highest F* in the dependency (C, AgrS, T) **satisfied by Move** must have a filled specifier".

dependency has two positions that have to be PF-realised in MSc, namely (C*, AgrS*, T). In the absence of any lexical item that could satisfy AgrS*, SpecAgrSP has to be filled – by an expletive if no subject DP moves there. As regards the derivation of VSO constructions there are several possible derivations. R&R (op. cit.) suggest that in literary Welsh C* is realised by merger of a particle as illustrated in (23). Hence this construction is not really verb-initial.

(23) Mi welais i Megan. (Welsh; Roberts 2000b, (1a))

PRT saw I Megan

"I saw Megan."

It is further argued that e.g. in Old Irish merger of inflectional features satisfies C*, while in Modern Irish rich agreement satisfies AgrS*.

The greatest advantages of R&R's approach are that it offers a unified account of two phenomena, the subject requirement in the I-domain and the V2 requirement in the C-domain, which have been treated as separate conditions and that it can account for why the traditional EPP does not hold in some V2-languages, like German and Dutch, and in VSO-languages, like Welsh and Irish. On the other hand, their approach, unfortunately, also has several shortcomings. R&R (op. cit.) point out that their diacritic * is really a strong feature (which is not specified for a particular type of feature) that can be associated either with C or AgrS (or both) and is thus just a paraphrase of Chomsky's (1995) definition of the EPP as a strong [D]-feature on T. Hence, they remark, it shares with Chomsky's strong [D]-feature that it does not offer an explanation of why there is such a feature in the first place. Although they try to account for the presence of the * in general, it remains unclear why the * can show up on C in some languages, on AgrS in others and even on both C and AgrS in yet other languages – it seems to be just another parameter. Another problem concerns the question of why the Moveoption requires subsequent filling of the corresponding specifier position. R&R propose the following solution.

T-to-C is triggered by C*. XP-movement is triggered by the need [...] to identify the C-dependency in root declaratives; since these clauses are unmarked for clause type, the only content of C is marking of Speech Time; XP-topicalisation is required in order to identify the Speech Time.

(R&R 1998, p. 20)

I do not see, however, in how far complementisers or particles or inflectional features are different from finite verbs, i.e. why merger of the former does not require XP-topicalisation to identify the Speech Time, while movement of the latter does.

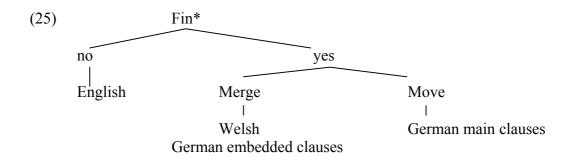
R&R (op. cit.) have introduced important modifications with respect to subject positions and the EPP. Including the V2 phenomenon in their account, R&R extend the range of projections to be considered when looking at the EPP from the Split-IP to the other functional domain, the (Split-)CP. In doing so, they direct our attention to the fact that there is at least one more subject position that has not been considered so far, namely SpecCP. However, SpecCP is different from the subject positions discussed before because it is only optionally a subject position and the optionality is different from the optionality observed with respect to subject positions in the Split-IP. While optionality in the I-domain means that the subject position in question can either be filled or not, SpecCP has to obligatorily be filled in declarative main clauses of V2 languages but can be filled by any XP so that filling by the subject DP is just one out of several possibilities. In addition, R&R break with the belief that there is a particular position in the I-domain that necessarily has to be realised, i.e. they break with the traditional idea of the EPP. Adopting A&A's (1998) idea that the EPP can not only be checked by Merge/Move of an XP but also by Merge/Move of a head and extending it in so far as this EPP is not necessarily associated with one particular head, AgrS, but with some head of the dependency (C, AgrS, T) they render the EPP much more flexible and do away with a lot of problems the "old" EPP raised for an analysis of V2- and VSO-languages. In particular, they claim that both SpecTP and SpecAgrSP can remain empty if C is the highest (and only) position carrying a *, thus accounting for the possibility of VP-internal subjects in German (provided that they are really VP-internal).

Roberts (2000b) takes up this approach and in particular investigates the question of the EPP in the C-system, focussing on the parametric options instantiated by English (as an example of the languages for which the EPP was originally developed), German (a V2 language) and Welsh (a VSO language). He argues that in declarative main clauses Welsh realises Fin* by merger of a particle (i.e. a head) and German by movement of the finite verb to Fin* (via T and AgrS) plus movement of an XP to SpecFinP resulting in the creation of a spec-head relation, while English does not require a morphophonological realisation of Fin. The application of the *-parameter (24) to Fin, one of the heads of the Split-CP following Rizzi (1997b), can thus be illustrated by the diagram in (25).

(24) The *-parameter

(based on R&R 1998, Roberts 2000b)

- Heads are parametrised as to whether they require PF-realisation or not.
- The diacritic * symbolises the need for PF-realisation.
- PF-realisation can be achieved by either Merge or Move where Move requires that subsequently the specifier of the PF-realised head be filled.



As Roberts (2000b) does not modify the system in any crucial way, the R&R (1998) situation as regards subject positions and the EPP is still valid. This means that there is a generalised EPP which requires at least one position of the (C, AgrS, T) dependency to be phonologically realised and that PF-realisation can be achieved by Merge/Move of an XP or by Merge/Move of a head. In addition to SpecVP as the thematic subject position and a potential surface subject position and to SpecTP and SpecAgrSP as potential subject positions, the system also acknowledges the existence of a potential subject position in the C-domain, SpecCP or in a Split-CP SpecFinP. Two aspects are crucial here. First of all, the parametrisation of the EPP, i.e. the fact that it can hold either in the I-domain or in the C-domain, has as a result that there is no universal canonical subject position any longer. Second, movement of the subject XP to SpecCP can be argued to be a topicalisation operation (although R&R (1998) explicitly reject the idea of a Topic criterion along the lines of Rizzi's (1997a) Wh-criterion) and therefore SpecCP can be seen as a subject position that encodes semantic properties.

The model that I develop in the following chapters does not build on one of the approaches discussed above but draws on each of the three strands in one way or another. Among the points to be adopted or developed are the idea of the EPP as a feature, the assumption that subject properties are encoded by features and associated with particular positions as proposed in the cartographic approach, the idea that there is a relation between the traditional conception of the EPP and the V2 requirement (cf. Roberts & Roussou 1998),

and last but not least the idea that the EPP can be checked by merger of a head or by head-movement (cf. Alexiadou & Anagnostopoulou 1998). While I exploit and combine several proposals that have recently been made, I explicitly do not adopt the phase model as introduced by Chomsky (1999).

2. The EPP and the Extension Condition

Having traced the historical development of subject positions and the EPP, it is clear that any recently developed system will comprise more than just one subject position – after all even Chomsky (1998, 1999, 2001) with his very reduced/minimalist clause structure postulates the existence of two subject positions (SpecvP and SpecTP) and most approaches argue for at least two subject positions in the Split-IP. Before going into the presentation of my own conception of clause structure, I will try and answer the question "What is the EPP?".

Assuming that there are at least two subject positions in the Split-IP (for reasons for this assumption see chapter II, 3.2.3.) plus the thematic subject position SpecvP, one has to investigate whether all of these subject positions are associated with the EPP/with an EPP-feature. If not, the question arises whether there is one position that is always associated with the EPP/with an EPP-feature or whether there is always one (but not necessarily always the same) position that is associated with the EPP/with an EPP-feature.

I argue here that subject positions and the EPP/an EPP-feature are not inherently connected in any way. Instead, I propose that there is a correlation between the Extended Projection Principle (which will be shown to be in fact a feature) and another requirement that Chomsky claims to hold of syntactic derivations, namely the Extension Condition (Chomsky 1993, 1995), or more precisely a correlation between the EPP and the possibility for head-movement to be integrated into the Extension Condition.

As the previous statement implies that the syntactic nature of head-movement has been contested, I also present some of the arguments why Chomsky thinks that head-movement is a PF-phenomenon. Then I show that on the other hand there is evidence that head-movement takes place in narrow syntax and finally I suggest how (at least some of) these problems can be overcome and how head-movement can be integrated into narrow syntax.

2.1. The EPP-feature – the general idea

2.1.1. Some data

The following discussion of the EPP is based on examples from English (1), Welsh (2) and German (3)-(5). For the sake of clarity, the finite verb is underlined in these examples and the participle (if present) is marked with a dotted line.

(1) Peter read the book.

(2) Mi <u>welais</u> i Megan. (Welsh; from Roberts 2000b)

**Prt saw I Megan

"I saw Megan."

- (3) ... daß Peter das Buch <u>gelesen hat</u>.
 ... that Peter the book read has
 "... that Peter has read the book."
- (4) Peter <u>hat</u> das Buch <u>gelesen</u>.

 Peter has the book read

 "Peter has read the book."
- (5) Dieses Buch <u>hat</u> kein Mensch <u>gelesen</u>.

 this book has no human being read

 "No-one has read this book."

As (2) – just like (1) and (4) – is a normal declarative main clause, we can see that Welsh is a VSO language. Roberts (2000b), whose analysis I adopt in the following presentation, argues that the particle sits in Fin and that the finite verb moves to the highest head position of the Split-IP, in his system AgrS (later Pers).

Apart from the observation that German word order appears to be relatively free, three facts remain constant. German displays the so-called root-embedded asymmetry which is found in most of the Germanic languages.³⁹ With respect to German it means that in embedded clauses the finite verb always shows up in clause-final position as in (3), whereas in main clauses the finite verb has to be in second position. This Verb Second (V2) requirement is illustrated by (4), a normal declarative main clause with the subject DP in initial position, and especially (5), where the object has been topicalised and is nevertheless immediately followed by the finite verb. Last but not least, (3) and (4) show that German is an OV-language (i.e. the object precedes the lexical verb if the latter has not moved to the second position) as opposed to English, which is a VO-language.

-

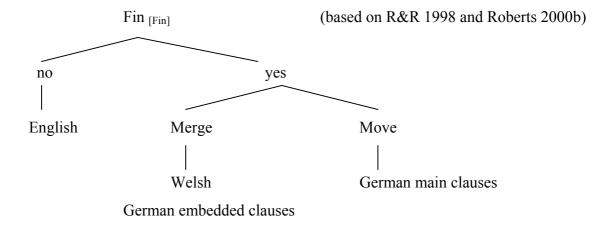
³⁹ In all Germanic languages except English the finite verb has to show up in second position in main clauses (the so-called Verb Second (V2) requirement). With respect to embedded clauses, however, Germanic languages vary a lot. Dutch mostly has the finite verb in clause-final position just like German (at least the verbal complex is clause-final), in the Mainland Scandinavian languages the finite verb stays in the vP, preceding the object and concerning Icelandic it is debated whether this language displays a root-embedded asymmetry (cf. chapter II, 4.3.2.D). English certainly does not have a root-embedded asymmetry with respect to declarative clauses.

The root-embedded asymmetry as illustrated by (3) and (4) is very interesting from a structural point of view. Den Besten (1983) was the first to suggest that in main clauses the finite verb occupies C (COMP in his terms), whereas in embedded clauses this position is taken by the complementiser forcing the finite verb to stay lower down in the clause. In the more elaborate clause structure that I use here, I argue that the finite verb and the complementiser compete for Fin (cf. Rizzi 1997b).

2.1.2. Different ways of realising head-positions

Following Alexiadou & Anagnostopoulou (1998), Roberts & Roussou (1998) and Roberts (2000b), I suggest that if a head position is associated with a feature that requires to be checked by a head, this requirement can be satisfied either by Merge or by Move. This means that depending on the inventory of the language in question, we can merge a suitable element such as a complementiser, a particle, an affix, etc. or employ head-movement – that is, in the constructions discussed in this work, verb movement.

Coming back to the examples given above, I suggest that Fin can optionally be associated with a finiteness feature which, if present, has to be checked by a head. The options that result from my assumptions can schematically be represented as follows.



In English declarative main clauses the Fin head usually does not carry any feature and therefore the C-system is not activated. German embedded clauses and Welsh instantiate two different options of checking Fin's feature by Merge. In Welsh a particle, here *mi*, is merged – an option that is not available in German because German does not have any particles marking (non-)finiteness. In German embedded clauses, it is the complementiser that

⁴⁰ I do not consider instances of residual V2 here which do involve some projection of the Split-CP.

is merged in Fin, thus blocking V-movement to this position (the operation used in main clauses to check [Fin]).⁴¹

If Fin_[Fin] checking by V-movement in German main clauses were the whole story we would expect German main clauses to be verb-initial contrary to fact. In other words, it remains to be explained why the head realised by head-movement has to be preceded by an XP (for the reason why it has to be exactly one XP see section II, 3.1.2.). It is exactly at this point that the EPP comes into play. I suggest that any head that is realised by head-movement at some point of the derivation and that is not associated with any additional feature (such as a Nominative Case feature for example) that requires the presence of an XP in the specifier of the respective head has to carry an EPP-feature, which makes sure that a specifier is created.^{42,43} Before discussing how this conception of the EPP is implemented and why it is a reasonable assumption to make in the first place, an aside on the operation of head-movement is necessary.

2.2. Head-movement – is it syntactic or a PF-phenomenon or even an illusion?

2.2.1. The Extension Condition and Chomsky's objections

The Extension Condition (Chomsky 1993/1995, ch. 3) is – to my knowledge – the earliest instance where Chomsky contests the syntactic nature of head-movement because he excludes head-movement from the domain of a rule which holds of syntactic operations, the Extension Condition. The Extension Condition requires that syntactic operations extend the tree at the root and Chomsky (1993, 1995) explicitly points out that this requirement only holds of substitution operations (i.e. all kinds of first merge and of movement of an XP to a specifier position) and not of adjunction operations (especially head-movement)⁴⁴.

(i) #Maria kommt nicht zur Party, weil sie hat keine Lust.

Maria comes not to-the party because she has no interest

"Maria doesn't come to the party because she doesn't feel like it."

I suggest that in this case *weil* is merged in a higher head of the C-domain (either in Foc if *weil* is stressed or in Top if the novelty of the ensuing reason is to be highlighted) so that Fin can be – in fact has to be – realised by V-movement

⁴³ On the special situation with respect to the "universal EPP" on T see chapter II, 5.

⁴¹ It has recently become acceptable to use certain complementisers, especially *weil* 'because', with V2 (where *weil* is mostly followed by a short pause).

⁴² One could equally well say that just any head that is realised by head-movement has to carry an EPP-feature but for reasons of economy I assume that there are no redundant features. This means that if there is a feature that – as a by-product does the job of the EPP-feature which is spelt out below – there will be no EPP-feature.

Let us assume, then, that adjunction need not extend its target. For concreteness, let us assume that the extension requirement holds only for substitution in overt syntax [...]. (Chomsky 1995, ch.3, p. 191)

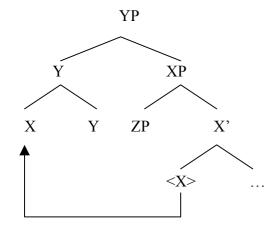
The condition is empirically motivated for substitution before Spell-Out by relativized minimality effects and others, and it does not hold after Spell-Out if the Case agreement theory of the minimalist approach is correct. It also cannot hold strictly for adjunction, which commonly (and in the case of head-adjunction, always) targets an element within a larger projection.

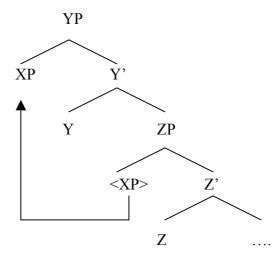
(Chomsky 1995, p. 327)

As illustrated in the following structures, head-movement – unlike XP-movement – does not target the topmost node of the existing structure and therefore does not extend the tree at the root but just makes it "grow fatter".

head-movement (6)

XP-movement (7)





In Derivation by Phase then, Chomsky (1999) explicitly spells out his doubts that headmovement belongs to the canon of narrow syntactic operations and lists several arguments that favour an analysis of head-movement as a PF-phenomenon. The properties that render head-movement "unsyntactic" are, according to Chomsky, (i) the fact that head-movement does not have any semantic effects, (ii) that one cannot determine why it is, e.g. in languages like French, V that moves to T and DP that moves to Spec and not D to T and VP to Spec, (iiia) that head-movement is an adjunction operation, (iiib) that it is countercyclic, (iiic) that the raised head does not c-command its trace and (iv) that head-movement obeys different

⁴⁴ I do not want to enter into the discussion here of whether adjunction (except from the case of head-movement) exists at all.

locality conditions than XP-movement. Roberts (2000a, 2000b, 2003), however, shows that most of these problems are either only apparent or can easily be overcome. In addition, there is empirical evidence that head-movement cannot be a PF-phenomenon.

2.2.2. Head-movement and the interfaces

Assuming that all displacements that have a semantic effect have to take place in narrow syntax (Chomsky 1999), the contrast in (8) shows that head-movement has to be a syntactic operation. The sentences in (8) are identical except for tense – (8a) is in the preterite, i.e. in a synthetic tense, while (8b) features the analytic perfect – but in (8a) focus fronting of the complete VP (for my assumptions about the structure of VP I refer the reader to section II, 3.3.) leads to ungrammaticality whereas the same operation is perfectly fine in (8b).

- (8) a. *[FocP [VP Das Buch las] Foc Peter (nicht den Artikel schrieb). (German)

 the book read Peter not the article wrote

 "Read the book is what Peter did, not write the article."
 - b. [FocP[VPDas Buch gelesen] Foc hat Peter (nicht den Artikel geschrieben).

 the book read has Peter not the article written

 "Read the book is what Peter has done, not write the article."

If head-movement were a PF-operation it should not have an influence on the grammaticality of phrasal movement that takes place for semantic reasons. In particular, we would expect focus fronting of VP⁴⁵ (i.e. movement of VP to SpecFocP) to be possible no matter whether this VP contains a finite verb or not because it would only be at PF that the finite verb is put into second position.⁴⁶ If, however, the finite verb head-moves to Fin (via all intervening head-positions), it cannot be focussed together with the direct object in (8a). In (8b), on the other hand, it is the auxiliary that moves to Fin while the lexical verb stays VP-internal. Hence the complete VP can be focussed. As head-movement interacts with focus fronting, an

⁴⁶ The analysis of head-movement as a PF-phenomenon poses another problem in this respect and this problem involves the definition of "second position". If V2 is no longer identified as, say, head-movement to Fin triggered by the need to check some feature, one could argue that in (8a) the verb has already been put in second position, namely as a by-product of focus fronting of VP and it would be even more difficult to explain why (8a) is ruled out.

_

⁴⁵ A discussion of the range of complex XPs that are allowed in SpecFocP and of why others, e.g. vP, are obviously banned from this position (Kayne, p.c.) is beyond the scope of this thesis.

operation that clearly has a semantic effect and therefore takes place in the narrow syntactic component, it cannot be a PF-phenomenon.⁴⁷

Similarly, Fischer & Alexiadou (2001) show that V-movement in Old Catalan has a semantic effect and hence cannot take place at PF. They suggest that there is a ΣP between CP and IP which is associated with information structure, more precisely negation, emphatic and neutral affirmation. In a system that is reminiscent of R&R (1998), Roberts (2000b) and the system developed here, they propose that negation realises Σ by merger and in particular, that V-movement to Σ results in an emphatic affirmation.

In addition, Fischer & Alexiadou argue that Stylistic Fronting (SF) of a participle in Old Catalan is an instance of head-movement and not XP-movement because SF of the participle can strand the direct object (cf. Holmberg 2000c).

(9) que feita aviets _ la corona del Emperi (Old Catalan; F&A's 2001, (3a)) that made had _ the crown of-the emperor

Holmberg (2000c) provides another piece of evidence in favour of the claim that head-movement is a syntactic operation. Although not only XPs but also heads can undergo SF, auxiliaries cannot do so, as illustrated in (10).

(10) *Verið hefur tekin erfið ákvörðun. (Icelandic; Holmberg 2000c, (54a)) been has taken difficult decision

Auxiliaries certainly have p[honological, S.M.]-features and should therefore qualify for SF if it were really a phonological operation. Holmberg, however, argues that auxiliaries lack semantic/thematic features. So obviously SF does not only require p-features but also some formal or semantic features and is therefore not a PF-operation.

⁴⁷ If my analysis is correct, languages that do not have V-movement should not display such a contrast. This prediction is borne out. In English, the lexical verb does not leave the vP, no matter whether it is finite or non-finite. Hence the formation of a pseudo-cleft sentence is possible independent of the tense of the sentence.

⁽i) a. Read the book is what Peter did.

b. Read the book is what Peter has done.

Of course, the verb in the vP is always non-finite in a pseudo-cleft construction and we get *do*-support but this "only" highlights the old question of how finite lexical verbs check Tense- and phi-features. I will not address this problem here.

57

Last but not least, Roberts (2000b) shows that head-movement (of an auxiliary with the contracted negation n't attached to it) can license Negative Polarity Items (NPIs), as can be seen in (11).

- (11) a. *Anybody didn't speak to him. (Roberts's 2000b, p. 209, (11))
 - b. Didn't anybody speak to him?

If head-movement of the auxiliary plus negation took place at PF it should not have an influence on the interpretation nor be able to formally license NPIs via a c-command relation. Hence head-movement must be a narrow syntactic operation.

2.2.3. Does head-movement exist after all?

The above examples suggest that head-movement is a syntactic phenomenon, contrary to what Chomsky proposes. The proof, however, relies on the assumption that head-movement does exist in the first place – an assumption that is no longer universally accepted and the idea that head-movement is in fact remnant XP-movement (among others Kayne 1998, Koopman & Szabolcsi 2000) has recently had a great impact on syntactic theory. Therefore it is important to see how approaches along these lines fare with respect to the example in (8), even more so as standard cases of V2 have successfully⁴⁸ been accounted for by means of remnant movement (Müller 2001, 2002a, b). Can the contrast in (8) be accounted for in terms of remnant movement as well or does it not only argue for the syntactic nature of head-movement but also for its existence in the first place?

As for Kayne (1998, ff.), his system can account for the contrast found in (8) in pretty much the same way as an account involving head-movement. In the Kaynean system, movement of the finite verb to Fin would simply be replaced with remnant VP-movement to SpecFinP (where the remnant VP is required to contain nothing but the finite V). Then whatever XP has moved out of VP⁴⁹ is free to move to SpecFocP. In (8b) it would be, say, AuxP that moves to SpecFinP (after its complement vP has moved to some other position) enabling the complete VP to move to SpecFocP. So at first glance the Kaynean approach is very similar to the head-movement approach and just replaces V-movement to Fin with VP-movement to SpecFinP. In another respect – which has nothing to do with the example in (8) but with the interpretation of the sentence-initial XP in V2 constructions in general – it does

⁴⁸ For an alternative view see Biberauer & Roberts (2003a).

⁴⁹ Of course, in sentences different from (8) also XPs that do not originate in VP can move to or be merged in SpecFocP or SpecTopP.

58

make different predictions. Since SpecFinP will always be occupied by a phrase that contains nothing but the finite verb in V2 clauses, i.e. remnant VP, vP or AuxP respectively, this position is not available for the sentence-initial XP. Hence, assuming a Split-CP à la Rizzi (1997b), the fronted XP cannot occupy the neutral position SpecFinP but has to always show up in a position that forces a particular interpretation, such as SpecTopP and SpecFocP (unless one introduces yet another, neutral position). This prediction is not borne out and there are several types of XP that can show up in sentence-initial position with neutral stress and interpretation (see chapter II, 3.1.1.).

Müller (2001, 2002a, b) proposes that V2 constructions can be reanalysed as vP1 constructions in a system based on remnant movement. He argues that by a series of last resort movements everything but the "sentence-initial" XP and the finite verb is moved out of vP, which then moves as a remnant vP to SpecCP. This approach technically explains the V2 phenomenon very well⁵⁰ but it is, unlike the approach I will propose here, more or less feature-free and does not take semantics into account. Despite (or because of) the fact that Müller does not consider the semantic aspect, he can still account for the contrast observed in (8). We can either move [$_{\rm vP}$ DP V $_{\rm fin}$] to SpecCP as in (8a) or [$_{\rm vP}$ VP V $_{\rm fin}$] as in (8b). Since Müller does not adopt a Split-CP, the correct interpretation of the SpecCP-element has to be taken care of by features on C or by the interfaces, for example. We might then want to say that also assignment of focus is a separate operation and that it always operates on the vP-internal XP but not on the finite verb. Therefore Müller's system can perfectly explain the contrast in (8) because it is the lexical verb (8a) and the auxiliary (8b), respectively that is excluded from focus.

As the remnant movement approaches do not fail to account for V2 in general and for (8) in particular, adopting either remnant movement or a combination of head-movement and XP-movement seems to boil down to a matter of personal preference but the head-movement approach nevertheless has some advantages in my opinion. The system that I will advocate here and the Kaynean system work in a similar way as movement is assumed to be triggered by features. This means that movement is not just a blind, mechanical process but triggered by

⁵⁰ Biberauer & Roberts (2003a), however, argue against Müller's (2001, 2002a, b) reanalysis of V2 in terms of remnant vP-fronting. They provide a range of data and constructions that can hardly or even not at all be explained by Müller's theory. An extremely compelling argument comes in form of certain adverb-initial V2 clauses because there are adverbs that can be shown to be merged outside vP (Cinque 1999, B&R op. cit.) and that can nevertheless occupy the sentence-initial position. If V2 were really vP1 such sentences are not expected to be possible, contrary to fact. In the traditional two-movement derivation of V2, on the other hand, they fall out naturally. Although Biberauer & Roberts favour an analysis that involves head-movement of the verb, they explicitly allow for the possibility that both movements are instances of XP-movement, i.e. that what looks like V-movement is actually movement of an XP that contains nothing but the finite verb/auxiliary. For some objections against the latter option see my arguments against Kayne's approach.

syntactic and semantic needs. In that way, both approaches tie in with Chomsky's postulation that all displacements that have a semantic effect have to take place in narrow syntax. The only difference is that the head-movement approach needs less structure, i.e. fewer phrases than the remnant movement approach because every phrase provides two landing sites (a specifier and a head position) in the former but only one (a specifier) in the latter, unless one adopts the idea of multiple specifiers⁵¹. Hence an account in terms of head-movement is more economical. The system proposed by Müller, on the other hand, argues for the aforementioned mechanical movement (i.e. a series of last resort movements ensure that only one XP occupies the edge of vP) and therefore it seems to be just a matter of chance that it is the "right" XP that remains at the edge of vP and that it gets the intended interpretation as well. This accidental nature of the movements, esp. of those that make an XP leave vP and find a place somewhere in the *Mittelfeld* allegedly only to make sure that only one XP is left in vP, is undesirable in view of the fact that word order is not free in German (contrary to what has often been claimed) and that one can detect a (slightly) different reading with each word order. All in all I consider an approach that allows for both head- and XP-movement more economical and more plausible if the movements are triggered by formal and semantic features.

2.3. Head-movement and the Extension Condition – how can these two be reconciled?

Having argued for the existence of head-movement and for its syntactic nature, we are now faced with the problem that we either have to dispense with the Extension Condition (or say that it only holds for one type of syntactic operation) or find a way of making head-movement comply with the Extension Condition. It is the latter option that is advocated here. In view of the structure given in (6), it is clear that head-movement indeed does not extend the tree at the root and therefore does not meet the Extension Condition as Chomsky (1993, 1995) has phrased it. If, however, evaluation of the Extension Condition does not take place immediately after an operation has been carried out but is delayed for some time (to be specified below) and if there is a mechanism that makes sure that every instance of head-movement is immediately followed by an operation that does extend the tree at the root, i.e. by an operation that creates the specifier of the head in question either by Merge or Move of an XP, head-movement does not necessarily violate the Extension Condition any more. The

_

⁵¹ Kayne (2003b) explicitly rejects the idea of multiple specifiers.

refined version of the Extension Condition that allows for head-movement to be intergrated into narrow syntax is defined as follows.

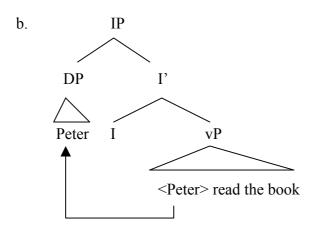
The New Extension Condition

A given category C is EC-compatible iff C is extended at the root once all F_C , formal features of C (including semantic features, such as Foc, Top and subject-of-predication) entering into checking operations, are checked.

The crucial idea now is that it is the EPP-feature that makes sure that head-movement complies with the Extension Condition, i.e. is immediately followed by a substitution operation in the absence of any other feature that would lead to the creation of the specifier of the head in question. 52 The application of this idea with respect to one particular head, namely Fin, is illustrated by means of partial and simplified derivations of examples (1) - (5) given above, repeated here as (12) - (16).

In English, Fin is not associated with any feature therefore neither head-movement nor merger of a head take place as regards this particular head-position.

(12) a. Peter read the book.



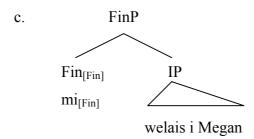
With respect to Welsh (13), I follow Roberts (2000b) and assume that the particle *mi* realises Fin_[Fin] by merger. Hence the tree is automatically extended at the root and the Extension Condition is satisfied.

⁵² Crucially, the EPP-feature cannot be checked by head-movement in my system (contrary to A&A 1998). This restriction is due to the fact that the EPP-feature is designed as a specifier-creating feature and is not a [D]-feature.

- (13) a. Mi <u>welais</u> i Megan. (Welsh; from Roberts 2000b)

 **Prt saw I Megan

 "I saw Megan."
 - b. Num = $\{Fin_{[Fin]}, mi_{[Fin]}\}$



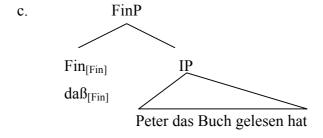
The same applies to merger of the complementiser $da\beta$ in German embedded clauses. When the derivation has reached the topmost node of the I-system, the numeration possibly looks like the one in (14b) and still contains two elements.⁵³ These two elements are the finiteness feature that marks Fin and the complementiser $da\beta$ (which probably also carries a finiteness feature because clauses introduced by $da\beta$ are necessarily finite). I assume that these two elements can form a kind of complex feature bundle that can be merged with IP. Therefore we have a substitution operation which meets the Extension Condition without having recourse to a repair mechanism and it is clear that there is no need for an EPP-feature on Fin.

(14) a. ... daß Peter das Buch <u>gelesen hat</u>. (German)

... that Peter the book read has

"... that Peter has read the book."

b. Num = $\{Fin_{[Fin]}, da\beta_{[Fin]}\}$



5

⁵³ Here, I am interested in the derivation of the embedded clause only and I will not go into the question of whether the numeration also contains material to construct the matrix clause or whether we have to do with lexical (sub-)arrays.

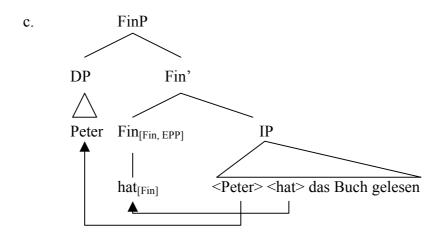
The derivation of the main clause in (15) constitutes the interesting case where the New Extension Condition comes into play. The numeration of the main clause does not contain any element that could form a complex feature bundle with Fin, in fact, by the time the derivation has reached the topmost node of the I-system, the numeration does not contain any lexical item any more that could possibly be merged in Fin (15b). Therefore Fin_[Fin] has to be checked by V-movement. In addition, Fin is not associated with any formal or semantic feature⁵⁴ that would trigger Merge or Move of an XP to create SpecFinP. I propose that Fin hence does not only carry the finiteness feature but also an EPP-feature. This EPP-feature saves the derivation from crashing because it makes sure that V-movement to Fin is immediately followed by movement of any type of XP or by merger of an expletive or of a contentful XP (e.g. an AdvP). As a result the tree is extended at the root when all features of Fin, i.e. both the finiteness and the EPP features, are checked and the Extension Condition is satisfied.

(15) a. Peter <u>hat</u> das Buch <u>gelesen</u>.

Peter has the book read

"Peter has read the book."

b. $Num = \{Fin_{Fin, EPP}\}\$



As Fin is only associated with the EPP-feature, i.e. the specifier-creating feature, and not with, say a Nominative Case-feature which would need to be checked by a subject DP (and which would make the EPP-feature superfluous), Fin is not sensitive to the type of XP that is merged in SpecFinP. That's why it is also possible to check the EPP-feature by moving an object DP

.

⁵⁴ For an alternative view see chapter II, 5.2.

to the sentence-initial position as in (16) – for the mechanism that decides on which XP is actually moved to or through SpecFinP I refer the reader to chapter II, 3.1.

(16) Dieses Buch <u>hat</u> kein Mensch <u>gelesen</u>.

this book has no human being read

"No-one has read this book."

To sum up, the EPP-feature in this approach is conceived as a feature that provides a way of integrating head-movement, i.e. an adjunction operation, into the (New) Extension Condition. The EPP-feature ensures that any head-movement operation is followed by an operation that creates the specifier of the complex head in question, i.e. Merge or Move of an XP. As no item, feature or index or the like must be introduced in the course of the derivation (Inclusiveness Condition, Chomsky 1999), any head that cannot form a complex feature bundle with a lexical item in the numeration and that is not associated with any feature that triggers XP-movement anyway (and whose feature(s) can hence only be checked by head-movement) automatically has to carry an EPP-feature. The EPP-feature thus takes care of the requirement that the tree be extended at the root once all feature-checking on a head is done. ⁵⁵

Having introduced the general idea that underlies the notion of the EPP-feature as I use it in my analysis, two questions remain. These are (i) Which heads can or must be associated with an EPP-feature? and (ii) What about the "universal EPP" on T? Before I tackle these questions I have to say some words about the clause structure I assume.

_

⁵⁵ An interesting by-product of this conception of the EPP-feature is that the name of the feature – Extend(ed) **Pr**ojection **P**rinciple feature – is motivated and highlights the correlation between the EPP-feature and the Extension Condition.

3. Clause structure

The clause structure that I propose here relies both on the *Minimalist Program* and on the cartographic approach as developed by Belletti (2001a, 2003), Cardinaletti (2002) and Rizzi (2002) among others. The structure is minimalistic because the individual phrases can lack the specifier whenever this specifier is not needed, thus departing from the X'-format. On the other hand, I do not adopt the idea of multiple specifiers (Chomsky 1995, ch. 4.10). This means that if there is evidence for another specifier (or if we need another landing site), we have to conclude that there is another complete phrase – possibly with a head that is not lexically realised. As I follow the cartographic approach and use a range of positions that I have clearly identified in the languages and constructions to be discussed here, there is a fairly large array of functional categories, each associated with a particular feature, anyway. Adopting the cartographic approach also means that the structure can contain several functional categories associated with semantic features in addition to the core functional categories v, T and C – a possibility that is, by the way, not denied by Chomsky (cf. Chomsky 1999, fn. 6).

The clause structure used in this work and discussed in detail below, however, is by no means exhaustive. First of all, it is likely that the categories identified here can be further decomposed. The number of features subsumed under T, for example, suggests that TP might indeed consist of AgrSP and TP and that the agreement phrase itself might comprise separate phrases for person and number agreement (PersP and NumP) as proposed among others by Shlonsky (1989), Taraldsen (1995), Roberts (2000) and Sigurðsson (2000). Such a decomposition is supported by certain phenomena found in Icelandic. For present purposes, however, such a finer grained structure is not necessary and therefore TP is used as a cover term. The derivations proposed here, however, would not be affected in a negative way by the introduction of separate agreement projections above TP. Second, it is highly probable that

-

For a phrase to be (actively) contained in a structure the numeration from which the structure is derived has to contain at least one feature that realises the head of the phrase in question. I put *actively* in brackets because I do not want to enter into the discussion of whether phrases for which we do not have evidence in a particular sentence are absent from the structure or only inert as this discussion is beyond the scope of this work (cf. Thráinsson 1996).

⁵⁶ The use of labels is – as in bare phrase structure – just a matter of convenience but of no theoretical import. The notation in (i), e.g. simply means that the lexical item *has* is merged together with the phi-features in a position traditionally associated with auxiliaries but there is no item called Aux contained in the numeration, let alone in a pre-existing structure.

65

there are several adverb-related categories (cf. Cinque 1999) but I gloss over the position of adverbs in this work⁵⁷ and therefore do not suggest any particular adverb-related positions. In addition, since I propose that there is a separate position for definite subject DPs (as opposed to indefinite subjects) there should probably be a separate position for definite object DPs as well and last but not least, I have not considered the possibility that there is a specialised position above the position for definite subjects (corresponding to the Wackernagel position) for pronominal subject DPs in German.

Having discussed the categories that are not considered, it is high time to introduce the categories that are actually used. The traditional categories VP, IP and CP are all assumed to be further decomposed so that we have a Split-VP, a Split-IP and a Split-CP. The three systems consist of the following categories, brackets indicating optionality.⁵⁸

Clause structure

C-system: (Force) (Top) (Foc) (Fin)⁵⁹

I-system: (Top) (Foc) (Ref) (Top) (Foc) T (Aux)

V-system: (Top) (Foc) v V

3.1. The projections of the C-system

3.1.1. Sentence-initial XPs in V2 clauses and their positions

As regards the C-system I assume one of the simplest Split-CPs proposed by Rizzi (1997b)⁶⁰ which suffices for the present purposes, the analysis of Verb Second (V2) declarative clauses. The analysis of V2 clauses developed here is a kind of compromise between the asymmetric approach to V2 (cf. Travis 1984, Zwart 1997a, b) and the symmetric approach (Vikner 1995,

⁵⁷ I am aware of the fact that adverbs are very important for the analysis of clause structure and have proved crucial for determining whether a language has verb movement or not (among many others Pollock 1989, Vikner 1995). The findings of these works concerning the position of adverbs/negation in English, Icelandic and the Mainland Scandinavian languages and about the use of adverbs/negation as indicators for verb movement and object movement are tacitly adopted unless stated otherwise.

It seems, however, as though these findings do not carry over to German and that German has a(nother) position for adverbs/negation somewhere within vP/VP (cf. Frey & Pittner 1998).

⁵⁸ The optionality of Fin is different from the optionality of the other heads. The presence or absence of Force, Top, Foc and Ref depends on semantic, interpretational, discourse-related needs, whereas the presence or absence of Fin is basically a question of which language one looks at (e.g. Fin is obligatory in V2 languages while in English it is present in residual V2 constructions only). For an account of this difference in optionality see chapters II, 3.1.2. and 5.2.

⁵⁹ Each category takes the next one to its right as its immediate structural complement.

⁶⁰ I do not discuss the arguments here that have led to the postulation of a Split-CP but refer the reader directly to Rizzi (1997b).

Schwartz & Vikner 1996).⁶¹ In the asymmetric approach the structure of subject-initial V2 clauses is different from that of all the other V2 clauses (e.g. object-initial or adverb-initial clauses). While subjects are taken to always occupy the canonical subject position SpecIP, which means that subject-initial clauses are IPs, it is assumed that all the other sentence-initial XPs are topicalised. Since topicalisation targets SpecCP this analysis implies that non-subject-initial V2 clauses are CPs. According to the symmetric approach on the other hand, all V2 clauses are CPs because subject-initial and non-subject-initial V2 clauses show exactly the same behaviour with respect to a number of phenomena such as adjunction to V2 clauses, extraction from embedded V2 clauses, etc. (Schwartz & Vikner 1996). In view of this identity in behaviour, identity in structure is only reasonable.

I argue that V2 is uniformly a phenomenon of the C-system but that it involves different phrases within the Split-CP (nevertheless I might just use 'CP' if a further distinction is not relevant at some point of the discussion)⁶². There is, however, good evidence that we do not simply have the dichotomy "subject vs all other possible XPs" but that we need a finergrained distinction as illustrated with examples from German below.

- (1) a. Der Minister übernahm die Verantwortung für den Skandal.

 The minister accepted the responsibility for the scandal.
 - b. Diesen Minister hat die Presse schon lange kritisiert.

 this-Acc minister has the press already long criticised

 "The press has criticised this minister for a long time."
 - c. Heute hat es ohne Unterlaß geregnet. (Haider 1993)

 today has it without interruption rained

 "Today it has rained without interruption."
 - d. OHNE UNTERLASS hat es heute geregnet. (Haider 1993)
 without interruption has it today rained
 "Without ANY interruption it has rained today."
 - e. Unter diesen Umständen kann ich nicht arbeiten.

 under these circumstances can I not work

 "Under these circumstances I cannot work."

-

⁶¹ For the reasons why I adopt an approach to V2 that is based on head movement plus subsequent XP fronting and not one of the recently developed ones based on remnant movement (Kayne 1998, Koopman & Szabolcsi 2000, Müller 2001, 2002a, b) I refer the reader to chapter II, 2.2.3. where I discuss head movement in detail.

⁶² For reasons why I assume a Split-CP – unlike Frey (2000) and Müller (p.c.), for example – see below.

- (2) a. Peter liebt Maria.

 Peter loves Maria.
 - b. PETER liebt Maria.
 - c. Den Peter liebt Maria.

 the-Acc Peter loves Maria

 "Maria loves Peter."
- (3) a. Die Regierung betrachtet das Volk als korrupt.

 the government considers the people as corrupt

 "The government considers the people corrupt." OR

 "The people considers the government corrupt."
 - b. Das Volk betrachtet die Regierung als korrupt.

 the people considers the government as corrupt

 "The people considers the government corrupt."

The above examples show that certain XPs can occupy the sentence-initial position of sentences with "neutral stress and interpretation" whereas other XPs require either a particular intonation (contrastive focus), special morphological markers or discourse links to be able to show up sentence-initially. I argue that neutral stress and interpretation means that the respective XP sits in SpecFinP while the other XPs occupy SpecFocP or SpecTopP, depending on their interpretation.

Different from what the adherents of the asymmetric approach postulate (if we translate the asymmetry to the Split-CP), not only subjects (1a) but also certain adverbs (1c) can show up in sentence-initial position without being topicalised or focussed.⁶³ In fact, (4a) is much more natural as an out-of-the-blue utterance than (4b), cf. ch. III, 3.2.

(4) a. Gestern hat's geregnet.

yesterday has-it rained

"It rained yesterday."

⁶³ Of course, all these XPs **can** be stressed, focussed or topicalised, hence occur in one of the higher specifiers, SpecFocP and SpecTopP, respectively.

^{(1&#}x27;) a. Der MINISTER übernahm die Verantwortung (nicht der Kanzler). *The MINISTER accepted the responsibility (not the chancellor).*

b. HEUTE hat es ohne Unterlaß geregnet.

today has it without interruption rained
"TODAY, it has rained without interruption."

b. Es hat gestern geregnet. it has yesterday rained "It rained yesterday."

The adverbs that can occupy SpecFinP are probably all those adverbs that fall into Frey & Pittner's (1998) categories of Bereichsadverbiale and Frameadverbiale as they are usually adverbs that create a setting, especially temporal and locative adverbs such as gestern 'yesterday', heute 'today', hier 'here', etc. In addition, I suggest that these adverbs are merged in SpecFinP whenever they occur in this position because they create the setting for the complete event (cf. chapter III, 2.2.).⁶⁴

Other adverbials like ohne Unterlaß 'without interruption' (1d) and unter diesen *Umständen* 'under these circumstances' (1e) can only show up in sentence-initial position if they are focussed or topicalised or forced by some other discourse requirement into this position and therefore occupy SpecFocP and SpecTopP, respectively.

As regards objects the situation is more complex. The first intuition is that at least certain object DPs can show up in SpecFinP, as for example diesen Minister 'this minister' in (1b). On closer inspection, however, it becomes clear that even the object in (1b) is topicalised, a fact that is mirrored by the use of the demonstrative diesen 'this-Acc'. If the demonstrative is replaced with the indefinite article, the sentence is ungrammatical with neutral stress and interpretation (5a). It is, however, grammatical if (part of) the DP carries contrastive focus (5b, c).

- *Einen Minister hat die Presse schon lange kritisiert. (5) a. minister has the press already long criticised "The press has criticised a minister for a long time."
 - b. EINEN Minister hat die Presse schon lange kritisiert (aber nicht alle). minister has the press already long criticised (but not all) "The press has criticised one minister for a long time (but not all)."
 - Einen MINISTER hat die Presse schon lange kritisiert (aber nicht c. den Kanzler).
 - minister has the press already long criticised (but not a the chancellor)

of predication in the respective clauses.

⁶⁴ If Fin is associated with a subject-of-predication feature (as is suggested in chapter II, 3.1.2. and 5.2.), these adverbs might also be merged lower down in the tree and move up to SpecFinP because they serve as the subject

"The press has criticised a MINISTER for a long time (but not the chancellor)."

This observation supports the assumption that also object DPs can only show up sentence-initially if they are focussed or topicalised. The examples in (2), however, show that focalisation does not always suffice to make an object a licit sentence-initial element. (2b), just like the neutral (2a), can only have the interpretation where *Peter* is the Experiencer or Agent, i.e. the subject. To turn *Peter* into the Benefactive, i.e. the object, we have to use the proper name in combination with the definite article (which is unambiguously marked as Accusative), a construction that is otherwise only used in colloquial speech and regional varieties of German.

On the other hand, there are contexts in which an object can occur in sentence-initial position even though it is not unambiguously morphologically marked, nor carries special focus. Our world knowledge alone allows us to figure out the "correct" reading as in (3). In (3) both DPs, *die Regierung* 'the government' and *das Volk* 'the people', could be either Nominative or Accusative but one will almost always get the reading in which the sentence-initial DP is the "considerer", i.e. the sentence-initial DP gets the default interpretation "subject". (3a), however, also allows for an object-reading of *die Regierung* because it is part of our knowledge of the world that usually people consider the government corrupt and that it is not the other way round. In (3b), on the other hand, there are no semantic reasons that favour or even force an object-reading of *das Volk*.

Sentences with a Dative object DP in initial position on the whole pattern like other object initial main clauses, i.e. the Dative object either has to be (contrastively) focussed or topicalised.

(6) Dem Peter hat Maria ihre Liebe gestanden. (German)

the-Dat Peter has Maria her love confessed

"To Peter, Maria confessed her love."

One type of sentence-initial Dative object DPs, namely those in passives, and Dative and Accusative Experiencer DPs of psych-verbs, however, suggest that FinP – contrary to what has just been said – is not a completely neutral position.

(7) Einem Mitbewohner wurde im Park die Geldbörse entwendet. (Frey 2000)

A-Dat flatmate was in-the park the wallet stolen

(8) a. Mir ist kalt. (German)

me-Dat is cold

"I feel cold."

b. Mich friert.me-Acc freezes"I feel cold."

As (7) can serve as an answer to the question *What happened?* the Dative object DP should occupy SpecFinP but although the Dative DP is probably the highest XP in the vP/VP it is definitely not the highest element in the I-system (the definite subject moves to SpecRefP (see II, 3.2.3.) and the AdvP is even higher) and therefore it should be associated with some feature that has to be checked in the C-system to be able to move across the higher XPs. That's why I suggest that Fin is associated with a subject-of-predication feature in the V2 languages (for a discussion of this suggestion and its implications see chapter II, 3.1.2. and 5.2.).

As remnant VPs in sentence-initial position are somewhat marked anyway, I assume that they also require a triggering semantic feature, such as Topic or Focus, to be able to show up in this position. The fronted VP has to have a special function in the discourse as in (9) where one might think of a discussion of possible consequences of a political scandal, the resignation of the minister (not) being one of them.

(9) Zurücktreten wird der Minister deswegen wohl nicht.

resign will the minister because-of-that probably not

"The minister probably won't resign because of this."

Table 1 summarises the positions in which the various XPs can be spelt out and whether they have to be associated with a particular semantic feature. The XPs that need not carry a semantic feature⁶⁵ can, of course, do so and move via SpecFinP to one of the semantic projections.

_

⁶⁵ If Fin is, however, associated with a subject-of-predication feature the mechanism has to be slightly rephrased. In addition, this subject-of-predication feature is taken to be different from the other semantic features because all clauses have to have a subject-of-predication of some kind whereas there is no need for topics or focussed elements, for example.

Table 1:

	SpecTop/FocP	SpecFinP	semantic feature	no feature
subject DPs	✓	✓	✓	✓
adverbs which create a	✓	✓	√	✓
setting				
Dative object DPs in	✓	✓	✓	✓
passives, Experiencer DPs of				
psych-verbs				
other adverbs, PPs	✓	X	✓	X
object DPs (except those in	✓	X	√	X
line 3)				
(remnant) VP	✓	X	✓	X

As shown above, most object DPs, a large number of adverbs and adverbial PPs and remnant VPs can only move to the sentence-initial position (which is then SpecTopP or SpecFocP, respectively) if they carry a Top- or a Foc-feature. This means that fronting of these types of XPs has to be semantically triggered or imposed by discourse requirements. Subject DPs, Dative object DPs in passives, Experiencer object DPs of psych-verbs and adverbs that create a setting, on the other hand, are admissible in sentence-initial position even with neutral/default stress and interpretation. This observation indicates that fronting of these XPs is not triggered by semantics. I argue that they show up in the semantically neutral SpecFinP simply to fulfil the V2 requirement.

3.1.2. Locality and why the finite verb in Fin can only be preceded by one XP

In a system that does not posit the existence of formal or semantic features on Fin that need to be checked by an XP, the restriction of SpecFinP elements to subject DPs, a particular type of objects and certain adverbs is due to locality and economy. ⁶⁶ If the numeration contains an

⁶⁶ If, however, Fin is associated with a subject-of-predication feature and subject DPs, certain Dative and Accusative object DPs and adverbs that create a setting, respectively, can carry such a feature as well, this explanation in terms of locality and economy becomes obsolete. On the one hand, a feature-based account is desirable because also in non-V2 languages such as Italian, for example, the same range of XPs seems to share certain properties that are typically attributed to subjects (Cardinaletti 2002). On the other hand, there remains the question why exactly these XPs can carry the subject-of-predication feature but not others and the apparent locality effects call for an explanation as well because they are too obvious to be accidental.

adverb that creates a setting, merger of this adverb is always more economical than movement of some XP to SpecFinP. If there is no such adverb and no XP is associated with a feature that requires the respective XP to move to the edge of the I-system (for such operations see chapter II, 4.3.3.), subject DPs and Dative object DPs in passives are usually closest to SpecFinP⁶⁷ and are therefore the only elements that can move there respecting locality conditions.

This argumentation predicts that if we have an object that has scrambled over an indefinite subject, this subject can only show up in sentence-initial position if it is topicalised or focussed because it is not the element closest to SpecFinP in this case. The example in (10) seems to confirm this prediction because the subject *ein Kind* 'a child' has to be focussed.⁶⁸

(10) [Context: Irgendjemand hat giftige Köder ausgelegt und schon mehrere Hunde und Katzen sind daran eingegangen.

Someone has laid out poisoned baits and several dogs and cats have died.]

Ein Kind hat einen solchen Köder glücklicherweise noch nicht gegessen.

a child has a such bait fortunately not yet eaten

"Fortunately, no child has eaten such a bait yet."

This differentiation of the various types of XP and their way of reaching the sentence-initial position of declarative V2 clauses is reminiscent of Frey's (2000) account of deriving V2. According to Frey (op. cit) there are three possibilities of satisfying the V2 requirement in German – (a) merger of an expletive, (b) "stylistic fronting" and (c) semantically/pragmatically triggered fronting of an XP. In the case of stylistic fronting, it is – according to Frey – exactly the phrase that would be highest in the *Mittelfeld* that is fronted to the sentence-initial position and stylistic fronting is characterised by the fact that the operation is completely unmarked and "contextually neutral". Stylistic fronting just serves as a means to fulfil the V2 requirement. It usually applies to subjects, Dative DPs of passive constructions and temporal and frame adverbials (Frey & Pittner 1998) and it cannot apply whenever there is a sentence topic, which marks the left edge of the I-system. On the other hand, C can also

⁶⁷ Of course, TP (or RefP if present) would be closer to SpecFinP than these XPs but TP (RefP) does not qualify as a candidate for movement to SpecFinP. If Fin is associated with a subject-of-predication feature (as I argue below and in ch. II, 5.2.) this restriction becomes plausible because TP (RefP) is the predication rather than the subject of the predication.

⁶⁸ This argumentation relies on Frey's (2000) assumption that the sentence adverb *glücklicherweise* 'fortunately' marks the right edge of the (upper) topic area of the I-system.

be associated with a semantic or pragmatic feature, such as [fok] or [link], according to Frey. Fronting of an XP to check these features results in the sentence not being contextually neutral any more but having a certain semantic or pragmatic effect.

The main difference between Frey's (2000) approach and mine is that Frey does not assume a Split-CP. Instead, C can be associated with a range of features, like [fok] or [link] etc. (resulting in the respective reading) or no feature at all in the case of stylistic fronting. In addition, Frey seems to suggests that movement of an XP to a, say, focus-marked CP suffices for the XP to get a focussed reading, while I assume that the XP itself is also associated with a focus-feature and that we have mutual feature-checking (see II, 4.2.).

As we have just seen that it is possible to account for the differences observed e.g. between subjects and objects in sentence-initial position even if one assumes a simple CP, it is necessary (i) to provide evidence for the existence of a Split-CP in German and (ii) to explain why we cannot get a topic plus a focussed XP preceding the finite verb in German.

Müller (p.c.) argues that the fact that the finite verb cannot be preceded by two constituents, such as a topic and a focussed element indicates that we have an "unsplit" CP in German. Frey (2000) and Müller among others then assume that C can be associated with a range of semantic features like [top] or [foc] which determine the interpretation of the phrase in SpecCP. My claim, however, is that there are constructions that instantiate two positions in the preverbal domain. I take, for example, doubling structures, such as (11) to be evidence for a Split-CP.

- (11) a. Diesen Satz, den mag ich einfach nicht. (German)

 this-Acc sentence, that-Acc like I simply not

 "This sentence, I simply don't like (it)."
 - b. Die Temperaturen, die klettern heute auf über 20°C.

 the temperatures they climb today to above 20°C

 "The temperature (it) rises to above 20°C today."

I argue that these constructions are topicalisations that involve a complex DP, in the case of (11a) e.g. [DP2 den [DP1 diesen Satz]] (cf. Belletti 2003). The complex DP that consists of DP1 and the resumptive pronoun moves to SpecFinP where the resumptive pronoun is left behind while DP1 moves on to SpecTopP (cf. Grohmann 2000; it has been highly debated though whether these constructions involve movement or rather basegeneration of the topic in the left periphery). In addition, the above examples show that the verb stays in Fin and does not move

74

to the higher heads of the Split-CP, Top or Foc.⁶⁹ Thus, this construction not only proves the existence of a Split-CP in German but also shows that topicalised or focussed XPs move through SpecFinP to their respective "surface" positions. The latter observation is crucial with respect to the ungrammaticality of topic-plus-focus structures.

According to my definition of the EPP, V2 structures arise if the finiteness feature on Fin can only be checked by head-movement (V-movement to be more precise) because this V-movement has to immediately be followed by the creation of the specifier of Fin (see chapter II, 2.3.). If the numeration (or possibly the lexical subarray in the case of embedded V2 clauses) is exhausted at the time when SpecFin has to be filled, the closest argument or adverb, usually the subject DP, moves to SpecFinP. If the numeration is not exhausted yet there are two possibilities. Either the numeration contains one of Frey & Pittner's (1998) Frame- or Bereichsadverbiale or an expletive which is then merged in SpecFinP or the numeration contains a topic- or focus-feature. In the latter case, the XP that is associated with the corresponding semantic feature moves to SpecFinP in a look-ahead operation and checks the EPP-feature of SpecFinP (for an alternative view see below and ch. II, 5.2.) before it moves on to check its semantic feature against the head (Top or Foc) that has been merged with FinP in the meantime.

To rule out V3 constructions it does not suffice to refer to Relativised Minimality (Rizzi 1990, 1998/2001, 2002; Roberts 2000b) and say that a topic XP cannot move across a focussed XP because they are "of the same type" since there are languages, e.g. Italian, that do allow for topics and focussed XPs to cooccur. Instead, it seems as though V2 is a little bit more than V-movement to a "neutral" Fin and EPP-driven creation of SpecFinP after all and that V2 has some semantic content as well. Therefore I propose that in V2 languages Fin is associated with a feature "subject-of-predication" (cf. Cardinaletti 2002). If this assumption is correct it becomes clear why subject DPs, Dative object DPs of passives, Experiencer objects of psych-verbs and adverbs that create a setting can show up in SpecFinP. Subject DPs – as the name suggests – are by default the subject of predication, unless some higher ranked constraints (not to be understood in the OT sense) single out some other XP as subject of predication. If the complete event or state is the predicate and does not allow for any

⁶⁹ I assume that only functional heads that can be associated with verbal features, as for example v, T, Agr (if such projections exist) and Fin, can trigger V-movement. Other head-positions are only transit sites required by the Head Movement Constraint if a verb has to reach some higher V-related head position. So a finite verb can, in fact must, move through e.g. Ref (provided that RefP is present or activated in the structure) if it has to check features on Fin. In other words, a verb has to move through all head positions of the I-system if it has to reach the C-system. As the finite verb, however, does not move across the clause boundary, i.e does not move through the C-system to a higher system, there is no requirement that forces the verb to move to a head position where it does not have to check any feature. Hence such a movement is ruled out by economy.

argument to be specified as subject of predication as in presentational sentences⁷⁰, the subject-of-predication feature is either checked by an expletive, by an event argument or by an adverb that creates a setting. As the adverb provides the temporal or locative frame in which the event is anchored it becomes clear why precisely adverbs that create a setting can show up in SpecFinP but not others. In view of the fact that in the absence of an Agent as in passives, the Experiencer is most likely to be identified as the highest argument according to the thematic hierarchy and linking theories, it is also clear why the Dative object DP in passives (which is typically an Experiencer) serves as the subject of predication and need not be associated with a semantic feature such as topic or focus to be able to show up in sentence-initial position. The same holds, of course, of the Experiencer objects of psych-verbs.⁷¹

The question now is how the subject-of-predication feature is checked if we have a topicalised or focussed sentence-initial XP. I propose that such topics and focussed elements are exactly the elements over which we predicate, i.e. subjects of predication. With respect to topicalisations this assumption should be fairly uncontroversial because following Rizzi (1997b) the topic is a piece of old information on which we comment. Focussed elements, on the other hand, usually provide new information. As new information usually comes last in a sentence and is not expected to be the subject of predication, I suggest that it is exactly the association with focus (a kind of 'warning signal' that marks the XP) that enables new information to serve as subject of predication. Being the subjects of predication, the semantically marked XPs have to move through SpecFinP to check the subject-of-predication feature and as a predication can only have one subject, we can either have a topic or a

(i) Es hat soeben der Kanzler die Bühne betreten. (German) Expl has just the chancellor the platform mounted

This sentence would usually be translated into English as 'The chancellor has just mounted the platform.' but this is not an exact translation of the German sentence. The German sentence describes an event or a situation and can be uttered, for example, in a report from a "Wahlparty" (a party given by a political party after an election where the leading people of the respective party all give short speeches interpreting the results of the election). Imagine the commentator explaining some general things and then he sees that the chancellor has arrived. As an explanation for why he interrupts his comments and has the camera turn to another scene he can utter the sentence in (i). As far as I (being a non-native speaker of English) can tell, the English translation given above cannot be used as a simple presentational sentence in the situation described because we say something about the chancellor and do not describe the scene. Instead the commentator would probably say 'In this moment the chancellor has mounted the platform.' – This construction, however, is a topicalisation construction with a topicalised adverbial. The topicalised adverbial provides the setting and allows for the whole event to show up in the "comment" part of the sentence. This is the closest we can get to the German utterance but still some element (here the adverbial) has to be singled out.

 $^{^{70}}$ I argue that this is what we witness in certain *es*-constructions where *es* is an expletive merged in SpecFinP because no other XP is the subject of predication as in (i). (For a detailed analysis of these constructions see chapter III, 2.)

⁷¹ Both Dative object DPs in passives and Experiencer objects of psych verbs tend to be animate. This fact suggests that in the absence of an Agent or Causer an animate object is the preferred choice as regards the subject of predication. I will not go into the discussion of this question here.

focussed element but not both at the at the same time. This restriction concerning the subject of predication and the condition stating that head-movement has to be followed by a specifier-creating operation explain why exactly one XP precedes the finite verb, i.e. why we get V2 constructions but not $V1^{72}$ or V3 constructions if the finite verb moves to Fin.

Everything that has just been said about the subject-of-predication feature only applies to V2 languages because I argue that the location of the subject-of-predication is parametrised. While it is associated with Fin in V2 languages, it is located in the I-system in non-V2 languages. As topics and focussed elements do not have to move through SpecFinP to check the subject-of-predication feature in non-V2 languages, these languages allow for topics and focussed elements to cooccur, unlike V2 languages.

Another desirable side effect of the above proposal is that it provides an account of why the optionality of FinP is different from the optionality of the other optional projections. Since Fin is the location of the subject-of-predication feature in V2 languages this projection is obligatory in these languages, but not in the languages where the subject-of-predication feature sits in the I-system.

All in all, it has been shown that sentence-initial XPs in German main clauses can be either "neutral" or topicalised or focussed, depending on their grammatical function and that there is evidence that these XPs also occupy different specifiers of a Split-CP and not just the SpecCP of a C-head associated with different features. In addition, I have argued that there is a subject-of-predication feature which is parametrised between V2 and non-V2 languages and that the ungrammaticality of V3 orders, in particular of topic – focussed XP – $V_{\rm fin}$ sequences, in V2 languages is due to the subject-of-predication feature on Fin and not to an unsplit CP.

3.2. The projections of the I-system

3.2.1. Overview

For the sake of convenience I repeat the set of projections that I assume to make up the Split-IP.

The discussion of the various projections of the I-system touches on a variety of aspects. The Topic and Focus phrases will be argued to be involved in the operation that is commonly

⁷² I will not propose an analysis of V1 constructions here – the easiest explanation would be to assume the

referred to as scrambling, i.e. movement of an XP out of its base position to some position in the *Mittelfeld*. In this section I will present only some general ideas about scrambling. This phenomenon will be discussed in more detail and compared to Object Shift once I have introduced my assumptions about the structure of the V-system and about checking (ch. II, 4.3.3.).

SpecRefP and SpecTP will be identified as subject positions, the former hosting definite/specific DPs and the latter indefinite DPs. Being classified as subject positions, these positions will be of particular interest because the questions of the EPP, of the "canonical subject position" and especially of the "universal EPP on T" come up again. However, to satisfactorily deal with these questions some knowledge about my conceptions of the V-system and checking is needed here as well.

There is not much to say about AuxP and therefore I do not dedicate a separate section to this position. The following comment should suffice – AuxP (which can be iterated), or more precisely Aux, is the position where auxiliaries are merged.

3.2.2. TopP, FocP and Scrambling

Frey (2000) extensively argues that there is a topic position above the position of definite subjects and marking the left edge of the *Mittelfeld* as shown in (12), where *den Otto* 'the-Acc Otto' occupies this topic position.

Nächsten Monat wird den Otto erfreulicherweise die Botschafterin von next month will the-Acc Otto happily the ambassadress of Norwegen heiraten.

Norway marry

"Happily the ambassadress of Norway will marry him next month."

XPs assigned contrastive focus can show up in the same area of the clause suggesting that we do not only have a TopP at the left edge of the *Mittelfeld* but also a FocP.

presence of an empty operator in these sentences.

(13) ... daß dem alten MANN der Nachbarsjunge wieder nicht geholfen hat.
... that the-DAT old man the neighbour boy again not helped has
"... that the boy next door again did not help the old man."

Frey (2000) also discusses cases where the direct object DP has obviously been moved and occupies a position lower than that of the definite subject (14; Frey's 2000, (70b)). However, as he only considers sentence topics and as these object DPs fail his tests for topichood he rejects the idea that scrambling can always be analysed as fronting of a topic – an idea that has been put forth as allegedly only definite XPs undergo scrambling (Jayaseelan 2001).

(14) In dieser Woche hat Otto mindestens eine Briefmarke jeder Besucherin in this week has Otto at least one stamp every visitor gezeigt.

shown

"This week, Otto has shown at least one stamp to every visitor."

I fully agree that *mindestens eine Briefmarke* 'at least one stamp' is not a topic (note that it is an indefinite DP that has scrambled here!) but as I have difficulty uttering this sentence with neutral stress I assume that the direct object DP occupies a focus position. It is, however, hard to determine whether my assumption is right because the example involves quantifiers and the word order might be influenced by scope requirements. Nevertheless, even if scope plays a role here, the direct object DP can be argued to have moved to a semantic functional projection.

I therefore assume that scrambling, i.e. movement of an XP out of its base position to some position in the *Mittelfeld*, is always movement of an XP to the specifier of a functional projection that is associated with semantic features, such as topic or focus.⁷³ There are two areas in the *Mittelfeld* in which these projections can be located – both above and below RefP, the position of definite subject DPs – and that's the reason why scrambling does not seem to target a specific position.

⁷³ Scrambling has been argued to display both A- and A'-properties (for an overview see Alexiadou & Anagnostopoulou 1997, Vikner 1999/2000, Hinterhölzl 2000), among the arguments for scrambling as A-movement is that scrambling allegedly does not lead to a weak cross-over effect. The A'-properties of scrambling can easily be accounted for if scrambling is indeed topicalisation and focalisation, respectively, because Rizzi (1997b) identifies SpecTopP and SpecFocP as A'-positions. Rizzi (op. cit.), however, also observes that there are some differences between Topic and Focus, one being that topicalisation never gives rise to a weak cross-over effect, while focalisation does. He attributes this difference to focalisation involving a

3.2.3. Two subject positions in the Mittelfeld

This section takes me back to the core of this study as it deals with the subject positions found in the Split-IP. The analysis presented here is mainly based on Kiss (1996) and on the idea advocated in the cartographic approach that each property associated with subjecthood should be encoded in a separate position (cf. chapter II, 1.2.)

Assuming that the complex adverb *schon immer* 'always' occupies a fixed position, the examples in (15) show that there are two subject positions in the *Mittelfeld*, one above the adverb and associated with definite subjects (and marginally with indefinite and quantified subjects; therefore it might be better to speak of specific subjects) and one lower than the adverb and associated with indefinite and quantified subjects, but never with definite subjects.

- (15) a. Diesen Satz haben schon immer alle Studenten gehaßt. (German)

 this sentence have already always all students hated

 "This sentence, all students have always hated."
 - b. *Diesen Satz haben schon immer die Studenten gehaßt.

 this sentence have already always the students hated
 - c. PDiesen Satz haben alle Studenten schon immer gehaßt.

 this sentence have all students already always hated
 - d. Diesen Satz haben die Studenten schon immer gehaßt.

 this sentence have the students already always hated

Diesing's (1992) observation that bare plurals that precede the adverb have a generic reading, while bare plurals that follow the adverb have an existential reading can be reproduced in these sentences as well.

- (16) a. Diesen Satz haben Studenten schon immer gehaßt.

 this sentence have students already always hated

 "This sentence, students (in general) have always hated."
 - b. Diesen Satz haben schon immer Studenten gehaßt.

 this sentence have already always students hated

 "There have always been some students who have hated this sentence."

Diesing (1992) originally proposed that the lower subject position is the position where the subject DP is merged, i.e. SpecvP according to recent proposals about clause structure, and that the higher position is SpecIP, probably to be translated as SpecTP. Kiss (1996), however, convincingly argues that in both English and German the lower subject position is VP-external (or vP-external, respectively) as well and that, in fact, lower subjects occupy SpecIP and not higher subjects. The upper subject position, Kiss calls RefP.⁷⁴

Following Kiss I assume that all subjects⁷⁵ move to SpecTP (where indefinite/non-specific subjects can stay unless they are forced to move to the C-system) and that definite/specific subjects have to move on to SpecRefP, to check a definiteness/specificity feature. This analysis means that RefP is another projection associated with a semantic feature and that SpecRefP is the designated position for definite/specific subject DPs.

3.2.4. RefP and the EPP

With respect to the question of the EPP, RefP does not pose a problem. First of all, SpecRefP will certainly not be identified with the traditional definition of the EPP, i.e. the requirement that clauses must have subjects because it was never stated that clauses must have definite subjects. Second, if RefP is present (or active, depending on whether non-realised projections are absent or just inert – a question I will not address in this work) it is present precisely to allow an XP to check its definiteness/specificity feature. Therefore RefP's specifier will always be occupied and the EPP as I defined it will automatically be satisfied. In fact, it is rather head-movement to Ref that poses a problem here not the subsequent creation of Ref's specifier. If we have a German main clause that contains a definite subject DP, the finite verb has to move from T to Fin via Ref in order not to violate the Head Movement Constraint. This movement of the finite verb through Ref must be triggered by some kind of look-ahead operation. However, once head-movement to Ref has taken place, the creation of SpecRefP is self-evident as the need for this specifier was the reason for the presence of RefP in the first place. The place of the presence of RefP in the first place.

⁷⁴ For a detailed discussion of Kiss' (1996) paper I refer the reader to chapter II, 1.2.

⁷⁵ I am aware of the fact that, e.g. in Mainland Scandinavian, subjects can follow the lexical verb even in clauses where we do not have verb movement as in (i).

⁽i) ... at der har danset nogen i haven (Danish; from Vikner 1995, p. 203, (82)) ... that Expl has danced someone in garden-the "... that someone has danced in the garden."

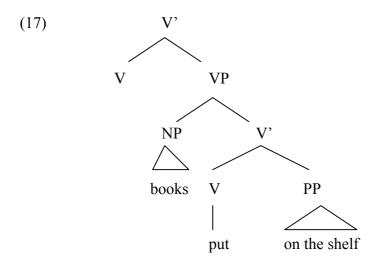
These constructions certainly call for another analysis (see chapter III, 2.5.).

⁷⁶ Similarly all TopPs and FocPs will never have their specifier created because of the presence of an EPP-feature.

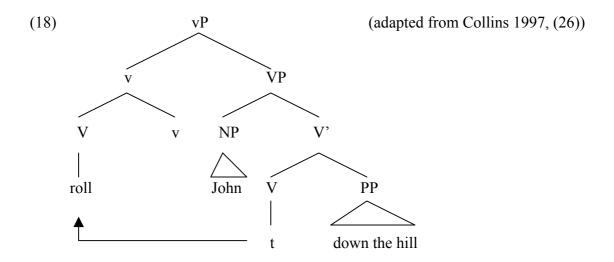
Thus we are only left with one head that has not been discussed with respect to the EPP yet and this head is precisely the one which has often been identified with the EPP, namely T. Before the crucial question of the status of T concerning the EPP can be tackled a rather large aside on the V-system and checking is necessary.

3.3. The projections of the V-system

At first glance the structure of the vP/VP area does not seem to require much attention as VPshell structures have become fairly common since they were suggested by Larson (1988). It is, however, right at VP that the first deviation from the mainstream has to be noted. Kayne (1994) argues from a technical point of view that there is a universal base underlying all languages and that this universal structure has the order specifier-head-complement (SVO being one particular instance of this order). More precisely, Kayne (op. cit.) explicitly shows that SOV (and specifier-complement-head) does not exist, unless derived by movement of the object/complement to some specifer position between the positions of the subject and the verb. Therefore the universal base hypothesis is mostly synonymous with the assumption that in both English and German, for example, the complement underlyingly follows the verb and obligatorily moves to a higher specifier in German. Despite Kayne's formal technical arguments and probably unconsciously inspired by Haider's (2002) postulation that OV is more basic than VO (although I generally disagree with Haider) and following Hale & Keyser (1993) and Roberts (2000b) I assume that the "complement" is merged in SpecVP and that the VO-order is derived by movement of the verb to some higher position. Hale & Keyser (op. cit.) develop this structure to account for alternations like (i) She put the books on the shelf. vs (ii) She shelved the books. They assume that both sentences underlyingly have a VP-shell structure as in (17) with the Theme occupying the specifier of the lower VP and the PP the complement position of this VP and in which a (reduced) PP incorporates in several steps into the light verb to derive (ii).



As Hale & Keyser need the complement position of the lower V for the PP, they are more or less forced to put the object in SpecVP, at least they have strong theoretical support for assuming this structure. In his account of Locative Inversion, Collins (1997) adopts Hale & Keyser's structure but he does so only for unaccusative verbs.



As Collins discusses Locative Inversion, there is again a PP that has to occupy the complement position of VP if one does not want to assume that the PP is adjoined or merged in some higher position.

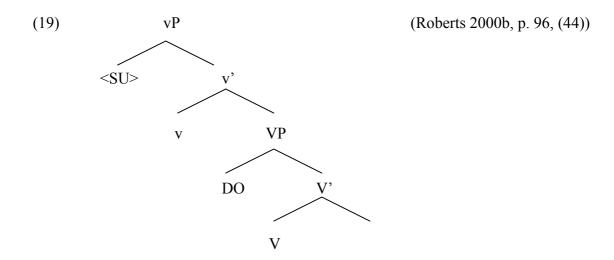
There is no such reason for Roberts (2000b) to assume a structure in which the object is merged in SpecVP. He introduces the structure in (19) when he mentions that Accusative Case is checked in SpecVP⁷⁷ but there is nothing that forces him to assume that the direct

_

⁷⁷ Roberts (2000b) does not speak of checking here but gives the following "formula".

⁽i) Val(Case, DP) = ACC iff DP is in SpecVP

object is merged in SpecVP, it could in fact have moved there from the complement position of VP⁷⁸ (Roberts, p.c.).



Despite the open question of what occupies the complement position of V, it is exactly the structure proposed in Roberts (2000b) that I adopt here. More precisely, unlike Hale & Keyser (op. cit.) I do not assume that PP arguments are merged in the complement position of V, nor that complement clauses occupy this position (vs Zwart 1997b). Concerning the former I rather suggest that the direct object and the PP argument form a kind of Small Clause that is merged in SpecVP (remotely reminiscent of Hoekstra & Mulder 1990).⁷⁹

(20) die Hemden auf die Leine hängen

the shirts on the line hang

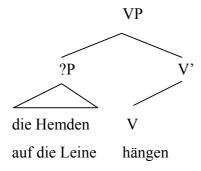
"to hang the shirts on the line"

⁷⁸ Roberts (p.c.), however, also points out that he does not see any advantage in positing this.

In fact, it seems more plausible to assume that direct objects, just like subjects and indirect objects, are merged in a specifier position.

The assumption that the object DP and the PP form a kind of Small Clause is supported by the fact that these phrases can marginally be fronted together as in (i). As the finite verb can only be preceded by a single constituent, DP and PP must form a consituent.

⁽i) # Hemden im Geschirrspüler hat noch keiner gewaschen. (German) shirts in- the dishwasher has yet no one washed "No one has ever washed shirts in the dishwasher."



As regards complement clauses I propose that they are merged in SpecVP just like object DPs. The fact that they occur sentence-finally is not evidence enough to conclude that they are merged in the complement position – in fact, applying the derivation I propose (see chapter II, 4.3.) they would not end up in sentence-final position then. Instead, I argue that the sentence-final position of embedded clauses and of extraposed object DPs or PPs⁸⁰ is due to movement to the topic or focus position above vP (cf. Belletti 2001a, 2003).

The reasons why I postulate that objects occupy SpecVP will become clearer when I present the complete picture, explaining the differences between OV and VO languages.

My assumptions about vP are much more uncontroversial. I assume that the v-head, and hence vP, is obligatory and that its presence does not depend on the verb being transitive or unergative.⁸¹ It is only SpecvP that is not projected if the verb is passive or unaccusative because SpecvP is the position where the subject DP is merged. In other words, the presence

⁸⁰ It is not exactly grammatical to extrapose object DPs or PPs in German but the construction becomes more and more common in spoken and even in written German (even in formal registers).

(i) Es geht ja die Kunde, daß morgen abgereist wird aus Bagdad, [...] it goes Prt the news that tomorrow left is from Baghdad "It is being said that [the journalists, S.M.]will leave Baghdad tomorrow."

(German; broadcast on SWR 1, March 17th, 2003)

In (i) aus Bagdad 'from Baghdad' is a kind of afterthought that provides information that is already known or can at least be inferred from the context (a report on the preparations for the war in Iraq) – therefore the PP should occupy a topic position. In (ii), on the other hand, the extraposed PP provides crucial new information so that it is very likely that it has moved to SpecFocP – even more so as the relation of the numbers is so incredible (4500 signatures for one postbox) that it is probably focussed.

(ii) Hätte die Post Sinne (und Verstand!), würde sie doch reagieren auf 4500 Unterschriften had the post senses (and common sense) would she Prt react to 4500 signatures

zur Wiederaufstellung *eines* abgeschraubten Briefkastens. *to-the putting up again of-one unscrewed postbox*

"If the post had senses (and common sense!), it would react to 4500 signatures demanding that a single postbox that was removed be put up again."

(DIE ZEIT, June 5th, 2003, p.19)

.

⁸¹ The fact that Swedish has passive morphology (the so-called *s*-passive) which I take to be checked in little v – after all, vP has often been called VoiceP (Kratzer 1994) – shows that v has to be present in passives.

or absence of SpecvP is solely determined by selection and has nothing to do with the presence or absence of an EPP-feature on v. Even in the case of an unaccusative verb undergoing movement from V to v, SpecvP will not be created.

Having familiarised the reader with the clausal skeleton that underlies my analyses, I can now proceed to the more technical question of how checking is defined here before I finally come back to the initial question of what has become of the "universal EPP" on T.

4. Checking

4.1. Types of features

With respect to the semantic effect of syntactic operations, two conceptions exist side by side. On the one hand, there is Chomsky's minimalist clause structure that is generally reduced to the core functional categories v, T and C (Chomsky 1999) and in which semantic effects should follow from formal feature checking. On the other hand, we have the cartographic approach (Belletti 2001a, 2002; Cardinaletti 2002; Cinque 1999; Rizzi 2002) in which functional categories should ideally only be associated with one specific feature or in other words, in which each feature should be associated with its own functional category. More importantly, in the latter approach there are categories hosting formal features (e.g. phifeatures) and categories hosting semantic features such as Topic, Focus (Rizzi 1997b, 2002), Subject-of-predication (Cardinaletti 2002), etc. As shown above, the model of clause structure I use here departs from the pure *Minimalist Program* in that it comprises both semantic and formal functional categories.

The presence and checking of both syntactic and semantic features in narrow syntax is, in fact, implied in the *Minimalist Program* if Chomsky (1995) and Martin (1999) are right when they define that "perfection [...] means that the structure of C_{HL} is minimally that which is imposed by the structure of external interface systems" (Martin 1999, p. 1). Given that this view about perfection is correct it is only logical that we have semantically triggered movements in syntax because the structure that is spelt-out and handed over to LF must be ready for interpretation. This means that, e.g. elements that should be interpreted as focussed must show up in a focus position by spell-out and it is very unlikely that it is always formal feature checking that makes sure that the element in question ends up in the appropriate position. ⁸² A closer look at the apparently "free" word order of languages like German ⁸³ also

⁸² Formal features, such as Case and phi-features of a DP, always have to be checked in the same way in a given language no matter whether the DP is focussed or not. Focus, however, is an optional feature and therefore it is hardly possible to link focus, say, with phi-feature checking.

Chomsky (1999), e.g., says that phi-features (of the subject DP) are checked *in situ* via Agree (Case being checked as a free rider/Case being a reflex of Agree) and that it is only the EPP-feature on T that makes subject DPs move to SpecTP. If the numeration contains *there*, the subject DP (which has all its features checked via Agree) does not move because merging the expletive in SpecTP is cheaper/more economical than moving the subject DP. That's why I do not see how focus (or topic or ...) can be parasitic on formal feature checking.

⁸³ Phonology, or to be more precise intonation, in fact heavily interacts with both syntax and semantics as well and a sentence can be completely out with intonation A and perfectly fine with intonation B. Hence it is necessary that elements that have to be marked as focussed in the phonological realisation occupy a focus position before a structure is handed over to PF, i.e. the respective elements have to get into a focus position in narrow syntax.

suggests an interaction between syntax and semantics/discourse requirements because all the various possible word orders of a sentence each have a different reading, although the differences sometimes reduce to nuances.

So far, I have just spoken of "checking" without defining how I understand checking to work. While for the above discussion of the EPP and of clause structure some general idea of checking has been sufficient, the definition of the EPP on T and the discussion of differences between OV and VO languages call for a precise definition of the various checking configurations assumed in this work.

4.2. Matching features

I propose that for checking to work we have to have a matching pair of features. For the sake of illustration I assume that all semantic and formal features, except for the EPP-feature, come in a [+] and in a [-] version⁸⁴ and that checking is equal to forming [+/-] pairs of matching features.⁸⁵ Neither a [+] nor a [-] version of a feature can survive on its own and will make a derivation crash if not paired with its counterpart. On the other hand, there is no such distinction like interpretable vs uninterpretable features.⁸⁶ This system of feature pairs

(i) *Conny hat nicht eines kaputt gemacht.

*Conny has not one broken made

"Conny hasn't broken one."

(neutral stress and intonation)

To convey the intended meaning, (i') has to be used instead.

(i') Conny hat keines kaputt gemacht. Conny has not-one broken made "Conny hasn't broken one."

If eines 'one' is stressed, however, the original sentence is perfectly fine.

(ii) Conny hat nicht EINES kaputt gemacht.

Conny has not ONE broken made

"Conny hasn't broken a single one." (or: "Conny hasn't broken one (but two).")

For a comparison with Haeberli (1999a) see footnote 87.

⁸⁴ I explicitly do not want to suggest that these pluses and minuses really exist (I could just as well have spoken of male and female features or of hook and eye features etc) – they are just notational devices to make identification of matching pairs simpler.

⁸⁵ I assume that there is another, but independent process that involves matching of features. Following Chomsky (1993/1995, ch. 3) and Bobaljik & Jonas (1996) I assume that T (for exceptions see section II, 4.3.2.B) actually carries two sets of phi-features, nominal and verbal, which have to be checked by DP and V, respectively, and which have to match. This matching results in agreement. I will, however, dispense with the nominal set of phi-features in the derivations below.

⁸⁶ In particular, coming from a language with rich nominal morphology (or rather rich "determinal" morphology) I do not see how Case can be called uninterpretable. *Den Hunden* 'the-Dat-Pl dogs-Dat-Pl', for example, is unambiguously Dative Plural and even without a context or any syntactic structure one immediately knows that the dogs are either Patients or Benefactives – simply because the DP is Dative. What is more, this unambiguous identification does not only hold for inherent Case but also for Nominative and Accusative Case, e.g. *der Hund* 'the-Nom-Sg dog' and *den Hund* 'the-Acc-Sg dog', respectively. Theta-roles, however, cannot always be read

also settles the question of Greed vs Attract, which has been a matter of debate for several years (Chomsky 1993, 1995; Martin 1999). Instead of playing one concept off against the other one, we can say that Greed and Attract coexist because the item that has a [+] feature and the item that has a [-] feature are both looking for the respective partner. Hence the distinction between Greed and Attract can be dispensed with altogether because coming up with an appropriate checker is a "bilateral" desire. This notion of checking implies that whenever I use the expressions "is attracted" or "attracts" I do not refer to the concept of Attract as opposed to Greed.

4.3. Checking configurations

4.3.1. Specifier-head configuration

In the system proposed here all checking is strictly local in the way described below. All checking, i.e. the necessary [+/-]-pair-formation, is done either in a spec-head or in a head-head relation. Except for languages with very poor verbal morphology there is no long-distance checking or (long-distance) Agree, nor is there any feature-movement. With respect to checking in a spec-head configuration it is important to point out that this spec-head relation need not be immediate/direct as in (1), which is the default case.

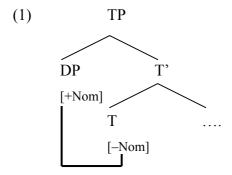
off structurally Case-marked DPs even in languages with rich morphology (e.g. ECM-constructions and active vs passive clauses).

Furthermore, an NP in the complement position of a verb can check the N-feature in situ, according to Haeberli, i.e. checking can also take place in what used to be a government configuration.

Last but not least, "+" and "-" do have a meaning in Haeberli's system. Following Chomsky (1995), he takes the "-" version of a feature to represent an uninterpretable feature while a "+" stands for an interpretable feature. He therefore adopts the view that checking is an asymmetric process in which a non-interpretable feature attracts an interpretable feature. In my system, however, checking is defined as matching of features – a symmetric operation.

Haeberli's system is rather reminiscent of Pesetsky & Torrego's (2000) conception of checking. Although they do not work with categorial feature matrices and although they do not use the [+/-] notation but represent uninterpretabale features by a "u" (uWh, e.g., is an uninterpretable Wh-feature), the actual checking operation is the same as proposed by Haeberli, namely a non-interpretable feature attracting an interpretable feature to enter into a checking relation.

⁸⁷ Haeberli's (1999a) system looks very similar at first sight because he also works with $[\pm/-]$ versions of features but it differs in crucial ways in almost all other respects. Although he allows for certain constructions to result from checking of semantic features such as $[\pm \text{ Top}]$, Haeberli puts basic operations like Case- and EPP-checking down to checking of categorial features only. More precisely, he defines the categories V, N, A, P, T, D, C as different combinations of the features $[\pm D, \pm T, \pm N, \pm V]$ whereas I mainly assume these categories to be associated with "contentful" formal and semantic features, such as $[\pm \text{ Case}]$, $[\pm \text{ phi}]$, $[\pm \text{ specific}]$.

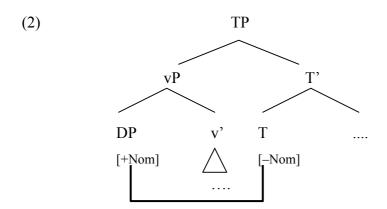


It is sufficient if the feature that has to be checked is contained in the phrase that occupies the specifier of the head in question because looking into the specifier is possible.

Checking in a Specifier-Head Relation

A maximal projection XP with the feature $[\pm \alpha]$ and head Y with the matching feature $[\pm \alpha]$ can enter into a checking relation iff

- (i) XP is the specifier of Y or
- (ii) XP is a specifier within the specifier of Y.⁸⁸



This means that in a configuration like (2), e.g., a Nominative subject DP that is contained in the vP that has moved to SpecTP (cf. section II, 4.3.2.C) can check the [-Nom]-feature on T. This indirect spec-head checking relation can, however, not be established if the potential checker is involved in a direct spec-head checking configuration (within this specifier) that has been established through movement⁸⁹ and that is still active, i.e. has not been resolved by one element moving out.

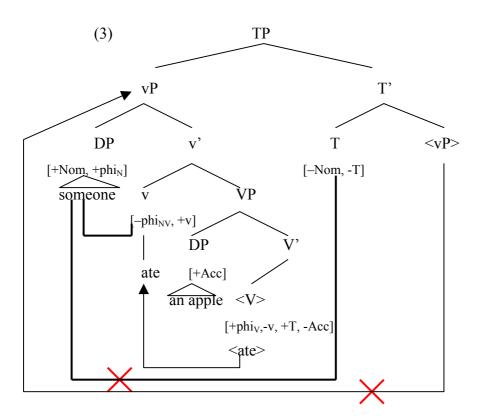
⁸⁸ Similar but not identical assumptions can be found in Chomsky (1993/1995, p. 177ff, definition of checking domain) and Müller (2001) where "the specifier of a specifier of X can check a feature of X". [Roberts (2000/2001) summarises Chomsky's definition of checking domain as follows: "the checking domain of a head X is the Specifier of X, categories adjoined to XP, categories adjoined to SpecX and categories adjoined to X itself."]

⁸⁹ A checking relation that has been established by merger is different from a checking relation that has been established by movement. The former type is in some cases more or less a by-product of selection (e.g. an object

Active Checking Relation

A checking relation is active as long as neither of the two elements that entered into the checking relation has moved on to enter into another checking relation.

(Note: This rule only applies to spec-head relations because head-head relations cannot be resolved as excorporation is not allowed and as hence it is always the complex head that moves on.)



The configuration in (3)⁹⁰ does not allow for Nominative Case checking because the lexical verb has moved to little v (for a discussion of the various options with respect to V-movement see section II, 4.3.2.), thereby establishing a direct spec-head configuration with the subject DP. I assume that in languages with poor or no verbal agreement morphology these (abstract) phi-features can be checked in the SpecvP-v configuration, i.e. the lexical verb does not have

DP merged in SpecVP (see chapter II, 3.3.) is selected by the verb and also checks Accusative Case in this configuration), whereas the latter one is established just to allow for checking.

If this distinction did not exist the only argument of an unaccusative verb could not check Nominative Case in clauses with a compound tense as in (i) with the partial derivation in (ii). The same applies to passives.

⁽i) Die Tomaten sind gewachsen. (German)

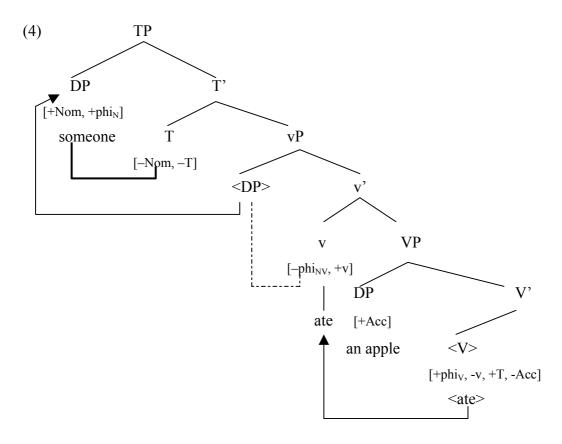
the tomatoes are grown

"The tomatoes have grown."

⁽ii) $[_{TP}[_{vP} v [_{DP} \text{ die Tomaten}] \text{ gewachsen}]] \text{ sind } [_{AuxP} < \text{sind} > < vP >]]$

⁹⁰ These are only partial derivations and the reasons for and consequences of certain movements are discussed in the remainder of this chapter.

to move to T for phi-feature checking. This checking configuration is not resolved by the time Nominative Case has to be checked because neither the lexical verb has moved to T and left the vP nor has the subject DP itself left the vP. Movement of the subject out of the vP, i.e. movement of the subject DP alone to SpecTP is therefore the only possibility of checking Nominative Case if the lexical verb just moves to little v.⁹¹ This solution is illustrated in (4).⁹²



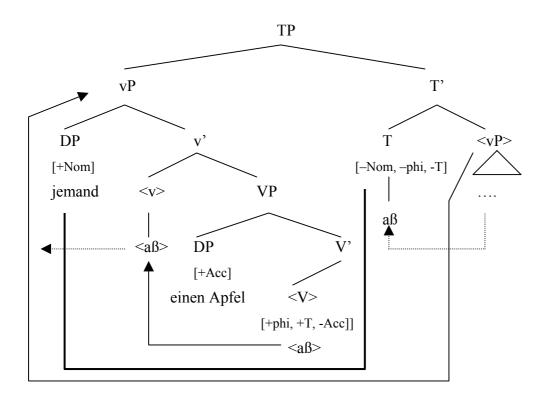
In (5), on the other hand, the direct spec-head relation has been resolved because the lexical verb has moved through v to T. Hence looking into the specifier is possible here.

⁹¹ In English vP-movement to SpecTP is also blocked because in non-V2 languages T is associated with the subject-of-predication feature (cf. chapters II, 3.1.2. and 5.2.) and the complete vP cannot serve as the subject of predication. This fact is the crucial one when it comes to clauses with a compound tense as there is probably no agreement relation/no active checking relation between the subject DP and a participle in English.

In the MSc languages (in which the sop-feature sits on Fin as they are V2 languages), however, little v can be argued to be always associated with some agreement morphology because Swedish at least has overt passive morphology and participial agreement morphology.

⁹² Another explanation of why vP movement is ruled out if the verb undergoes movement to little v (and does not move on) can be phrased along the lines of an assumption made by Pesetsky & Torrego (2000). They suggest that the complement of a head cannot move to the specifier position of the same head because the head would then merge with the same constituent twice. In German, e.g., we can argue that vP movement to SpecTP is possible because the finite verb (or auxiliary) always moves to T. This means that the moved vP merges with a complex T-head which is different from the T-head vP originally merged with. In English, on the other hand, vP movement is ruled out because T remains T due to the lack of V-movement to T. We would expect, however, vP movement to be possible in clauses with a compound tense where we get Aux movement to T. This possibility can be argued to be ruled out because in non-V2 languages T is associated with the subject-of-predication feature.

(5) ... daß jemand einen Apfel aß.
... that someone an apple ate
"... that someone ate an apple."



As will be discussed in chapters II, 4.3.2. and 4.3.3, these proposals about checking in a spec-head configuration are of crucial importance when it comes to explaining the differences between OV and VO languages and to explaining Object Shift and scrambling and the (non-) availability of these operations in the different languages. In addition, they are interesting from a typological point of view (cf. II, 4.3.3. and Holmberg 2000a).

4.3.2. Checking in a head-head configuration and types of V-movement

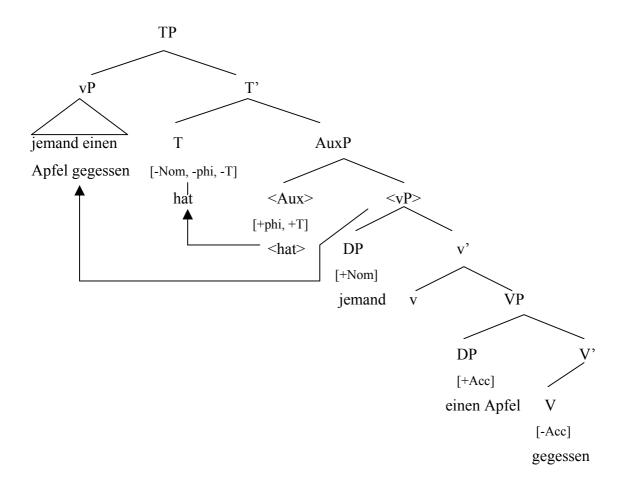
Concerning checking in a head-head configuration not much has to be said about the actual operation which can be executed either by merger of a head or by movement of a head to another head position. Here, the important aspect about checking in a head-head configuration concerns the various types of V-movement, where the term V-movement only refers to movement of the lexical verb.

All in all I suggest that there are three types of syntactic V-movement (no V-movement, short and long V-movement) and one type of "morphological" V-movement (V-stem movement to bind verbal affixes) instantiated in the Germanic languages discussed here.

A) no V-movement

This type of V-movement is only found in the OV-languages, i.e. German and Dutch of the languages considered here, and there only in clauses that feature a compound tense, as illustrated in (6) and in the corresponding partial derivation.

(6) ... daß jemand einen Apfel gegessen hat.
... that someone an apple eaten has
"... that someone has eaten an apple."



German and Dutch have fairly rich verbal morphology which allows for a verb to be merged in its fully inflected form and be identified as a verb without having to check a categorial feature (unlike the verb of languages with poor or very rich morphology; see below). Therefore I assume that a participle can stay in its base-position. This immobility of the non-finite lexical verb results in OV order.

In these clauses the auxiliary moves from Aux to T (and even further if we have a definite subject and/or a main clause) to check Tense- and phi-features. In most cases (for exceptions see chapters III, 2.3. and III, 4) there remains a [-Nom] feature to be checked on T.

The element to check this feature is the subject DP but in the configuration we have in OV-languages, namely a non-finite lexical verb that stays in its base position, the subject DP is not in a checking relation within vP. Therefore it is the whole vP that moves to SpecTP because vP is closer to T than DP_{Subj}^{93} and the Nom Case feature is checked in a spec-head relation with looking into Spec. Hence we not only have OV order but the object is followed by the whole verbal complex in embedded clauses.

B) short V-movement

Short V-movement is understood to mean V-movement to little v. It is, however, crucial that the verb does not move on to a higher position. Short V-movement can be found in the VO-languages but not all VO-languages uniformly involve short V-movement – in some cases they also display long V-movement as will be shown in a moment.

In English we find short V-movement throughout (i.e. both with simple and compound tenses and both in embedded and main clauses), except for cases in which *have* or *be* are used as main verbs. ^{94, 95} Pollock (1989) was one of the first to argue for a lack of V-movement in English (as VP was unsplit in these days), based on the assumption that adverbs like *often* are adjoined to VP (now vP). ⁹⁶ I follow Pollock (1989) and Vikner (1995) here and assume that manner adverbs mark the left edge of vP in English and in the Scandinavian languages.

- (7) a. Charlie often criticises his professor.
 - b. *Charlie criticises often his professor.

Movement of AuxP (with a head that has been emptied by movement of Aux to T) to SpecTP results in the same surface order of the overt elements as movement of vP to SpecTP as can be seen in the partial derivations below.

- (i) $[_{TP} [_{AuxP} < Aux > [_{vP} Subj v Obj V] Aux-T < AuxP >]$
- (ii) $\left[_{TP} \left[_{vP} \text{ Subj v Obj V} \right] \text{ Aux-T } \left[_{AuxP} < Aux > < vP > \right] \right]$

This problem, however, disappears if V moves to T (Collins 1997) and the subject DP does not stay vP-internal but moves to SpecFocP of the FocP between TP and vP as I suggest for the *there*-construction (ch. III, 2.6.1.). In (ib), it is the quotation that checks the subject-of-predication feature on T (cf. ch. II, 5.2.), while in (ii) the quotation is topicalised and the subject DP checks the sop-feature.

(ii) "I finally quit this job," John murmured happily. (Collins 1997, (14a))

⁹³ One could argue that AuxP is even closer and should therefore move to SpecTP. I do not deny this possibility (especially in view of the derivation of three-verb clusters) but for expository reasons I assume here that it is the (remnant) vP that moves to SpecTP.

⁹⁴ Auxiliaries are not of interest here as they are not merged in V anyway.

⁹⁵ For constructions that constitute exceptions because they do involve long V-movement (e.g. Locative Inversion) see chapter III, 2.6.4.

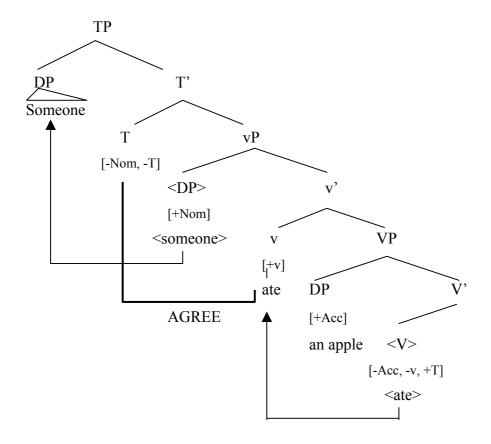
⁹⁶ Examples of quotative inversion like (i) have been considered problematic because assuming that the subject DP stays in SpecvP the adverb cannot mark the left edge of vP (cf. Alexiadou & Anagnostopoulou 2001).

b. "Don't touch that dial!" suggested the TV screen abruptly.

- c. Charlie has often criticised his professor
- d. Charlie is often stubborn.
- e. *?Charlie often is stubborn.

A sample derivation is given in (8).

(8) Someone ate an apple.



The derivation in (8), and example (7c) show that in English the lexical verb – no matter whether it is finite or non-finite – moves to little v to check a [v]-feature. I assume that this movement is due to the fact that English has so little verbal morphology that the lexical item merged in V has to be identified as a verb by checking a categorial feature. ⁹⁷ In addition, I suggest that the verb does not have to move to a higher head position because there are basically no phi-features to check (the residual person agreement can probably be checked in the SpecvP-v relation or at long distance) and because Tense features can be checked at long distance (this Agree relation, however, can only be established as long as no NegP intervenes

between T and v). English thus has only V-to-v movement and this movement results in VO-order. Since short V-movement implies that if the verb is transitive or unergative (see chapter III, 2.6. for constructions with unaccusatives or passives) there is an active immediate checking relation between SpecvP and v at the time when Nominative Case has to be checked, the subject DP has to leave vP and move to SpecTP. 98

In the Mainland Scandinavian (MSc) languages the situation is very similar to that found in English with the only exception that the MSc languages are V2 languages which means that in main clauses the finite verb moves to Fin. Short V-movement is therefore instantiated in embedded clauses (if they feature a synthetic tense the finite lexical verb just moves from V to little v (9/11), if they feature a compound tense the non-finite lexical verb undergoes short V-movement and the auxiliary, which does not inflect for person, stays in Aux (10/12)⁹⁹ – different from the auxiliary in English which shows verbal morphology and moves to T) and in main clauses that feature a compound tense. In the latter the non-finite lexical verb undergoes short V-movement and the auxiliary moves to Fin (via all intervening head positions). As short V-movement establishes an active checking relation between SpecvP and v, only the subject DP alone can move to SpecTP to check Nominative Case.

```
(9) ... at Johan leste boken (Norwegian)... that Johan read book-the"... that Johan read the book."
```

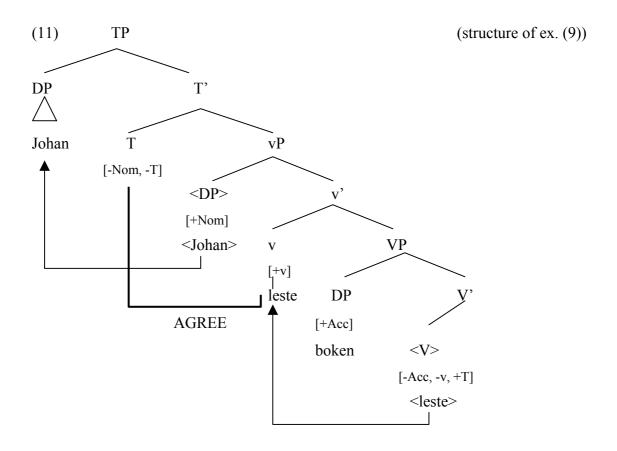
(10) ... at Johan har lest boken. (Norwegian) ... that Johan has read book-the "... that Johan has read the book."

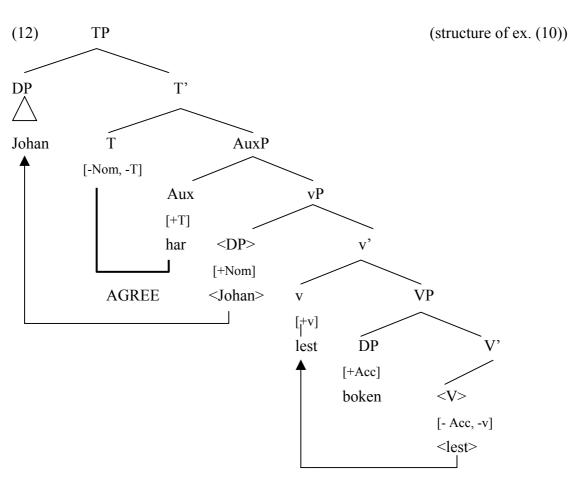
⁹⁷ This idea is reminiscent of the idea that we actually only merge roots that become verbs and nouns by checking v- and n-features, respectively, developed in the Distributed Morphology approach (Alexiadou 2003a, Marantz 1997, 2003a, b)

⁹⁸ For an alternative or additional account see footnote 91.

⁹⁹ That the auxiliary does not move in MSc embedded clauses can be inferred from the fact that it follows negation which is usually assumed to mark the left edge of vP.

⁽i) ... at Johan ikke har lest boken. (Norwegian) ... that Johan not has read book-the "... that Johan has not read the book."





MSc main clauses with a synthetic tense are discussed in the next section as they involve long V-movement.

C) long V-movement

Generally, long V-movement subsumes all V-movement that leaves the vP/VP, i.e. movement of the verb to T, Ref or Fin or whatever head position one might think of. With respect to the languages considered here, long V-movement is found in the main clauses of the Germanic V2 languages – provided that they feature a synthetic tense – and then equals movement to Fin and in German/Dutch embedded clauses with a synthetic tense. In the latter case, it is, however, only V-movement to T or Ref. In addition, long V-movement is instantiated in the embedded clauses of Icelandic, which will be shown to have embedded V2. Icelandic, however, also differs from the other Germanic V2 languages in that all its V-movement (at least up to T) is not syntactically but morphologically triggered (see below).

In both German/Dutch and the MSc languages the finite lexical verb undergoes V-to-v-to-T(-to-...-Fin) movement in the relevant clauses. The only difference between the West Germanic and the North Germanic languages is that in the former the first step of this long V-movement is only triggered by the Head Movement Constraint, whereas in the latter it is forced by the need to check the categorial v-feature.

In (13) the verb has left the vP by the time that Nominative Case has to be checked, hence there is no active checking relation that prevents looking into Spec. Therefore the remnant vP can move to SpecTP and Nominative Case is checked by looking into the moved vP in SpecTP (cf. Haegeman 2000, p.86; Pearson 2000). Last but not least the finite verb moves to Fin and the subject DP to SpecFinP. 101

1995, p. 144). In this case, the subject DP moves on its own. However, if Holmberg (1999) is right, the remnant vP moves to SpecTP after all, with the only difference that most object DPs have to move out of vP to some focus position before remnant vP movement takes place.

¹⁰⁰ It is not clear whether MSc clauses are derived in exactly the same way. In sentences that do not feature a negation, e.g., one cannot show whether it is really the remnant vP that moves to SpecTP in MSc, but if there is an element that marks the left edge of vP one can see that it is at least not always the remnant vP that moves to SpecTP. If the remnant vP contains a non-pronominal object it must not move to SpecTP (Holmberg & Platzack 1995, p. 144). In this case, the subject DP moves on its own, However, if Holmberg (1999) is right, the remnant

¹⁰¹ Extraction of the subject out of the moved vP does not pose a problem as the Left Branch Condition seems to be violable in certain languages anyway as (i) suggests. As regards German, specifier extraction is also a possible analysis of the *was-für* Split (Abels 2003).

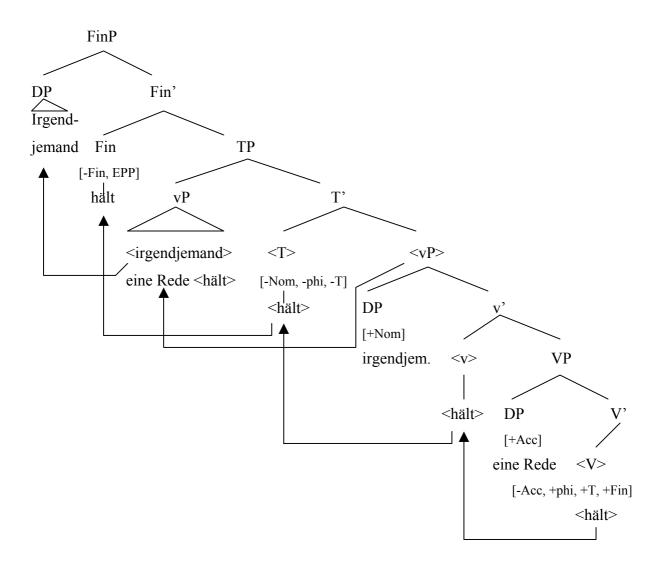
⁽i) Cuius_i legis [DP t_i librum]? (Latin; Roberts 1997) whose you-are-reading book "Whose book are you reading?"

⁽ii) Was hast du für ein Buch gelesen? (German) what have you for a book read

(13) Irgendjemand hält eine Rede. (German)

someone holds a speech

"Someone gives a speech."



As regards German/Dutch embedded clauses (with a synthetic tense as in (14)) the derivation proceeds exactly as in (13) till the remnant vP is merged as the specifier of TP. To complete the derivation, the complementiser is merged with TP to form FinP.

(14) ... daß irgendjemand eine Rede hält. (German)
... that someone a speech holds
"... that someone gives a speech."

[&]quot;What kind of book did you read?"

The interaction of the three types of V-movement with the requirements that hold for checking configurations results in two kinds of Nominative Case checking – either by DP_{Subj} movement to SpecTP or by movement of the (remnant) vP to SpecTP and checking by means of looking into Spec. The different patterns are summarised in table 1.

Table 1:

		German/Dutch	MSc	English
main clauses	synthetic tense	long V-mvt =>	long V-mvt =>	shortV-mvt =>
		remnant vP-mvt	remnant vP-mvt or	DP-mvt
			DP-mvt	
	analytic tense	no V-mvt =>	short V-mvt =>	short V-mvt =>
		vP-mvt	DP-mvt	DP-mvt
embedded	synthetic tense	long V-mvt =>	short V-mvt =>	short V-mvt =>
clauses		remnant vP-mvt	DP-mvt	DP-mvt
	analytic tense	no V-mvt =>	short V-mvt =>	short V-mvt =>
		vP-mvt	DP-mvt	DP-mvt

As I assume that OV is the underlying order, OV-order requires that the verb does not move at all or leaves the vP. VO-order, on the other hand, is the result of short V-movement which is triggered by the need to check a categorial feature. This need is either due to poor verbal morphology or to very rich verbal morphology as will be shown in the next section. In the Germanic languages with poor verbal morphology the verb can undergo long V-movement only in V2 constructions where the verb moves to Fin.

Having discussed the various types of syntactic V-movement found in the major Germanic languages, I presently turn to Icelandic and suggest that this language has extensive V-movement but that this V-movement is morphologically triggered.

D) morphologically triggered V-(stem-)movement

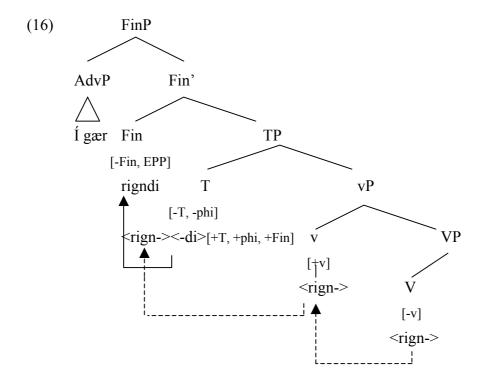
The assumption that apart from syntactic V-movement that is triggered by the need to check features there is a completely different type of V-movement is based on sentences like the one in (15).

"Yesterday it rained."

As Icelandic is a V2 language, I assume that the sentence-initial "setting adverb" is merged directly in SpecFinP. If the lexical verb now simply moved from V to Fin via little v and T, the sentence should be ungrammatical because, provided my definition of the Extension Condition is correct, V-movement should require SpecTP to be filled but the presence of bað in SpecTP leads to ungrammaticality. Therefore the derivation of Icelandic clauses must be accounted for differently. I suggest that in Icelandic the verbal morphology is merged separately in T (and if T is split, in the respective head positions of the split-TP), an analysis that is quite plausible given the rich inflectional morphology of Icelandic. 102 If T is realised by merger of the affix, the creation of a SpecTP is not necessary as far as the Extension Condition is concerned. This means that only the verb stem is merged in V, that it has to move to little v to check a v-feature to be identified as a verb and that movement of the verb stem to T is not triggered by the need to check a feature on T (this feature is checked by the affix) but simply by the morphological requirement that the affix be bound. Hence this kind of head-movement is a morphological operation that just happens to take place in narrow syntax but is not a proper syntactic operation. 103 After the stem has combined with the affix, however, movement is syntactic and requires that the specifier, here SpecFinP, be created. The derivation of (15) proceeds as follows.

¹⁰² With respect to verbal morphology there is, admittedly, not much difference between German and Icelandic and children should have trouble to find evidence for whether the language they learn merges the affixes separately or not. However, when we take a look at nominal morphology, we immediately notice that Icelandic has a much richer inventory of inflections on nouns (in German it is almost only the determiner that inflects for Case). Assuming that the word formation processes are the same for nouns and verbs, children will encounter enough pieces of evidence that Icelandic has richer morphology than German. Therefore learnability does not pose a problem for my suggestion that Icelandic word formation works differently from word formation in German.

¹⁰³ If there is really a parallel between clausal and nominal structures the fact that the definite article is an affix that attaches to the noun in Icelandic might be a piece of evidence that morphological movement takes place in narrow syntax.



It is generally assumed that the finite verb undergoes long V-movement even in embedded clauses in Icelandic because it precedes the negation *ekki*, which is taken to mark the left edge of vP. The only point that has been debated is whether the finite verb just moves to T or whether it moves all the way up to Fin so that Icelandic has generalised embedded V2 (Vikner 1995; Gunnar Hrafn Hrafnbjargarson p.c.). Vikner (1995) points out that non-subject XPs can precede the finite verb in embedded clauses and concludes that these clauses must be V2. Hrafnbjargarson (p.c.) objects and considers such topicalisation structures highly marginal. It has to be noted, however, that in his variety of Icelandic (i.e. that of younger speakers) most topicalisations are highly marginal even in main clauses.

In view of the fact that in main clauses that feature a weather verb Icelandic only allows for $pa\delta$ in sentence-initial position (in other words, $pa\delta$ must not be used in yes-no questions or if another XP occupies the sentence-initial position) and that $pa\delta$ can show up in embedded clauses if it is sandwiched between the complementiser and the finite verb (17), I suggest that Icelandic has indeed generalised¹⁰⁴ embedded V2.

10

¹⁰⁴ Vikner (1995, p. 48/74) points out that we do not find V2 (to be more precise, non-subject XPs preceding the finite verb) in embedded questions – on the other hand, embedded clauses can feature *það* (Vikner 1995, p.76). Sigurðsson (p.c.) assumes that embedded clauses just have V-to-T movement and he points out that certain types of embedded clauses do not even feature this V-movement.

... that Expl¹⁰⁵ has rained yesterday

"... that it rained yesterday."

The derivation as regards V-movement then goes as follows. The verbal stem is merged in V and raises to v to check a categorial feature and to pick up participial morphology. This movement does not require SpecvP to be filled as the presence or absence of SpecvP is determined by argument structure only and I argue that in Icelandic $ba\delta$ is actually an expletive and not a quasi-argument (cf. chapter III, 3.3.). In the next step the stem of the auxiliary is merged in Aux. Then the inflectional morphology of the auxiliary and Tense-and phi-features form the T-head by merger and simultaneously Tense- and phi-features get checked. This affix triggers movement of the auxiliary stem to T because the affix has to be bound. However, there is no syntactic need, such as feature checking, for this V-movement and since all features on T have been checked by merger, SpecTP will not be projected. Then the fully inflected auxiliary moves to Fin and since this step is an instance of syntactic head movement it calls for the creation of SpecFinP which is executed by merger of the expletive $ba\delta$ which thereby fulfils the V2 requirement. As a last step the complementiser $a\delta$ is merged in Force.

Since I have just discussed the derivation of a very special type of construction (namely one featuring a weather verb) I have to add a few more words on more general constructions. First of all, as implied in the last derivation Icelandic does not always have long (morphological) V-movement but only if we have a synthetic tense. In the case of compound tenses, the stem of the auxiliary is merged in Aux, binds the inflectional morphology in T and then moves to Fin in its fully inflected form, while the verb stem of the lexical verb is merged in V and undergoes short (morphological) V-movement to little v where it checks a categorial feature and picks up participial morphology. Second, although morphological V-movement to T does not require the creation of SpecTP, SpecTP has, of course, to be created if Nominative Case has to be checked. I argue that, just as with syntactic V-movement, it is the remnant vP that moves to SpecTP to check Nominative Case by means of looking into Spec in clauses with long V-movement, i.e. in clauses with a synthetic tense. On the other hand, short V-movement implies that the subject DP alone moves to SpecTP. The Icelandic patterns can be summarised as follows.

¹⁰⁵ I gloss all expletive-like elements as "Expl" no matter whether they have been and/or will be analysed as expletives, event arguments or quasi-arguments.

With respect to the Dat-Nom construction, i.e. a construction where the subject is Dative and the object carries Nominative Case, Nominative Case checking must be established in a different way (for some stipulations see chapter III, 2.4.) because in contexts with short V-movement it is still the (Dative) subject that

Table 2:

		Icelandic	
main clauses	synthetic tense	long morphological V-mvt => remnant vP-mvt but just to	
		check Nominative (otherwise no SpecTP)	
	analytic tense	short morphological V-mvt => DP-mvt but just to check	
		Nominative (otherwise no SpecTP)	
embedded	synthetic tense	long morphological V-mvt => remnant vP-mvt but just to	
clauses		check Nominative (otherwise no SpecTP)	
	analytic tense	short morphological V-mvt => DP-mvt but just to check	
		Nominative (otherwise no SpecTP)	

4.3.3. Consequences of the restrictions on checking – Scrambling vs. Object Shift and a note on typology

The interaction of possible checking configurations and the various types of V-movement not only determines the way Nominative is checked in the different languages it also determines possible word orders. As we have already seen, OV- and VO-word order, respectively is a direct consequence of this interaction. It has, however, even more far-reaching implications. As pointed out to me by Anders Holmberg (p.c.) this interaction between V-movement, restrictions on vP-movement and Nominative Case checking nicely ties in with a typological observation. My system predicts that the word order V-O-AUX cannot be derived (because the V-O part indicates that short V-movement has taken place and therefore V-O, more precisely the vP, cannot move to the pre-AUX position) and this word order is indeed not found (Holmberg 2000a).

The aspect which is even more interesting with respect to the topics considered in this study is the question of whether the distinction between Object Shift (OS) (18) and scrambling (19) falls out as well.

(18) a. Jón keypti bókina ekki. (Icelandic; H&P 1995, (6.9b) *Jón bought the-book not*"Jón didn't buy the book."

moves to SpecTP and not the (Nominative) object. This also means that there must still be some kind of feature (a subject feature?) associated with T that triggers movement of the remnant vP and of the subject DP, respectively, to SpecTP. After all, the Dat-Nom construction displays exactly the same word order as Nom-Acc constructions as regards the position of the subject and the object, esp. in Object Shift contexts.

- b. Johan känner henne inte. (Swedish; H&P 1995, (6.2a) *Johan knows her not*"Johan doesn't know her."
- (19) Gewiß hat dieses Buch niemand gelesen. (German)

 certainly has this book no-one read

 "Certainly, no-one has read this book."

OS is a phenomenon that is nowadays found in the Scandinavian languages. 107 It is usually analysed as leftward movement of the object out of vP (the object in the end precedes negation which marks the left edge of vP) if and only if the lexical verb has moved out of vP as well (Holmberg's Generalisation). This means that (i) OS only ever occurs with synthetic tenses and (ii) in the MSc languages it only ever occurs in main clauses (with a synthetic tense). OS is restricted in other ways as well. In the MSc languages only pronominal objects can object shift, while Icelandic also allows for OS of full DPs which, however, must not be indefinite or quantified (Holmberg & Platzack 1995, p. 144/147). The question of what kind of operation OS is has been the topic of many studies and could not be answered yet because OS has contradictory properties. Holmberg & Platzack (1995) discuss a range of suggestions that have been made. This discussion can be summarised as follows. Some analyses can easily be falsified, e.g. OS cannot be a PF-operation because it can be shown to apply prior to topicalisation, an operation which takes place before LF (and PF)¹⁰⁸, nor can OS be movement to AgrOP as MSc probably does not have Agr projections at all due to its poor inflectional morphology. Despite some properties that speak in favour of an analysis of OS in terms of cliticisation (the object pronoun has to be unstressed, morphologically simple and adjacent to I), OS cannot be cliticisation because the object cannot move independently of the verb (unlike Romance clitics), does not move to C together with the verb and most importantly, because in Icelandic we get OS of full DPs. The most important question has been whether OS is A-movement or A'-movement. Although OS, in the traditional analyses, crosses the external argument without inducing a violation of Relativised Minimality and although the shifted object cannot bind an anaphor – two arguments against OS being Amovement – OS has usually been considered to be an instance of A-movement. Properties of OS that support such an analysis are the fact that OS is clause-bounded, that it does not

¹⁰⁷ In earlier stages of the language, Object Shift was also to be found in English.

¹⁰⁸ For an alternative view see Holmberg (1999) where he argues that OS takes place in "Stylistic Syntax", a component of grammar that has properties of both syntax and PF.

license parasitic gaps, that it is insensitive to cross-over, that it seems to land in a Case position, that the shifted object is not topicalised or focussed and that it does not have operator-like properties.

Scrambling, which is found to different extents in German and Dutch, is movement of an XP (not restricted to object DPs!) to some position in the *Mittelfeld* of a clause. It does not seem to target a particular position in the *Mittelfeld* and it is not dependent on verb movement. Scrambling seems to have exactly the opposite properties to OS except for the fact that it is clause-bounded as well (at least in the Germanic languages). For example, scrambling does not target a Case position and it licenses parasitic gaps. In addition, it has often been claimed that scrambling is sensitive to cross-over, though not generally. Despite this uncertainty and despite the fact that the scrambled XP can bind an anaphor, scrambling tends to be analysed as A'-movement.

Although I cannot account for all the properties of OS and scrambling I believe that my analysis offers a (partial) explanation of the OS/scrambling distinction. I suggest that the first step of the operation is the same for both OS and scrambling – in fact, with respect to OS there is only one single step. ¹⁰⁹ I take this first (and only, respectively) step to be movement of the (remnant) vP to SpecTP. ¹¹⁰ Recall, that (remnant) vP movement is only possible if we have long V-movement or no V-movement at all because otherwise checking of Nominative Case by means of looking into Spec is blocked. This means that OS is nothing but movement of the remnant vP to SpecTP. As the Scandinavian languages alternate between long and short V-movement (in Icelandic, this alternation is manifested in the distinction between clauses with a simple tense and clauses with a compound tense whereas in the MSc languages, it is manifested in the distinction between main clauses with a simple tense and main clauses with an analytic tense plus embedded clauses in general), it is clear that OS can only ever occur in the clauses where the lexical verb undergoes long V-movement, i.e. in all clauses with a synthetic tense in Icelandic and in main clauses with a synthetic tense in the MSc languages. ¹¹¹

¹⁰⁹ This parallelism is implied in the studies by Bobaljik & Jonas (1996) and Koster & Zwart (2000) as well because they suggest that there is a correlation between the availability of Transitive Expletive Constructions (TECs) and OS in a language and since German allows for TECs it must have OS too.

¹¹⁰ Interestingly, Koster & Zwart (2000) suggest exactly the opposite, namely that in languages that do not allow for TECs and OS the complete VP moves to SpecTP, while in the other languages all arguments move separately.

Holmberg (1999), on the other hand, also suggests that OS involves movement of the (remnant) vP (in his system VP). He points out that it is exactly because OS is vP movement that OS seems to be dependent on V-movement.

 $^{^{111}}$ Note that this account of OS – provided that it is correct – also shows that the finite verb moves to Fin in Icelandic embedded clauses. If it stayed in T we should get the word order Comp-Subj-Obj-V $_{\rm fin}$ -Neg in embedded clauses, contrary to fact.

This analysis also accounts for the observation that OS does not lead to a violation of Relativised Minimality because if the object moves with the remnant vP it does not cross the subject at all. In addition, an analysis of OS in terms of remnant vP movement to SpecTP also suggests that OS is A-movement; the deviating properties can be due to the fact that it is not a DP that moves to SpecTP but a more complex structure. What seems to be problematic to explain is why in Icelandic indefinite or quantified object DPs must not object shift and especially why in the MSc languages only pronominal objects can undergo OS. One possible solution would be to assume that there is a separate projection for definite objects – like RefP for definite subjects¹¹² – that interacts with the OS operation. In a similar vein Holmberg (1999) proposes that the objects that cannot undergo OS (a crucial difference!) move to a focus position (which could be the FocP right above vP) before movement of the remnant vP takes place.

Turning to scrambling now, I suggest that movement of the (remnant) vP is only the first step of the complex operation that makes up scrambling. As regards German and Dutch I have shown that these languages have (remnant) vP movement throughout and therefore it is not surprising that scrambling does not seem to depend on V-movement according to the traditional analyses and that it is not sensitive to the type of clause we have. After this step, which OS and scrambling have in common, I assume that the XP that undergoes scrambling moves on to the specifier of one of the various TopPs or FocPs of the I-system and therefore does not target a fixed position and displays properties of A'-movement. Even the conflicting data with respect to weak cross-over effects can be accounted for since Rizzi (1997b) distinguishes between quantificational A'-relations (instantiated by focalisation, which gives rise to a weak cross-over effect) and non-quantificational A'-relations (instantiated by topicalisation, which does not lead to weak cross-over effects).

If scrambling means that the scrambled XP is either topicalised or focussed (i.e. if scrambling changes the interpretation of a clause) we also have an explanation of why scrambling is optional whereas OS has to take place whenever the structural conditions for OS are met. Last but not least, the observation that scrambling can license parasitic gaps and anaphors while OS can not can be explained in terms of c-command. As the object shifted object in a way stays in its base position (within the moved remnant vP) it cannot c-command anything outside VP. A scrambled XP, on the other hand, occupies the specifier of a semantic functional projection and therefore c-commands everything lower down in the tree. One problem remains, though. Why can the object shifted object DP not move on to the specifier

¹¹² I will not work out this idea here although definite and indefinite objects behave differently in many respects

of a TopP or a FocP, in other words why can Scandinavian objects not scramble? If Holmberg (1999) is right and object shifted objects are necessarily non-focussed it is clear why they cannot target FocP but this property does not exclude SpecTopP as a possible landing site though.

Having presented my assumptions about clause structure and checking and their various implications I can now finally come back to the crucial question that remains to be answered, namely the question of what has become of the universal EPP on T in my system.

5. The "universal EPP" on T

5.1. Feature checking on T

The assumption that there is some feature on T (no matter whether it is identified as a [D]-feature, a [person]-feature, an EPP-feature or whatever) that obligatorily triggers movement to SpecTP or merger of an expletive in SpecTP seems to be a relic of GB-theory where specifiers were obligatory (cf. chapter II, 1). As the *Minimalist Program* allows for projections not to have a specifier at all, we are left with the question whether TP is really a special projection that always requires a specifier or whether it can do without a specifier, given the appropriate conditions.

In chapter II, 3.2.3. I have classified SpecTP as a subject position but it does not seem to be a specialised subject position in the way SpecRefP is, for example. To be more precise, most subjects have to move to or through SpecTP, independent of their semantics. Therefore it is impossible to apply the argumentation I suggested with respect to SpecRefP and the EPP, namely to say that T is associated with the semantic feature X that triggers movement of the subject DP to SpecTP and that SpecTP (and probably TP at all) will not be projected if this semantic feature is not present. Especially the point about the absence of the complete TP¹¹³ is untenable as I assume that T carries Tense- and phi-features. Therefore a closer look at the features associated with T and the way they are checked is necessary to see whether SpecTP is obligatory or not.

5.1.1. Nominative Case

I suggest that in most cases this EPP reduces to Nominative Case checking and that therefore it has been interpreted as a subject requirement. However, the need to check Nominative Case does not imply that (a) it is always the subject DP that moves to SpecTP and (b) that every subject DP or every Nominative DP has to raise to SpecTP. Statement (a) crucially relies on my definition of checking. Whenever checking by means of looking into Spec is possible, i.e. whenever long V-movement or no V-movement at all has taken place, it will be the (remnant) vP and not just the subject DP that moves to SpecTP to check Nominative Case. This means that in most cases¹¹⁴ when we have a Nominative subject DP SpecTP will be filled (due to Case checking) even in constructions where the subject has traditionally been assumed to be

¹¹³ Here I only consider "standard" clauses, i.e. no Small Clauses or the like, which probably deviate in the make-up of their functional structure from standard clauses.

¹¹⁴ For exceptions, e.g. the *there*-construction in English, see chapter III, 2.6.2.

vP-internal as in the German example in (1) and hence SpecTP cannot be occupied by *pro* in these constructions, contrary to common analyses (cf. for example Vikner 1995).

(1) ...weil ja doch [TP [VP Menschen Fehler < machen >] machen < VP>].

...because Prt Prt human beings mistakes make

"...because human beings make mistakes."

Statement (b) refers to constructions in which the Nominative subject DP does stay lower down in the structure as in the English *there*-construction (2) and to constructions in which the subject DP is associated with a Case other than Nominative, like the Dat-Nom construction in Icelandic (3) where the subject carries Dative Case and the object Nominative Case.

- (2) There arrived 3 men.
- (3) Málaranum líka litirnir. (Icelandic)

 the-painter-Dat like-3pl the-colours-Nom

 "The painter likes the colours."

I will argue that in these cases Nominative Case checking works differently than in the default case (for a detailed discussion see chapters III, 2.6.2., II, 4.3.2.D fn. 106 and III, 2.4.). These constructions are of particular interest here because it remains to be shown whether the lack of Nominative Case checking in a spec-head relation is remedied by the presence of an EPP-feature.

5.1.2. T and the New Extension Condition

While Nominative Case checking on T is reminiscent of the traditional EPP, I suggest that a number of phenomena with respect to SpecTP can be accounted for by means of the New Extension Condition proposed in chapter II, 2.3. When we apply the New Extension Condition to T we get the following three options.

- (i) T is created by merger of some element. Hence this operation extends the tree at the root and no specifier is needed.
- (ii) T is realised by head-movement. This operation has to be immediately followed by the creation of SpecTP because head-movement alone does not extend the tree at the root

and leads to a violation of the (New) Extension Condition. If SpecTP is not created by a Nominative Case checking operation, T has to carry an EPP-feature.

(iii) T is not realised at all.

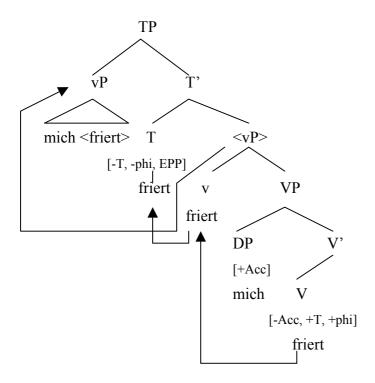
Option (i) is instantiated by Icelandic. As I have shown above (chapter II, 4.3.2.D) merger of the expletive $pa\delta$ in SpecTP leads to an ungrammatical sentence. I have concluded that Icelandic cannot have V-movement to T (since I assume that empty expletives, such as pro, do not exist) and that instead, its rich verbal morphology is merged as a head on its own which is then bound by the verbal stem, which undergoes movement for morphological reasons. This means that in constructions that lack a subject, such as constructions featuring a weather verb and impersonal passives, SpecTP is not filled because merger of the verbal affix meets the Extension Condition. If SpecTP is filled by the remnant vP or the subject DP this is only due to the subject checking Nominative Case (in interaction with long V-movement and short V-movement, respectively). Icelandic, however, seems to have the possibility of "weakening" the Nom-feature to a "subject"-feature because Dative subject DPs behave exactly like Nominative subject DPs with respect to DP- and vP-movement.

Option (ii) is instantiated by all languages that have (truly syntactic) long-V movement and/or movement of the auxiliary to at least T. Whenever the verb or auxiliary moves to T to check features, we have an instance of head-movement that must be amended by the subsequent creation of SpecTP. If T carries a Nom-feature in addition to the Tense and phifeatures checked by the verb, (remnant) vP movement or DP_{Subj} movement takes place depending on the by now well-known conditions, so that the need to check Nominative Case renders an EPP-feature superfluous. If we get V-movement to a non-Nominative T-head (or to a T-head whose Nominative Case feature is checked in a configuration other than spec-head), however, this T is automatically associated with an EPP-feature. As this EPP-feature is explicitly dissociated from Nominative Case checking, it can be checked by just any XP (like the EPP-feature on Fin!) as the partial derivation of impersonal psych-verb constructions illustrates. Here it is simply the closest XP that moves to SpecTP.

(4) Mich friert. (German)

me freezes

"I feel cold."



One could also think of merger of an expletive to satisfy the EPP. This possibility might be attested in Danish impersonal passives, because even in main clauses (it is important that we consider main clauses because MSc does not have head-movement to T in embedded clauses) that have some XP in sentence-initial position we get *der* 'there' in SpecTP, as can be seen in (5). For a detailed analysis I refer the reader to chapter III, 2.5.

(5) [At du ville komme] blev der regnet stærkt med.

that you would come was Expl counted strongly with

"People strongly counted on your coming."

(Danish; Vikner 1995, p. 248, (iv))

Option (iii) finally seems to pose a problem. If the presence of an EPP-feature is solely determined by the New Extension Condition, i.e. if an EPP-feature is only present if head-movement checks all features of the target head so that no independent feature triggers the creation of the corresponding specifier, we would expect that there are instances in which T is not (overtly) realised at all. English, in constructions where there is a low subject and no V-/ Aux-movement to T, should be an example of such a language. To be more precise, we would expect an asymmetry between clauses featuring an auxiliary or *have/be* as a main verb and those featuring a finite lexical verb as in (6) – contrary to fact.

- (6) a. There is a man in the garden.
 - b. *Arrived a man at the station.
 - c. There arrived a man at the station.

One possible solution to the problem is to say that some part of TP, no matter whether it is the head or the specifier, has to be realised overtly to make sure that the event described by the predicate can be located in time and space and that there is a second type of EPP-feature that takes care of this requirement. It is, however, not desirable to have two different kinds of EPP-feature (one being a syntactic device required by the New Extension Condition and one being a semantic device), especially if it looks like a generalised EPP-feature minus Nominative Case checking contexts or even worse, if it looks like sticking in an EPP-feature whenever we have no other explanation.

5.2. The EPP-feature as a subject-of-predication feature?

In chapter II, 3.1.2. I suggested that Fin is not completely neutral, meaning that the creation of SpecFinP is only due to an EPP-feature, but that Fin is associated with a subject-of-predication (sop) feature. This assumption then relied on the observation that it is not always the element closest to Fin that moves to SpecFinP but still an element that does not force topicalisation or focalisation (in that particular case a Dative Experiencer). To avoid a violation of locality conditions it is necessary that Fin is associated with some contentful feature that looks for a particular XP and not just for any, i.e. the closest XP. Here, I elaborate on this idea and argue that there is a sop-feature which sits on Fin in V2-languages, while in non-V2 languages it is located in T and that the EPP can probably be reduced to this sop-feature. The first part of the idea, namely that the location of the sop-feature is parametrised, ties in with the above stipulation that T has to be realised to locate the event in time and space and with a statement Holmberg & Platzack (1995) make about the category of finiteness.

In traditional grammar *finite* has roughly the meaning 'restricted to the particular situation', i.e., the finite form of a verb indicates the existence of a predication *at the time of the utterance* [...]

(Holmberg & Platzack 1995, p. 23)

In this section I only sketch the proposal – the whole range of implications of these assumptions and the interaction of the concept of "subject-of-predication" with other aspects of the system developed so far will be discussed in depth in the practical part of this study.

In non-V2 languages, the subject DP is the default subject of predication because both the sop- and the Nominative Case feature are located in T. If elements other than the subject should get more attention in the utterance, one has to resort to special constructions such as topicalisation, focalisation or clefting. On the other hand, if there is no Nominative subject and no subject-of-predication available as in presentational constructions, an expletive or event argument has to be merged to check the sop-feature on T. As T is associated with this sop-feature realisation of SpecTP is obligatory and as it is mostly checked by the subject DP (due to the additional Nominative Case feature), it looks as though SpecTP were specialised to subjects.

In V2 languages basically any category can check the sop-feature because Fin, unlike T, is not associated with any Case feature. That's why not only subjects but also Dative Experiencers of passives and psych-verbs and adverbs that create a setting can go into sentence-initial position with neutral stress and interpretation – they qualify as subjects of predication and check the corresponding feature by moving to SpecFinP or by being merged there. In contexts without a subject of predication it is again an expletive or an event argument that checks the sop-feature. With respect to topicalised elements in German and Dutch, I suggest that all XPs that target SpecTopP of the C-system have to go through SpecFinP and check the sop-feature. I take doubling constructions, such as (7), to overtly realise the trace/copy of the topicalised XP in SpecFinP (cf. Grohmann 2000).

(7) Diesen Satz, den mag ich einfach nicht. (German)

this sentence, this-Acc like I simply not

"This sentence, I simply don't like it."

This analysis is quite plausible because when introducing the terms "topic" and "comment", Rizzi (1997b) gives the following definition: "[T]he comment is a kind of complex predicate, an open sentence predicated of the topic and introducing new information." (Rizzi 1997b, p. 285).¹¹⁵

¹¹⁵ Focussed elements in sentence-initial position, however, constitute a tricky case. These constructions should be derived in exactly the same way as topicalisation structures, i.e. the focussed element should pass through SpecFinP checking the sop-feature, but in view of the properties of focus one would expect exactly the opposite (cf. chapter II, 3.1.2.).

Not all V2 languages, however, allow for non-subject-initial clauses as easily as German. My informant on Icelandic, e.g., considers topicalisation structures highly marginal and even judges them to be ungrammatical if they contain a definite subject DP lower in the structure (8) and Transitive Expletive Constructions display a Definiteness Effect with respect to the subject (cf. chapters III, 1.1.1. fn. 123 and III, 2.4.).

(8) *Á lestarstöðina er forsetinn mættur. (Icelandic)

at train-station-the is president-the showed up

"The president arrived at the station."

Therefore I assume that in Icelandic definite subjects are necessarily the subject of predication (this might be correlated with the fact that Dative Experiencers of psych-verbs are real subjects in Icelandic). 116, 117

If the premises are right (i.e. V2 languages have the sop-feature on Fin and the EPP reduces to this sop-feature), V2 languages should not require SpecTP to be filled, unless Nominative Case has to be checked. This prediction is borne out in Icelandic, which has the peculiarity of having morphological V-movement, but it certainly does not hold for German. In impersonal psych-verb constructions (9) and impersonal passives (10) the vP has to move to SpecTP just as in constructions that contain a Nominative element. Therefore I, unfortunately, have to stick to the concept of an EPP-feature whose presence is required to make V-movement pass the New Extension Condition.

- (9) ... weil mir kalt war. (German)
 ... because me-Dat cold was
 "... because I felt cold."
- (10) ... daß getanzt wurde.... that danced was"... that there was dancing."

The fact that Stylistic Fronting (which is in complementary distribution with expletive *bað* and therefore targets SpecFin, according to my analysis) can only take place if there is a subject gap, i.e. if there is no subject at all or the subject is very low in the structure, supports the idea that definite subjects have to target SpecFinP in Icelandic

¹¹⁷ Unfortunately, I have too little data to judge the situation in the MSc languages but Swedish seems to prefer cleft constructions to object-initial V2-clauses, suggesting that objects cannot easily check the sop-feature.

Similarly, I have no explanation for why in Danish the presence of der 'there' in SpecTP (e.g. in impersonal passives) is obligatory, unless I assume that there is an EPP-feature.

```
der er blevet danset.
                                                (Danish; Vikner 1995, p. 209, (93d))
(11)
       ... at
       ... that Expl is been danced
       "... that there has been dancing."
```

Der, which is of locative origin (Vikner 1995), cannot be argued to check Nominative Case, unlike its Swedish and Norwegian pronominal counterpart det 'it', and it cannot be argued to check a sop-feature in SpecTP either because Danish is a V2 language. Hence it looks as though the EPP-feature is still needed. The most undesirable point here is that the EPP-feature that is needed to account for the presence of der in Danish cannot be attributed to the New Extension Condition because in embedded clauses Danish does not have any V-movement to T (Vikner 1995).

Despite the fact that there seems to be some kind of EPP-residue I keep the proposal that in most cases the EPP can be reduced to a sop-feature because such an analysis can account for two properties that have originally been associated with the EPP. First of all, the idea that clauses must have a subject of predication is not that different from the assumption that clauses must have a subject because in most cases the subject and the subject of predication are identical. On the other hand, the definition of the EPP in terms of a subject-ofpredication feature offers the extension that is called for by Roberts & Roussou's (1998) argument that the EPP in the I-domain cannot really be a subject requirement because it can be checked by a semantically empty expletive which is certainly not selected as an argument. Second, the assumption that the EPP is actually a sop-feature and that languages are parametrised with respect to which head carries this sop-feature captures the idea proposed by Roberts & Roussou (1998) that the V2 phenomenon and the EPP on T are actually one and the same phenomenon.

Although the concept of a subject-of-predication feature, unfortunately, does not allow us to skip the EPP-feature completely, it is important to bear in mind that in any case there is no universal EPP. The projection of SpecTP is not obligatory whenever T is overtly realised and all features associated with T are checked by means of merger of a head, as for example in Icelandic impersonal passives and Icelandic weather verb constructions. This observation is reminiscent of Alexiadou & Anagnostopoulou's (1998) analysis. While A&A suggest that

¹¹⁸ For an alternative view see Holmberg (2000c).

merger of a head or head-movement can check the EPP provided that the head carries a [D]-feature so that no specifier is needed in these cases, I assume that all heads that would be analysed as carrying a [D]-feature in their system are merged and that therefore there is no EPP-feature at all. This apparently little difference has a big advantage, however. A&A have to stipulate that EPP-checking by head-movement is less costly than EPP-checking by XP-movement because the former does not extend the tree. If this head-movement is actually merger of a head the preference for this operation falls out quite naturally as Merge always preempts Move.

6. Summary

As an introduction to the topic and to the questions that are of particular interest in this study I presented an overview over the development of the concept of the "EPP" and the proliferation of subject positions due to the introduction of split functional projections. With this knowledge as a background, I introduced my assumptions about the EPP and about clause structure. I suggested that there is a correlation between head-movement and the EPP and this idea led to the formulation of the New Extension Condition. In a nutshell, I proposed that head-movement – although it does not extend the tree at the root – does not violate the Extension Condition and does not have to be attributed to PF. The only requirement is that head-movement be immediately followed by an operation that creates the specifier of the head that triggered head-movement. If head-movement checks all the features of the head so that no XP would be forced to move to the relevant specifier to check some feature, I assume that the head has to carry an EPP-feature which then triggers XP-movement. This EPP-feature is not restricted to any particular head but can be associated with any head where head-movement has to be amended (although in the present system it looks as though the EPP were needed only in a very restricted set of constructions and interestingly only on T).

With respect to clause structure, I follow a moderate cartographic approach with both a split C-system and a split I-system and a universal base as regards the structure of the vP. Contrary to common belief, I suggest that all languages are underlyingly OV (cf. Hale & Keyser 1993, Roberts 2000b) and that, provided all conditions on checking are met, the (remnant) vP can move to SpecTP. Although this structure might be problematic with respect to Kayne's (1994) LCA and does not offer a structural subject-object asymmetry (Heck, p.c.) these unconventional assumptions have many advantages. In addition to the fact that I have a universal base, this framework allows for an explanation of OV vs VO word order, ties in with typological observations and offers an account of at least some of the differences between Object Shift and scrambling. The possibility of vP-movement to SpecTP explains why some subjects appear to be vP-internal and can nevertheless check Nominative Case, which is associated with T and last but not least, it obviates the need for expletive *pro* and traces of expletives in SpecTP¹¹⁹ because, for example, in Icelandic SpecTP is not required at all and in German, where it is required, it is always filled by the (remnant) vP.

¹¹⁹ In fact, these items are not only not needed but even impossible so that Cardinaletti's (2002) statement "I do not see any advantage in denying the existence of a phonetically null pronoun" does not hold any longer because I do not simply **deny** the existence of *pro* but show that its alleged position is not available.

I assume that in all three domains (V-, I- and C-) there are subject positions. SpecvP is the thematic position in which subject DPs are merged (unless the verb is passive or unaccusative – in which case the "subject" is merged in SpecVP). In the I-system, there are several functional – both formal and semantic – positions which can serve as subject positions to a varying degree. SpecTP is the position to which all Nominative subject DPs have to move for reasons of Case checking but they can also move there together with the (remnant) vP. Definite/specific subjects, however, only pass through SpecTP because they have to check a definiteness/specificity feature against Ref. Topic and focus phrases of both the I- and the C-system can always be targeted by subject DPs as well, depending on the interpretation that is to be conveyed by the respective clause. Last but not least, SpecFinP is an unmarked position for subject DPs in V2 languages. Despite the range of possible subject positions, however, there is no canonical subject position and SpecTP only comes close to being a canonical subject position because in the default case the subject carries Nominative Case and then it has to target SpecTP.

The question then was whether all of these subject positions are somehow linked to an EPP-feature and whether the "traditional" EPP could be translated into a general EPP-feature on T. All purely semantic projections (i.e. TopPs, FocPs and RefP) require their features to be checked by XPs (head-movement to the corresponding head-positions only occurs as a byproduct to prevent a violation of the head-movement constraint) and are only present or active if there is an XP with a matching feature in the numeration. This means that we never get head-movement to one of these projections that has to be amended by EPP-triggered XPmovement – XP-movement will always be triggered by the semantic feature. SpecvP is assumed not to be subject to the New Extension Condition – even though there are many instances of V-movement to little v - because the presence or absence of SpecvP is determined by selection. In the end, we are left with Fin(P) and T(P) which are the traditional candidates for an EPP-feature. Roberts & Roussou (1998), for example, suggested that the EPP located on T and the V2 phenomenon associated with C are one and the same thing. Here I offered two explanations. In the "EPP-approach" I suggested that the process of assignment of an EPP-feature in cases where head-movement would not be followed by independently triggered XP-movement applies to Fin and T. This approach, however, meets with several problems. On the one hand, if Fin were associated with an EPP-feature we would expect a Dative Experiencer moving across a definite subject to result in a locality violation, contrary to fact. On the other hand, sentences where there is no V-movement to T at all but which nevertheless require an expletive in SpecTP, such as There arrived three men. would call for a

second kind of EPP. For these reasons I proposed that the EPP-feature is not the whole story and that all clauses contain a subject-of-predication feature which, in V2 languages, sits on Fin and in non-V2 languages on T. While this assumption comes close to the original EPP, which requires every clause to have a subject, supports the idea that the EPP and the V2 phenomenon are related and solves the problem of the presence of expletive *there* in the English sentence above, some German/Dutch and Danish impersonal constructions, unfortunately, still seem to require the postulation of an EPP-feature. Although an analysis in terms of a sop-feature, just like all the accounts that involve the EPP, cannot explain why the position of the sop-feature is parametrised and why Fin but not T requires to be realised itself if it carries the sop-feature, the subject-of-predication feature is not an abstract, purely formal device like the EPP but has some semantic plausibility.

One thing, however, is important to bear in mind with respect to the "pure" EPP-approach. The way I have defined the EPP, namely as a device that amends head-movement, means that the EPP-feature has nothing to do with a particular subject position, in particular there is no reason to assume that T is universally associated with an EPP-feature. This dissociation becomes most obvious when we consider the alternative to head-movement, namely merger of a head. A head can be realised either by Merge or by Move, provided it requires realisation at all. If it is realised by Merge no specifier is needed because merger of a head extends the tree at the root and the (New) Extension Condition is satisfied. In this case the creation of a specifier can only be due to the need to check some feature that has not been checked by merger of the head. I assume that, e.g., Icelandic impersonal passives and weather verb constructions instantiate this pattern. Only realisation of a head by means of head-movement requires the creation of the corresponding specifier because head-movement alone does not extend the tree at the root and therefore violates the (New) Extension Condition. This requirement, however, is universal and not a property of T only.

In the next part of this study I analyse various impersonal constructions in a couple of Germanic languages and I focus on the questions of how to account for the differences as regards grammaticality of the respective constructions and as regards the distribution of the expletive that varies considerably. Last but not least, I apply the devices offered by the framework developed in this section to get rid of empty versions of the expletive, namely traces/copies and *pro* which were basically needed to satisfy the EPP.

III. Applications

1. Background

In this part I investigate the structural make-up of various impersonal constructions and other constructions that have traditionally been analysed as involving an overt expletive, an expletive *pro*, the trace/copy of an expletive or a quasi-argument, such as Transitive Expletive Constructions (TECs) and related thetic constructions, impersonal passives, impersonal psych-verb constructions and weather verbs. I will take a comparative perspective, looking at several Germanic languages and focussing on German or on a comparison between German and Dutch as in the case of TECs and impersonal passives. I am particularly interested in the following questions: (1) Why is the construction in question (un)grammatical in the respective language?, (2) To what extent does the distribution of the "expletive" vary crosslinguistically and how can we account for this variation (and for its correlates)? and (3) Is it really necessary to postulate the existence of non-overt expletives or can we do without?

Before trying to answer these questions I summarise the most important facts about presentational sentences and impersonal passives – the central constructions discussed in this study -, illustrate the cross-linguistic differences observed among the Germanic languages with respect to these constructions and take a quick glance at earlier accounts. On the one hand, I introduce approaches that I will argue against and on the other hand, I present some ideas that I will elaborate in my analysis.

1.1. The data

1.1.1. Presentational sentences

Presentational sentences or thetic constructions are sentences that can be used as answers to the question *What happened?* or as out-of-the-blue utterances. As such they comprise not only Transitive Expletive Constructions (TECs) but also the English *there*-construction¹²¹ and similar constructions found in the MSc languages and, of course, in the languages that allow for TECs. Due to their thetic nature, these constructions must not rely on any aforementioned material or on the context in general. All information provided must be new. Hence we

¹²⁰ I use "expletive", i.e. the term *expletive* in inverted commas, as a cover-term for expletives, event arguments and quasi-arguments.

usually find only indefinite DPs in TECs but in some languages definite DPs are possible as well as long as the referents are uniquely identifiable (cf. chapter III, 2.3.1.). The analysis of the interaction of these semantic requirements with syntactic constraints constitutes a major part of the discussion of presentational sentences later on.

TECs are, as the name suggests, constructions that feature a transitive verb and in which an expletive occupies the sentence-initial position as all the arguments of the verb stay fairly low in the structure. Of the languages discussed here, only German, Dutch and Icelandic allow for TECs, while English and the MSc languages do not, as illustrated in (1) - (5).

- (1) Es haben einige Kinder Spinat gegessen. (German)

 Expl have several children spinach eaten

 "Several children have eaten spinach."
- (2) Er heeft iemand een appel gegeten. (Dutch)

 Expl has someone an apple eaten

 "Someone has eaten an apple."
- (3) Það hafa margir jólasveinar borðað búðing. (Icelandic)¹²²

 Expl have many X-mas trolls eaten pudding

 "Many Christmas trolls have eaten pudding."
- (4) *Det har någon ätit ett äpple. (Swedish)

 Expl has someone eaten an apple

 "Someone has eaten an apple."
- *There has someone eaten an apple.

While TECs are grammatical only in some of the languages, similar constructions featuring either be (i.e. existential constructions) or an unaccusative verb or an unergative verb plus a locative element can be found in all of the languages of this study. Some examples are given in (6) - (10).

12

¹²¹ For an alternative view see chapter III, 2.6.1.

¹²² This example is taken from Bobaljik & Jonas (1996) – their (16a). The Swedish example in (4) is their (15d).

- (6) Es ist jemand im Garten. (German)

 Expl is someone in-the garden

 "There's someone in the garden."
- (7) Er is iemand in de tuin. (Dutch)

 Expl is someone in the garden

 "There's someone in the garden."
- (8) Það eru mættir þrír menn. (Icelandic)

 Expl are showed-up three men

 "There arrived three men."
- (9) Det har kommet tre menn. (Norwegian)

 Expl have come three men."
- (10) a. There's someone in the garden.
 - b. There arrived three men.

Thus the possibility for a language to have expletive constructions seems to depend on the number of arguments the verb takes. This fact has generally been attributed to whether the respective language has V-movement and/or whether it licences several subject positions, thus providing enough positions for the expletive, the subject DP and the object DP (cf. chapter III, 1.4.). I will argue that the cross-linguistic differences are due to the type of "expletive" a language employs and to the features associated with a certain position (esp. the subject-of-predication feature) rather than to the licensing of subject positions.

At least equally important as the distinction between languages that have TECs and those that do not have them is that even the languages that allow for TECs do not pattern exactly alike. The differences among the languages are, admittedly, subtle but nevertheless crucial. TECs have, for instance, commonly been claimed to display a Definiteness Effect with respect to the subject (among others Bobaljik & Jonas (1996), Cardinaletti (1990) and Chomsky (1995)). While this observation holds for Dutch and Icelandic 123, it does not do so

_

¹²³ Vangsnes (2002) qualifies this statement with respect to Icelandic saying that the DE is not absolute because quantificational DPs are perfectly fine in Icelandic TECs. He particularly criticises that Chomsky spreads the incorrect information about the DE (Vangsnes 2002, p. 66, footnote 8).

for German (11) - (13). Another aspect concerns the "expletive" itself. German and Icelandic have an expletive that is, according to Vikner (1995), of pronominal origin, whereas the Dutch expletive is of locative origin.

- (11) a. Es haben einige Kinder Spinat gegessen. (German)

 Expl have several children spinach eaten

 "Several children have eaten spinach."
 - b. Es hat soeben der Kanzler die Bühne betreten.

 Expl has just the chancellor the platform entered

 "The chancellor has just mounted the platform."
- (12) a. Er heeft iemand een appel gegeten. (Dutch)

 Expl has someone an apple eaten

 "Someone has eaten an apple."
 - b. *Er heeft zo-even de kanselier het toneel betreden.

 Expl has just the chancellor the platform entered

 "The chancellor has just mounted the platform."
- (13) a. Það lesa margir stúdentar bækur eftir Chomsky. (Icelandic)

 Expl read many students books by Chomsky

 "Many students read books by Chomsky."
 - b. *Það lesa stúdentarnir bækur eftir Chomsky.
 Expl read students-the books by Chomsky
 "The students read books by Chomsky."

Da hin und wieder behauptet wird, Deutsch weise einen Definitheitseffekt (= DE) der Art auf, wie wir ihn vom Englischen kennen, sei hier betont, daß das nicht der Fall ist. [...] Es ist schlechterdings falsch, daß im Deutschen ein DE bei Existentialaussagen auftrete [...].

(Haider 1993, p. 189)

[As every now and then it is claimed that German displays a DE of the kind that we know from English, I want to point out that this is not the case. It is simply wrong that a DE arises in existential sentences in German.]

_

¹²⁴ As the existence of a DE is such a wide-spread assumption, the reader might question my judgements but Haider (1993) fully agrees with me.

In chapter III, 2. I show that these differences naturally follow from my assumptions about clause structure in combination with a differentiation of the type of "expletive" that is used in the individual languages.

1.1.2. Impersonal passives

With respect to impersonal passives there is not only a distinction between languages in which the construction is grammatical and those where it is not. The distribution of the expletive also varies considerably within the group of languages that allow for impersonal passives as can be seen in (14) - (17).

```
(14) a. *(Es) wurde getanzt. (German)

Expl was danced

"There was dancing."/"People were dancing."
```

- b. ... daß (*es¹²⁵) getanzt wurde.
 - ... that Expl danced was
 - "... that there was dancing."/"... that people were dancing."
- c. Gestern wurde (*es) getanzt.
 yesterday was Expl danced
 "Yesterday, there was dancing."/"Yesterday, people were dancing."
- (15) a. *(Er) wordt gedanst. (Dutch)

 Expl is danced

 "There is dancing."/"People are dancing."
 - b. ... dat (er) wordt gedanst/gedanst wordt. 126 ... that (Expl) is danced/danced is
 - "... that there is dancing."/"... that people are dancing."
 - c. Op het schip wordt (er) gedanst.

 on the ship is (Expl) danced

"On the ship, there is dancing."/"On the ship, people are dancing."

¹²⁶ I assume that *gedanst wordt* (i.e. the word order we find in German) represents the order derived in narrow syntax, while *wordt gedanst* is due to reordering at PF because the choice of word order is solely determined by prosody (Hans Kamp, p.c.).

¹²⁵ The presence of *es* can be grammatical, namely if *es* is a referential pronoun standing for e.g. *das Ballett* 'the ballet'. This case, however, is not considered here.

(16) a. (Það) var dansað. (Icelandic)
Expl was danced
"There was dancing."/"People were dancing."
b. ... að það hafi verið dansað.

... that Expl has-subjunc ¹²⁷been danced
"... that there was dancing."/"... that people were dancing."

c. [?]Í gær var (*það) dansað.

yesterday was Expl danced

"Yesterday, there was dancing."/"Yesterday, people were dancing."

(17) a. Det ble danset. (Norwegian)

Expl was danced

"There was dancing."/"People were dancing."

- b. ... at det ble danset.... that Expl was danced"... that there was dancing."/"... that people were dancing."
- c. I går ble det danset.yesterday was Expl danced"Yesterday, there was dancing."/"Yesterday, people were dancing."
- (18) a. *There was danced.
 - b. *It was danced.

Of the languages investigated here, only English does not allow for impersonal passives. The four remaining languages all have some kind of impersonal passive construction but none shows exactly the same distribution of the "expletive". This difference is particularly striking in the case of the closely related languages German and Dutch. While in German the expletive only ever shows up in the sentence-initial position of main clauses, Dutch *er* can also optionally show up in embedded clauses and in main clauses where some other XP occupies the sentence-initial position. A large section of my analysis of impersonal passives will be devoted to the explanation of this phenomenon (cf. chapter III, 2.3.). In Icelandic, the expletive seems to be obligatory only in embedded clauses whereas it is optional even in the

11

¹²⁷ The fact that the auxiliary is in the subjunctive here is due to the fact that this clause has been taken from a context of reported speech.

sentence-initial position of main clauses; and in Norwegian (which represents the MSc languages here), finally, the expletive is obligatory throughout.

The analysis of TECs and impersonal passives that I propose is largely devoted to an explanation of the German and Dutch facts, on the basis of which it was developed. I will, however, also offer (sometimes tentative) accounts of the Scandinavian and English data.

1.2. Expletives

1.2.1. Expletives everywhere

Cardinaletti (1990) and Vikner (1995)¹²⁸ are presented as the main proponents of the "expletive approach". This approach decisively relies on the G&B-framework and the assumption that SpecIP¹²⁹ is filled even when it is not overtly realised as in (19), where there is no subject at all, or in (20), where the subject is considered to be VP-internal.

- (19) Gestern wurde *pro* getanzt. (German; Cardinaletti 1990, p.16, (24b)) *yesterday was Expl danced*"Yesterday there was dancing."
- (20) Es_i hat t_i offensichtlich ein Fest stattgefunden.

 Expl has obviously a party taken-place

 "Obviously, a party has taken place."

This assumption that SpecIP is always filled led to the postulation of the presence of either a non-overt expletive pronoun or of a trace of an overt expletive pronoun that has moved to SpecCP because German is a V2 language. According to Cardinaletti, the C-head governs SpecIP in German and thereby licenses the occurrence of expletive *pro* in SpecIP. In addition, the expletive in SpecIP receives Nominative Case thus blocking the VP-internal subject from receiving Nominative Case. This assumption is central to Cardinaletti (op. cit.) who follows Belletti (1988) in analysing the VP-internal subject DP as carrying Partitive Case. She argues that the Definiteness Effect in examples like (21)¹³⁰ can easily be explained if the subject does not sit in SpecIP (which hosts a trace of *es* instead) but in SpecVP and therefore receives Partitive Case. The only problem of her analysis is that (21), contrary to what Cardinaletti

¹²⁸ Vikner's (1995) approach is based on Cardinaletti's but nevertheless departs in crucial ways from it.

¹²⁹ In the presentation of the "expletive approach" I stick to the terms used then.

^{130 (21)} is Cardinaletti's 1990, p. 21, (40b), however, without her incorrect "??"-judgement.

claims, is not at all ungrammatical and does not display a Definiteness Effect (see also Haider 1993).

(21)Es kam der König über die Hügel geritten. (German) Expl came the king over the hills ridden "The king came riding over the hills."

Some definite DPs (e.g. personal pronouns) are indeed ruled out in the es-construction but this restriction is solely due to semantics as I will argue (cf. chapter III, 2.3.1.), because sentences like (21) are thetic sentences and hence must not contain DPs that require a context and on the other hand, the DP has to be uniquely identifiable.

Although Vikner (1995) explicitly adopts Cardinaletti's analysis that there is a nonovert expletive element in SpecIP and that this expletive is assigned Nominative Case under government from C, he does not encounter Cardinaletti's problems with respect to (21). This advantage is due to the fact that Vikner rejects the idea that the VP-internal subject carries Partitive Case¹³¹ and instead assumes that it forms a chain with the expletive and thus receives Nominative Case (cf. Hoekstra & Mulder 1990). The real problem concerning Vikner's approach is a conceptual one. He admits that people have argued that the expletive is merged in SpecCP (Sigurðsson 1989, Tomaselli 1990) but as his analysis crucially relies on the story of Case-assignment via government from C (which is nowadays problematic exactly because of the notion of government) he follows Cardinaletti and assumes that the expletive (overt or non-overt) is always merged in SpecIP and moves to SpecCP if it is overt. This requirement forces him to assume VP-internal subjects all over the place although there is no way of showing that they are really VP-internal in e.g. (22) (= Vikner's 1995, p. 189, (43a) and p. 193, (59a)).

... daß *pro* jemand einen Apfel gegessen hat. (22)(German) ... that pro someone an apple eaten "... that someone has eaten an apple." ... daß *pro* ein Apfel gegessen wurde. 132

b.

¹³¹ Vikner's (1995, p. 175) arguments against Partitive Case in German, however, fail in the clause structure I propose because there the subject is not vP-internal, or more precisely it is contained in the vP that has moved to SpecTP, and is therefore not predicted to carry anything but Nominative Case.

¹³² In fact, if *nicht* marked the left edge of vP in German as well (although I have a hunch that it is VP-internal in German), (i) would argue against Vikner's assumption.

... that pro an apple eaten "... that an apple was eaten."

In fact, Vikner himself admits that there is no compelling reason that supports his assumptions about clause-structure.

When the expletive is in CP-spec, IP-spec will be part of the chain, irrespective of whether the expletive was base-generated here or not. However, if the expletive was not generated in IP-spec, it would be difficult to explain why the associate NP may not occur in IP-spec when the expletive is in CP-spec.

(Vikner 1995, p.186)

To sum up, independent of the explanation of Case assignment which is obsolete anyway, the "expletive approach" is characterised by the postulation that expletives are universally merged in SpecIP and what is more, that there are both overt and non-overt expletives due to the need to fill SpecIP. This means that we get an expletive not only in constructions that do not contain a subject DP (e.g. impersonal passives (23) and impersonal psych-verb constructions (24)) but also in constructions which (allegedly) have a vP-internal subject, i.e. TECs and related constructions (25). An overview of the structures according to the expletive approach is given below.

- (23) Es_i wurde t_i getanzt. (German) Expl was danced "There was dancing."
 - b. Gestern wurde pro getanzt. yesterday was pro danced "Yesterday, there was dancing."
 - ... daß *pro* getanzt wurde. c. ... that pro danced was "... that there was dancing."
- (24)Mich friert pro. a. freezes pro me

⁽i) ... daß der Apfel nicht gegessen wurde. ... that the apple not eaten

[&]quot;... that the apple was not eaten."

"I feel cold."

- b. Mich friert's. 133

 me freezes-it

 "I feel cold."
- (25) a. Es_i hat t_i jemand einen Apfel gegessen.

 Expl has someone an apple eaten

 "Someone has eaten an apple."
 - b. Gestern hat *pro* jemand einen Apfel gegessen.

 yesterday has pro someone an apple eaten

 "Yesterday, someone ate an apple."
 - c. ... daß *pro* jemand einen Apfel gegessen hat. ... that pro someone an apple eaten has "... that someone has eaten an apple."

Vikner (1995) in addition postulates a distinction between expletive elements of pronominal origin (like *it*) and of locative origin (like *there*). He distinguishes three types of languages with respect to this classification. First, languages, such as Norwegian and Swedish, which have only one single element (*det* in both languages), which is necessarily of pronominal origin then; second, languages, like Danish (*det* vs *der*), Dutch (*het* vs *er*) and English (*it* vs *there*), which have two different elements and where the pronominal element realises arguments and quasi-arguments whereas the locative element is used as the expletive and last but not least, languages like German which have two elements (here: (quasi-) argumental *es* vs expletive *pro*) but where the distinction becomes visible only in SpecIP while in SpecCP the expletive is also realised by the pronominal element.

Although Cabredo Hofherr's (2000) approach is not exactly an "expletive" approach, I mention it here as well because she also assumes the presence of empty categories in the above-mentioned constructions. Cabredo Hofherr rejects most of Cardinaletti's and Vikner's assumptions but still develops a system that cannot do without *pro*. Her analysis can be summarised as follows. She argues that German does not have any non-overt expletive nor an overt expletive subject realised by *es*. Instead, she suggests that sentence-initial expletive *es* is an expletive topic, i.e. she does not deny the existence of an expletive *es* as one might first

¹³³ In fact, Cardinaletti (1990) suggests that in (24b) and (24a) we have an overt and a non-overt quasi-argument, respectively and that these examples constitute a case of real optionality. Note that 's is the reduced variant of es – the full form (which Cardinaletti always uses) is extremely unnatural with impersonal psych verbs.

think but only the existence of an expletive **subject**. She further claims that any occurrence of *es* in a subject position and any occurrence of *pro* at all is a quasi-argument. The realisation of the quasi-argument as either *es* or *pro*, according to Cabredo Hofherr, depends on where the quasi-argument is merged. If the quasi-argument is a derived subject (i.e. an underlying object), as in impersonal passives for example, it will appear non-overtly as *pro*, while quasi-arguments that are merged as subjects are realised by *es*.

1.2.2. Against non-overt expletives

Differently from Cardinaletti (1990) and Vikner (1995), I argue that non-overt expletives do not exist at all. After all, *expletive* means 'filler' and therefore the expletive should really overtly realise a position, especially since the *Minimalist Program* allows for specifiers to be absent so that we do not have to postulate the existence of non-overt expletives that fill specifiers for which we do not have any overt evidence. In addition, I assume that expletives are always merged in the position in which they are spelt out. This means that a true expletive can never be merged in a lower position and then move up to its "surface position" but has to be merged in the position that it has to fill. This restriction is due to two factors.

First, expletives cannot check any features except for subject-of-predication-features (cf. Cabredo Hofherr's (2000) assumption that expletive *es* is always an expletive topic) simply because of their property of being fillers only, i.e. I explicitly do not assume that expletives can check any Case features or that they can be selected. Checking of a sop-feature by an expletive is a repair mechanism and can only take place if there is no real subject of predication available.

Second, the lower positions are (or can be) filled by other XPs so that they are not available for the expletive. In chapter II, 4.3.2.A/C I have argued that in German and Dutch SpecTP is always occupied by the (remnant) vP. Moreover, as German explicitly does not display a Definiteness Effect (i.e. SpecRefP must be available for a definite subject), SpecRefP, the designated position for definite subjects cannot be occupied by an expletive or a trace of it either. Provided that the merging site of expletives does not vary depending on whether there is a definite subject or not, expletives can thus only be merged in SpecFinP in German for example.

This restriction on the occurrence of expletives, however, is sometimes blurred by the existence of event arguments and quasi-arguments that are homophonous with the respective expletive and that can carry Case (quasi-arguments only) and occur in positions other than those available for expletives.

This confusion of various empty elements is illustrated by the following point. Since sentences like (26b) are grammatical with *es* provided that *es* is a referential pronoun (cf. footnote 125), any *pro* instead of *es* as in (26c) should be interpreted as an empty derived subject too.

- (26) a. Gestern wurde das Menuett getanzt. (German)

 yesterday was the menuett danced

 "Yesterday people were dancing the menuett."
 - b. Gestern wurde es getanzt.yesterday was it danced"Yesterday people were dancing it."
 - c. Gestern wurde pro getanzt.yesterday was pro danced"Yesterday people were dancing."

Therefore *pro* could only ever be a null argument (a postulation that comes very close to Cabredo Hofherr's (2000) suggestion that *pro* is a quasi-argument merged in object position) and never a non-argumental expletive as suggested by Cardinaletti (1990). In addition, *es* can cooccur with a kind of "cognate object" and moreover, the auxiliary agrees with the cognate object and not with *es* (or does not show default agreement).

- (27) a. Es wurde ein letzter Tanz getanzt.

 Expl was a last dance danced

 "People were dancing a last dance."
 - Es wurden mehrere Tänze getanzt.
 Expl were several dances danced
 "People were dancing several dances."

These agreement facts show that the (derived) subject has to raise to at least SpecTP and establish a spec-head relation for phi-feature checking.

The fact that expletive *pro* is not needed for Case- or phi-feature checking in a minimalist system is also pointed out by Alexiadou & Anagnostopoulou (1998) who question the existence of expletive *pro* too. In particular, they argue that expletive *pro* if it were present should have some kind of semantic effect, e.g. lead to a Definiteness Effect with respect to the

"associate", because Chomsky (1995) claims that the numeration contains only elements that have an effect on the output. As expletive *pro* certainly does not have an effect on PF, it should have one on LF. In German, just as in the VSO-orders investigated by A&A, however, one can find no such semantic effect and therefore we do not have any evidence for the existence of expletive *pro*.

1.3. Locatives in Small Clauses

In this section I sketch an idea proposed by Hoekstra & Mulder (1990) that I adopt and elaborate in chapter III, 2.3.2. ff. Hoekstra & Mulder suggest that certain unergative verbs when they are used in a construction involving a locative constituent should be analysed as unaccusatives that take a Small Clause as their only argument. They observe that these unergative verbs which typically describe physical activities can occur in two different constructions as is illustrated in (28).

- (28) a. Jan heeft (in de sloot) gesprongen. (Dutch; cf. H&M 1990, (2a)/(13))

 Jan has in the ditch jumped

 "Jan has jumped (in the ditch)."
 - b. Jan is in de sloot gesprongen. (H&M 1990, (2b))Jan is in the ditch jumped"Jan has jumped into the ditch."

Hoekstra & Mulder note that the change in the auxiliary (hebben 'have' vs zijn 'be') is correlated with a change in meaning. (28a) means that Jan has performed the physical activity of jumping (in a ditch) whereas (28b) describes the state of Jan being in the ditch as a result of a jumping event. To account for these differences in meaning Hoekstra & Mulder suggest that the examples have different structures. In (28a) the locative PP is not an argument and just indicates the location where the jumping has taken place while in (28b) the main predication is the one of Jan being in the ditch which is represented by a Small Clause (SC) [Jan in de sloot] in the syntax. This SC is merged as the internal argument of the verb. As there is no external argument in a construction like (28b), the verb cannot assign (Accusative) Case to the DP in the SC (Burzio's Generalisation) and therefore the DP has to move to SpecIP. 134, 135

¹³⁴ This analysis is similar to Moro's (2000) account of copular constructions. Copular verbs take a Small Clause argument as shown in (i).

Hoekstra & Mulder (1990) transfer this SC-analysis to Locative Inversion and to the *there*-construction in English. They suggest that in the case of Locative Inversion (29) the DP and the PP form a SC which is merged as the complement of the verb – an assumption that is supported by the fact that it has often been noted that the possibility of Locative Inversion is restricted to unaccusative verbs.

In the course of the derivation, the PP moves to SpecIP¹³⁶ where it is assigned Nominative Case which it then shares with the postverbal DP by means of the trace of the PP in the SC as illustrated in (30).

(30)
$$[IP PP_i I [VP V [SC NP t_i]]]$$
 (based on H&M 1990, (64)) Nom. Case

Last but not least, they suggest that the *there*-construction, which is only possible if the verb is either *be*, an unaccusative verb or an unergative verb constructed with a locative

Depending on whether it is DP_1 or DP_2 that raises to SpecIP we get the canonical or the inverse order of the copular construction, respectively.

¹³⁵ The fact that Hoekstra & Mulder (1990) assume that in clauses like (i) the prefix *be*- is the predicate of a SC and undergoes head-incorporation ties in with my suggestion that in (ii) the DP and the PP form a SC which is merged as the complement of the verb (cf. chapter II, 3.3.).

(ii) Hemden auf die Leine hängen (German) shirts on the line hang "to hang shirts on the line"

If this is correct, then stylistic fronting involves predicate XP raising, in a sense the reverse of what is understood to be the classical Extended Projection Principle. The crosslinguistically more common cases of locative inversion could also be accommodated under this approach, if locative inversion is actually a subcase of predicate inversion [...].

(A&A 1998, p.520/521)

¹³⁶ The idea of predicate raising in Stylistic Fronting and Locative Inversion has also been put forth in Alexiadou & Anagnostopoulou (1998).

PP, has exactly the same derivation with *there* being merged in the SC and moving up to SpecIP. Of particular importance in view of the account that I will propose here is the fact that Hoekstra & Mulder point out that according to their analysis *there* is not an expletive but a locative element.

As will become evident later, my analysis of presentational sentences and of impersonal passives in some languages is heavily influenced by Hoekstra & Mulder's idea that there is some kind of locative element in these constructions although I am going to argue that this element is not necessarily merged in a SC.

1.4. Positions and movements involved in the derivation of TECs

Chomsky (1995) claims that TECs are the only constructions that use the specifiers of all the functional categories he assumes, namely SpecAgrOP, SpecTP and SpecAgrSP. Precisely, he suggests that Icelandic TECs like the one in (31) have the structure described below.

(31) Það lesa margir stúdentar bækur Chomskys. (Icelandic)

Expl read many students books Chomsky's

"Many students read Chomsky's books."

According to Chomsky the expletive is merged in SpecAgrSP where it checks a strong [D]-feature and the subject raises to SpecTP where it checks an [N]-feature. The fact that T is only associated with an [N]-feature and not with a [D]-feature like AgrS is considered to offer an account of why TECs display a Definiteness Effect (DE) with respect to the subject. This claim, however, does not hold for German (a problem Chomsky shares with Cardinaletti (1990) and Bobaljik & Jonas (1996)).

As AgrS and AgrO are two instantiations of one and the same category, AgrO is associated with a strong [D]-feature as well and therefore the object DP raises to SpecAgrOP. As a by-product this analysis provides us with an explanation of why Object Shift tends to be restricted to definite DPs, namely because it is a [D]-feature and not just an [N]-feature that has to be checked on AgrO. Chomsky, however, does not address the question of how this

138 At first sight the grammaticality judgements concerning examples featuring the negation *ekki* argue against an Object Shift analysis.

¹³⁷ For a criticism of this description see Vangsnes (2002) and footnote 123.

⁽i) ?Það lesa margir stúdentar bækur Chomskys ekki. (Icelandic) Expl read many students books Chomsky's not

[D]-feature gets checked in TECs that feature an indefinite object or a compound tense and hence do not allow for Object Shift to take place, as illustrated in (32).

(32) Það hafa margir stúdentar ekki lesið bækur Chomskys. (Icelandic)

Expl have many students not read books Chomsky's

"Many students have not read Chomsky's books."

In a later account, Chomsky adds two more problems to the already existing ones. In pursuit of a simpler, more reduced clause structure Chomsky (1995, ch. 4.10) argues against the existence of the agreement projections AgrSP and AgrOP and for a system that allows for multiple specifiers instead. Thus, outer SpecvP and outer SpecTP replace SpecAgrOP and SpecAgrSP, respectively. With respect to TECs these assumptions imply that the object shifted object occupies the outer SpecvP and the subject DP the inner SpecTP while the expletive is merged in the outer SpecTP. If this were the whole story we would expect TECs to have the word order Expl – DP_{subj} – V – DP_{obj}, contrary to fact. Chomsky does not offer a convincing explanation of how/why the verb shows up in second position in the end but puts it down to a readjustment operation at PF (Chomsky 1995, p. 368). Another problem concerns the position of the negation. So far it has been assumed that the negation marks the left edge of vP. If this assumption is still valid and if the object shifted object occupies the outer SpecvP, the negation should precede the shifted object. However, one of the consequences standardly attributed to OS is that it results in the object preceding negation. Another possibility would be to assume that the negation sits between the two specifiers of vP but this solution is equally stipulative and therefore unsatisfactory.

Bobaljik & Jonas (1996) use the same inventory of (specifier) positions as Chomsky but their approach (which heavily relies on the notion of equidistance) postulates a correlation between V-movement and the licensing of SpecTP as a subject position and hence a correlation between V-movement and the possibility for a language to have TECs. They argue that V-movement to AgrO renders SpecAgrOP and SpecVP (equals my SpecvP) equidistant

[&]quot;Many students do not read Chomsky's books."

⁽ii) Pað lesa margir stúdentar ekki bækur Chomskys. Expl read many students not books Chomsky's "Many students do not read Chomsky's books."

for (overt) movement of the object to SpecAgrOP. In a second step, V-movement to T renders SpecAgrOP and SpecTP equidistant for VP-internal material, i.e. for the subject. Therefore the subject DP can move to SpecTP skipping SpecAgrOP. As the equidistance of SpecAgrOP and SpecTP is only achieved by the verb moving to T, Bobaljik & Jonas argue that SpecTP is licensed as a subject position only in languages that have V-movement. The availability of SpecTP as a subject position, however, is a prerequisite for TECs because SpecTP has to host the subject DP as the expletive occupies SpecAgrSP. 139 If a language does not have Vmovement, it simply does not provide enough specifier positions for the expletive and the two arguments of the transitive verb so that TECs are ruled out.

Koster & Zwart's (2000) approach does not so much rely on V-movement but rather on XP-movement. More precisely, they argue that it is also one single factor that determines whether or not a language allows for Object Shift, TECs and impersonal passives. This factor consists in whether a language licenses its VP-internal ¹⁴⁰ material individually or collectively. Koster & Zwart assume the clause structure in (33).

(33)
$$\left[AgrSP AgrS \left[TP T \left[AgrOP AgrO \left[vP DP_{subj} v \left[VP V DP_{obj} \right] \right] \right] \right] \right]$$

In this structure, SpecAgrSP and SpecTP are positions in which subjects can be licensed, whereas objects are licensed in SpecAgrOP. If a language individually licenses its VP material, the object DP moves to SpecAgrOP (which results in Object Shift, according to Koster & Zwart¹⁴¹) and the verb moves to T. This means that both SpecTP and SpecAgrSP are still available, providing positions for both the subject DP and an expletive. Hence languages that instantiate individual licensing, such as Dutch and German, allow for TECs. English, on the other hand, has collective licensing, which means that the complete VP moves through SpecAgrOP, where the object DP is licensed, to SpecTP, where the verb checks its features against T. As SpecTP is occupied by the VP, only SpecAgrSP is available as a

However, (ii) is just a constituent negation while (i) represents the intended sentential negation. The slight marginality of (i) is probably due to a general awkwardness or even incompatibility of presentational constructions with negation that can be observed in many languages rather than to a lack of Object Shift.

¹³⁹ Note that Alexiadou & Anagnostopoulou (1998) also argue for a correlation between licensing SpecTP as a subject position and the availability of TECs and Object Shift structures.

It is important that "VP-internal" really only refers to VP, i.e. the verb and its internal argument, and not to

vP.

141 As Koster & Zwart (2000) explicitly correlate Object Shift and TECs, one has to conclude that they assume Object Shift and scrambling to be one and the same phenomenon as German and Dutch allow for TECs but have traditionally been analysed as having scrambling, not OS. In addition, this correlation implies that the MSc pronominal Object Shift does not count as Object Shift in Koster & Zwart's terms because the MSc languages do not allow for TECs.

subject position. Therefore TECs are ruled out in languages that license VP-internal material collectively.

In a way, Koster & Zwart's approach is exactly the opposite of mine as I assume that in German and Dutch the whole vP moves to SpecTP while it is only the subject DP (or the expletive, respectively) in English. While I just have to assume that the Left Branch Condition does not hold universally, thus allowing for extraction of the subject DP from the moved vP (cf. chapter II, 4.3.2.C), Koster and Zwart are faced with several problems as they themselves note.

We remain somewhat agnostic about the exact dimension of the verb phrase moving in the process of collective licensing in English. If the verb is in v, the constituent moving is actually v', excluding the external argument, or vP if external argument extraction can somehow take precedence. The general idea is that what moves is a 'predicate', in the sense of a verb with its internal arguments and perhaps some local adverbial material.

(Koster & Zwart 2000, p. 164)

Having discussed some of the previous analyses of TECs and impersonal passives and pointed out their shortcomings, I now turn to my own account of the two constructions.

2. The derivation of presentational sentences and impersonal passives

2.1. Not all of the alleged expletives can be expletives

In chapter III, 1.2.2. I have argued that expletives are indeed only fillers and therefore cannot check any features except for sop-features (as a last resort operation). These assumptions imply that expletives are also semantically empty. In Dutch, however, impersonal passives with and without er vary in interpretation as can be seen in (1).

- (1) De voorstelling kwam maar heel stroef op gang. (Dutch)

 the show came only very slowly on going

 "The show got off to very grinding start."
 - a. Maar op het laatst werd gelachen.but on the last was laughed"But in the end the audience laughed."
 - b. Maar op het laatst werd er gelachen.but on the last was Expl laughed"But in the end there were some people who laughed."

The interpretation varies insofar as the presence or absence of er has an effect on the interpretation of the implicit agent. In impersonal passives without er (1a), the implicit agent is a contextually known or inferable entity (here: the audience of the show). In impersonal passives with er (1b), on the other hand, the implicit agent is restricted to an indefinite subset of that entity (here: some people in the audience of the show) (Hans Kamp, p.c.). In other words, er requires the implicit agent to be indefinite and thus leads to a kind of Definiteness Effect. Hence er is obviously not semantically empty and therefore cannot be an expletive.

The attempt to translate (1) into German and especially to reproduce the semantic effect of er fails in a way that is revealing.

(2) a. Aber letztendlich wurde (doch) gelacht. (German)

but in the end was (after all) laughed

"But in the end people/the audience laughed (after all)."

¹⁴² Not all speakers of Dutch, however, can reproduce this differentiation (cf. section III, 2.3.2.).

- b. *Aber letztendlich wurde es (doch) gelacht.
 but in the end was Expl (after all) laughed
 "But in the end there were some people who laughed."
- c. Aber letztendlich wurde da (doch) gelacht.
 but in-the-end was DA¹⁴³(after all) laughed
 "But in the end there were some people who laughed."

(2a), without any "expletive", can be translated exactly like (1a) although a partitive reading of the implicit agent might be favoured. This preference, however, is determined by the context (it is not likely that everyone who was disappointed first will be convinced in the end) and not due to syntactic constraints. The (b)-example with *es*, on the other hand, is completely ungrammatical because *es* cannot show up in the *Mittelfeld* (cf. III, 1.1.2. (14c)). I argue that this positional restriction is due to the fact that *es* is a pure expletive and therefore can only be merged in SpecFinP (ch. III, 1.2.2.).

With da, however, German has another item at its disposal that can be used like an expletive. Da has a distribution which very much resembles that of Dutch er. ¹⁴⁴

(3) a. Da wurde getanzt. (German)

**DA was danced*

"There was dancing."/"People were dancing (there)."

- b. ... daß (da) getanzt wurde.
 - ... that DA danced was
 - "... that there was dancing."/"... that people were dancing (there)."
- Gestern wurde (da) getanzt.
 yesterday was DA danced
 "Yesterday, there was dancing."/"Yesterday, people were dancing (there)."

Since *da* is not restricted to the sentence-initial position of main clauses, (2c) is perfectly grammatical and, just like (1b), only refers to a subset of the audience. More precisely, (2c) conveys the idea that from time to time some people were laughing.

¹⁴⁴ In chapter III, 2.3.3. I discuss the properties of da in more detail.

¹⁴³ I gloss *da* 'there' as *DA* because I do not want to commit myself to any classification of *da* (yet). *Da* is clearly of locative origin but as I gloss expletive *there* as 'Expl' I cannot gloss the expletive-like *da* as 'there'.

In view of these facts it is likely that Dutch *er* and German *es* are not the same kind of element and, in addition, that *er* is not an expletive. The question that remains to be answered is what it is then. One thing is clear – any analysis of Dutch *er* should account for its distributional properties (such as its optionality and the fact that it can not only occupy the sentence-initial position of main clauses) as well as for its semantic properties (restricting the implicit agent of impersonal passives to an indefinite subset of the known or inferable entity; inducing a DE in TECs). In the next sections I give such an explanation.

2.2. Event arguments

To account for the different distribution of the "expletive" in German and Dutch impersonal passives and for the absence or presence, respectively, of a DE in TECs I exploit an idea proposed by Kiss (1996) and in similar terms by Cardinaletti (2002). As mentioned above, thetic sentences can be used out of the blue or as an answer to the question *What happened?* because they report on events. Cardinaletti (2002) argues that these properties mean that all arguments of the verb are introduced as event participants and more precisely that no argument can serve as subject of predication. In the cartographic approach, which postulates that there is a position in which a subject-of-predication (sop) feature is checked, this lack of an argumental subject of predication in presentational sentences implies that no DP can move to check the sop-feature and calls for some other element to take care of sop-feature checking. In view of this lack of a subject of predication, Cardinaletti suggests that thetic sentences can optionally contain a location-goal argument which then serves as subject of predication. As an example of such a location-goal argument Cardinaletti gives the *there* of English *There arrived three men.* ¹⁴⁶

Kiss (1996) formulates the idea that thetic constructions (also represented by the English *there*-construction) do not predicate over an entity but over a specific point in space and time more explicitly than Cardinaletti. This observation leads her to the conclusion that thetic constructions feature a special argument.

¹⁴⁵ I develop an analysis of the German and Dutch facts first and later transfer this analysis to the other languages.

¹⁴⁶ In null-subject languages, this location-goal argument can be non-overt as illustrated in (i) (Cardinaletti's 2002, (147)).

(i) \emptyset_{LOC} è arrivato Gianni. (Italian) is arrived Gianni "Gianni has arrived."

Note that in Italian the postverbal subject is not subject to a DE either although (i) is a presentational sentence.

There constructions always predicate about a specific point in space and time: about "here and now", or "there and then". There may then be the spelling out of the deictically or contextually bound event argument referring to the given point in space and time, in which case it is expected to have the feature <+specific>.

(Kiss 1996, p. 135)

Kiss' and Cardinaletti's assumptions are central to the analysis I suggest in this study. Not surprisingly, I want to argue that languages can possess an event argument, which has a locative and/or temporal flavour, ¹⁴⁷ besides an expletive or instead of an expletive. In addition, I adopt the idea that event arguments carry a [+specific] feature and can serve as subject of predication. As a consequence, event arguments have to occupy SpecRefP, the position associated with the checking of specificity features, at some point of the derivation. As regards the checking of the subject-of-predication feature we have to distinguish between non-V2 languages and V2 languages because the location of the sop-feature is parametrised (see chapter II, 5.2.). In the former, the sop-feature sits on T so that the event argument has to pass through SpecTP (and move to SpecRefP), whereas in the latter, it has to end up in SpecFinP. In the next few chapters I discuss in detail how these assumptions about expletives and event arguments can account for the differences among the Germanic languages as regards impersonal passives and presentational constructions.

2.3. Comparing German and Dutch

2.3.1. Presentational sentences and impersonal passives as expletive constructions – German

Recall that the two expletive constructions that have been considered so far are characterised by the following properties in German. *Es* can only ever show up in the sentence-initial position of main clauses, i.e. in SpecFinP, and there is no DE in TECs nor does *es* in any way affect the interpretation of the implicit agent of impersonal passives. All of these facts strongly suggest that *es* is a semantically empty element¹⁴⁸ and is merged in SpecFinP to satisfy some purely syntactic requirement. Therefore I argue that in German we indeed have to do with an expletive. This expletive has to be merged in SpecFinP to check the sop-feature

¹⁴⁷ I follow Kiss (1996) in calling this extra argument an event argument but I do not subscribe to any of the traditional analyses involving event arguments. It would probably be more adequate to call this argument a location-goal argument (following Cardinaletti (2002)) or a locative or temporal proform. As I would then either have to distinguish in every single case whether we have to do with a temporal or locative element or to handle an extremely complex term I stick to 'event argument'.

in the absence of any real subject of predication and to fulfil the V2 requirement, thus saving the sentence.

If es is a pure expletive merged in SpecFinP (as this is the position that has to be filled in the V2 language German), all characteristics of impersonal passives and TECs in German can be explained as I show in the discussion of the individual examples (repeated here for the sake of convenience).

```
(4) a. *(Es) wurde getanzt. (German)

Expl was danced

"There was dancing."/"People were dancing."

b. ... daß (*es) getanzt wurde.

... that Expl danced was

"... that there was dancing."/"... that people were dancing."

c. Gestern wurde (*es) getanzt.

yesterday was Expl danced

"Yesterday, there was dancing."/"Yesterday, people were dancing."
```

In (4a) the complete vP, which contains just the participle, moves to SpecTP, thus checking the EPP-feature¹⁴⁹ whose presence was triggered by the auxiliary *wurde* 'was' headmoving from Aux to T. This means that SpecTP is not available for merger of the expletive or of its alleged non-overt counterpart *pro*. The assumption that vP moves to SpecTP not only serves as a device to get the word order right but it also has the advantage that it settles the problem of the "cognate object". If a cognate object is present as in (5), it moves to SpecTP as part of the vP and can check its Nominative Case feature there.

(5) Es wurde gerade der letzte Tanz getanzt, als der Strom ausfiel.

Expl was just the last dance danced when the power went off

"People were just dancing the last dance when the power went off."

¹⁴⁸ In fact, *es* does not seem to be completely semantically empty (cf. ch. II, 3.1.2. footnote 70) because it creates a reading that can hardly be translated into English. Its content, however, can probably be best defined negatively (Sigurðsson, p.c.) – it is not a pronoun, it is not an adverb, it is not an event argument, ...

¹⁴⁹ Possibly T does not (only) carry an EPP-feature in German because this EPP-feature should preferably be checked by merger of the expletive (Merge over Move) but is associated with a complex T-feature which cannot be checked by the auxiliary alone. This idea is supported by the fact that the perfect is a tense rather than an aspect in German. Therefore the complex T-feature requires checking by the participle contained within the vP and cannot be checked by an expletive.

However, as the vP suffices to fill SpecTP, I (unlike Cabredo Hofherr (2000)) do not have to postulate the existence of an empty cognate object. As such a generalised cognate object might be conceptually challenging in some cases, as e.g. with *hämmern* 'to hammer' or *bohren* 'to drill', the fact that I do not need a cognate object but can still provide a position for it if it is there is extremely advantageous. Speaking of cognate objects, it is important to point out that the expletive cannot be merged in SpecRefP either since the cognate object, which ends up as a derived subject, can be definite as in the example above and therefore has to be able to occupy SpecRefP.¹⁵⁰

If there is no XP that serves as the subject of predication *es* is merged in SpecFinP to check the sop-feature. The derivation corresponding to (4a) is given in (6).

(6) $\left[\text{FinP Es wurde} \left[\text{TP} \left[\text{vP v} \left[\text{vP getanzt} \right] \right] \right] \right] < \text{wurde} < \text{vP} > \text{[} \right] \right]$

¹⁵⁰ Since the vP (no matter whether it contains a cognate object or not) takes care of the requirement that SpecTP be filled it should in theory be possible to create impersonal passives of unaccusatives. This is, however, not the case or, more precisely, only very few unaccusatives, like *sterben* 'die', allow for impersonal passive formation (unaccusative mismatch, cf. Levin & Rappaport Hovav 1995). Again, one could argue that this restriction is due to semantic constraints. Passivisation of transitive verbs simply leaves the Agent (which can be recovered from the context or from our knowledge of the world) unexpressed, while the Patient or Experiencer is still present. If this argument is suppressed as well, the construction becomes ungrammatical because a crucial part of information is missing, see (i). Passiviation of unaccusative verbs then suppresses the central piece information, namely the affected entity.

(i) Es wurde *(ein Mann) zusammengeschlagen. (German)

Expl was a man beaten up

"A man was beaten up."

On the other hand, if the specification of the Experiencer/Patient is not necessary or even not wanted, impersonal passives become possible and can be used as a stylistic device, as in (ii) where the large number of nameless victims is highlighted.

(ii) Es wird viel gestorben in diesen ersten Märzwochen im Krieg zwischen Israel und Palästina.

Expl is much died in these first March weeks in-the war between Israel and Palestine

"Many people die in these first weeks of March in the war between Israel and Palestine."

Stuttgarter Zeitung, 23.03.2002 "E-mails aus Jerusalem"

Roberts's (1987) suggestion that the passive *en*-morphology is argumental, i.e. expresses the external argument in passives, can possibly offer a syntactic explanation of why impersonal passives of unaccusatives are ungrammatical. (Though borderline cases like *sterben* 'die' again cannot be accounted for.) In a system that employs VP-shells, passive morphology or the corresponding features (depending on the type of language we look at) will be associated with little v – the Voice head and the head introducing the external argument. One can now assume that transitive and unergative verbs can realise their external argument either in SpecvP (in active clauses) or in little v (in passive clauses), i.e. the external argument can be realised in different positions of one and the same category. The only argument of unaccusatives, however, is merged in SpecVP (in active clauses) while their passive morphology/features would be merged in little v like that of transitive and unergative verbs. I suggest that it is not possible to shift the place of realisation of an argument from one category to another (here from VP to vP). Hence (impersonal) passives of unaccusatives are ruled out.

If, however, some locative or temporal adverbial serves as the subject of predication as in (4c), this AdvP or PP is merged in SpecFinP and hence there is no need for the expletive (and no position either). The same holds for the case of the embedded clause in (4b) because the complementiser $da\beta$ 'that' is merged in Fin thus obviating the need for SpecFinP. ¹⁵¹

With respect to TECs I basically assume the same derivation, the crucial parts of which are presented below.

- (7) a. Es haben einige Kinder Spinat gegessen. (German)

 Expl have several children spinach eaten

 "Several children have eaten spinach."
 - Es hat soeben der Kanzler die Bühne betreten.
 Expl has just the chancellor the platform entered
 "The chancellor has just mounted the platform."

As either the auxiliary or the finite verb (in the case of simple tenses) moves to T, SpecTP has to be created. This requirement is satisfied even without the presence of an EPP-feature because TECs contain a subject; hence SpecTP is filled due to Nominative Case checking. Again, it is the (remnant) vP that raises to SpecTP and Nominative Case is checked via looking into Spec. The fact that there is subject-verb agreement in TECs also argues for a spec-head relation of the subject and the finite verb and against Cardinaletti's (1990) and Vikner's (1995) assumption that the expletive is merged in SpecTP (i.e. their SpecIP) while the subject DP stays vP-internal. If the subject is indefinite as in (7a), the auxiliary (or the finite verb, respectively) moves on to Fin and since TECs do not allow for any argument of the verb to be singled out as subject of predication *es* is merged in SpecFinP, thus satisfying the V2 requirement. If, however, the subject is definite as in (7b), it raises to SpecRefP to check the specificity feature and then the derivation continues as in the example with the indefinite subject.

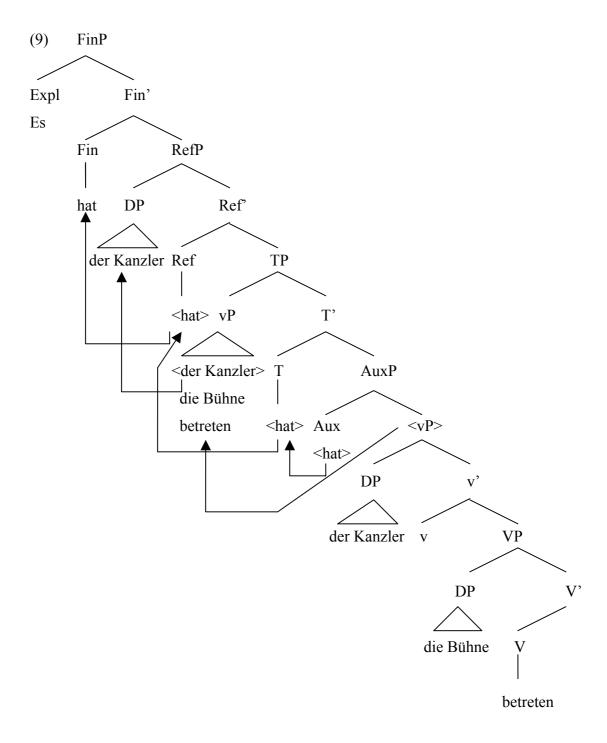
- (8) a. $[F_{inP} Es haben [T_P [v_P einige Kinder v [v_P Spinat gegessen]] < haben > [AuxP < haben > < v_P >]]]$
 - b. $[F_{inP}]$ Es hat $[R_{efP}]$ Define Kanzler] <a href="https://examples.org/hat-square-representation-new-model-norm-new-model-n

¹⁵¹ The question of where and how the subject-of-predication feature is checked in embedded clauses remains to be solved.

¹⁵² With respect to impersonal passives the above derivation implies that the auxiliary does not agree with the expletive. Instead, the auxiliary shows default agreement.

Bühne betreten]]
$$<$$
hat $>$ [$_{AuxP}$ $<$ hat $>$ $<$ v $P>$]]]] 153

The following tree structure illustrates the raising of the definite subject even better.



In the last couple of paragraphs I have argued that the absence of a Definiteness Effect in German shows that the expletive cannot be merged in SpecRefP because if it were merged there it would block movement of the subject to this position and lead to a DE. In addition,

_

¹⁵³ I do not make any assumptions about the position of the adverb here. However, I do assume that the Left

RefP is optional and only present if there is some element such as a definite DP or an event argument that has to check a specificity feature. Thus SpecRefP could under no circumstances be a position where a semantically empty expletive is merged. If *es* were merged there, it should be an event argument because event arguments carry a [+specific] feature. Another property of event arguments, however, is that they have some locative flavour but *es* is at best of pronominal origin (if it does not happen to be just homophonous with the referential pronoun and the quasi-argument *es*).

Last but not least I have to specify my statement about the absence of a DE in TECs in German because some people might object that there is some kind of DE after all. It is certainly true that TECs do not tolerate just any definite DP. (7b), for example, would be on the verge of ungrammaticality if *der Kanzler* 'the chancellor' was replaced with *der Mann* 'the man', and pronominal subjects are not possible either.

(10) *?Es hat soeben der Mann die Bühne betreten. (German)

Expl has just the man the platform entered

"The man has just mounted the platform."

I suggest that these restrictions, however, are not due to any syntactic constraints but solely to the presentational nature of these sentences. As thetic sentences can be uttered out of the blue they must not contain any DPs, such as pronouns, that require aforementioned material for their interpretation. In addition, the referent of the subject DP has to be uniquely identifiable even if there is no context except for the situation in which the sentence is uttered. This requirement is definitely met by the DP *der Kanzler* (in 2003 everyone will conclude that Gerhard Schröder mounted a platform) but not by *der Mann*. In the following it becomes even more evident that the possibility of identification is the crucial aspect that decides whether a certain DP is acceptable or not. Imagine a couple of people watching a movie or a play that features only a man and a woman and someone explaining the scenes for their blind friend. All of a sudden (10) becomes acceptable because *der Mann* is uniquely identifiable as we just have the contrast man/woman. This variation shows that the restricted DE cannot be due to a syntactic constraint – it is highly unlikely that the expletive is merged either in SpecFinP or in SpecRefP, depending on the situation in which the sentence is uttered. On the other hand, an account of the restricted DE in terms of semantic constraints following from the thetic nature

of TECs is quite plausible – especially in an approach in which syntax and semantics are interwoven.

2.3.2. Event arguments mistaken for expletives – Dutch

Turning to Dutch now, I suggest that Dutch is one of the languages that feature an event argument in presentational sentences. In other words, er is not a pure expletive (which would be merged in SpecFinP as Dutch is a V2 language) but an event argument, which carries a [+specific] feature and is therefore merged in SpecRefP, the designated position for definite subjects. 154 This assumption accounts for the DE observed in Dutch TECs. Since the event argument is merged in SpecRefP the definite subject DP cannot move to this position and thus cannot check its own specificity feature. 155 Therefore the derivation crashes. If (11) is analysed along these lines the derivation goes as follows.

- (11)heeft iemand een appel gegeten. (Dutch) Expl has someone an apple eaten "Someone has eaten an apple." heeft zo-even de kanselier het toneel betreden. 156 b.
 - Expl has just the chancellor the platform entered "The chancellor has just mounted the platform."

Just as in German, the subject DP moves to SpecTP pied-piping the complete vP, thus satisfying the requirement that SpecTP be filled (which results from the auxiliary moving to T) and checking Nominative Case at the same time. The next step, however, creates the difference between German and Dutch because in Dutch TECs vP-movement is followed by merger of the event argument er in SpecRefP. After the verb has moved to Fin, this event argument raises to SpecFinP where it makes sure that the V2 requirement is met and the sopfeature is checked.

 $[F_{inP}]$ Er heeft $[R_{efP}]$ <er> <heeft> $[T_{P}]$ [V_{P} iemand V_{P} een appel gegeten]] (12) $\langle \text{heeft} \rangle [\text{AuxP} \langle \text{heeft} \rangle \langle \text{vP} \rangle]]]]$

The ungrammaticality of (11b) is really only due to the definite DP because the sentence becomes grammatical if we replace the definite DP with an indefinite one.

¹⁵⁴ Provided that my analysis is correct, "Transitive Expletive Construction" is a misnomer in Dutch as these constructions are actually "Transitive Event Argument Constructions".

155 If *er* were an expletive merged in SpecFinP the DE could not be explained.

Er heeft zo-even een Amerikaan het toneel betreden. (Dutch) (i) "An American has just mounted the platform."

The analysis of er as an event argument, or as Cardinaletti (2002) calls it, as a location-goal argument, is supported by the fact that er is historically derived from the distal locative demonstrative daar.

I propose that this analysis of *er* as an event argument can be carried over to impersonal passives as well. This means that whenever *er* is present it is merged in SpecRefP. Hence the implicit agent of an impersonal passive featuring *er* can only have the indefinite interpretation (leaving aside the question of how the implicit agent actually gets its interpretation), i.e. the implicit agent can only refer to the indefinite subset of the contextually known or inferable entity. Or to put it differently, the specific interpretation of the implicit agent is only available if *er* is absent from the structure. Thus, it is clear that in embedded clauses and in main clauses where some other XP occupies SpecFinP the presence/absence of *er* is not really optional but depends on the meaning that is to be conveyed by the sentence.

The case in which no other XP occupies SpecFinP, however, seems to be a bit tricky because all of a sudden er is obligatory, thus strongly resembling expletive es in German. On the other hand, (13) only allows for an indefinite interpretation of the implicit agent.¹⁵⁷

(i) Er werd door iedereen gedanst. (Dutch)

Expl was by everyone danced
"Everyone was dancing."

In view of this remark it might be the case that it is the dancing event itself that is only a "subevent" and therefore kind of indefinite rather than the implicit agent (which must not depend on SpecRefP for being allowed a definite interpretation then). At least in German (iia) suggests more strongly than (iib) that people did something else apart from dancing.

(ii) a. Da wurde getanzt. (German)

DA was danced

"People were dancing."

b. Es wurde getanzt.

Expl was danced

"People were dancing."

In addition, Henk van Riemsdijk (p.c.), who does not share the intuitions about impersonal passives described in the text either, points out that also in clauses where er seems to be optional (i.e. embedded clauses and main clauses with some other XP in sentence-initial position) er can only ever be absent if it is replaced with a locative. In that case, Dutch obviously obligatorily requires the presence of an event argument in impersonal passives. This event argument, which specifies the "here and now" or "there and then", can be realised either by the default form er or by a more specific adverb/PP. See also Hoekstra & Mulder (1990) who suggest that locatives and er should be treated alike.

¹⁵⁷ Jeroen van Craenenbroeck and Jan-Wouter Zwart (p.c.) object to this interpretation pointing out that (i) is perfectly fine.

were dancing."

This restriction shows that also in this case er is an event argument merged in SpecRefP. The only difference is that here the event argument is obligatory because it also assumes the function of an expletive. In other words, if the event argument er is not present and no other XP can satisfy the V2 requirement and check the sop-feature, the derivation will crash because Dutch does not possess an expletive er that could be merged directly in SpecFinP (and which would therefore allow for a definite interpretation of the implicit agent). ¹⁵⁸

So far I have just considered constructions that feature an auxiliary other than *zijn* 'be' and I have suggested that the event argument *er* is merged in SpecRefP. With respect to existential constructions and thetic constructions where the verb is either unaccusative or an unergative which is constructed with a locative and which Hoekstra & Mulder (1990) analyse as unaccusativised, however, I follow Hoekstra & Mulder and assume that *er* is merged in a Small Clause that serves as the only argument of an unaccusative verb. Example (14) is then derived as follows.

(14) Er is iemand in de tuin. (Dutch)

Expl is someone in the garden

"There's someone in the garden."

The event argument and the PP form a complex PP, similar to the complex DP suggested by Belletti (2003) for (clitic) doubling structures, ¹⁵⁹ and this complex PP in turn forms a SC¹⁶⁰ with the subject DP. The SC is merged in SpecVP (or in SpecAuxP, depending on whether one analyses copular verbs as lexical verbs or as auxiliaries – I go for the former option

(ii) Lo vedo, Gianni.

him see-1sg Gianni

"Gianni, I can see him."

(Italian)

This argumentation lends itself to a presentation in terms of OT. The derivation starts out with two candidates, one in which the event argument is merged in SpecRefP and one without er. In the former the event argument can move to SpecFinP and save the sentence from crashing but leading to a DE with respect to the implicit agent as a by-product, whereas the latter derivation crashes because SpecFinP cannot be created. Therefore the candidate with the event argument wins.

According to Belletti (2003), the clitic and the doubled DP form a complex DP (i) in constructions such as (ii). In the course of the derivation the complex DP is resolved by extraction.

⁽i) $[_{DP1} lo [_{DP2} Gianni]]$

¹⁶⁰ I do not make any suggestions about the internal structure of Small Clauses as this is beyond the scope of this thesis.

here¹⁶¹). Differently from Hoekstra & Mulder (1990), I assume that the remnant vP, i.e. the complete SC and not only *er*, moves to SpecTP after the copular verb has moved to T. In this configuration the subject DP, which is contained in the SC, checks Nominative Case. Then the derivation carries on in the by now well-known fashion¹⁶² and the event argument moves via SpecRefP to SpecFinP checking the respective features, where the intermediate step leads to the DE.

(15)
$$[F_{inP} \text{ Er is } [R_{efP} \le er \ge is \ge T_{P} [V_{P} \le is \ge V_{P} [S_{C} \text{ iemand } [P_{P} \le er \ge in \text{ de tuin}]] \le is \ge V_{P}]]]$$

Thus er can be merged either in a SC which is an argument of the verb or individually in SpecRefP but the "base position" of er is not of great importance here. It is, however, crucial that er is an event argument associated with a [+specific] feature which forces the event argument to occupy SpecRefP at some stage of the derivation because it is this property of the event argument that accounts for the DE with respect to the subject of presentational constructions and with respect to the implicit agent of impersonal passives with er.

2.3.3. Some remarks on German 'da'

Having discussed the clear-cut cases of expletive es in German and event argumental er in Dutch, I now come back to German da which I briefly mentioned in section III, 2.1.. There, I showed that da can have exactly the same distribution in impersonal passives as Dutch er. In addition, da 'there' is clearly of locative origin and is not devoid of meaning. All of these aspects suggest that da is an event argument as well but, unfortunately, its true nature is hard to determine. First of all, there is a range of instances in which da is interpreted differently from an event argument or in which it displays properties that are not expected from event arguments as the following examples show.

(16) a. Auf dem Schiff da wird getanzt. (German)

on the ship DA is danced

"On the ship over there is dancing."/"On the ship over there
people are dancing."

_

¹⁶¹ I choose this option in view of a parallelism with English where I propose that the DP moves to the specifier of the FocP that sits between AuxP and vP (cf. ch. III, 2.6.1.). The DP, however, could not target SpecFocP if it were merged in SpecAuxP.

¹⁶² I do not mention every single step of V-movement here.

- b. Auf dem Schiff, da wird getanzt.on the ship DA is danced"On the ship, there is dancing."/"On the ship, people are dancing."
- [Es ist bitter zu wissen, was er draußen verpaßt!] c. [it is bitter to know what he outside misses-out-on] ["It is bitter to know what he misses out on in the outside world."] Während er hier einen streng geheimen Schlagbaum bewacht, while he here a strictly secret barrier guards "While he guards a top secret barrier here wird da draußen getanzt und geliebt und gelacht. DA outside danced and loved and laughed out there, people are dancing, making love and laughing." (from: Reinhard Mey, "Alle Soldaten woll'n nach Haus")

If da occurs together with a(nother) locative element it is always interpreted as a locative too but in various ways. In (16a) da is part of the DP, similar to French -la in ce bateau-la 'the boat over there', so that it has a deictic interpretation. In (16b), which is distinguished from (16a) only by the comma-intonation, 163 da serves as a resumptive pronoun that takes up the PP. In (16c), finally, da can take up the $drau\betaen$ of the first clause (hence be a resumptive pronoun) and/or emphasise the $drau\betaen$ of the second clause, hence have a deictic nature which emphasises that the outside world is out of reach.

The fact that *da* is compatible with a definite subject as in (17) strongly suggests that we do not have to do with an event argument merged in SpecRefP here although the sentence superficially looks like a TEC.

(17) Da hat der Ministerpräsident eine mitreißende Rede gehalten.

DA has the prime minister a rousing speech held

"The Prime Minister gave a rousing speech."

The problems with this example start when one tries to translate it. On the one hand - given the right intonation and preferably the presence of the particle aber - (17) can express appreciation and be roughly translated as 'Wow! The Prime Minister has given a rousing

-

¹⁶³ In spoken German the two options are hardly ever clearly distinguished and the context will tell which reading is the intended one.

speech!'. ¹⁶⁴ In this case *da* is arguably simply a particle that marks illocutionary force (exclamative) and not an event argument (Guido Mensching, p.c.). On the other hand, (17) can be translated as 'On that occasion, the Prime Minister gave a rousing speech.'. Although in this reading *da* spells out the "there and then" like the event arguments identified by Kiss (1996), *da* might just be a normal adverb here. An analysis of *da* as an adverb is unproblematic because locative or temporal adverbs and event arguments are hard to tell apart since event arguments are historically related to these adverbs. An analysis of *da* in terms of an event argument, however, would force me to revise my assumptions about event arguments (not very desirable!) because there is no DE with respect to the subject in (17).

If da were an event argument merged in SpecRefP, one would also expect that it is incompatible with individual level predicates (like *kennen* 'know'), whose subjects occupy SpecRefP, while it should be compatible with stage level predicates (like *geboren werden* 'be born'), whose subjects sit in SpecTP (Peter Öhl and Eva-Maria Remberger, p.c.).

- (18) a. ... weil da Jungen die Romane von Karl May kennen.
 ... because DA boys the novels of Karl May know
 "because boys know the novels by Karl May (there)"
 - b. ... weil da Jungen geboren werden.... because DA boys born are"... because boys are born (there)."

This test, however, does not prove that da is an event argument. Da is certainly fine with the stage level predicate in (18b) but I find it extremely hard to get any other reading (i.e. a thetic one) than the one where da is a pure locative. In addition, (18a) is a grammatical sentence as well but again, da can only have a locative reading (and one is tempted to add noch 'still').

(19) In Sachsen kann man Winnetou aufführen, weil da Jungen die Romane in Saxony can one Winnetou stage because there boys the novels von Karl May (noch) kennen.

of Karl May still know

"In Saxony one can stage Winnetou because there boys (still) know the novels by Karl May."

_

¹⁶⁴ With this intonation and this reading (17) does not qualify as a thetic sentence anyway.

The test would be fine if we could say that the event argument da is impossible with individual level predicates because the subject has to occupy SpecRefP and therefore we can only get locative da. This line of reasoning, however, breaks down since stage level predicates only allow for locative da as well.

Nevertheless, there are also examples that support the idea that da is an event argument. When we insert da in a structure in which er was identified as an event argument, da all of a sudden does lead to a DE, just like er in Dutch.

- (20) a. *Ich gebe ab, weil da der Kanzler die Bühne betreten hat.

 I give away because DA the chancellor the platform entered has
 "I'll stop here because the chancellor has mounted the platform."
 - b. Ich gebe ab, weil da ein Amerikaner die Bühne betreten hat.

 I give away because DA an American the platform entered has

 "I'll stop here because an American has mounted the platform."

In addition, the presence of *da* can restrict the referent of a subject *wh*-phrase to an indefinite entity. Imagine, for example, a teacher standing in front of a class and uttering the following sentences.

- (21) a. Wer hat gelacht? "Who has laughed?"
 - b. Wer hat da gelacht?who has DA laughedroughly: "Who has dared to laugh?"

In (21a), the teacher asks for the name(s) of the student(s) who laughed without any other semantic or pragmatic implications. So the question without *da* requires a definite referent as an answer. In (21b), on the contrary, the teacher does not necessarily ask for names; instead (21b) is more or less a reproach which implies that some student(s) laughed, thus referring to an indefinite number of students out of a definite set of students.

Therefore I suggest that German has different kinds of da – among them an exclamative marker, definitely a locative adverb and probably an event argument. As it is so

hard to tell the adverb and the event argument apart, it might be the case that we witness the locative adverb da being reanalysed as an event argument in German. ¹⁶⁵

2.4. Icelandic

In Icelandic the distribution of $pa\delta$ in impersonal passives looks quite puzzling at first sight. It is obligatory in embedded clauses, optional in the first position of main clauses and ungrammatical in main clauses where some other XP occupies the sentence initial position as can be seen in (22)

(22)(Það) var dansað. (Icelandic) a. Expl was danced "There was dancing."/"People were dancing." ... að það hafi verið dansað. b. ... that Expl has-subjunc been danced "... that there was dancing."/"... that people were dancing." ?Í gær var (*það) dansað. c. yesterday was Expl danced "Yesterday, there was dancing."/"Yesterday, people were dancing."

The latter observation, together with the fact that $pa\delta$ is of pronominal and not of locative origin, shows that $pa\delta$ is an expletive. Therefore it can only ever be merged in SpecFinP because Icelandic is a V2 language (in which SpecTP is not even required to be filled as Icelandic merges its verbal affixes in T thus satisfying the New Extension Condition). I argue that the optionality of $pa\delta$ in SpecFinP is due to the fact that Icelandic in general easily allows for V1 constructions (I do not have an explanation for this liking though). Leaving V1 constructions aside, the expletive shows up in SpecFinP to satisfy the V2 requirement and to check the sop-feature whenever no other XP does so. Last but not least, given that Icelandic has generalised V2 in embedded clauses (cf. ch. II, 4.3.2.D) it falls out that $pa\delta$ is obligatory in the "initial" position of embedded clauses.

Analysing *það* as an expletive we do not expect Icelandic to display a DE with respect to the subject in TECs, contrary to fact.

_

 $^{^{165}}$ Dutch er is also not just an event argument but has other functions as well – among others it is also a locative

- (23) a. Það lesa margir stúdentar bækur eftir Chomsky. (Icelandic)

 Expl read many students books by Chomsky

 "Many students read books by Chomsky."
 - b. *Það lesa stúdentarnir bækur eftir Chomsky.
 Expl read students-the books by Chomsky
 "The students read books by Chomsky."

I argue that this DE is not due to some element blocking the definite subject from moving to SpecRefP and checking its specificity feature but to some requirement specific to Icelandic (of the languages considered here) that forces definite subjects to be the subject of predication and therefore target SpecFinP (cf. chapter II, 5.2.).¹⁶⁶

Apart from this additional assumption that is required for definite subjects (but which is needed independently of TECs¹⁶⁷), my derivation of Icelandic TECs does not encounter any of the problems Chomsky's account poses. If the lexical verb is finite as in (23a) it – more precisely its stem – moves via little v to T where it attaches to the inflectional affix. This long V-movement enables the remnant vP to move to SpecTP. In this position, the subject DP contained within vP checks Nominative Case via looking into Spec. In addition, this remnant vP-movement accounts for why we observe Object Shift in sentences that feature the negation *ekki*, for example (cf. the example in footnote 138). Finally, the verb moves on to Fin and *það* is merged in SpecFinP to check the sop-feature.

(24) $[F_{inP} \text{ Það lesa } [T_P [v_P \text{ margir stúdentar } < \text{les-}]] < \text{les-} -a > (ekki) < v_P >]]$

adverb that is not specified with respect to distance, unlike hier 'here' and daar 'there'.

(i) Það hefur sérhver köttur verið í eldhúsinu. (Icelandic; Vangsnes 2002, p. 48, (11c)) *Expl has each cat been in kitchen-the* "Each cat has been in the kitchen."

(ii) Pað hafa báðir kettirnir étið mús.

Expl have both cats eaten mouse
"Both cats have eaten a mouse."

¹⁶⁶ Note that e.g. universally quantified DPs, which target SpecRefP, are in fact allowed in Icelandic TECs.

¹⁶⁷ Gunnar Hrafnbjargarson, e.g., considers topicalisation structures with a definite subject DP ungrammatical (i) while impersonal passives with a sentence-initial adverb (22c), which do not contain a definite subject, are only slightly marginal.

⁽i) *Á lestarstöðina er forsetinn mættur. (Icelandic)

at train-station-the is president-the showed up

"The president arrived at the station."

In TECs with a compound tense, the stem of the lexical verb moves to little v to pick up the participial inflection and stays there. Therefore movement of the complete vP to SpecTP is blocked. Hence it is just the subject DP that moves to SpecTP to check Nominative Case after the auxiliary has raised to T and there is no Object Shift. Last but not least, the auxiliary moves to Fin and the expletive is merged in SpecFinP.

- (25) a. Það hafa margir stúdentar ekki lesið bækur eftir Chomsky. (Icelandic)

 Expl have many students not read books by Chomsky

 "Many students have not read books by Chomsky."
 - b. [FinP Það hafa [TP margir stúdentar <haf- -a> [AuxP <haf-> [vP ekki [vP <margir stúdentar> les- -ið [vP bækur eftir Chomsky <les->]]]]]]

If the subject is quantificational, there will be two intermediate steps, namely the finite verb moves via Ref from T to Fin and the quantificational subject raises to SpecRefP.

Besides the distribution of the expletive, the word order variation with respect to the subject that can be observed in (26) is quite puzzling as well.

- (26) a. Það eru mættir þrír menn. (Icelandic)

 Expl are showed-up three men

 "There arrived three men."
 - Það eru þrír menn mættir.
 Expl are three men showed up
 "There arrived three men."

According to my analysis $pa\delta$ is an expletive merged in SpecFinP, thus not blocking any of the subject positions of the *Mittelfeld*. In addition, there is no requirement for SpecTP to be filled as the verbal inflection is merged in T. Nevertheless a Nominative DP is expected to move to SpecTP to check its Case feature there. This derivation is represented by (26b). However, as (26a) shows, Icelandic obviously also allows for the only argument of an unaccusative verb to stay lower down, in SpecVP or in SpecFocP. This word order can be explained in several ways. Either Icelandic possesses a mechanism that allows for Nominative Case to be checked in a position other than SpecTP or *prír menn* in (26a) carries inherent

Partitive Case (Belletti 1988). The latter option, however, is fairly unlikely because Icelandic has a very rich morphological system so that it is improbable that Nominative Case and Partitive Case should have the same form. In addition, in both (26a) and (26b) the verb agrees with the subject, something that would not be expected if the subject DP carried Partitive Case. Therefore it is more plausible that under certain conditions Nominative Case can be checked either VP-internally (a mechanism that could also account for Nominative Case checking in Dat-Nom-constructions¹⁶⁸) or in SpecFocP in Icelandic. This possibility is probably linked to the fact that in Icelandic the verbal (person) morphology is merged as a separate affix. This pronominal-like behaviour of the verbal inflectional morphology is exactly what characterises pro-drop languages like Italian (cf. Alexiadou & Anagnostopoulou 1998). These languages have to have a mechanism that allows the affix to check Nominative Case in the absence of a subject DP and to share this Case with an additional (sometimes postverbal) subject DP. Whatever process (concerning Case-checking) is at work in the prodrop languages should be transferable to Icelandic too. Belletti (2001a, b, 2003), however, argues that the postverbal subject sits in SpecFocP in Italian (and I propose that the English there-construction involves this focus projection as well (ch. III, 2.6.1.)) but, unfortunately, this analysis does not carry over to Icelandic as Gunnar Hrafn Hrafnbjargarson (p.c.) points out that *brír menn* in (26a) does not carry focus. Hence the postverbal subject seems to occupy SpecVP rather than SpecFocP, thus being more like the Nominative object DP of Dat-Nom constructions.

To sum up, Icelandic, just like German, features an expletive in TECs and impersonal passives. The somewhat unexpected distribution is due to the fact that Icelandic has a number of language-specific properties, among them the requirement that definite subjects target SpecFinP, a particular liking for V1 constructions and generalised V2 in embedded clauses.

2.5. Mainland Scandinavian

The first thing that strikes one's eye when looking at impersonal passives in the MSc languages is that det^{169} is always obligatory, even in the *Mittelfeld* of a clause, i.e. in sentences where some XP occupies SpecFinP as in (27c), although the MSc languages are V2 languages.

¹⁶⁸ Note that in these constructions the verb agrees with the Nominative object DP (unless it is a first or second person pronoun – in this case, the verb shows default agreement).

¹⁶⁹ I first discuss the two MSc languages, Norwegian and Swedish, which have an "expletive" of pronominal origin and then add a few words on Danish whose "expletive" *der* is of locative origin according to Vikner (1995).

(27) a. Det ble danset.

(Norwegian)¹⁷⁰

Expl was danced

"There was dancing."/"People were dancing."

- b. ... at det ble danset.
 - ... that Expl was danced
 - "... that there was dancing."/"... that people were dancing."
- c. I går ble det danset.

 yesterday was Expl danced

"Yesterday, there was dancing."/"Yesterday, people were dancing."

In view of the analysis of Dutch *er*, one might be tempted to analyse *det* as an obligatory event argument but the fact that *det* is not of locative origin speaks against such an account.¹⁷¹ On the other hand, I have argued above that expletives can only be merged in the position in which they are spelt out. Provided that this assumption is right, *det* cannot be an expletive either because the examples in (27) suggest that *det* is merged in SpecTP – or lower down – and moves up. As *det* is probably of pronominal origin (Vikner 1995) it has to go through SpecTP and SpecRefP to check Nominative Case and the [+specific] feature, respectively. Where necessary, it moves on to SpecFinP. The fact that in some constructions Swedish *det* is preferably translated by *man* 'one' (plus an active clause) in German (Ramge 2002) and therefore seems to be more like an argument, suggests that *det* is a quasi-argument merged in SpecvP. This analysis would account not only for why *det* is obligatory (cf. chapter III, 3.2.) but also for the fact that TECs are ruled out in the MSc languages. As TECs contain both a subject DP and an object DP there is simply no position in which the quasi-argument *det*

⁻

¹⁷⁰ In this discussion I group Norwegian and Swedish together although the two languages display different verbal patterns. In addition to the passive which is formed by means of the auxiliary *bli* plus past participle, Swedish (just like Danish, cf. Mikkelsen (2001)) has the so-called –*s*-passive (in which an –*s* is attached to the verb stem). While in "normal" passives the two forms are more or less interchangeable, impersonal passives obligatorily require the –*s*-passive (Ramge 2002, p. 206).

The following observation also argues against an analysis of *det* as an event argument or as a locative proform. A topicalised PP cannot be taken up by *det* in Norwegian but has to be doubled by a truly locative proform such as *der* 'there'. Focussed PPs, which do not have to be taken up again, however, can cooccur with *det*.

⁽i) a. På stasjonen, der har tre menn ankommet. (Norwegian) on station-the there have three men arrived "At the station, there arrived three men."

b. På STASJONEN har det ankommet tre menn on station-the have Expl arrived three men "At the STATION, three men arrived."

could be merged, or vice versa, if the quasi-argument is merged in SpecvP there is no position left for the subject DP. 172

(28)*Det har någon ätit ett äpple. (Swedish) Expl has someone eaten an apple "Someone has eaten an apple."

Similarly, I argue that even in thetic constructions with an unaccusative verb (29a) and in passives with a postverbal subject (30a) det is a quasi-argument merged in SpecvP.

(29)Det har kommet tre (Norwegian) a. menn. Expl have come three men "There arrived three men." *Det har presidenten kommet. 173 b.

(i) Der ventede mig en unbehagelig aften hjemme. (Danish; Mikkelsen 2001, (18a)) Expl awaited me an unpleasant evening at.home "An unpleasant evening awaited me at home."

Mikkelsen claims that these constructions display a DE with respect to the theme argument but not with respect to the benefactive as in (i) and (ii).

* Der ventede mig den unbehagelige aften (Mikkelsen 2001, (19a)) (ii) hjemme. Expl awaited me the unpleasant evening at.home "The unpleasant evening awaited me at home." Der tilfaldt den ældste datter en stor sum penge. (Mikkelsen 2001, (18b)) b. Expl to.fell the eldest daughter a large sum money "The eldest daughter received a large sum of money." *Der tilfaldt den ældste datter den store sum penge. (Mikkelsen 2001, (19b)) c. Expl to.fell the eldest daughter the large sum money "The eldest daughter received the large sum of money."

I argue that these facts follow from the thetic nature of these sentences and from the requirement that the referent of the DP be uniquely identifiable (cf. my account of the restricted DE with respect to the subject in German TECs). While the first person personal pronoun and the superlative are uniquely identifiable, the theme DPs are not. The same effect can be reproduced for German as in (iiia). However, as soon as the theme DP is modified in a way that makes it identifiable the DE disappears (iiib).

*Es erwartete mich das Unbehagen. (German) (iii) Expl awaited me the uneasiness "The uneasiness awaited me."

Es erwartete mich das wohlbekannte Unbehagen. b. Expl awaited me the well-known uneasiness

"The well-known uneasiness awaited me."

¹⁷² Mikkelsen (2001) points out that Danish allows for thetic constructions with two DP arguments as long as neither is an external argument, e.g. if the arguments are a benefactive and a theme as in (i). The grammaticality of these constructions is predicted by my analysis.

¹⁷³ As a by-product the examples in (29) show that an indefinite (derived) subject DP can stay in SpecVP, while a definite one would have to raise to SpecRefP.

Expl has president-the come "The president arrived."

(30)det ble spist et eple. (Norwegian) ... at a. ... that Expl was eaten an apple "... that an apple was eaten." *... at det ble spist eplet. b. ... that Expl was eaten apple-the "... that the apple was eaten." *... at det ble bitt meg [av en hund]. c. ... that Expl was bitten me [by a dog] "... that I was bitten [by a dog]."

Such an analysis, i.e. if *det* is a quasi-argument merged in SpecvP and carrying both a Nominative Case feature and a specificity feature, has the advantage that several properties of passives and thetic constructions can be accounted for. First of all, the Definiteness Effect with respect to the derived subject follows from the fact that the quasi-argument has to occupy SpecRefP at some stage of the derivation to check its specificity feature. Locality requires that it is always the quasi-argument that moves to SpecRefP because it is closer to SpecRefP than the argumental DP and thus blocks the subject from moving to this position. Second, there is strong evidence that the DP in SpecVP carries Accusative Case (Mikkelsen (2001), Arne M. Lindstad (p.c.)).¹⁷⁴ In view of the fact that MSc allows for passives with *det* and a postparticipial subject DP (full DPs) as in (30a), I asked Arne M. Lindstad whether clauses that would be glossed as "... that Expl was bitten I [by a dog]" were possible as well. He gave me the (ungrammatical) example (30c) but highlighted that *meg* 'me' was "of course not Nominative". This remark shows that although Case is hardly visible in MSc these postparticipial DPs are felt to be Accusative. Unfortunately, MSc verbs do not have any agreement morphology so that one cannot tell whether the verb agrees with the quasi-

¹⁷⁴ Two remarks on other theories about the Case of the "associate" DP: As MSc has extremely poor Case marking one could, of course, follow Belletti (1988) and assume that the DP carries Partitive Case (which would then be identical in form with Accusative in the case of pronouns – the only instance where MSc has morphological Case-marking) and is therefore subject to a DE.

The assumption that the DP is not Nominative argues against Hoekstra & Mulder's (1990) analysis, in which they suggest that in thetic constructions with unaccusatives *det* and the DP form a Small Clause and share Nominative Case.

argument (as I would predict) or with the postverbal DP.¹⁷⁵ This observation about Case becomes less surprising if the little v head of these constructions is special in that it selects a quasi-argument and therefore allows for V to be associated with Accusative Case (Burzio's Generalisation). In addition, this assumption is supported by the fact that in footnote 171 the derived subject is postparticipial (and therefore Accusative) only in the example that features *det*, while it moves to SpecTP to check Nominative Case if *det* is absent (in the latter case there is no DE either).

A problem, however, arises in the form of Danish. Danish has two "expletive" elements *det* and *der* the latter of which features in impersonal passives and thetic constructions. As *det* shows up in contexts (e.g. with weather verbs) that have traditionally been analysed as involving quasi-arguments and as *der* is of locative origin according to Vikner (1995), an analysis of *der* as a quasi-argument seems implausible. It rather looks like an event argument. On the other hand, Danish *der* behaves exactly like Norwegian and Swedish *det*. In particular, Danish does not allow for TECs, a fact that is completely unexpected if *der* is a Caseless event argument merged in SpecRefP. In addition, Vikner (1995) and Mikkelsen (2001) conclude from the behaviour of *der* in raising constructions that *der* is associated with Nominative Case.

```
(31) a. ... at deri faktisk ser ud til ti ikke at blive danset til festen.
... that Expl actually sees out to not to be danced at party-the
"... that there actually seems not to be any dancing at the party."
(Danish; Vikner 1995, p.186, (37a), Mikkelsen 2001, (16a))
b. *... at det faktisk ser ud til der ikke at blive danset til festen.
... that it actually sees out to Expl not to be danced at party-the
(Vikner 1995, p. 186, (37b), Mikkelsen 2001, (16b))
```

These facts suggest, that der is – despite its seemingly locative origin and despite the existence of a quasi-argument det, which is used with weather verbs – a quasi-argument like

(i) Það var lamið stúlkuna í klessu. (Icelandic; M&S 2002, p. 98, (2)) it_{EXPL} was hit-neut.sg. the girl-f.sg.ACC in a.mess "The girl was badly beaten."

This construction, though morphologically passive, features an Accusative object DP and no agreement with the postverbal DP (differently from "normal" passives). In addition, the construction does not allow for a *by*-agent

_

¹⁷⁵ These findings are reminiscent of a construction that has recently been developing in Icelandic, discussed by Maling & Sigurjónsdóttir (2002) and called the "new impersonal" construction by them.

Norwegian and Swedish *det*.¹⁷⁶ I will not propose a final explanation of these puzzling and contradictory properties of Danish *der* here but leave the problem for further research as do Koster & Zwart (2000).

2.6. English

2.6.1. The 'there'-construction as a focus construction

English is different from the other Germanic languages discussed here in that it allows neither for TECs nor for impersonal passives.

- (32) a. *There at someone an apple.
 - b. *There someone ate an apple.
- (33) a. *It was danced.
 - b. *There was danced.
 - c. *There was eaten an apple.
- (34) a. There arrived three men.
 - b. There walked a man into the room. (Hoekstra & Mulder 1990, (80a))
- (35) There was an apple eaten.

Based on the sentences that are grammatical in English I have claimed above that English does allow for thetic constructions with existential *be*, unaccusatives and unaccusativised unergatives with a locative PP. Comments by native speakers, however, suggest that this is not true but that these *there*-constructions are actually focus constructions in which the postverbal DP is focussed. One informant explicitly points out that in (34a) the focus is on the DP not on the arriving.¹⁷⁷ This shows that the English *there*-constructions are completely

and shows no DE with respect to the postverbal DP. The latter characteristics do not apply to the Norwegian construction.

¹⁷⁶ Holmberg (2000c), too, points out that Danish "expletive" *der* is historically related to the locative proform *der* 'there' and nevertheless can be shown to carry Nominative Case.

¹⁷⁷ Tim Stowell (p.c.) compares the properties of the subject DP in the *there*-construction to Heavy NP Shift/ extraposition. In support of his claim he points out that if a verb takes both a DP and a PP argument the DP has to follow the PP in the *there*-construction, as in (i) and equally in (34b) which should actually be (ii), cf. Chomsky (1999).

⁽i) a. *There were put three books on the table.

different from thetic constructions, which can serve as answers to the question *What happened?* and in which therefore no element carries special focus. The observation that the *there*-construction is a focus construction ties in with descriptions of certain *det*-constructions in Swedish cited in Hoekstra & Mulder (1990). They conclude that in (36) [*personer här*], which can syntactically be analysed as a Small Clause, constitutes the main predication. They describe the example as "a locational predication denoting a particular state, which is further characterized as "working" (H&M 1990, p. 35).

(36) Det arbetar mänga personer här. (Swedish)

Expl work many people here

"There are many people working here."

Phrased slightly differently, one can say that the SC is assigned information focus so that this *det*-construction is not a thetic construction either and parallels the English *there*-construction. Following H&M I suggest that in existential constructions like (37) and in *there*-constructions with an uaccusativised verb as (34b) the DP and the PP form a SC which is merged as the only argument of the copula and the lexical verb, respectively.

(37) There's someone in the garden.

The derivation of English *there*-constructions then goes as follows. The DP or the SC, respectively is merged in SpecVP. The verb, no matter whether it is a lexical or a copular verb, moves to little v to check a [v]-feature. Then the subject DP (or the SC in (37)) moves to the specifier of the FocP that immediately precedes the vP and the remnant vP moves to SpecTopP. Semantically this remnant vP-movement is well motivated as the remnant vP constitutes the presupposition, i.e. it can be argued to be old information. Syntactically it does not pose any problem either. First of all, there is no active checking relation between SpecvP and little v because the argument(s) of the verb are merged in SpecVP and even if the subject DP of (ii) in footnote 177 were merged in SpecvP it would have moved out of vP by the time remnant vP-movement takes place, thus resolving the active checking relation. Second, it is the "whole" remnant vP that checks the topic feature so that no looking-into-Spec operation (which determines whether (remnant) vP-movement is possible in the case of movement to

b. There were put on the table three books.

⁽ii) There walked into the room a man.

SpecTP) is required at any time. The copula moves on to T (and later to Ref), while the lexical verb probably stays in the vP because lexical verbs cannot undergo movement in English (except in cases of residual V2). Last but not least, *there* (which I classify as an event argument because of its locative origin) is merged in SpecTP to check the subject-of-predication feature, which is associated with T as English is not a V2 language (not considering cases of residual V2 here), and raises to SpecRefP to check the specificity feature. (38a) illustrates this derivation of (34a). It would, however, just as well be possible to assume that *there* is merged in a SC, as proposed for these constructions in Dutch and illustrated in (38b).

- (38) a. $[_{RefP}$ There Ref $[_{TP}$ <there> T $[_{TopP}$ $[_{vP}$ arrived $[_{vP}$ <three men> <arrived>]] Top $[_{FocP}$ three men Foc <vP>]]]]
 - b. $[_{RefP} \text{ There Ref } [_{TP} < \text{there} > T [_{TopP} [_{vP} \text{ arrived } [_{VP} [_{SC} < \text{three men} > < \text{there} >] < \text{arrived}]] Top [_{FocP} \text{ three men Foc } < \text{vP} >]]]]$

Such an analysis of the *there*-construction also accounts for why TECs, repeated here for the sake of convenience, are ruled out in English. ¹⁷⁸

(39) a. *There at someone an apple.

(i) Sitä ovat nämä lapset jo oppineet uimaan. (Finnish; H&N 2002, (3a)) Expl-Part have these children-Nom already learned to.swim
"These children have already learned to swim."

Unlike English, Finnish is a topic-prominent language and H&N show that the topic, and hence the expletive in TECs, occupies SpecFP (which strongly resembles my SpecRefP). I suggest that this means that the sop-feature sits on F/Ref in Finnish. At first sight it would be expected that Finnish displays a Definiteness Effect with respect to the subject because SpecF/RefP is occupied by the expletive. However, as FP/RefP is not restricted to subjects in Finnish, definite subjects must be licensed in some other position – after all, an object topic does not lead to a Definiteness Effect either. H&N suggest that the highest DP in a "TEC", no matter whether it is a subject DP (i) or an object DP (ii), occupies a focus position. Therefore the Finnish "TEC" is a focus construction similar to the English *there*-construction (but targets a FocP of the I-system).

(ii) Sitä en niitä lapsia ole nähnyt minäkään. (H&N 2002, (63a)) Expl not.1sg those kids have seen I.even "Even I haven't seen those kids."

This assumption ties in with my analysis that in the German example in (iii) the object PP has scrambled to the specifier of a TopP or FocP of the I-system, thus preceding the subject in SpecTP.

(iii) Es haben an diesen Wahlen noch weniger Leute teilgenommen als an den letzten. Expl have in these elections even fewer people part-taken than in the last "In these elections, even fewer people took part in than in the last."

¹⁷⁸ The fact that English is not a V2 language does not suffice to rule out TECs. Finnish, a non-V2 language, allows for a construction that looks like a TEC as Holmberg & Nikanne (2002) show.

- b. *There someone ate an apple.
- c. *There ate an apple someone.

(39a) would probably have to be analysed as featuring movement of the finite lexical verb to at least Top, if not T or even Ref and this kind of V-movement is impossible in English except in the case of residual V2. I propose, however, that this V-movement is not the only reason why (39a) is ungrammatical. The crucial point is that the focussed DP has to end up in clause-final position exactly as in Heavy NP Shift and extraposition constructions. In both (39a and b), however, the "focussed" DP is followed by the object DP.

The ungrammaticality of (39c), however, is harder to explain. It should be possible for the subject DP to move to SpecFocP and for the remnant vP, consisting of the finite verb and the object DP, to raise to SpecTopP. One might think that the subject DP does not qualify for focalisation/extraposition here (not "heavy" enough?) but the sentence does not improve if someone is replaced with a structurally more complex DP. My hunch that the structure in (39c) should in principle be possible is supported by a remark in Chomsky (1999). Chomsky points out that according to Kayne "English marginally allows for a kind of transitive expletive construction" (Chomsky 1999, p. 16) and the examples he gives have exactly the same structure as my example (39c), namely Expl-V_{fin}-DP_{Obj}-DP_{Subj}. ¹⁷⁹ As the object DP is a locative in these examples, it might actually not be some property of the subject DP that rules out (39c) but the fact that the object DP is a theme and not a locative. Hence "TECs" in English seem to be restricted to transitive verbs whose object DP expresses a locative (and which therefore resemble unergative verbs with a locative PP, cf. footnote 177, (ii)). This observation suggests that there, which I classified as an event argument, is not merged in SpecTP but that it is still much more locative in nature and is merged in a structure where it doubles a locative. 180 Therefore "normal" TECs, which do not feature a locative, are ruled out.

As the subject DP does not target SpecTP in the *there*-construction another question has to be answered, namely that of how the DP checks Case.

¹⁷⁹ The examples Chomsky gives (without indicating the (degree of) marginality) are the following.

⁽i) There entered the room a strange man. (Chomsky 1999, (26 (i)))

⁽ii) There hit the stands a new journal. (Chomsky 1999, (26 (ii))) Again, I assume the structure [proform [DP/PP]] proposed by Belletti (2003). To make this analysis work I have to assume that the object DP of Chomsky's/Kayne's examples is actually a PP with a silent preposition and that verbs like *arrive* feature an implicit PP.

2.6.2. The Case of the subject DP

Concerning Case, two scenarios would be possible. Either the DP carries inherent Partitive Case, which can be checked in situ, or it carries Nominative Case. As English has hardly any Case morphology, it is hard to prove whether one solution is more adequate than another.

Intuitively it is tempting to assume that in all of the examples given above, the DP is associated with Partitive Case just as in Finnish where Partitive is morphologically realised in similar constructions (40) and to deduce the DE from this fact.

(40) Sitä leikkii lapsia pihalla. (Finnish; Holmberg & Nikanne 2002, (45))

Expl plays children-Part in.yard

"There are children playing in the yard."

Apart from the fact that the *there*-construction is incompatible with certain partitive expressions such as $(41)^{181}$, two other points speak against this assumption though.

- (41) *There are most of the students present.
- (42) a. There were both political parties represented at the conference.
 - b. There is the village idiot at the front door. 182

First, the DE does not seem to be as strict as has generally been assumed – a fact that cannot be accounted for by the Partitive Hypothesis. If, however, the DP is Nominative and moves to SpecFocP – as has also been suggested by Holmberg & Nikanne (2002) for Finnish – there must be a way to license definite DPs even though the event argument occupies SpecRefP.¹⁸³ The alleged DE then probably follows from the by now well-known semantic requirement that the subject be uniquely identifiable (which might be stronger in English than in German) and the examples in (42) do not pose a problem in this respect.

¹⁸¹ Belletti (1988; footnote 16), following Higginbotham, argues that *most* is not partitive but proportional and hence ungrammatical in the *there*-construction.

¹⁸² (42a and b) are Holmback's 1984, (35) and (49b), respectively as cited in Birner & Ward (1998). Although list readings can also feature definite DPs as in (i) I argue that the list as a whole is indefinite. This assumption is supported by the fact that the verb is singular, i.e. the whole list is seen as one single (indefinite) item.

⁽i) 'Are there any sights one should visit in Stuttgart?' 'Well, there's the television tower, the *Staatsgalerie*, the old castle, the zoological-botanical garden,...'

¹⁸³ Note that there is no DE with respect to the postverbal subject in Italian either. It might, however, be argued that this postverbal subject simply doubles the person morphology of the verb – an assumption that does not carry over to English.

Second, the verb agrees with the postverbal DP in English, whereas it shows default agreement (3rd person singular) in Finnish. The agreement facts strongly suggest that the DP is Nominative in English. Belletti (2001b) suggests that a DP that cannot "check Case" can be licensed by Focus and Nominative Case is just the default realisation of an overt DP. This approach, however, leaves us with the question of how the Nominative Case feature on T gets checked. I therefore assume that in clauses in which the subject does not target SpecTP for interpretational reasons it is possible for Nominative Case to be checked via Agree (just as Tense- and phi-features are checked via Agree in the default case in English). 185

2.6.3. Impersonal passives

The problem of Nominative Case checking immediately leads to the question of why English does not allow for impersonal passives as is illustrated in (43).

- (43) a. *It was danced.
 - b. *There was danced.

First of all, (43a) is ungrammatical because *it* cannot serve as an expletive or as an event argument. Apart from being a referential pronoun, *it* can only stand for an extraposed clause or be a quasi-argument, as e.g. in weather verb constructions. Hence impersonal passives could only be formed by means of the event argument *there*. In the discussion of *there*-constructions I have argued that *there* is merged in SpecTP (or in a SC from where it moves to SpecTP) to check the subject-of-predication feature (and then moves on to SpecRefP). If we now make the additional assumption that finite T is always associated with Nominative Case in languages with poor nominal morphology, the ungrammaticality of (43b)

The use of me here, however, might just be due to the strategy to avoid I as in (ii). More importantly, note that the use of the Accusative form of the pronoun in (i) is accompanied by default agreement.

¹⁸⁴ Examples like (i) seem to be incompatible with the assumption that the postverbal DP carries Nominative Case.

⁽i) %There is me.

⁽ii) Tanya and me are off to Acapulco. (DCE 1995³, *me*) ¹⁸⁵ Differently from Hoekstra & Mulder (1990) who assume that *there* "shares" Nominative Case with the postverbal DP via its trace/copy in the SC, I do not assume that *there*, even if it should be merged in a SC, is in any way involved in Nominative Case checking.

Nor do I assume that *there* is involved in any Case-checking operations in the raising- and ECM-constructions below. For reasons of space I cannot go into the analysis of these examples here.

⁽i) There is likely to be a riot.

⁽ii) We expect there to be a riot.

falls out. – The derivation crashes due to an unchecked Case-feature on T, assuming that the event argument cannot check Case. In MSc, on the other hand, the Nominative Case feature on T is checked by the quasi-argument, hence impersonal passives are grammatical. The closest one can get to impersonal passives in English is a construction involving a nominalisation as in (44).

- (44) a. There was dancing.
 - b. There was some dancing going on.

Although sentences like (44a) are generally given as a translation for impersonal passives, they are actually existential *there*-constructions (as can be seen in (44b)) in which the event is expressed by the gerund which can check Nominative Case. Similarly, I argue that (45), which can easily be mistaken for a kind of passive (cf. MSc (30)), is to be analysed as an existential construction with a reduced relative clause (Bowers 2002, Tim Stowell p.c.). ¹⁸⁶

- (45) There was an apple eaten.
- (46) a. By the time I got back, there was an apple eaten.
 - b. There was an apple eaten in the Garden of Eden.
 - c. There was an apple eaten on Tuesday.

This analysis is supported by the context in (46a) that one of my informants provided. Here, the focus is not on the eating event, but on the fact that there was an apple missing or an apple less. Moreover, most of my informants did not like the "bare" version in (45) that much but added either locative or temporal PPs to complete the sentence, e.g. (46b) and (46c). These

⁽iii) For there to be a riot is highly unlikely.

¹⁸⁶ Chomsky (1999) suggests that examples like (45) involve a "Thematization/Extraction" (TH/EX) operation, which makes sure that the DP leaves the vP (or moves to the edge of vP) – however, without yielding surface-semantic effects in English – while the participle (which does not constitute a reduced relative clause in Chomsky's analysis) stays in the vP.

Too points speak against Chomsky's analysis. First, some informants who accept (45) classify it as a focus construction ("[A]gain focus effect. Among the things that had (or perhaps hadn't?) been eaten, the salient thing is the apple."). This remark is striking, especially since Chomsky explicitly denies any semantic effects, though the operation he suggests would allow for or rather predict semantic effects, such as a focus reading. Second, Chomsky cannot account for the fact that even those informants who accept (45) consider (i) as ungrammatical. Existential constructions, on the other hand, seem to be restricted to simple tenses (cf. footnote 187).

⁽i) *There has been an apple eaten.

amendments support my assumption that these sentences are not passives but existential constructions and as such need a point of reference.

In addition, if *there* is not merged directly in SpecTP but in a SC, it requires the presence of a DP to be merged with. It cannot be merged with the participle to form a "SC" like *[danced there] because Small Clauses are by definition verbless. Therefore impersonal passives, a verbal construction, are ruled out and hence English only allows for the existential construction in which *there* can form a SC with the gerund.

2.6.4. Locative Inversion

Last but not least, I add a few words on Locative Inversion and constructions with a preposed locative PP followed by *there*. I assume that Locative Inversion as in (47a) constitutes a case of residual V2 in English.

- (47) a. Down the hill rolled the ball.
 - b. *Down the hill has the ball rolled.
 - c. ?*Down the hill has rolled the ball.

If the PP is topicalised or focussed, i.e. targeting SpecTopP or SpecFocP of the C-system, it follows that the subject is not subject to a DE because SpecRefP is freely available. However, one would expect the word order in (47b) to be grammatical, contrary to fact. Roberts (p.c.) pointed out to me that the ungrammaticality of this word order is a more general phenomenon also found in the Romance languages. Moreover, a large majority of my informants do not accept Locative Inversion with a compound tense at all, ¹⁸⁷ so that the impossibility of (47b) does not necessarily speak against analysing Locative Inversion as a V2 construction. A point in favour of assuming a V2 structure comes in the form of question formation. The fact that "Locative Inversion wh-questions" do not require (or rather do not allow for) do-support, as illustrated in (48), can easily be accounted for if the finite lexical verb targets the C-system in this construction. ¹⁸⁸

The vast majority of the tokens are intransitive; the only two that appear to contain a transitive verb involve the complex predicates *take place* and *take root*. Of the 1778 tokens, 654 (37%) are instances of inversion around *be*. In 1162 cases (65%) the sentence is in the past tense, in 603 cases (34%) it is in the present tense, and in 13 cases (1%) it is in the infinitive.

(Birner & Ward 1998, pp. 165/166)

¹⁸⁷ Perhaps there is a general incompatibility of inversion structures with compound tenses – after all, Birner & Ward (1998) note with respect to inversion contexts that all examples involve a simple tense.

¹⁸⁸ Collins (1997) does not treat Locative Inversion as a residual V2 construction. Instead, he assumes that the PP can somehow check the EPP/D-feature on T (either the DP embedded in the PP can check the EPP/D-feature or

(48) Down which hill rolled the ball?

In addition, I suggest that the *here-comes*... construction is a special kind of Locative Inversion, namely a Locative Inversion construction that serves as a presentational sentence.

- (49) a. *Here comes the man.
 - b. Here comes the man that we have been talking about.
 - c. Here comes my sister.
 - d. Here she comes.

It follows then that the restricted DE in the *here-comes*... construction, which distinguishes the latter from general cases of Locative Inversion, is again not due to any syntactic constraints but to the fact that this construction has a presentational nature. ¹⁸⁹ Just as in German TECs (ch. III, 2.3.1.) the subject DP has to be rather specific because it has to be identifiable without any aforementioned information. The main reason for mentioning the *here-comes*... construction, however, is that it provides evidence that we have to do with a V2 construction. First, we can observe a root-embedded asymmetry, which is typical of V2 and second, it displays a pronoun/non-pronoun distinction (49d vs 49c) exactly as Old English V2 clauses.

Sentences that feature a preposed PP and *there* constitute a particularly interesting case because they allow for two different, yet unambiguous analyses, depending on whether they are judged to display a DE or not.

- (50) a. Down the hill there rolled a ball.
 - b. \checkmark /*Down the hill there rolled the ball.

All of my informants accept (50a); but while two find (50b) perfectly well-formed, most of the others clearly reject it. From the comments that some people added, it becomes clear that the diverging grammaticality judgements reflect two different structures. The few speakers

just any categorial feature can check the EPP/D-feature on T). He, however, needs additional stipulations to account for why the verb agrees with the subject DP not with the DP complement of the PP.

If Locative Inversion is a V2 construction, the subject DP moves to SpecTP (or even to SpecRefP) and therefore the agreement facts fall out. The restriction of Locative Inversion to unaccusative verbs might be due to the fact that the "weak" English verbs can only ever target T if they do not have to move across a subject DP.

¹⁸⁹ Due to the presentational nature of the *here-comes*... construction, *here* must not be topicalised or focussed. Instead, it is merged in SpecFinP to check the subject-of-predication feature, which in this residual V2 construction is associated with Fin and not with T.

who accept (50b) interpret *there* as a resumptive pronoun that takes up the sentence-initial PP. ¹⁹⁰ Hence (50b) is a V2 construction and *there* occupies a specifier of the C-system, probably SpecFinP, and therefore allows for a definite DP in SpecRefP. This means that for these speakers Locative Inversion and constructions with a fronted PP plus *there* are more or less one and the same construction. ¹⁹¹ Those who reject (50b) obviously interpret it as a *there*-construction with a topicalised/focussed PP (i.e. not a V2 construction) and several of them point out that they have the feeling that *there* and the definite article do not go together ("there' and the 'the' conflict by both trying to be dominant in the sentence"). In other words, *there* is interpreted as an event argument and subject of predication which competes with the definite subject DP for SpecTP and subsequently for SpecRefP – leaving aside the marginal possibility of licensing a definite DP in SpecFocP because *the ball* is not unambiguous enough anyway. Hence (50b) has the derivation in (51a) if it is judged to be grammatical and (51b) if it is ungrammatical.

- [TopP Down the hill Top [FinP [PP < down the hill> there] rolled [RefP the ball < rolled> [TP < the ball> < rolled> [VP [SC < the ball> < [PP [PP down the hill] there]>] < rolled> [VP [SC < the ball> < [PP [PP down the hill] there]>] < rolled> [VP [SC < the ball> < [PP down the hill] there]>] < rolled> [VP [SC < the ball> < [PP down the hill] there]>] < rolled> [VP [SC < the ball> < [PP down the hill] there]>] < rolled> [VP [SC < the ball> < [PP down the hill] there] < rolled> [VP [SC < the ball> < [
 - b. $*[_{TopP}$ Down the hill Top [$_{RefP}$ there Ref [$_{TP}$ <there> T [$_{TopP}$ [$_{vP}$ rolled [$_{VP}$ [$_{SC}$ <the ball> <down the hill>] <rolled>]] Top [$_{FocP}$ the ball Foc < $_{vP}$]]]]]

The fact that the overwhelming majority consider the combination of a preposed PP plus *there* to induce a DE suggests that it is a *there*-construction rather than a case of complex Locative Inversion¹⁹² and that (51b) is the correct derivation apart from the fact that the postverbal subject DP should be indefinite.

-

¹⁹⁰ "I guess in the sentences without 'there', you would have a kind of pause between the two clauses: 'down the hill' [pause, almost a comma] 'rolled a ball'. The 'there' fills in the pause.[…]" (Fiona Imlach, p.c.) This description also supports my assumption that the PP is topicalised or focussed.

¹⁹¹ Interestingly, the two informants who accept (50b) are New Zealanders (while those who reject it are British) and semi-professional writers. One might wonder whether their judgements reflect a new grammar that is developing down under but, on the other hand, these informants belong to two different generations so that one cannot speak of a recent development

cannot speak of a recent development.

192 This assumption is supported by the fact that the interrogative form of this construction requires *do* support, thus suggesting that the declarative counterpart is not a residual V2 construction.

⁽i) Down which hill did there roll a ball?

3. Weather verbs

3.1. Preliminary remarks

Differently from my analysis of thetic constructions and impersonal passives in the various Germanic languages, my analysis of weather verbs should be uncontroversial – except perhaps my story about Icelandic. In fact, what follows is basically a repetition of the traditional ideas about weather verb constructions. The only reason why I include this chapter in my dissertation is that I have been asked several times (when presenting my analysis of German TECs and impersonal passives) how I would account for the fact that there **are** instances, among others weather verb constructions, in which *es* is obligatory in all kinds of clauses. ¹⁹³

3.2. German, Dutch, MSc and English

All of the languages discussed in this chapter display the same pattern, no matter whether they are V2 languages or not, no matter what type of verb movement they have etc. *Es*, *het*, *det* and *it*, respectively, are obligatory in sentence-initial position, if some other XP occupies the sentence-initial position and in embedded clauses. Finally, they are all pronouns or at least homophonous with the 3rd person neuter personal pronoun of the respective language.¹⁹⁴

(1) a. Es hat gestern geregnet. (German)

it has yesterday rained

"It rained yesterday."

b. Gestern hat (e)s geregnet.yesterday has it rained"Yesterday it rained."

¹⁹³ This account carries over to expressions like *es gibt* 'there are' where *es* is obligatory as well. Note that differently from TECs, in which *es* is an expletive and in which the finite verb agrees with the subject DP, quasi-argumental *es* behaves like a real subject and agrees with the finite verb.

argumental *es* behaves like a real subject and agrees with the finite verb.

194 The fact that for emphasis *es* can be replaced with *das* 'that' in German indicates that this *es* is different from expletive *es* (cf. Vikner 1995).

(i) Das regnet! (German) that rains

"The rain is coming down in buckets!"

c. ... daß es gestern geregnet hat.... that it yesterday rained has"... that it rained yesterday."

(2) a. Het regent.

(Dutch)

It rains.

- b. Gisteren heeft het geregend.yesterday has it rained"Yesterday it rained."
- c. ... dat het geregend heeft.... that it rained has"... that it has rained."
- (3) a. Det har regnet.

(Norwegian)

It has rained.

- b. I dag har det regnet.today has it rained"Today it has rained."
- c. ... at det har regnet i dag
 ... that it has rained today
- (4) a. It rained yesterday.
 - b. Yesterday it rained.
 - c. ... that it rained yesterday.

In view of these facts I assume that all of these "pronouns" are quasi-arguments. As such they are obligatorily merged in SpecvP like an external argument, check Nominative Case in SpecTP and a specificity feature in SpecRefP and move on to higher specifier positions where necessary. ¹⁹⁵ The derivation of (1b), for example, looks as follows.

(i) Es regnete Konfetti. *It rained confetti*.

(German)

¹⁹⁵ The fact that weather verbs can also take an Accusative direct object supports the idea that we have a quasi-argument that is merged in SpecvP like an external argument.

(5) $[F_{inP} Gestern hat [RefP es < hat > [TP [vP < es > v [vP geregnet]] < hat > [AuxP < hat > < vP >]]]]]$

Thus the quasi-argument of weather verbs behaves like a real argument and must be distinguished from expletives or event arguments, which among other things cannot check Nominative Case.

Despite being associated with all these features though, the quasi-argument does not really have any semantic content as it does not spell out an Agent or a Causer. Therefore the quasi-argument almost only serves as subject of predication if there is no other XP available that could do so. This fact explains why (1b) is much more natural than (1a). In other words, if a sentence contains a frame adverb (i.e. one of these adverbs that establish a setting (cf. chapter II, 3.1.1.)), it is highly probable that it is the adverb that checks the sop-feature and not the quasi-argument.

3.3. Icelandic

Icelandic is the odd one out as concerns the distribution of $pa\delta$ in weather verb constructions, as can be seen in (6).

(6) a. Það rigndi (í gær). (Icelandic)

Expl rained (yesterday)

"It rained (yesterday)"

b. Í gær rigndi (*það). yesterday rained Expl

"Yesterday, it rained."

c. Hann sagði, að það hafi rignt í gær.
he said that Expl has-subjunc rained yesterday
"He said that it rained yesterday."

d. Rigndi (*það) í gær?¹⁹⁶

rained Expl yesterday

Did it rain yesterday?

-

 $^{^{196}}$ According to Gunnar Hrafn Hrafnbjargarson (p.c.) many people consider (6b) and (6d) with $pa\delta$ grammatical. I assume that in their case $pa\delta$ is a quasi-argument, like the one found in the other Germanic languages. Hence we have to do with two different grammars. The question of whether the expletive is undergoing a reanalysis as a quasi-argument is left for further research.

These examples show that bað is not obligatory, in fact, that it can only show up in the sentence-initial position of declarative main clauses and in the clause-initial position (following the complementiser) of embedded clauses. Due to its restricted distribution bað cannot be a quasi-argument. As its distribution is, however, exactly the same as that of the expletive in impersonal passives, I suggest that in Icelandic weather verbs do not select any argument, not even a quasi-argument but require the presence of an expletive if the V2 requirement cannot be met otherwise. In other words, the expletive bað is merged if it is needed to check the sop-feature associated with Fin. Therefore bað is obligatory in the sentence-initial position of declarative main clauses and similarly in the clause-initial position of embedded clauses because Icelandic has generalised V2 in embedded clauses. Whenever the sop-feature is checked by some other XP as in (6b) there is no need for the expletive as illustrated in the derivation in (7). Remember that SpecTP does not have to be filled in Icelandic because the (New) Extension Condition is met by merger of the verbal inflection and the ensuing verb movement is a morphological operation triggered by the need of the affix to be bound, hence does not require the presence of an EPP-feature on T (cf. chapter II, 4.3.2.D).

(7)
$$\left[\int_{\text{FinP}} \hat{\mathbf{f}} \right] = \left[\int_{\text{VP}} \left[\int_{\text{VP$$

The fact that control clauses like *It often rains before snowing*. cannot be translated as such into Icelandic but require a finite embedded clause supports my analysis of $ba\delta$ as an expletive as well as my assumption that Icelandic has generalised embedded V2.

- (8) a. Það rigndi án þess að það hafi snjóað. (Icelandic)

 Expl rained without it-Gen that Expl had snowed

 "It rained without snowing."
 - b. ?Það rigndi án þess að hafi snjóað.

 Expl rained without it-Gen that had snowed
 - c. Það rigndi án þess að snjóað hafi.

 Expl rained without it-Gen that snowed had

Holmberg (2000c) argues that expletive *það* is in complementary distribution with stylistic fronting and I take (8a) and (8c) to illustrate this phenomenon. While in example (8c) the V2 requirement is satisfied by stylistic fronting of the participle *snjóað* 'snowed', (8a), which is

only used in spoken Icelandic, employs expletive $pa\delta$ to fill the SpecFinP position in the absence of a subject (of predication). If weather verbs selected a quasi-argument which could show up either as $pa\delta$ or as pro, stylistic fronting should be impossible because this operation requires a subject gap. Hence $pa\delta$ can only be an expletive. The marginality of (8b) finally shows that Icelandic has embedded V2 and that the auxiliary pafi 'had' cannot undergo stylistic fronting (cf. Holmberg 2000c).

To sum up, Icelandic is not special because it has a strange distribution of the quasi-argument that is different from the distribution of the quasi-argument in the other Germanic languages but it is special because weather verbs do not "select" a quasi-argument at all. Instead, an expletive, which behaves exactly like the expletive of constructions that have traditionally been analysed as featuring an expletive, has to be merged where necessary.

¹⁹⁷ The fact that (8b) is not completely ungrammatical might be due to a marginal acceptability of V1 constructions even in embedded clauses.

4. Impersonal psych verbs

To conclude the discussion of impersonal constructions I take a look at impersonal psych verbs in German, not without adding a few words on Icelandic. In Icelandic, impersonal psych verb constructions never feature an "expletive", while in German the use of ' s^{198} seems to be strangely optional.

(1) a. Mir ist kalt. (German)

me-dat is cold

"I feel cold."

b. ... weil mir kalt ist.... because me-Dat cold is"... because I feel cold."

(2) a. Mir ist's kalt.

me-Dat is 't cold

"I feel cold."

b. ?(E)s ist mir kalt.(i)t is me-Dat cold."I feel cold."

c. ... weil 's mir kalt ist.
... because't me-Dat cold is
"... because I feel cold."

d. ... weil mir 's kalt ist.... because me-Dat't cold is"... because I feel cold."

(3) a. Mich friert.

me-Acc freezes

"I feel cold."

-

¹⁹⁸ This is the reduced form of *es*. The full form is hardly ever used with impersonal psych verbs and sounds very odd. Although I tend to use the version with 's more often than the one without, I clearly prefer the version without to the one with *es* so that the use of *es* instead of 's in examples might distort the facts when it comes to grammaticality judgements.

- b. ?... weil mich friert.... because me-Acc feezes"... because I feel cold."
- (4) a. Mich friert 's. me-Acc freezes't

 "I feel cold."
 - b. ?(E)s friert mich.

 (i)t freezes me-Acc

 "I feel cold."
 - c. ... weil 's mich friert.
 ... because't me-Acc freezes
 "... because I feel cold."
 - d. ?... weil mich 's friert.... because me-Acc't freezes"... because I feel cold."
- (5) a. Mér er kalt. (Icelandic)

 me-Dat is cold

 "I feel cold."
 - b. *Mér er það kalt.me-Dat is it/Expl cold"I feel cold."
 - c. *Það er mér kalt.

 it/Expl is me-Dat cold

 "I feel cold."
 - d. ... af þvi (að) mér er kalt.... because that me-Dat is cold"... because I feel cold."
 - e. *... af þvi það er mér kalt.
 ... because it/Expl is me-Dat cold
 "... because I feel cold."
 - f. *... af þvi mér er það kalt.
 ... because me-Dat is it/Expl cold

"... because I feel cold."

- (6) a. Mig kelur.

 me-Acc becomes-numb

 "I become numb."
 - b. *Mig kelur það.me-Acc becomes-numb it/Expl"I become numb."
 - c. *Það kelur mig

 it/Expl becomes-numb me-Acc
 - "I become numb."
 - d. ... af þvi mig kelur.... because me-Acc becomes-numb
 - "... because I become numb."
 - e. *... af þvi það kelur mig.
 ... because it/Expl becomes-numb me-Acc
 - "... because I become numb."
 - f. *... af þvi mig kelur það.
 ... because me-Acc becomes-numb it/Expl
 - "... because I become numb."

Concerning Icelandic, I follow Hrafnbjargarson (2002) who locates the merging site of Dative subject DPs in SpecvP, i.e. I assume that the Experiencer argument no matter whether it carries Dative or (probably inherent) Accusative Case is a real subject merged in SpecvP. Being a real subject, these DPs are generally the subject of predication. Hence they should target SpecFinP. The derivation of (6a) then looks as follows:

(7) $[_{FinP} \text{ Mig kelur } [_{RefP} < mig > < kelur > [_{TP} < kal- -ur > [_{vP} < mig > < kal- > [_{VP} < kal- >]]]]]]^{200}$

¹⁹⁹ Note that in German (4a) is much more natural than (4b) indicating that the Experiencer is the default subject of predication here.

²⁰⁰I assume that the DP does not pass through SpecTP because SpecTP need not be filled in Icelandic and Nominative does not have to be checked in this construction. However, it has to pass through SpecRefP to check the specificity feature.

182

In the previous chapters I have argued that quasi-arguments (which Icelandic does not seem to have anyway, cf. chapter III, 3.3.) are merged in SpecvP and that Icelandic expletive $ba\delta$ is only ever merged in SpecFinP. As the Experiencer DP is merged in SpecvP it is impossible to have a quasi-argumental $ba\delta$ in impersonal psych verb constructions and as the Experiencer DP serves as the subject of predication (unless, e.g. a frame adverbial assumes this function) there is no need for an expletive either. Hence the use of $ba\delta$ in impersonal psych verb constructions inevitably leads to ungrammaticality.

In German, however, the Experiencer DP does not assume the function of a real subject (it fails all the tests for subjecthood mentioned in Zaenen, Maling & Thráinsson (1985)) but is an internal argument merged in SpecVP. What I would like to argue here is that the construction with (e)s and the one without do not constitute a case of real optionality but reflect two different grammars,²⁰¹ namely one in which impersonal psych verbs "select" a quasi-argument which is then merged in SpecvP and one where there is no such quasi-argument. Unlike Cardinaletti (1990), who argues that the quasi-argument of impersonal psych verbs (which can be es or pro) is an internal argument, I assume that this quasi-argument just like the one associated with weather verbs is an external argument merged in SpecvP. More precisely, one can say that (8a) has the same structure as (8b) with an additional Experiencer DP, which can be argued to be similar to an ethical Dative here.

(8) a. ...weil 's mir kalt ist.
... because't me-Dat cold is
"... because I feel cold."
b. ... weil 's kalt ist.
... because't cold is
"... because it is cold."

The assumption that the quasi-argument is merged in SpecvP has the advantage that I do not have to postulate that Dative and Accusative are two realisations of the same inherent abstract Case (cf. Cardinaletti 1990). Another fact that speaks against Cardinaletti's analysis

²⁰¹ Cardinaletti (1990) citing Lenerz (1985) points out that the use of (e)s with impersonal psych verbs arose in Middle High German when the use of sentence-medial es with weather verbs increased as well. Both versions have, however, survived side by side till today but younger speakers tend to prefer the version with 's, especially in embedded clauses.

is that, interestingly, constructions with a Dative Experiencer are more acceptable without (*e*)s than constructions with an Accusative Experiencer.

(9) a. ... weil mir kalt ist.
... because me-Dat cold is
"... because I feel cold."
b. ?... weil mich friert.
... because me-Acc freezes
"... because I feel cold."

This difference can be accounted for if (9b) requires inherent Accusative Case because there is no external argument and if inherent Accusative Case, unlike Dative, is a marked option in Modern German. Therefore impersonal psych verbs that take an Accusative Experiencer DP are preferably used with a quasi-argument, which by virtue of being an external argument makes structural Accusative Case available. (10) then has the derivation in (11).

- (10) ... weil 's mich friert.
 ... because't me-Acc freezes
 "... because I feel cold."

The finite verb moves to T (via little v) and therefore SpecTP has to be filled. This requirement, however, does not pose a problem here because the quasi-argument moves to SpecTP – pied-piping the vP – to check Nominative Case and then raises to SpecRefP to check the specificity feature. Last but not least, it is important to point out that I assume that (e)s cliticises to its respective host only at PF.

The derivation of the corresponding clause without (e)s requires an extra trigger because the filling of SpecTP is not achieved as a by-product of Nominative Case checking by the quasi-argument. Therefore it is necessary to postulate the presence of an EPP-feature which triggers movement of the vP to SpecTP. The only other option would be to assume that the T of embedded clauses is associated with the sop-feature and that this feature is checked by the Experiencer DP. While it is reasonable that the Experiencer DP is the subject of predication here, clauses like (12) argue against locating the sop-feature on T.

(12) ... weil diesen Artikel niemand gut findet.
... because this-Acc article no-one good finds
"... because no-one likes this article."

In this clause, the object DP has been scrambled out of the vP in SpecTP because it is the topic of the embedded clause. As such it is also the subject of predication and it is highly unlikely that it has checked the sop-feature while it was still in SpecTP, i.e. deeply embedded in the moved vP. Hence I suggest that in some rare constructions there is an EPP-feature on T, namely if we have syntactic V-movement to T and there is no Nominative Case and no sop-feature to be checked on T. In this case the EPP-feature is needed to trigger XP-movement to SpecTP so that head-movement does not violate the New Extension Condition.

Last but not least, some stipulations about why impersonal psych verb constructions are ungrammatical in MSc and English. MSc does not have any Case morphology on full DPs nor any inflectional person morphology on the finite verb so that the MSc equivalents of German *den Mann friert* 'the-Acc man freezes' and *der Mann friert* 'the-Nom man freezes' are indistinguishable. Hence the languages go for the default case and interpret the Experiencer as carrying Nominative Case. In English, on the other hand, impersonal psych verb constructions are ruled out because English is not a V2 language any more. This means that the sop-feature which is checked by the Experiencer argument is associated with T. T, however, also carries a Nominative Case feature, which cannot be checked by a Dative or Accusative Experiencer argument. Therefore the derivation crashes.

5. Summary

In this section I have discussed impersonal passives, thetic constructions (among them TECs), weather verbs and impersonal psych verb constructions against the background of the clause structure and the checking system that I developed in the theoretical part. The most important point is that one has to distinguish between expletives, event arguments and quasi-arguments and that superficially similar constructions, as e.g. TECs in German and Dutch, have different structures because they feature different "expletive" elements. In particular I have argued that expletives are semantically empty elements that do not carry any Case- or phi-features. Consequently expletives cannot be merged in SpecTP to check Nominative Case. This means that expletives can only function as a filler of a specifier, i.e. they can check only a subject-of-predication feature if no other XP can serve as subject of predication. Hence expletives can only ever be merged in the position where they surface. With respect to V2 languages, this implies that there are no empty expletives (no expletive *pro*) and that an overt expletive cannot be merged in SpecTP and raise to SpecFinP, leaving a trace/copy in SpecTP.

Event arguments, on the other hand, can also check the subject-of-predication feature but moreover they specify the 'here and now' or 'there and then' of the event (Kiss 1996) and are therefore associated with a feature [+specific] which requires them to pass through SpecRefP. Another characteristic of event arguments is that they are of locative or temporal origin – a fact that is reflected by the function Kiss attributes to them. I have proposed that event arguments can either be merged in SpecRefP or, following Hoekstra & Mulder (1990), in a Small Clause that serves as the only argument of an unaccusative or unaccusativised verb. The fact that event arguments are not just fillers but have semantic content which requires them to target SpecRefP at some stage of the derivation means that, in V2 languages, they cannot only show up in the sentence-initial position of declarative main clauses but also in the *Mittelfeld*, e.g. in embedded clauses. The most important property of event arguments is that in certain constructions, e.g. in impersonal passives in Dutch, they are not obligatory. Instead, the presence or absence of the event argument depends on the meaning that is to be conveyed by the clause as its presence affects the interpretation of, e.g., the implicit agent.

The most argument-like of the three "expletive" items is the quasi-argument. I have suggested that quasi-arguments are obligatory (i.e. either a certain construction requires a quasi-argument or not but if it requires one, then it has to be present in all kinds of clauses), that they are merged in SpecvP like an external argument and that they carry a specificity- and a Nominative Case feature. The latter forces the quasi-argument to target SpecTP as well.

These assumptions are not really new, unlike my ideas of which constructions actually feature a quasi-argument. I have argued that not only weather verbs but also impersonal psych verb constructions with (e)s in German²⁰² and especially, thetic constructions and impersonal passives in the Mainland Scandinavian languages take a quasi-argument.

If we now consider structural properties as well, such as whether a language is V2 or not and what kind of V-movement is instantiated by the language in question, the following pattern emerges. In V2 languages which have no V-movement in embedded clauses, like German and Dutch, SpecTP will always be occupied by vP. In other words, SpecTP is not available for merger of either an expletive or an event argument. This means that whenever we have evidence that an "expletive" passes through SpecTP this "expletive" can only be a quasi-argument merged in SpecvP and moving to SpecTP as part of vP. Similarly, if the "expletive" is optional and can show up in positions other than SpecFinP it must be an event argument because an expletive can only check the sop-feature and therefore can only ever occur in SpecFinP in these languages.

Let us now turn to V2 languages that have short V-movement in embedded clauses, such as the Mainland Scandinavian languages. Due to this short V-movement, vP-movement to SpecTP is not possible which means that there is no obligatory filler of SpecTP in the MSc languages. Instead, two possibilities can be thought of: movement of a Nominative DP to SpecTP and merger of an "expletive" in SpecTP. With respect to the "expletives" the following pattern emerges. If T is associated with Nominative Case (which is hard to show as in the MSc languages only personal pronouns inflect for Case), only a quasi-argument can show up in SpecTP because both expletives and event arguments cannot check Case. In case T should not be associated with Case but carry a sop- or EPP-feature, SpecTP could be filled by an event argument or by an expletive. Since the "expletive" obviously moves in MSc as can be seen in (1), it cannot be an expletive.

(1) a. Det ble danset.

(Norwegian)

Expl was danced

"There was dancing."/"People were dancing."

b. I går ble det danset.

yesterday was Expl danced

"Yesterday, there was dancing."/"Yesterday, people were dancing."

²⁰² Cardinaletti (1990) also suggests that impersonal psych verbs "select" a quasi-argument but she analyses this

Moreover, as det^{203} is not of locative origin it should not be an event argument either. Hence I suggest that T is always associated with Nominative Case in the MSc languages²⁰⁴ and that det is a quasi-argument.

In a language like Icelandic that is a V2 language but in which the first steps of Vmovement are morphologically triggered, T will never be associated with an EPP-feature. In addition, as Icelandic has generalised V2, T does not carry the sop-feature either. Therefore SpecTP will only ever be filled if T carries Nominative Case. This Case feature could in theory be checked by an argumental DP or by a quasi-argument but obviously Icelandic does not have quasi-arguments at all (this lack of quasi-arguments may be correlated with the availability of non-Nominative subject DPs). Last but not least, bað can only be an expletive because it is not of locative origin and because its occurrence is restricted to SpecFinP, where it checks the sop-feature in the absence of any real subject of predication.

English is different from all the other languages discussed here because it is not a V2 language. This means that T plays a much more central role as it is the head on which the sopfeature is located. In addition, English features two different "expletive" elements - in weather verb constructions on the one hand and all the other constructions considered here on the other, namely it and there, respectively. This distinction suggests that there is not a quasiargument but either an expletive or an event argument. The latter option is more likely because there is clearly of locative origin. I have argued that all there-constructions – no matter whether they feature existential be or an unaccusative or an unaccusativised unergative verb – are focus constructions in which the only argument of the verb (either a DP or a SC) is focussed and therefore targets the FocP immediately preceding the vP. Therefore there is merged in SpecTP²⁰⁵ to check the subject-of-predication feature and moves on to SpecRefP to check the specificity feature which it carries due to its being an event argument. In addition, the there-construction has to contain a nominal element because there cannot check T's Nominative Case feature. That's why impersonal passives are ungrammatical in English.

quasi-argument as an internal argument.

203 For the additional problems posed by Danish *der* see chapter III, 2.5..

²⁰⁴ In chapter III, 2.6.3. I suggest that in languages with poor verbal morphology T is always associated with Nominative Case anyway.

²⁰⁵ There might also be merged lower down in the structure doubling a locative element.

IV. Conclusion

In this study I examined thetic constructions (especially TECs), impersonal passives, weather verbs and impersonal psych verbs in German, Dutch, Icelandic, the Mainland Scandinavian languages and English. In the light of the Minimalist Program and especially of a modified version of the Universal Base Hypothesis (Kayne 1994), I was mainly guided by the following questions.

- (i) How many subject positions are there at least? Which are they? How does Nominative Case checking work?
- (ii) What about the EPP in such an approach? Are all subject positions associated with the EPP? Or is there one particular subject position that is obligatorily associated with the EPP? Or is the EPP parametrised? Or is the EPP a generalised movement feature that can be associated with basically any head?
- (iii) Can we do without expletive *pro*?

The thesis consists of two parts – a theoretical one and a practical one. First, I presented a historical overview of the development of the notions "subject position" and "EPP". In Chomsky's works the number of subject positions has remained fairly small but the conception of the EPP has changed radically. It has developed from a principle that requires every clause to have a subject (or in other words, that requires SpecIP to be filled) into a generalised movement feature. As such the EPP-feature makes sure that an XP that checked all its features via Agree moves to its "surface" position or that an XP that is needed for later operations is brought to the edge of a phase. Another thread, represented by Kiss (1996), Bobaljik & Jonas (1996) and especially Cardinaletti (2002), describes the cartographic approach which proposes a large number of subject positions each associated with a single feature out of the bundle of features that make up subjecthood. Hence syntax and semantics become interwoven and the EPP more or less redundant. Finally, I presented approaches in which it is argued that the EPP is parametrised. It has been suggested that the EPP can be checked either by Merge/Move of an XP or by Merge/Move of an X° (Alexiadou & Anagnostopoulou 1998) and that languages vary as to whether the EPP is located in the Isystem or in the C-system (Roberts & Roussou 1998). In the ensuing presentation of my own approach I used ideas of all three lines of reasoning.

As I subscribe to an analysis of V2 as movement of the finite verb to Fin (i.e. an instance of head-movement) followed by Merge/Move of an XP in/to SpecFinP, I argued for the existence of head-movement and for its syntactic nature. More precisely, I argued for a correlation between head-movement and the EPP. In particular, I showed that the Extension Condition (Chomsky 1993/1995) can be phrased in such a way that head-movement does not violate it. The only requirement is that head-movement is immediately followed by an operation that extends the tree at the root, i.e. Merge or Move of an XP. This operation is triggered by the presence of an EPP-feature whenever no other feature requires the creation of a specifier of the complex head anyway. In the course of the thesis, I suggested that except for some very rare constructions (e.g. impersonal psych verbs without a quasi-argument in German) the EPP-feature reduces to a Nominative Case feature or to a subject-of-predication feature.

Another major part of the study has been devoted to the development of a clause structure that can be applied to both OV- and VO- languages. The characteristics of this clause structure are the following. All three domains of the structure, i.e. CP, IP and VP, are split; V2 constructions universally target the C-system; there are at least two subject positions in the I-system, the higher of which (SpecRefP) is the designated position for specific subjects and most important, I suggested that the direct object is merged in SpecVP in all languages.

This last point directly carries over to my assumptions about checking. The conditions on checking directly account for word order variations and their correlates. Except for some rare cases in languages with poor morphology, all checking requires either a spec-head or a head-head configuration. The spec-head relation need not be immediate because looking into Spec is possible unless there is an immediate active checking relation.

My analysis crucially hinges on the way verbal features, i.e. [v]-, T- and phi-features, are checked in the individual languages. In languages with fairly rich verbal morphology, like German and Dutch, the verb is merged fully inflected and need not check verbal categorial features (overtly) on little v. Therefore non-finite forms will stay in V, while finite forms move to T or even further. Hence there is never an active checking relation between SpecvP and v in these languages so that it is always the (remnant) vP that moves to SpecTP. Whenever the (remnant) vP contains a subject DP the Nominative Case feature is checked via looking into Spec. These instances of no V-movement or long V-movement in combination with (remnant) vP-movement result in OV-order and allow for scrambling.

In languages with poor morphology the fully inflected verb has to be identified as such by checking a categorial feature against little v, an operation that establishes an active

checking relation which blocks movement of the vP to SpecTP (because Nominative Case could not be checking via looking into Spec) unless the verb moves on to a higher head position as e.g. in V2 constructions. This short V-movement leads to VO-order. In addition, I argued that the interplay of short V-movement plus movement of the subject DP to SpecTP and long V-movement plus remnant vP-movement result in the word order patterns commonly associated with Object Shift. Among the languages that instantiate these types of V-movement are the MSc languages and, partly, English. English differs insofar as it is not a V2 language and therefore requires the subject-of-predication feature to be checked on T and not on Fin as V2 languages.

Last but not least, I suggested that Icelandic features yet another type of V-movement, namely morphologically triggered V-movement. Here the verbal morphology is merged separately – directly in T – and the verb stem moves up from V to bind the affix in T. As the T-head is actually realised by merger there is no need for SpecTP to be created.

In the second part of the thesis I applied these theoretical assumptions to the various languages in order to revise the account of several impersonal constructions. I suggested that constructions like TECs and impersonal passives though seemingly very similar in the individual languages (provided that they are available at all) feature different derivations and especially different "expletive" elements. I argued that what has commonly been called "expletive" actually covers true expletive elements as well as event arguments and quasiarguments. These "expletive" elements are distinguished by the number and type of features they carry. These features also determine where the "expletive" is merged and where it can/has to show up. In particular, true expletives do not carry any features and can therefore only be merged in the position where they are spelt out because they can only check a sopfeature (a repair mechanism if no other XP can serve as subject of predication). Event arguments spell out the 'there and then' or 'here and now' of an event and are hence associated with a specificity feature (cf. Kiss 1996). This feature requires event arguments to occupy SpecRefP at some point of the derivation. Quasi-arguments, finally, carry both a Nominative Case feature and a specificity feature. They are merged in SpecvP like "normal" external arguments and due to their features have to pass through SpecTP and SpecRefP. I attributed the fact that impersonal passives vary a lot with respect to the distribution of the "expletive" and that TECs can display a Definiteness Effect or not to the choice of different "expletive" elements in the individual languages.

Further, I argued that non-overt expletives do not exist. First, traces/copies of an overt expletive cannot exist because expletives can only be merged in the position where they are spelt out. More importantly, I provided evidence against the existence of expletive *pro*. Expletive *pro* is problematic from a conceptual point of view because a numeration should only contain material that has an effect on either PF or LF (Chomsky 1995). Being phonetically empty, expletive *pro* cannot have an effect on PF and it can be shown that expletive *pro* does not have any semantic effect, such as inducing a DE, either (cf. Alexiadou & Anagnostopoulou 1998). In addition, if Nominative Case checking has to be done in a spechead configuration, it is hard to see how the "associate" DP can check its Nominative Case feature if expletive *pro* occupies SpecTP (not considering the option of chain formation).

In Icelandic, expletive *pro* is simply not needed because SpecTP does not have to be filled as T is realised by merger of the verbal affix. Therefore one could argue with Cardinaletti (2002) that it is nevertheless desirable to assume the presence of expletive *pro* where other languages overtly feature an "expletive" or a subject DP because the structures are more similar then. I showed, however, that in other languages that have been argued to feature expletive *pro*, namely German and Dutch, *pro* is not only not needed but that there is no position available for it either. Expletive *pro* cannot be merged in SpecRefP because German TECs and impersonal passives do not display a Definiteness Effect and what is more, SpecTP will always be occupied by the (remnant) vP. These facts suggest that expletive *pro* does not exist at all. Last but not least, the fact that the subject DP is contained within the (remnant) vP that has moved to SpecTP explains why the subject DP can check Nominative Case in a spec-head relation and at the same time display properties that are typical of vP-internal subjects, according to traditional analyses.

Thus the theoretical framework developed in the first part combined with a finer-grained classification of the "expletive" elements allows for a unified account of impersonal constructions in the Germanic languages that does away with expletive *pro* and assumes a universal base structure where different word orders are solely due to different movements.

V. References

- Abels, Klaus (2003) "Phases, cyclicity, and stranding", paper presented at the IAP workshop on EPP and Phases, MIT.
- Abraham, Werner (1997) "The interdependence of case, aspect and referentiality in the history of German: the case of the verbal genitive" in van Kemenade, Ans & Nigel Vincent (eds) *Parameters of morphosyntactic change*. Cambridge: CUP, 29-61.
- Åfarli, Tor A. (2002) "Two Types of Object Experiencer Verbs in Norwegian" *The Journal of Comparative Germanic Linguistics* 4, 129-144.
- Alexiadou, Artemis (2001) "Uniform and Non-Uniform Aspects of Pro-Drop Languages", paper presented at the "Workshop on the Role of Agreement in Argument Structure", University of Utrecht.
- Alexiadou, Artemis (2003a) "Encoding Transitivity", paper presented at the workshop on Verb Classes and Alternations, Universität Stuttgart.
- Alexiadou, Artemis (2003b) "Uniform and Non-Uniform Aspects of Pro-Drop Languages", ms., Universität Stuttgart.
- Alexiadou, Artemis (2003c) "On the properties of VSO and VOS Orders in (some) pro-drop languages", paper presented at the Universität Leipzig.
- Alexiadou, Artemis & Elena Anagnostopoulou (1997) "Toward a uniform account of Scrambling and Clitic Doubling" in Abraham, Werner & Elly van Gelderen (eds) *German: Syntactic Problems: Problematic Syntax*.
- Alexiadou, Artemis & Elena Anagnostopoulou (1998) "Parametrizing AGR: Word Order, V-Movement and EPP-Checking" *NLLT* 16, 491-539.
- Alexiadou, Artemis & Elena Anagnostopoulou (2000) "The Subject In-situ Generalization, and the role of Case in driving computations", ms., ZAS, Berlin/Aristotle University of Thessaloniki and University of Crete.
- Alexiadou, Artemis & Elena Anagnostopoulou (2001) "The Subject-in-Situ Generalization, and the Role of Case in Driving Computations" *LI* 32, 193-231.
- Baker, Mark (1995) "The Mirror Principle and Morphosyntactic Explanation" LI 16, 373-415.
- Baker, Mark C. (1988) *Incorporation. A Theory of Grammatical Function Changing*. Chicago: University of Chicago Press.
- Barðdal, Jóhanna (1999) "The Dual Nature of Icelandic Psych-Verbs" Working Papers in Scandinavian Syntax 64, 79-101.
- Bayer, Josef & Peter Suchsland (1997) "Expletiva und leere Subjekte im Deutschen" Groninger Arbeiten zur germanistischen Linguistik (GAGL) 41, 12-38.
- Bayer, Josef & Peter Suchsland (1999) "Some remarks on Expletives in German", Universität Jena. http://www.uni-jena.de/philosophie/germsprach/noam.html
- Belletti, Adriana (1988) "The Case of Unaccusatives" LI 19, 1-34.
- Belletti, Adriana (1990) Generalized Verb Movement. Aspects of Verb Syntax. Turin: Rosenberg & Sellier.
- Belletti, Adriana (2001a) "Aspects of the low IP area", ms., Università di Siena.
- Belletti, Adriana (2001b) ""Inversion" as Focalization" in Hulk, Aafke & Jean-Yves Pollock (eds) *Subject Inversion in Romance and the Theory of Universal Grammar*. Oxford: OUP, 60-90.
- Belletti, Adriana (2003) "Extended Doubling and the VP periphery", paper presented at the Universität Stuttgart.
- Belletti, Adriana & Luigi Rizzi (1988) "Psych-Verbs and θ-Theory" NLLT 6, 291-352.

- Biberauer, Theresa (2001) "Rethinking the EPP and Spec-TP in Germanic", paper presented at the LAGB Autumn Meeting 2001, University of Reading.
- Biberauer, Theresa & Ian Roberts (2003a) "Evidence that V2 involves two movements: a reply to Müller", ms., University of Cambridge [to appear in Astruc & Richards (eds) (2003) *Cambridge Occasional Papers in Linguistics*, Volume 1].
- Biberauer, Theresa & Ian Roberts (2003b) "The EPP and word order change in Middle English", paper presented at the CGSW 18, University of Durham.
- Birner, Betty J. & Gregory Ward (1998) *Information Status and Noncanonical Word Order in English*. Amsterdam: John Benjamins.
- Bobaljik, Jonathan David & Dianne Jonas (1996) "Subject Positions and the Roles of TP" *LI* 27, 195-236.
- Boeckx, Cedric (2000) "EPP Eliminated", ms., University of Connecticut.
- Borsley, Robert D., Maria-Luisa Rivero & Janig Stephens (1996) "Long Head Movement in Breton" in Borsley, Robert D. & Ian Roberts (eds) *The Syntax of the Celtic Languages*, Cambridge: CUP, 53-74.
- Bowers, John (2002) "Transitivity" LI 33, 183-224.
- Cabredo Hofherr, Patricia (1999) "Two German Impersonal Passives and Expletive *pro*", *CatWPL* 7, 47-57.
- Cabredo Hofherr, Patricia (2000) La passivation des intransitifs en allemand et le statut des explétifs. Thèse de doctorat, Université Paris VII.
- Cabredo Hofherr, Patricia (2001a) "Inflected complementisers and pro-drop in Germanic", paper presented at the "Workshop on Agreement and Argument Structure", University of Utrecht.
- Cabredo Hofherr, Patricia (2001b) "Inflected complementisers and the licensing of non-referential pro-drop" to appear in *Proceedings of the Texas Conference on Agreement in Natural Language*.
- Cardinaletti, Anna (1990) *Impersonal Constructions and Sentential Arguments in German*. Padua: Unipress.
- Cardinaletti, Anna (1992) "SpecCP in Verb-Second Languages" GenGenP 0, 1-9.
- Cardinaletti, Anna (1994) "I pronomi espletivi e il "Vorfeld" nelle lingue germaniche" in Dolci, Roberto & Giuliana Giusti (eds) Studi di grammatica tedesca e comparativa, Università di Venezia, 31-48.
- Cardinaletti, Anna (2002) "Towards a Cartography of Subject Positions", ms., University of Bologna and University of Venice.
- Cardinaletti, Anna & Ian Roberts (1991) "Clause Structure and X-Second", unpublished ms., Università di Venezia and University of Wales.
- Carnie, Andrew & Heidi Harley (2001/2002), "Existential Impersonals", ms, University of Arizona.
- Chomsky, Noam (1965) Aspects of the Theory of Syntax. Cambridge, Mass.: MIT Press.
- Chomsky, Noam (1981) *Lectures on Government and Binding. The Pisa Lectures*. Dordrecht: Foris. (Studies in Generative Grammar 9).
- Chomsky, Noam (1982) Some Concepts and Consequences of the Theory of Government and Binding. Cambrigde, Mass.: MIT Press.
- Chomsky, Noam (1986) Barriers. Cambridge, Mass.: MIT Press.
- Chomsky, Noam (1993) "A Minimalist Program for Linguistic Theory" in Chomsky, Noam (1995) *The Minimalist Program*. Cambridge, Mass.: MIT Press, ch. 3.
- Chomsky, Noam (1995) The Minimalist Program. Cambridge, Mass.: MIT Press.
- Chomsky, Noam (1998) "Minimalist Inquiries: the Framework", ms. (draft), MIT.
- Chomsky, Noam (1998) "Minimalist Inquiries: the Framework" ms. (long version), MIT.
- Chomsky, Noam (1999) "Derivation by Phase", ms., MIT.

- Chomsky, Noam (2000) "On Nature and Language" edited by Adriana Belletti and Luigi Rizzi, ms.
- Chomsky, Noam (2001), "Beyond Explanatory Adequacy", ms., MIT.
- Cinque, Guglielmo (1999) Adverbs and Functional Heads. Oxford: OUP.
- Collins, Chris (1997) Local Economy. Cambridge, Mass.: MIT Press.
- Collins, Chris & Höskuldur Thráinsson (1996) "VP-Internal Structure and Object Shift in Icelandic" *LI* 27, 391-444.
- den Besten, Hans (1983) "On the Interaction of Root Transformations and Lexical Deletive Rules" in Abraham, Werner (ed.) *On the Formal Syntax of Westgermania*, Amsterdam: John Benjamins, 47-131.
- Diesing, Molly (1992) Indefinites. Cambridge, Mass.: MIT Press.
- Dobrovie-Sorin, Carmen (1998) "Impersonal *se* Constructions in Romance and the Passivization of Unergatives" *LI* 29, 399-437.
- Fischer, Susann & Artemis Alexiadou (2001) "On Stylistic Fronting: Germanic vs. Romance", ms., University of Potsdam.
- Frey, Werner (2000) "Über die syntaktische Position des Satztopiks im Deutschen" ZAS Papers in Linguistics 20, 137-172.
- Frey, Werner & Karin Pittner (1998) "Zur Positionierung der Adverbiale im deutschen Mittelfeld" *Linguistische Berichte* 176, 489-534.
- Grohmann, Kleanthes (2000) "Copy Left Dislocation" in Billerey & Lillehaugen (eds) *WCCFL 19 Proceedings*, Somerville, MA: Cascadilla Press, 139-152.
- Haeberli, Eric (1999a) Features, Categories and the Syntax of A-positions. Synchronic and Diachronic Variation in the Germanic Languages. PhD dissertation, University of Geneva.
- Haeberli, Eric (1999b) "On the word order 'XP-subject' in the Germanic languages" *Journal of Comparative Germanic Linguistics* 3, 1-36.
- Haegeman, Liliane (1997) "Verb second, the split CP and null subjects in early Dutch finite clauses", ms., University of Geneva.
- Haegeman, Liliane (1998) "Verb Movement in Embedded Clauses in West Flemish" *LI* 29, 631-656.
- Haegeman, Liliane (2000) "Remnant Movement and OV Order" in Svenonius, Peter (ed.) *The Derivation of VO and OV*. Amsterdam: John Benjamins, 69-96.
- Haegeman, Liliane (2001) "Antisymmetry and Verb-Final Order in West Flemish" *The Journal of Comparative Germanic Linguistics* 3, 207-232.
- Haider, Hubert (1988) "Null Subjects and Expletives in Romance and Germanic Languages", Working Papers of the Dept. of Linguistics University of Stuttgart (LIST #1), 1-15.
- Haider, Hubert (1990) "Null subjects and expletives in Romance and Germanic languages" in Abraham, Werner, Wim Kosmeijer & Eric Reuland (eds) *Issues in Germanic Syntax*, Berlin: Mouton de Gruyter, 49-66.
- Haider, Hubert (1993) Deutsche Syntax generativ. Tübingen: Narr.
- Haider, Hubert (2000) "OV is More Basic than VO" in Svenonius, Peter (ed.) *The Derivation of VO and OV*. Amsterdam: John Benjamins, 45-67.
- Hale, Kenneth & Samuel Jay Keyser (1993) "On Argument Structure and the Lexical Expression of Syntactic Relations" in Hale, Kenneth & Samuel Jay Keyser (eds) *The View from Building 20. Essays in Linguistics in Honor of Sylvain Bromberger*. Cambridge, Mass: MIT Press, 53-109.
- Hinterhölzl, Roland (2000), "Remnant Movement and Partial Deletion", ms.
- Hoekstra, Teun & René Mulder (1990) "Unergatives as Copular Verbs: Locational and Existential Predication" *The Linguistic Review* 7, 1-79.
- Holmberg, Anders (1999) "Remarks on Holmberg's Generalization" *Studia Linguistica* 53, 1-39.

- Holmberg, Anders (2000a) "Deriving OV Order in Finnish" in Svenonius, Peter (ed.) *The Derivation of VO and OV*. Amsterdam: John Benjamins, 123-152.
- Holmberg, Anders (2000b) "Expletives and Agreement in Scandinavian Passives", ms., University of Tromsø.
- Holmberg, Anders (2000c) "Scandinavian Stylistic Fronting: how any category can become an expletive", ms.
- Holmberg, Anders (2002) "Expletives and Agreement in Scandinavian Passives" *The Journal of Comparative Germanic Linguistics* 4, 85-128.
- Holmberg, Anders (2003) "Null subjects and uninterpretable features: evidence from Finnish", ms. http://www.dur.ac.uk/anders.holmberg/resources
- Holmberg, Anders & Urpo Nikanne (2002) "Expletives, Subjects, and Topics in Finnish" in Svenonius, Peter (ed.) *Subjects, Expletives, and the EPP*. Oxford: OUP, 71-105.
- Holmberg, Anders & Christer Platzack (1995) *The Role of Inflection in Scandinavian Syntax*. Oxford: OUP.
- Hrafnbjargarson, Gunnar Hrafn (2002) "Subject Case and Agreement in the History of English and Scandinavian", paper presented in the guest lecture series of the Graduiertenkolleg, Universität Stuttgart.
- Hróarsdóttir Þorbjörg (2000) "Parameter Change in Icelandic" in Svenonius, Peter (ed.) *The Derivation of VO and OV*. Amsterdam: John Benjamins, 153-179.
- Jayaseelan, K. A. (2001) "IP-iternal Topic and Focus Phrases" Studia Linguistica 55, 39-75.
- Jonas, Dianne (1996) "Clause Structure, Expletives and Verb Movement" in Abraham, Werner *et al.* (eds) *Minimalist Ideas. Syntactic Studies in the Minimalist Framework.* Amsterdam: John Benjamins, 167-188.
- Kayne, Richard S. (1994) *The Antisymmetry of Syntax*. Cambridge, Mass: MIT Press.
- Kayne, Richard S. (1998) "Overt versus Covert Movement", reprinted in Kayne, Richard S. (2000) *Parameters and Universals*. Oxford: OUP, 223-281.
- Kayne, Richard S. (2003a) "Antisymmetry and Japanese", ms., New York University.
- Kayne, Richard S. (2003b) "Some Remarks on Agreement and on Heavy-NP Shift", ms., New York University.
- Kiparsky, Paul (1994) "Indo-European Origins of Germanic Syntax" in Battye, Adrian & Ian Roberts (eds) *Clause Structure and Language Change*, Oxford: OUP, 140-169.
- Kiss, Katalin É. (1996) "Two subject positions in English" *The Linguistic Review* 13, 119-142.
- Koopman, Hilda & Dominique Sportiche (1988) "Subjects", ms., UCLA.
- Koopman, Hilda & Anna Szabolcsi (2000) Verbal Complexes. Cambridge, Mass.: MIT Press.
- Koster, Jan & Jan-Wouter Zwart (2000) "Transitive expletive constructions and the object shift parameter" *Linguistics in the Netherlands* 17, 159-170.
- Kratzer, Angelika (1994) "On external arguments" in *University of Massachussetts occasional papers* 17. Amherst: GLSA, University of Massachusetts, 103-130.
- Kroch, Anthony & Ann Taylor (1997) "Verb movement in Old and Middle English: dialect variation and language contact" in Kemenade, Ans van & Nigel Vincent (eds) *Parameters of morphosyntactic change*, Cambridge: CUP, 297-325.
- Kuroda, Sige-Yuki (1988) "Whether we agree or not: a comparative syntax of English and Japanese" *Linguisticae Investigationes* XII (1), 1-47.
- Larson, Richard K. (1988) "On the Double Object Construction" LI 19, 335-391.
- Lenerz, Jürgen (1985) "Zur Theorie syntaktischen Wandels: das expletive *es* in der Geschichte des Deutschen" in Abraham, Werner (ed) *Erklärende Syntax des Deutschen*. Tübingen: Narr, p. 99-136.
- Levin, Beth & Malka Rappaport Hovav (1995) *Unaccusativity. At the Syntax-Lexical Semantics Interface*. Cambridge, Mass.: MIT Press.
- Longman Dictionary of Contemporary English. (1995³) München: Langenscheidt-Longman.

- Maling, Joan & Sigríður Sigurjónsdottír (2002) "The 'new impersonal' construction in Icelandic" *Journal of Comparative Germanic Linguistics* 5, 97-142.
- Marantz, Alec (1997) "No Escape from Syntax: Don't Try Morphological Analysis in the Privacy of Your Own Lexicon" in Dimitriadis, A., L. Siegel *et al.* (eds) *University of Pennsylvania Working Papers in Linguistics 4.2. Proceedings of the 21st Annual Penn Linguistics Colloquium 1997*, 201-225.
- Marantz, Alec (2003a) "Blocking and Morphology", seminar given at the Universität Stuttgart.
- Marantz, Alec (2003b) "Roots and Argument Structure", paper presented at the workshop on Verb Classes and Alternations, Universität Stuttgart.
- Martin, Roger (1999) "Case, the Extended Projection Principle, and Minimalism" in Epstein, Samuel David & Norbert Hornstein (eds) *Working Minimalism*. Cambridge, Mass.: MIT Press, 1-25.
- McCloskey, James (1996) "On the scope of verb movement in Irish" NLLT 14, 47-104.
- McCloskey, James (1997) "Subjecthood and Subject Positions" in Haegeman, Liliane (ed.) *Elements of Grammar*. Dordrecht: Kluwer, 197-235.
- Mikkelsen, Line Hove (2001) "Reanalyzing the definiteness effect: evidence from Danish", ms.
- Moro, Andrea (2000) Dynamic Antisymmetry. Cambridge, Mass.: MIT Press.
- Müller, Gereon (2001) "Verb Second: A New Approach", ms., IDS Mannheim/paper presented at the Head Movement Workshop, UCLA. http://www.ids-mannheim.de/gra/personal/muellergereon.html
- Müller, Gereon (2202a) "V/2 = vP/1", paper presented at the GGS conference, Universität Frankfurt.
- Müller, Gereon (2002b) "V/2 = vP/1", paper presented at the CGSW 17, University of Iceland.
- Nelson, Diane (2001) "On the status of the implicit argument in impersonal passives", paper presented at the LAGB Autumn Meeting 2001, University of Reading.
- Nilsen, Øystein (2000) "V2 and Holmberg's Generalization", ms., Utrecht Institute of Linguistics OTS.
- Nilsen, Øystein (2003) *Eliminating positions. Syntax and semantics of sentence modification.* Utrecht: LOT (LOT Dissertation Series 73).
- Pearson, Matthew (2000) "Two Types of VO Languages" in Svenonius, Peter (ed.) *The Derivation of VO and OV*. Amsterdam: John Benjamins, 327-363.
- Pesetsky, David (1995) Zero Syntax. Experiencers and Cascades. Cambridge, Mass: MIT Press.
- Pesetsky, David & Esther Torrego (2000) "T-to-C Movement: Causes and Consequences", ms., MIT & University of Massachusetts/Boston. [to appear in Kenstowicz, Michael (ed.) (2000) *Ken Hale: a Life in Language*. MIT Press.]
- Platzack, Christer (1995) "The Loss of Verb Second in English and French" in Battye, Adrian & Ian Roberts (eds) *Clause Structure and Language Change*. Oxford: OUP, 200-226.
- Platzack, Christer (1999) "The Subject of Icelandic Psych-Verbs: a Minimalistic Account" Working Papers in Scandinavian Syntax 64, 103-115.
- Pollock, Jean-Yves (1989) "Verb Movement, Universal Grammar, and the Structure of IP" *LI* 20, 365-424.
- Ramge, Birgitta (2002) *Praktische Grammatik der schwedischen Sprache*. Wilhelmsfeld: Gottfried Egert Verlag.
- Rizzi, Luigi (1986) "Null Objects in Italian and the Theory of pro" LI 17, 501-557.
- Rizzi, Luigi (1990) Relativized Minimality. Cambridge, Mass.: MIT Press.
- Rizzi, Luigi (1997a) "Residual Verb Second and the *Wh*-Criterion" in Belletti, Adriana & Luigi Rizzi (eds) *Parameters and Functional Heads*. Oxford: OUP, 63-90.

- Rizzi, Luigi (1997b) "The Fine Structure of the Left Periphery" in Haegeman, Liliane (ed.) *Elements of Grammar*. Dordrecht: Kluwer, 281-337.
- Rizzi, Luigi (1998) "Relativized Minimality Effects", ms. (draft).
- Rizzi, Luigi (2001) "Relativized Minimality Effects" in Baltin, Mark & Chris Collins (eds) *The Handbook of Contemporary Sytactic Theory*. Oxford: Blackwell, 89-110.
- Rizzi, Luigi (2002) "Locality and the Left Periphery", ms., University of Siena.
- Roberts, Ian (1987) *The Representation of Implicit and Dethematized Subjects*. Dordrecht: Foris Publications.
- Roberts, Ian (1996) "Remarks on the Old English C-System and the Diachrony of V2" Linguistische Berichte, Sonderheft 7: Language Change and Generative Grammar, edited by Ellen Brandner & Gisella Ferraresi, 154-167.
- Roberts, Ian (1997) Comparative Syntax. London: Edward Arnold.
- Roberts, Ian (1998) "Have/Be Raising, Move F, and Procrastinate" LI 29, 113-125.
- Roberts, Ian (1999) "Head Movement", ms., Universität Stuttgart.
- Roberts, Ian (2000a) "Head Movement", lecture notes of graduate seminar, Universität Stuttgart.
- Roberts, Ian (2000b) *Principles and Parameters in a VSO Language. A Case Study in Welsh.*Ms., University of Stuttgart.
- Roberts, Ian (2000/2001) "Introduction to Syntax (Graduiertenkolleg)", lecture notes, Universität Stuttgart.
- Roberts, Ian (2001) "Head Movement" in Baltin, Mark & Chris Collins (eds) *The Handbook of Contemporary Sytactic Theory*. Oxford: Blackwell, 113-147.
- Roberts, Ian (2003) "Bare Head Movement", handout, University of Cambridge.
- Roberts, Ian & Anna Roussou (1998) "The Extended Projection Principle as a Condition on the Tense-Dependency" (2nd version), ms., Universität Stuttgart and University of Wales, Bangor.
- Roberts, Ian & Anna Roussou (2002) "The Extended Projection Principle as a Condition on the Tense Dependency" in Svenonius, Peter (ed.) *Subjects, Expletives, and the EPP*. Oxford: OUP, 125-155.
- Safir, Kenneth J. (1987) "What Explains the Definiteness Effect?" in Reuland, Eric J. & Alice G. B. ter Meulen (eds) *The Representation of (In)definiteness*. Cambridge, Mass.: MIT Press, 71-97.
- Schütze, Carson T. (1999) "English Expletive Constructions Are Not Infected" *LI* 30, 467-484.
- Schwartz, Bonnie D. & Sten Vikner (1996) "The Verb Always Leaves IP in V2 Clauses" in Belletti, Adriana & Luigi Rizzi (eds) *Parameters and Functional Heads*. Oxford: OUP, 11-62.
- Shlonsky, Ur (1989) "The Hierarchical Representation of Subject Verb Agreement", ms., University of Haifa.
- Sigurðsson, Halldór Ármann (1989) Verbal Syntax and Case in Icelandic. PhD dissertation, University of Lund.
- Sigurðsson, Halldór Ármann (2000) "The Locus of Case and Agreement" ms., University of Iceland/University of Lund.
- Sportiche, Dominique (1988) "A theory of of floating quatifiers and its corollaries for constituent structure", *LI* 19, 425-449.
- Stowell, Tim & Filippo Beghelli (1994) "The direction of quantifier movement", paper presented at the GLOW colloquium, Universität Wien.
- Svenonius, Peter (2000) "Impersonal Passives: A Phase-based Analysis", ms. http://www.hum.uit.no/a/svenonius
- Svenonius, Peter (2002) "Subject Positions and the Placement of Adverbials" in Svenonius, Peter (ed.) *Subjects, Expletives, and the EPP*. Oxford: OUP, 201-242.

- Taraldsen, Knut Tarald (1995) "On Agreement and Nominative Objects in Icelandic" in Haider, Hubert, Susan Olsen & Sten Vikner (eds) *Studies in Comparative Germanic Syntax*. Dordrecht: Kluwer, 307-327.
- Taraldsen, Knut Tarald (2000) "V-movement and VP-movement in Derivations Leading to VO-order" in Svenonius, Peter (ed.) *The Derivation of VO and OV*. Amsterdam: John Benjamins, 97-122.
- Thráinsson, Höskuldur (1996) "On the (Non-)Universality of Functional Categories" in Abraham, Werner *et al.* (eds) *Minimal Ideas. Syntactic Studies in the Minimalist Framework*. Amsterdam: John Benjamins, 253-281.
- Thráinsson, Höskuldur (2001) "Object Shift and Scrambling" in Baltin, Mark & Chris Collins (eds) *The Handbook of Contemporary Syntactic Theory*. Oxford, Blackwell, 148-202.
- Tomaselli, Alessandra (1990) *La sintassi del verbo finito nelle lingue germaniche*. Padua: Unipress.
- Travis, Lisa (1984) *Parameters and Effects of Word Order Variation*. PhD dissertation, Cambridge, Mass.: MIT.
- Uriagereka, Juan (1999) "Clarification [of Chomsky's 'Minimalist Inquiries: the Framework']", ms., University of Maryland.
- Uriagereka, Juan (1999) "Comment on Chomsky's 'Derivation by Phase", ms., University of Maryland.
- Vangsnes, Øystein Alexander (2002) "Icelandic Expletive Constructions and the Distribution of Subject Types" in Svenonius, Peter (ed.) *Subjects, Expletives, and the EPP*. Oxford: OUP, 43-70.
- Vikner, Sten (1995) *Verb Movement and Expletive Subjects in the Germanic Languages*. Oxford: OUP.
- Vikner, Sten (1999/2000) "Object Shift", lecture notes, Universität Stuttgart.
- Zaenen, Annie, Joan Maling & Höskuldur Thráinsson (1985) "Case and Grammatical Functions: The Icelandic Passive" *NLLT* 3, 441-483.
- Zwart, Jan-Wouter (1997a) *Morphosyntax of Verb Movement. A Minimalist Approach to the Syntax of Dutch.* Dordrecht: Kluwer.
- Zwart, Jan-Wouter (1997b) "The Germanic SOV languages and the Universal Base Hypothesis" in Haegeman, Liliane (ed.) *The New Comparative Syntax*. London: Longman, 246-267.

199

Hiermit erkläre ich, daß ich die vorliegende Arbeit unter fachlicher Betreuung selbständig und

nur mit den angegebenen Hilfsmitteln angefertigt habe.

Alle Textstellen, die in Wortlaut oder dem Sinn nach anderen Werken entnommen sind, habe

ich durch Angabe von Quellen als Zitate kenntlich gemacht.

Stuttgart, den 14. Januar 2004

(Sabine Mohr)