# Germanic syntax

Stefan Müller



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ISSN: 2366-3529

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Stefan Müller. 2019. *Germanic syntax* (Empirically Oriented Theoretical Morphology and Syntax ??). Berlin: Language Science Press.

This title can be downloaded at:
http://langsci-press.org/catalog/book/000

ISBN: Digital, complete work: 000-0-000000-00-0;
Hardcover: vol. 1: 000-0-000000-00-0; vol. 2 000-0-000000-00-0
Softcover: vol. 1: 000-0-000000-00-0; vol. 2 000-0-000000-00-0
ISSN: 2366-3529
no DOI
Source code available from www.github.com/langsci/000
Collaborative reading: paperhive.org/documents/remote?type=langsci&id=000

Cover and concept of design: Ulrike Harbort
Typesetting: Stefan Müller
Fonts: Linux Libertine, Arimo, DejaVu Sans Mono
Typesetting software: XeLaTeX

Language Science Press
Unter den Linden 6
10099 Berlin, Germany
langsci-press.org

Storage and cataloguing done by FU Berlin

For ???

# Preface

This book has two purposes: firstly the comparative analysis of the syntactic properties of the Germanic languages and secondly the introduction of a specific format for the description and comparison of languages. The framework in which the analyses are couched is called *HPSG light*. It is based on HPSG (Pollard & Sag 1987; 1994) in the specific version that is described in detail in Müller (2013). However HPSG light does not contain any complicated attribute value matrices (AVMs). If AVMs are used at all, they are reduced to the minimum containing a reduced set of features like ARG-ST for argument structure, COMPS for complements and SPR for specifier. All other aspects of the analyses are represented in syntactic trees, which are easier to read. The idea behind the introduction of HPSG light is to provide some tool for linguists who want to provide a more detailed description of a phenomenon without necessarily being forced to deal with all the technicalities. The degree of formalization corresponds to what is common in Government and Binding Theory, Minimalism, and the less formal variants of Construction Grammar. As for the one formal version of Construction Grammar that is a variant of HPSG, namely Sign-Based Construction Grammar (SBCG, Sag 2012), HPSG light can be regarded as a light version of SBCG as well, since the differences are neglected in the abbreviated representations and trees that are used in this book. The work presented here differs from non-formal work in GB/Minimalism and Construction Grammar in an important way: it is backed up by implemented grammars that use the full version of HPSG including a semantic analysis in the framework of Minimal Recursion Semantics (MRS, Copestake, Flickinger, Pollard & Sag (2005)). The detailed analyses are described in conference proceedings, journal articles and books and the reader is invited to consult these resources in case she or he is interested in the details. The implemented grammars are distributed with the Grammix virtual machine and can be downloaded from the author's web-page. The appendix of this book contains a list of sentences that were discussed in the respective chapters of this book and which are covered by the grammars of the respective languages. Readers are invited to enter the sentences into the TRALE system that comes with Grammix and inspect the complete AVMs.

## Acknowledgements

I want to thank all students of my course on the structure of Germanic languages. This book benefited enourmously from teir questions and the discussion during the lectures. Carolin Ulmer deserves special mention for important comments. I thank Anne Kilgus for pointing out typos.

## On the way this book is published

Teachers at schools and universities are payed by the state, that is by the public (you). Among their duties is the creation of teaching material. There is no reason whatsoever to leave the teaching material to profit oriented publishers. On the contrary, teaching material should be open and adaptable to the needs of the teachers who want to use it.

A study by the American Enterprise Institute shows that the price of college books rose by 812 % from 1978 to 2012 while the general consumer prices rose a mere 250 %.[1] Similar figures exist for scientific books in general and for university text books. My favorite example is a thin text book on logic *Logik für Linguisten*, which is a translation of the English text book *Logic for Linguists* (Allwood et al. 1973). This book has 112 pages. It was sold for 9,40e as a paperback by the Max Niemeyer Verlag. This publisher was bought by De Gruyter and the book is now sold for $126.00/89,95€ as an eBook and $133,00/94,95€ for the hardcover book[2] (see Müller 2012 for other examples and a general discussion). Both the eBook and the printed book are unaffordable for students. The way out of this highly problematic situation is to publish books open access. The PDF version of this book is free for everybody and the printed copy is available for a reasonable price since the book is licenced under a Creative Commons license and hence is not owned by a profit-oriented publisher and everybody can choose his or her own print on demand service in case the default service provided by Language Science Press is more expensive.

Berlin, 26th January 2019 Stefan Müller

[1] http://www.aei-ideas.org/2012/12/the-college-textbook-bubble-and-how-the-open-educational-resources-movement-is-going-up-against-the-textbook-cartel/. 10.09.2014.

[2] http://www.degruyter.com/isbn/978-3-11-096350-2. 1.09.2014.

# Contents

# 1 A general overview of the Germanic languages

This chapter provides an overview of general facts about the Germanic languages. It derives from slides for teaching courses about Germanic languages that were used by Ekkehard König and passed on to Matthias Hüning and via Matthias to me, which explains the similarity to the introductionary chapter by Henriksen & van der Auwera (1994) in the book *The Germanic Languages* edited by König & van der Auwera (1994).

## 1.1 Languages and speakers

Depending on whom one asks there are app. 5000 to 6000 languages spoken worldwide currently. The Germanic languages are a small subset (depending on the counting 15 languages). The problem is the distinction between language and language variety (e.g., varieties of Frisian). According to Max Weinreich a language is a dialect with an army and a navy. According to this "definition", Swiss German would not be a language. That the Swiss army has a bicycle group instead of a navy does not help. This brief discussion should indicate that it is often a political question whether two variants of a language are treated as different languages or not (Slovak vs. Czech and Serbian vs. Croatian). Altogether there are almost 500 million native speakers, which is 1/12 of the whole population of the world. Especially English is wide spread in terms of regions in which the language is spoken.

## 1.2 Historical remarks and relatedness between the languages

The Germanic languages constitute a separate branch of the tree representing the indo-european language family (see Figure 1.1 on the following page). Proto-Germanic formed between 2000 and 1000 BC. Its origins are in the Baltic region,

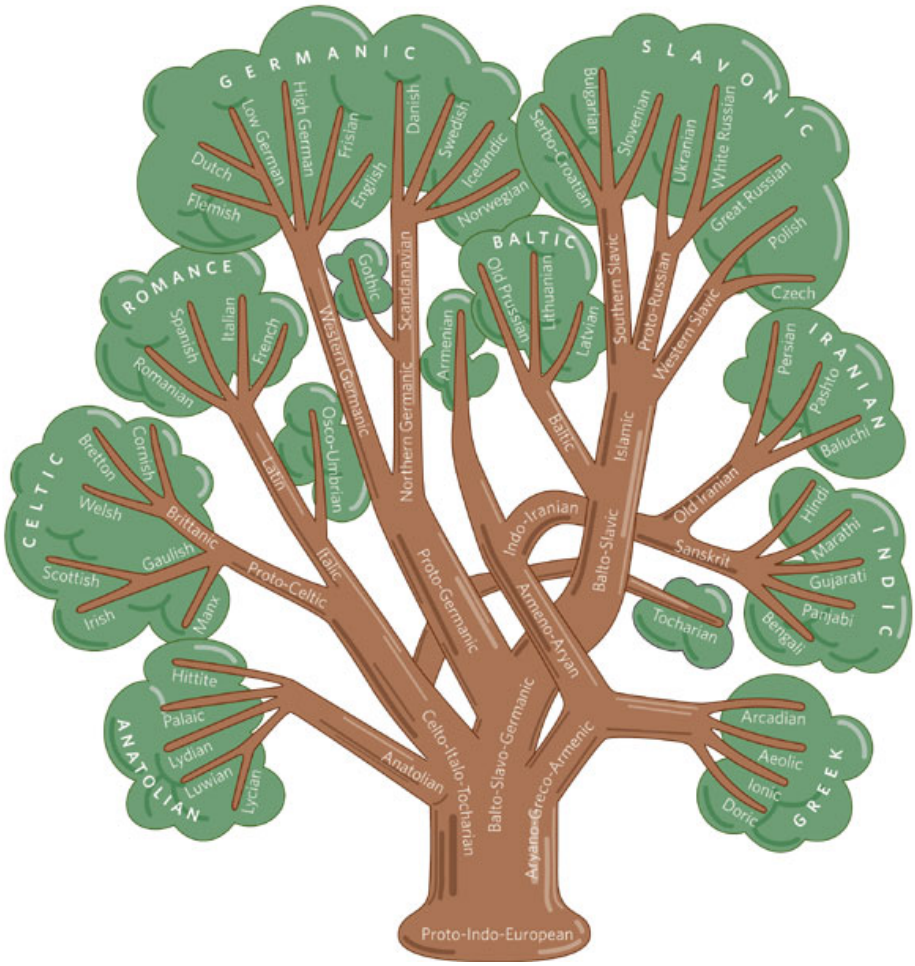



Figure 1.1: Language tree according to Fitch (2007: p. 665)

that is, in northern Germany and south Scandinavia. The area where it was spoken extended from the North Sea to Poland (app. 500 BC).

First Germanic Sound Shift took place app. until the second century BC. In that millenium the Germanic languages developed different consonants from the other indo-european languages. The first written documents are runes from app. 300 AC and the Gothic Bibel translation in the fourth century.

Wikipedia[1] provides the table in Figure 1.2 on the next page that depicts the development of the Germanic languages. Germanic is devided into East, West, and North Germanic. East Germanic existed in the form of Gothic until app. 1800 on the Crim, as Crimean Gothic and is now totally extinct. West Germanic consists of

- German,
- Yiddish,
- Luxembourgish,
- Pennsylvania Dutch,
- Low German,
- Plautdietsch (also called Mennonite Low German),
- Dutch,
- Afrikaans,
- Frisian, and
- English.

The North Germanic languages are:

- Danish,
- Swedish
- Norwegian
- Icelandic, and
- Faroese.

Table 1.1 on page 5 shows how similar the words from the main vocabulary of the Germanic languages are:

[1] https://en.wikipedia.org/wiki/Germanic_languages. 19.10.2014

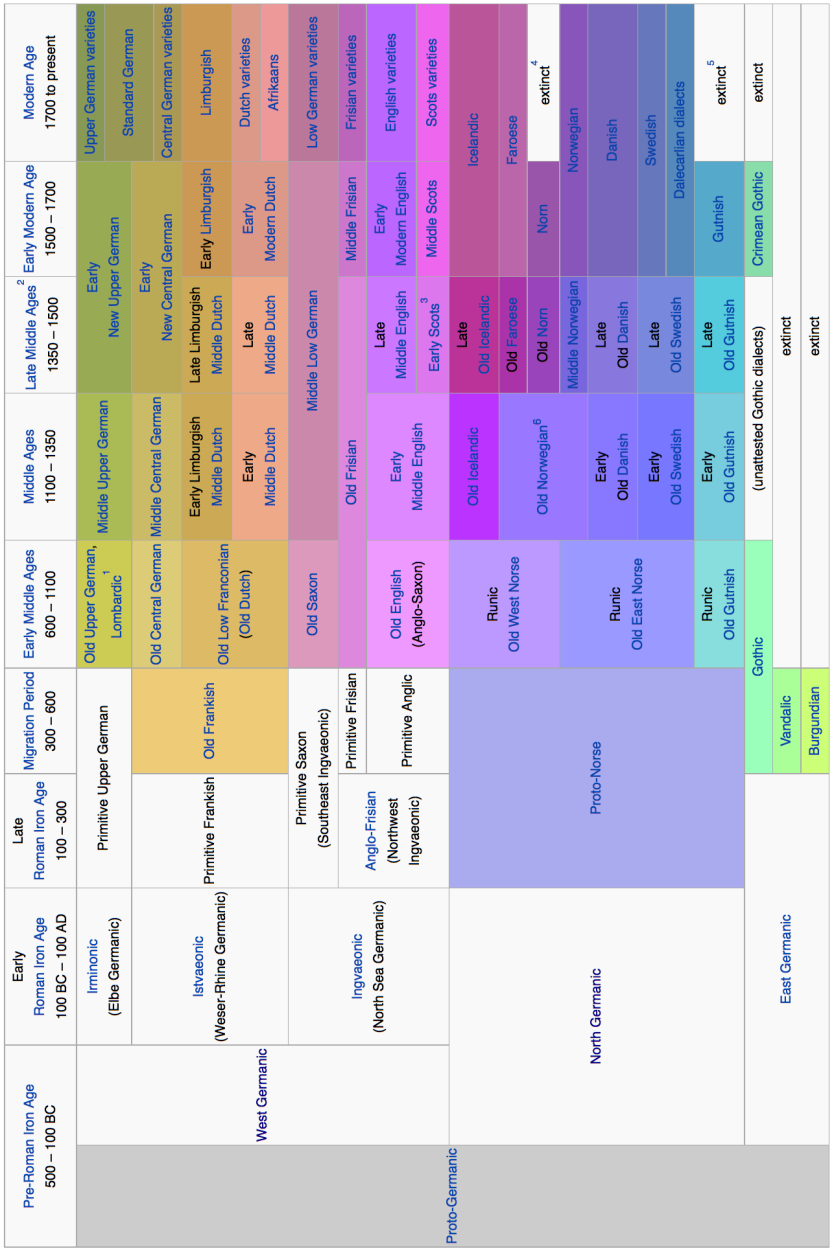



Figure 1.2: History and grouping of Germanic languages according to Wikipedia

Table 1.1: Words from the main vocabulary of some Germanic languages

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Dutch | vader | vier | vol | huis | bruin | uit | kruid | muis |
| German | Vater | vier | voll | Haus | braun | aus | Kraut | Maus |
| English | father | four | full | house | brown | out | crowd (?) | mouse |
| Frisian | – | fjouwer | fol | hûs | brún | út | krûd | mûs |
| Swedish | fader | fyra | full | hus | brun | ut | krut | mus |
| Danish | fader | fire | fuld | hus | brun | ud | krudt | mus |
| Norwegian | far | fire | full | hus | brun | ut | krydder | mus |
| Iclandic | faðir | fjórir | fullur | hús | brúnn | út | – | mús |

## 1.3 The three Germanic branches

Proto-Germanic developed into the three main branches East, West, and North Germanic, approximately in the first centuary AD. The reasons for this development were inherent variations in the respective dialects, migration (language contact) and standardization. This book treats the structure of the Germanic standard languages. This section is devided into three subsections that correspond to the three main Germanic branches. I will sketch over the historic developments that lead to the languages spoken today. Many of the details that are covered in Figure 1.2 will be ignored.

### 1.3.1 East Germanic

The Goths emigrated from the Danish islands and South Sweden approximately 100 BC and meet the Vandals and other tribes. Gothic and Burgundian and some smaller languages constitute the East Germanic branch, of which only Gothic got passed on. After the decay of the Gothic empires Gothic died out. There were some remains on the peninsula Crimea until app. 1800. The west gothic bishop Wulfila translated the Bible into Gothic. The best-known version of it is the fragment Codex Argenteus, which belongs to the university library of Uppsala. Figure 1.3 on the next page shows a picture of it.[2]

### 1.3.2 North Germanic

The first writings on runestones date back to the 6th century. The language of the Wikings (800–1050) was rather homogenous and it was only after this era that

[2] Taken from Wikipedia: http://de.wikipedia.org/wiki/Bild:Wulfila_bibel.jpg. 19.10.2014.

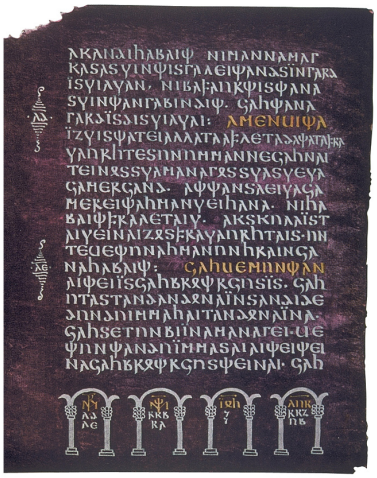


Figure 1.3: The Wulfila Bible (Codex Argenteus), picture from Wikipedia

two branches were starting to develop: the east-scandinavian branch with Old-Danish and Old-Swedish and the West-Scandinavian one with Old-Norwegian and Old-Icelandic.

#### 1.3.2.1 Danish

Danish (dansk) is the official language of the Kingdom of Denmark, second official language of the Faroe Islands and of Greenland, Inuit being the first official language of Greenland. Danish has app. 5,5 million speakers. About 50,000 speakers live in Schleswig-Holstein, the northernmost of the federal states of Germany. Danish is the Scandinavian language that drifted furthest away from the common scandinavic roots.

#### 1.3.2.2 Swedish

Swedisch (svenska) is the official language in Sweden with app. 8,5 million native speakers. It is the first language of app. 300,000 Swedish-speaking Finns in Finnland. Until the times of the Wikings Danish and Swedish were almost indistinguishable. Starting from app. 800 they started to diverge. Since app. 1300 there are obvious differences.

#### 1.3.2.3 Iclandic

Icelandic (íslenska) is the west-scandinavian language of Iceland since the settlement over 1000 years ago. There are app. 325,000 native speakers. 97 % of the Icelandic population (325,000) has Icelandic as their mother tongue and there are larger groups of native speakers in Denmark, the USA, and Canada (app. 15,000 in total). There is almost no variation (no dialects). The language is conservative, in the sense that Icelandic is the language among the Germanic languages that best preserved the Germanic vocabulary and inflection. In the beginning there were almost no differences between Norwegian and Icelandic but then the langauges diverged.

#### 1.3.2.4 Norwegian

There are two varieties of Norwegian (norsk): Danish-Norwegian (bokmål) and New-Norwegian (nynorsk). Both are official languages of Norway and are used in parallel. There are app. 4,3 million speakers. From 1380 to 1814 Danish was the written language and local dialects were spoken. Hence, a Norwegian standard had to be developed. This was done by Ivar Aasen (1813–1896), who developed Nynorsk. Nynorsk got an official status in 1885. Bokmål 'book tongue' is the first language of most of the Norwegians.

#### 1.3.2.5 Faroese

Faroese (føroyskt) is – together with Danish – the official language of the Faroe Islands. There are app. 47,000 speakers. The Faroe Islands belong to Denmark since 1816. Since 1948 they are a self-governing country within the Danish Realm. Faroese has a strong Danish influence. The first manuscript transmission is as recent as 1773 and even then there are not many written documents (in contrast to Icelandic).

### 1.3.3 West Germanic

Opinions on the question whether West-Germanic did develop from a single source or not differ. Some authors assume that the West Germanic languages do not have a common root, but instead developed from the following three unrelated branches of dialect groups (for instance Robinson 1992: 17–18 and Henriksen & van der Auwera 1994: 9):

references

- North Sea Germanic

- Weser-Rhine Germanic
- Elbe Germanic

Other authors assume that these three branches had a common ancestor (see Figure 1.2).

There is no unique mapping of these dialect groups to the languages spoken today.

#### 1.3.3.1 German

German is the official language of

- Germany (app. 80 million speakers),
- Austria (app. 7,5 million speakers),
- Liechtenstein (app. 15,000 speakers),
- Switzerland (4,2 million of 6,4 million Swiss residents),
- Northern Italy/South Tyrol (app. 270,000 speakers),
- Belgium (app. 65,000 speakers), and
- Luxembourg (app. 360,000 speakers).

Luxembourg has next to German also the original language Luxembourgish and French as official languages.

There are app. 97 million speakers of German, app. 90 of those are native speakers and 7 million have German as their second language. Approximately 80 million speakers speak German as a foreign language, app. 55 Milion of these live in the European Union.

There are three national main variants (Germany, Austria, Switzerland). In other countries German is usually a minority language. There are two larger dialect groups: Low German (Plattdüütsch, Nedderdüütsch; Standard German: Plattdeutsch or Niederdeutsch; Dutch: Nedersaksisch in the wider sense) and High German (varieties of German spoken south of the Benrath and Uerdingen isoglosses).

more

#### 1.3.3.2 Yiddish

Yiddish is one of many Jewish languages. App. 2 million people speak this languages in various regions of the world, most of them in the USA (1,25 Mill.). The number of Yiddish speakers was much higher 100 years ago: 7 million speakers of Yiddish lived in Europe, most of them in Russia and in Austria-Hungary. At most 75,000 Yiddish speakers are left in Western Europe. Yiddish has its roots in medieval German with influences from Hebrew and Aramaic.

#### 1.3.3.3 Pennsylvania German

Pennsylvania German (Pensilfaanish, Deitsch), which is also known as Pennsylvanian Dutch has app. 300,000 native speakers, who mainly live in the USA. The most important regions are Pennsylvania, Ohio, and Indiana. Pennsylvania German is the result of immigration in the 17th and 18th century. Members of various protestant religions (Mennonites, Pietists and so on) left Europe for reasons having to do with their religions but later immigrants that came for economic reasons followed. The language is based on Palatine dialects and is nowadays mainly spoken by Amish and Mennonites.

#### 1.3.3.4 Dutch

Dutch (Nederlands) is the official language of the Netherlands and has app. 15 million speakers there. Dutch is one of the official languages of Belgium (app. 6 million speakers; almost 4 million Walloones). Dutch is the sole official language and teaching language in Suriname, which is independent since 1975, and in Aruba and the Netherlands Antilles.

#### 1.3.3.5 Afrikaans

Afrikaans is one of the official languages of South Africa, which has eleven official languages. There are app. 6,4 million native speakers in South Africa, which is about 15 % of the population and 150,000 in Namibia. Afrikaans developed since the 17th century from Dutch dialects and is seen as an independent language since the beginning of the 19th century. The various languages spoken in the area interacted with Afrikaans and its origins and resulted in a structural simplification in comparison to Dutch. Today English has a strong influence.

#### 1.3.3.6 Frisian

The three varieties of Frisian are mutually not intelligible. There is North Frisian spoken by app. 10,000 speakers mainly on the north Frisian islands Amrum, Sylt, and Helgoland. East Frisian is extinct with the exception of Saterlandic, which is spoken in the three villages of Saterland (Landkreis Cloppenburg ) by between 1,000 and 2,500 people. West Frisian is spoken in the northern Dutch province Fryslân (Friesland) and has app. 350,000 native speakers.

#### 1.3.3.7 English

English has app. 570 million speakers at the end of the 20th century all over the world (337 million native speakers, 235 million speakers with English as the second language). The following list provides the countries with the most native speakers:

- USA: 227 million,
- Great Britain: 57 million,
- Nigeria: 43 million,
- Canada: 24 million,
- Australia: 17 million,
- Ireland: 3,5 million,
- New Zealand: 3,2 million.

There are many national variants, which differ mostly in pronunciation. Between 1 and 1,5 billion people have active or passive knowledge of English. English is official language in 59 states. It is the most important scientific language.

# 2 Phenomena

This chapter deals with variation in the Germanic languages in what is often called the Core Grammar, that is in sentences of the *John loves Mary* variety.[1] We will look at differences in the verb position (verb before object and object before verb), the verb second property, which all of the Germanic languages with the exception of English have, the ordering of subjects and obejcts with respect to each other, the placement of adverbials, the existence/non-existence of verbal complexes, the obligatoriness/absence of subjects, passive including the personal and impersonal passive, expletive pronouns and various ways to mark the clause type.

A note of caution is necessary here: especially the following three subsections are potentially confusing. A language like German will be categorized as an Subject-Object-Verb language, a verb-second language and a language with free constituent order (Haftka 1996). This sounds contradictory but it is not. The respective classifications refer to properties of languages as such not to the form of single sentences.

## 2.1 Order of subject, object and verb

The langauges of the world can be classified according to the order of subject, object, and verb that is dominant (Greenberg 1963). In order to make languages comparable a very general definition of grammatical functions like subject and object is used for such a classification. The definition is based on semantic properties: subjects are those arguments that are agentlike and objects are arguments that are rather patient like. This definition is not always identical to the language-particular definitions. For instance, if one follows the semantic definition, the

[1] Chomsky (1981: 7–8) suggests dividing grammars of natural languages into a core part and a periphery. All regular parts belong to the core. The core grammar of a language is assumed to be an instance of Universal Grammar (UG), the genetically determined innate language faculty of human beings. Idioms and other irregular parts of a language belong to the periphery. This book deals with phenomena usually assumed to be the core without assuming this core/periphery distinction and without assuming an UG (Müller 2014; 2015).

phrase *der Aufsatz* 'the paper' in (1) is the subject although it is inanimate and not an agent:

(1) Der Aufsatz interessiert mich.
the paper interests me
'I am interested in the paper.'

The language-particular definition of subject in German (and the Germanic languages in general) rather refers to properties like nominative case, subject-verb-agreement, and control. We will deal with this in more detail in Section 6.1.1.

Figure 2.1 shows the dominant order of subject, object, and verb among the world's languages. According to Dryer (2013) the dominant order is defined as

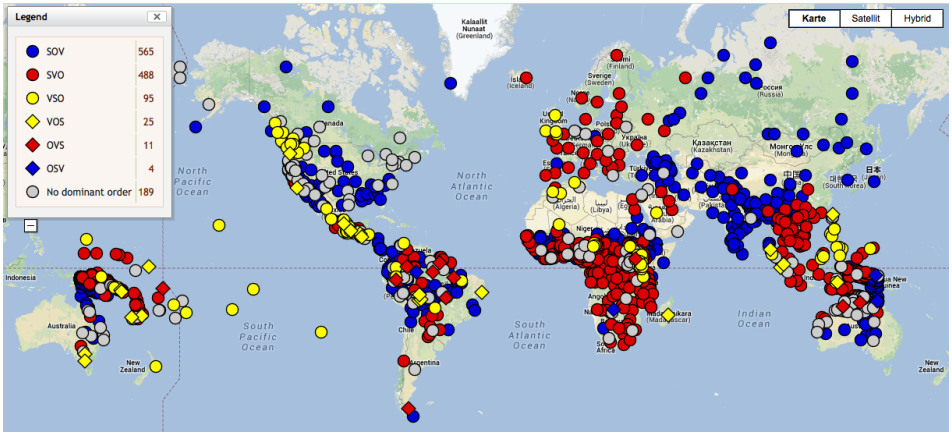



Figure 2.1: Matthew S. Dryer: Feature 81A: Order of subject, object and verb, The World Atlas of Language Structures

follows:

> Where a language is shown on one of the word order maps as having a particular order as the dominant order in the language, this means that it is either the only order possible or the order that is more frequently used. (Dryer 2013)

If we zoom in to display the European languages we get Figure 2.2 on the next page. According to the WALS the languages Iclandic, Norwegian, Swedish, Danish, and English are SVO languages. Dutch, German, and Frisian, however, are

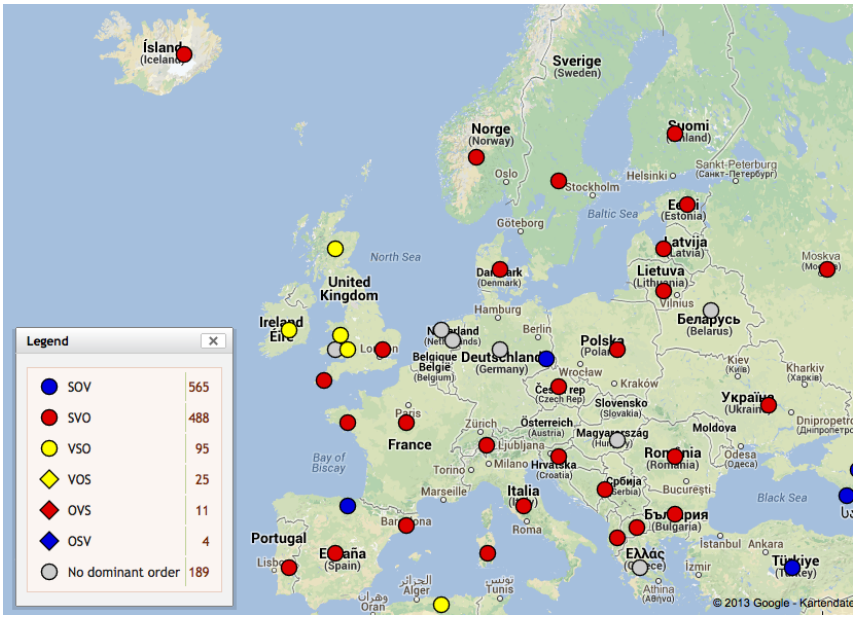



Figure 2.2: Dominant orders of subject, object, and verb in Europe

marked in grey, that is, these languages are marked to have no dominant order.[2] According to Figure 2.3 on the following page these languages have two dominant orders, namely SOV and SVO. The reason for this classification is that Dryer distinguishes between sentences in which the finite verb is the main verb (2a) and sentences in which the finite verb is an auxiliary as in (2b):

(2) a. Kim sieht den Mann.
Kim gees the man
'Kim sees the man.'

b. Kim hat den Mann gesehen.
Kim has the man seen
'Kim has seen the man.'

According to Dryer the pattern for (2a) is SVO and the one for (2b) is SAuxOV, where Aux stands for the auxiliary verb. Like Greenberg (1963), Dryer counts the latter pattern as SOV order. The question is whether it is adequate to ignore auxiliaries in the examination of constituent order. The auxiliary *hat* 'have' in (2b) syntactically behaves like the full verb *scheint* 'seems' in (3):

[2] Greenberg (1963: 87) listed German and Dutch among the SVO languages.

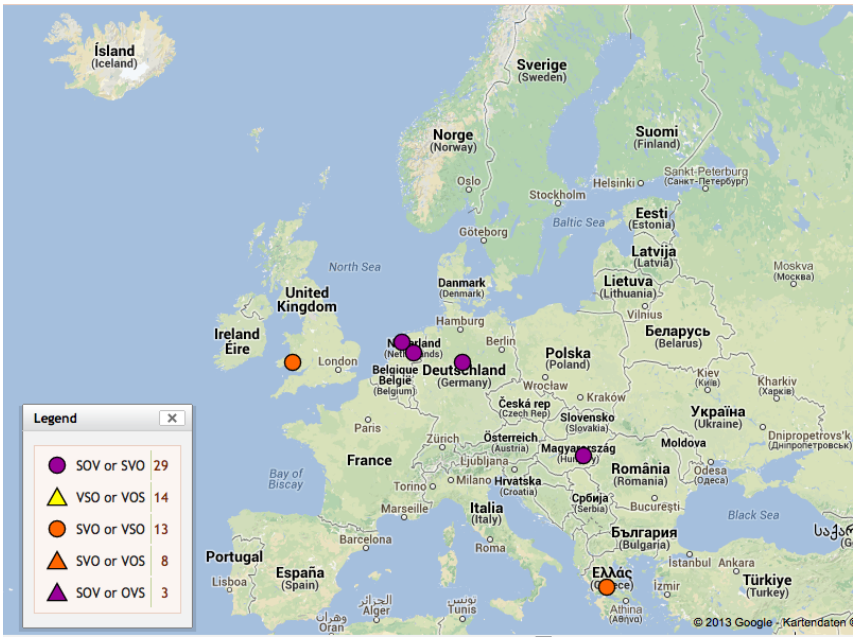



Figure 2.3: Two dominant orders of subject, object, and verb

(3) Kim scheint den Mann zu sehen.
Kim seems the man to see
'Kim seems to see the man.'

So, here we would have an SVOV order, something that does not exist in the typology under discussion. The languages in Figure 2.3 marked as not having a dominant order use the verb position to mark the clause type: it is just the finite verb that is in first or second position. Non-finite verbs are final:

(4) Kim scheint den Mann gesehen zu haben.
Kim seems the man seen to have
'Kim seems to have seen the man.'

In subordinate clauses we have both the finite verb and the non-finite verbs in final position while we have the finite verb in initial position[3] in questions and

[3] I use the term initial position to refer to the position the finite verb has in V1 or V2 clauses. The analysis of V2 and V1 involves fronting of the finite verb. In V2 clauses a constituent is fronted in addition.

declarative main clauses. A classification that is entirely based on counting patterns without taking auxiliary verbs into account cannot tear these properties apart (Höhle 1983). In what follows we will have a look at clauses with both finite and non-finite verbs. Such clauses reveal differences between OV and VO languages and I will argue that Afrikaans, Dutch, German, and Frisian should be counted among the OV languages and that the other observable pattern SVO is due to other properties of these languages, namely that they mark the clause type by verb position and that they are verb second (V2) languages.[4]

When one builds more complex German sentences involving several verbs, the embedding verb is usually realized to the right of the embedded verbs. This is shown in (5). (5a) shows a simple sentence with a finite verb. If we form the perfect as in (5b), the perfect auxiliary has to follow the participle. The auxiliary is the finite verb and it determines the form of the participle. Hence the finite verb is the verb that embeds the participle. This is indicated by the lower number of *hat* in comparison to *gesehen*. If we build an even more complex sentence by adding another verb, this verb will be serialized to the right of the present verbs (5c). The Danish example in (6c), quoted from Ørsnes (2009), corresponds to the German example in (5c).

(5) a. dass er ihn sieht$_1$ (German)
that he him sees
'that he sees him'

b. dass er ihn gesehen$_2$ hat$_1$
that he him seen has
'that he has seen him'

c. dass er ihn gesehen$_3$ haben$_2$ muss$_1$
that he him seen have must
'that he must have seen him'

(6) a. at han ser$_1$ ham (Danish)
that he sees him

b. at han have$_1$ set$_2$ ham
that he has seen him

c. at han må$_1$ have$_2$ set$_3$ ham
that he must have seen him

[4] The property of being a V2 language is independent of the SVO/SOV distinction. All Germanic languages except English are V2 languages. See Section 2.2 on V2.

As the examples in (6) show, the verbs are added in front of the verbs they embed in Danish. This is also the case for English as is evident from the glosses. In Danish and English the verbs precede the object (*ham*/*him*) and in German they follow it (*ihn*).

Haider (2017) pointed out two further differences between the Germanic VO and OV languages: particles precede verbs in OV languages and the same is true for resultative secondary predicates. In VO languages particles and result predicates follow the verb. This is demonstrated by the following two example sets:

(7) a. Peter will look up the information.
b. Peter wird die Information nachschlagen. (German)
Peter will the information PART.beat
'Peter will look up the information.'

(8) a. Peter will fish the pond empty.
b. Peter wird den Teich leer fischen. (German)
Peter will the pond empty fish

(7a) shows that *look* precedes the particle *up*, while the verb *schlagen* 'beat' has to follow the particle *nach* in German. Similarly, the secondary resultative predicate *empty* follows the verb in (8a), but *leer* precedes the verb in (8b). Note that I used a future auxiliary in the examples in order to avoid side effects that are due to the verb second property of German: in declarative main clauses the finite verb always precedes particles and resultative predicates but this is due to the clause type (see Section 2.2).

I will return to the SVO vs. SOV order in Chapter 5 and provide more evidence that was used in the literature to argue for the OV status of languages like German and Dutch.

## 2.2 V2

The Germanic languages, with the exception of English, are so-called *verb second languages* (V2 languages). The V2 property can be illustrated with the following German sentences. (9) shows declarative main clauses in which one of the constituents is fronted. (10) shows parallel interrogative clauses.

(9) a. Der Mann gibt der Frau morgen das Buch. (German)
the man gives the woman tomorrow the book
'The man give the woman the book tomorrow.'

b. Der Frau gibt der Mann morgen das Buch.
the woman gives the man tomorrow the book

c. Das Buch gibt der Mann der Frau morgen.
the book gives the man the woman tomorrow

d. Morgen gibt der Mann der Frau das Buch.
tomorrow gives the man the woman the book

(10) a. Wer gibt der Frau morgen das Buch? (German)
who gives the woman tomorrow the book
'Who gives the woman the book tomorrow?'

b. Wem gibt der Mann morgen das Buch?
who gives the man tomorrow the book
'Who does the man give the book to?'

c. Was gibt der Mann der Frau morgen?
what gives the man the woman tomorrow
'What does the man give the woman?'

d. Wann gibt der Mann der Frau das Buch?
when gives the man the woman the book
'When does the man give the woman the book?'

The finite verb is in second position in all the sentences in (9) and (10).

English, in contrast, does not allow orders in which the object appears immediately before the finite verb.

(11) a. * This man give I a book tomorrow.

b. * This book give I a man tomorrow.

c. * Tomorrow give I the man a book.

Adverbials and objects can be fronted but then they have to appear before the clause consisting of subject and verb and possibly other constituents.

(12) a. This book, I give the man tomorrow.

b. Tomorrow, I give the man a book.

Note also that fronting of objects is restricted to the secondary object for verbs with two objects for some speakers (Hudson 1992: 258).[5] So, while fronting of the

[5] I use the terms *primary object* and *secondary object* in order to avoid confusion that is sometimes caused by the terms *direct* and *indirect object*. The primary object is the first object in English and the dative object of ditransitive verbs governing the dative in German. The secondary object is the second object in English and the accusative in German ditransitive constructions.

secondary object in (13b) is permitted by all speakers, some speakers find extractions like the extraction of the primary object in (13c) unacceptable or marked.

(13) a. We give children sweets.
b. These sweets, we give children _.
c. % These children, we give _ sweets.

This is not the case in V2 languages: they are rather liberal as far as fronting is concerned. Basically all constituents can be fronted, exceptions being reflexive pronouns that are selected by inherently reflexive verbs (14), expletive objects (15), and certain modal particles (16).

references

(14) a. Maria erholt sich. (German)
Maria recovers REFL
'Maria recovers.'
b. * Sich erholt Maria.
REFL recovers Maria

(15) a. Er bringt es bis zum Professor. (German)
he brings EXPL until to.the professor
'He makes it to professor.'
b. # Es bringt er bis zum Professor.
EXPL brings he until to.the professor

(16) a. Er geht halt nicht. (German)
he goes PARTICLE not
'He simply does not go.'
b. * Halt geht er nicht.
PARTICLE goes he not

The element in front of the finite verb is not necessarily a clause mate of the finite verb. In fact, it can belong to a deeply embedded head as is demonstrated by the following example from German:

(17) [Über dieses Thema]$_i$ habe ich ihn gebeten, [[einen Vortrag $_{-i}$ zu halten]?[6] (German)
about this topic have I him asked a talk to hold
'I asked him to give a talk about this topic.'

[6] Hinrichs & Nakazawa (1989b: 21).

The PP *über dieses Thema* depends on *Vortrag* 'talk', which is part of the VP headed by *zu halten* 'to hold', which is in turn embedded under *gebeten* 'asked'. Sentences like (17) show that V2 frontings cannot be analyzed as a simple reordering of the arguments of a verb. While such an approach would work for the examples in (18), it would not extend to other cases in which the fronted element does not depend on the highest verb in the clause.

(18) Den Mann kennt er.
the.ACC man knows he
'He knows the man.'

The following examples from Danish (SVO) show that the property of being a V2 language is independent of the VO/OV property:

(19) a. Max har læst bogen. (Danish)
Max has read book.DEF
b. Bogen har Max læst.
book.DEF has Max read

The example in (19a) shows that the object follows the verbs and (19b) shows that the object *bogen* 'the book' can appear in sentence initial position infront of the finite verb *har* 'have'.

The V2 order is used in declarative main clauses throughout the Germanic languages (without English). Some Germanic languages do not use V2 order in embedded clauses. For a discussion of embedded interrogatives see Section 2.5.

While English does not allow for the order object verb subject, which is possible in the other Germanic languages due to V2 fronting, it allows for the fronting of the object in questions resulting in structures that are parallel to what we know from the other Germanic languages:

(20) a. Which book did Peter read?
b. Which book did Peter give to Mary?
c. To whom did Peter give the book?

English used to be a V2 language but lost this property. The V2 in questions is a residue of earlier stages of the language, which is why English is called a *residual V2 language* (Rizzi 1990).

V2 and verb fronting in general is a way to mark clause types in all Germanic languages. V2 sentence can be declarative clauses in all Germanic languages except English and they can be questions in all Germanic languages including English. In addition V2 sentences may be imperatives, as (21) shows.

(21) Jetzt gib ihm das Buch! (German)
now give me the book
'Give me the book now!'

Sentences with the finite verb in first position (V1) can be yes/no questions or imperatives:

(22) a. Gibt er ihm das Buch? (German)
gives he him the book
'Does he give him the book?'
b. Gib mir das Buch!
give me the book

Of course the order of elements is not the only cue as far as the clause type is concerned. Intonation and morphological marking of imperative forms plays a role as well.

The property of being a V2 language is sort of perverse: it is exceedingly rare among the world's languages. Apart from the Germanic languages there are only Modern Breton, Old French, Kashmiri, the austronesian languages Taiof and Sisiqa, the brazilian native languages Karitiana from the language family Tupí and the uto-aztekian language Tohono O'odham, which is spoken in the southwest of the US and in northern Mexico.

add references

## 2.3 Scrambling

While the constituent order in languages like English is rather fixed, languages like Dutch and German allow a rather free permutation of arguments. In order not to contaminate the effects by reorderings that are due to the V2 property, I use verb last sentences to illustrate the phenomenon. Example (23) shows the only possible order for subject and objects of a simple ditransitive sentence without extraction:

(23) because the man gives the woman the book (English)

If speakers want to realize the secondary object *the book* before the primary object *the woman*, they have to use a prepositional object. This type of reordering is called *dative-shift* and an example is provided in (24):

(24) because the man gives the book to the woman (English)

In contrast to this we have the German examples in (25). These examples show that the noun phrases can be freely permuted:

(25) a. [weil] der Mann der Frau das Buch gibt (German)
because the man the woman the book gives

b. [weil] der Mann das Buch der Frau gibt
because the man the book the woman gives

c. [weil] das Buch der Mann der Frau gibt
because the book the man the woman gives

d. [weil] das Buch der Frau der Mann gibt
because the book the woman the man gives

e. [weil] der Frau der Mann das Buch gibt
because the woman the man the book gives

f. [weil] der Frau das Buch der Mann gibt
because the woman the book the man gives

Not all of these orders can be used in all contexts. Some of the examples require a special, contrastive intonation. The orders can be sorted with respect to the number of contexts in which they can be used. **Hoehle82** suggests calling the order that can be used in most contexts the normal or unmarked order.

## 2.4 The position of adverbials

In languages like German, the position of adverbials is rather free: the adverb *gestern* 'yesterday' can appear anywhere between the arguments and the verb:

add Dutch examples

(26) a. weil der Mann der Frau das Buch gestern gab (German)
because the man the woman the book yesterday gave
'because the man gave the woman the book yesterday'

b. weil der Mann der Frau gestern das Buch gab
because the man the woman yesterday the book gave

c. weil der Mann gestern der Frau das Buch gab
because the man yesterday the woman the book gave

d. weil gestern der Mann der Frau das Buch gab
because yesterday the man the woman the book gave

In contrast, the position of the adverbials is rather restricted in SVO languages like Danish and English. The adverbials usually are placed before or after the VP;

that is, verb and objects form one unit and adverbials attach to the left or to the right of this unit. (27) provides an example:

(27) a. because the man often [gave the woman the book] (English)
b. because the man [gave the woman the book] often
c. * because the man [gave often the woman the book]
d. * because the man [gave the woman often the book]

It is assumed that verb and objects form a structural unit, a verb phrase (VP). Adverbials may attach to this VP forming a larger VP, which is than combined with the subject to form a complete sentence.

The following example, which is due to Quirk et al. (1985: § 8.20, 495), shows that even in very complex combinations of several verbs adverbs may be placed at the left periphery of a VP:

(28) It [certainly [$_{VP}$ may [possibly [$_{VP}$ have [indeed [$_{VP}$ been [badly [$_{VP}$ formulated]]]]]]]].

This is different from the OV languages where verbs form a verbal complex which usually cannot be interrupted by adverbs.

(29) a. dass der Mann der Frau das Buch morgen geben dürfen muss
that the man the woman the book tomorrow give may must
'that it must be possible that it is allowed that the man gives the woman the book tomorrow'
b. * dass der Mann der Frau das Buch geben morgen dürfen muss
that the man the woman the book give tomorrow may must
c. * dass der Mann der Frau das Buch geben dürfen morgen muss
that the man the woman the book give may tomorrow must

## 2.5 Embedded clauses

This section deals with embedded clauses that are introduced by a complementizer and with embedded interrogative clauses. The Germanic languages vary with respect to the verb placement in these subordinate clauses and with respect to the question whether the embedded clauses are V2 or not.

### 2.5.1 Embedded clauses introduced by a complementizer

As was already mentioned Afrikaans, Dutch, German are SOV languages and this is shown in embedded clauses that are introduced by a complementizer. (30) is an example:

(30) Ich weiß, dass Max das Buch heute gelesen hat.
I know that Max the book today read has
'I know that Max read the book today.'

English, beeing an SVO non-V2 language allows for SVO order only.

(31) I know that Max has read the book yesterday. (English)

Interestingly, Danish, also an SVO languauge, allows both SVO order (32) and V2 order (33) in clauses preceeded by a complementizer:

(32) Jeg ved, at Max ikke har læst bogen i dag. (Danish)
I know that Max not has read book.DEF today
'I know that Max did not read the book today.'

(33) a. Jeg ved, at i dag har Max ikke læst bogen. (Danish)
I know that today has Max not read book.DEF

b. Jeg ved, at bogen har Max ikke læst i dag.
I know that book.DEF has Max not read today

The example in (32) includes the negation in order to show that we indeed deal with the SVO order here. Without the negation it is not clear whether non-V2 clauses are allowed in clauses that are introduced by a complementizer since (34a) has the finite verb in second position. With the negation present, it is clear that we have a V2 clause if the negation follows the finite verb and that we do not have a V2 clause if the finite verb follows the negation as in (32) and hence is in third position.

(34) a. at Max har læst bogen (V2 or SVO)
that Max has read book.DEF

b. at Max har ikke læst bogen (V2)
that Max has not read book.DEF

For complementizerless sentences the V2 order is the only one that is possible:

(35) a. Max har ikke læst bogen (V2)
Max has not read book.DEF

b. * Max ikke har læst bogen (SVO)
Max not has read book.DEF

Yiddish and Icelandic are SVO languages as well. The clauses that are combined with a complementizer are V2:

(36) a. Ikh meyn az haynt hot Max geleyent dos bukh.[7] (Yiddish)
I think that today has Max read the book
'I think that Max read the book today.'

b. Ikh meyn az dos bukh hot Max geleyent.
I think that the book has Max read

provide Icelandic example

### 2.5.2 Interrogative clauses

The OV languages form subordinated interrogative clauses by preposing a phrase containing an interrogative pronoun[8] from an otherwise SOV clause. (37) shows a German example:

(37) a. Ich weiß, wer heute das Buch gelesen hat. (German)
I know who today the book read has
'I know who read the book today.'

b. Ich weiß, was Max heute gelesen hat.
I know what Max today read has
'I know what Max has read today.'

Since languages like German allow for scrambling, senteces like those in (37) could just be due to the permutation of arguments of a head. However, the generalization about these *w* clauses is that an arbitrary *w* element can be fronted. (38) gives an example from German that involves a nonlocal dependency:

(38) Ich weiß nicht, [über welches Thema]$_i$ er versprochen hat,
I know not about which topic he promised has
[[einen Vortrag $\__i$] zu halten]. (German)
a talk to hold
'I do not know about which topic he promised to give a talk.'

[7] Diesing (1990: p. 58).

[8] Most interrogative pronouns start with *w* in German and *wh* in English. Phrases containing an interrogative pronoun are called *w* phrases or *wh* phrases, respectively. Interrogative clauses are sometimes called *w* clauses or *wh* clauses.

Here, the phrase *über welches Thema* 'about which topic' is an argument of *Vortrag*, which is embedded in the VP containing *zu halten* 'to hold', which is in turn embedded under *versprochen hat* 'promised has'. The generalization about interrogative clauses is that an interrogative clause consists of a interrogative phrase (*über welches Thema* 'about which topic') and a clause in which this interrogative phrase is missing somewhere (*er versprochen hat, einen Vortrag zu halten* 'he promised to give a talk').

In German the order of the other constituents is free as in assertive main clauses and embedded clauses with a complementizer that were discussed earlier.

(39) a. Ich weiß, was keiner diesem Mann geben würde. (German)
I know what nobody this man give would
'I know what nobody would give this man.'

b. Ich weiß, was diesem Mann keiner geben würde.
I know what this man nobody give would

In Danish and English the interrogative clauses consist of an interrogative phrase and an SVO clause in which it is missing:

(40) a. Max har givet ham bogen. (Danish)
Max has given him book.DEF
'Max gave him the book.'

b. Jeg ved, hvad$_i$ [Max har givet ham $\__i$].
I know what Max has given him
'I know what Max gave him.'

c. Jeg ved, hvem$_i$ [Max har givet $\__i$ bogen].
I know who Max has given book.DEF
'I know who Max has given the book.'

(40a) shows the clause with SVO order and (40b) is an example with the secondary object as interrogative ponoun and (40c) is an example with the primary object as interrogative pronoun. The position that the respective objects have in non-interrogative clauses like (40a) is marked with $\__i$.

Yiddish is special in that it has a V2 order in interrogative clauses as well (Diesing 1990: Sections 4.1, 4.2): interrogatives consist of a interrogative phrase that is extracted from a V2 clause:

(41) Ir veyst efsher [avu do voynt Roznblat der goldshmid]?[9]
you know maybe where there lives Rosenblatt the goldsmith
'Do you perhaps know where Rosenblatt the goldsmith lives?'

So the variation is *w*-phrase + SOV, *w*-phrase + SVO, and *w*-phrase + V2.

## 2.6 The use of expletives to mark the clause type

The Germanic languages use constituent order to code the clause type: V2 main clauses can be assertions or questions, depending on the content of the preverbal material and intonation. Similarly embedded interrogative clauses consist of a *w* phrase and an SVO, SOV, or V2 clause. The fronting of a constituent in a V2 clause comes with certain information structural effects: something is the topic or the focus of an utterance. For embedded sentences it is important for some languages that the structure is transparent that is that we have the *w* + SVO or *w* + V2 order. There are situations in which it is inappropriate to front an element and in such situations the Germanic languages use expletives, that is, pronouns that do not contribute semantically, to maintain a certain order.

German uses the expletive *es* to fill the position in front of the finite verb, if no other constituent is to be fronted.

(42) a. Drei Reiter ritten zum Tor hinaus. (German)
three riders rode towards.the gate out
'Three riders rode out of the gate.'
b. Es ritten drei Reiter zum Tor hinaus.
EXPL rode three riders towards.the gate out

Danish uses the expletive to make it clear that an extraction of a consituent took place:

(43) a. Politiet ved ikke, hvem der havde placeret bomben.
police.DEF knows not who EXPL has placed bomb.DEF
'The police does not know who placed the bomb.'
b. * Politiet ved ikke, hvem havde placeret bomben.
police.DEF knows not who has placed bomb.DEF

Without the expletive one would have a pattern like the one in (43b). In (43b) we have the normal SVO order and it is not obvious to the hearer that the pattern

[9] Diesing (1990: S. 65). Zitiert aus Olsvanger, *Royte Pomerantsn*, 1949

consists of an extracted element (the subject) and an SVO clause from which it is missing. This is more transparent if an expletive is inserted into the subject position as in (43a).

Similarly Yiddish uses an expletive in embedded interrogatives (*w* + V2) if the subject is extracted or if there is no other element that is information structurally appropriate for the preverbal position: (44) shows examples from Diesing (1990):

(44) a. ikh hob zi gefregt ver es iz beser far ir (Yiddish)
I have her asked who EXPL is better for her
'I have asked her who is better for her.'

b. ikh hob im gefregt vemen es kenen ale dayne khaverim
I have him asked whom EXPL know all your friends
'I asked him whom all your friends know.'

(44a) is an example involving an interrogative pronoun that is the subject and (44b) is an example in which the preverbal position is not filled by an argument of *kenen* 'know' but by an expletive. The subject *ale dayne khaverim* 'all your friends' stays behind and the object *vemen* 'whom' is extracted since it is the interrogative pronoun.

## 2.7 Verbal Complexes in OV languages

The OV languages have a verbal complex, or more general, a predicate complex, since adjectives take part in complex formation as well. (45) gives a German example by Haider (1990):

(45) weil es ihm jemand zu lesen versprochen hat
because it.ACC him.DAT somebody.NOM to read promised has
(German)

'because somebody promised him to read it'

The arguments of the respective verbs can be mixed with arguments of other verbs. In the example above the *es* 'it' is not adjacent to its verb *lesen* 'to read', neither is *ihm* 'him' adjacent to *versprochen* 'promised' nor *jemand* to *hat* 'has'. In a more "well-behaved" ordering the object of *zu lesen* 'to read' is adjacent to the verb:

(46) weil jemand ihm das Buch zu lesen versprochen hat
because somebody him the book to read promised has
'because somebody promised him to read the book'

The ordering in (46) would allow for an analysis in which *das Buch zu lesen* forms a VP which is treated as an argument of *versprochen* 'promised'. However, this is not a viable analysis for (45) if one assumes that phrases have to be continuous.

One explanation of orders like the one in (45) is that the verbs form a unit that behaves like a simplex verb. As with the ditransitive verb *geben* 'to give' all permutations of the arguments of the verbs are possible in principle. So *zu lesen versprochen hat* forms a complex in both (45) and (46) and all permutations of the three arguments are permitted by the grammar.

VO languages like English and Danish do not allow permutations of arguments that belong to different verbs. In VO languages governing verbs always embed VPs. The following example indicates the structure:

(47) because somebody [will [promise him [to read the book]]]

## 2.8 Obligatoriness of subjects, case of subjects, and passives

SVO languages like English and Danish require a subject, while OV languages like German allow for subjectless constructions.

(48) a. Ihm graut vor der Prüfung. (German)
him.DAT dreads before the exam
'He dreads the exam.'

b. Heute wird nicht gearbeitet.
today is not worked
'There is no working today.'

According to the tests that were used for languages like Icelandic (for instance the possibility to omit a subject in infinitival constructions), the dative object *ihm* 'him' in (48a) is not a subject. There is no nominal argument at all in (48b). As we will discuss in Section 6, Icelandic has dative subjects (Zaenen et al. 1985), which makes it the most exciting language to study among the Germanic languages. We will see that a uniform analysis of case assignment is possible (Yip, Maling & Jackendoff 1987), although there is some variety in the inflectional systems of the Germanic languages.

As is shown in (48b), German allows for so-called impersonal passives. Impersonal passives are a special kind of passives in which no element gets promoted to subject. SVO languages like English, Danish do not allow subjectless constructions. English therefore does not allow impersonal passives at all as (49b) shows:

(49) a. weil noch gearbeitet wird (German)
because still worked is
'because there is still working there'

b. * because (it) was worked (English)

Interestingly, Danish found a way to fulfill the subject requirement and at the same time have impersonal passives: Danish simply inserts an expletive pronoun into the subject position:

(50) a. fordi der bliver arbejdet (Danish)
because EXPL is worked
'because there is working there'

b. fordi der arbejdes
because EXPL work.PASS
'because there is working there'

German does not allow for an expletive subject:

(51) * weil es noch gearbeitet wird (German)
because it still worked is
'because there is still working there'

It is possible to have an expletive pronoun in front of the finite verb as in (52), but this is a positional expletive whose purpose it is to mark the V2 sentence type.

(52) Es wird noch gearbeitet. (German)
EXPL is still worked
'There is still working there.'

The expletive is not an argument of any verb. The purely positional character of this expletive is shown by the fact that it does not appear in verb last sentences like (51).

## 2.9 Summary

This chapter provided an overview of the phenomena that are covered in this book. Of course we will look at everything in much more detail in the chapters to come. Let's start and get our hands dirty.

# 3 Valency, argument order and adjunct placement

This chapter deals with the representation of valency information and sketches the basic structures that are assumed for SVO and SOV languages. I provide an account for scrambling in those languages that allow for it and discuss the fixed vs. free position of adjuncts.

## 3.1 Valency representations

The valency of a head is represented in its lexical entry in the form of a list with descriptions of the elements that belong to the head's valency. (1) provides some prototypical examples:

(1) a. *schläft* 'sleeps': ⟨ NP[*nom*] ⟩
b. *unterstützt* 'supports': ⟨ NP[*nom*], NP[*acc*] ⟩
c. *hilft* 'helps': ⟨ NP[*nom*], NP[*dat*] ⟩
d. *gibt* 'gives': ⟨ NP[*nom*], NP[*dat*], NP[*acc*] ⟩
e. *wartet* 'waits': ⟨ NP[*nom*], PP[*auf*] ⟩

The elements in such lists come with a fixed order. The order corresponds to the order of the elements in English and to the so-called unmarked order in German, that is, for ditransitive verbs the order is usually nom, dat, acc (see Höhle (1982) for comments on the unmarked order). This fixed order is needed for establishing the link between syntax and semantics. The details can not be provided in this book but the interested reader is referred to (Pollard & Sag 1994; Müller 2007).

Given such a valency representation for a verb like *kennen* 'know' one can assume a grammar rule or an Immediate Dominance Schema that combines an element from the valence list with the respective head and passes all unsaturated elements on to the result of the combination. This can be depicted as in Figure 3.1 on the next page, which is an example analysis of (2).

(2) [dass] niemand ihn kennt
that nobody.NOM him.ACC knows
'that nobody knows him'

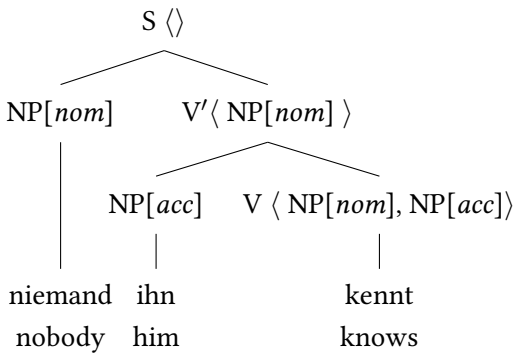



Figure 3.1: Analysis of (*dass*) *niemand ihn kennt* 'that nobody knows him', valency information is represented in a list

The lexical item for *kennt* 'knows' has a valence description containing two NPs. In a first step *kennt* is combined with its accusative object. The resulting phrase *ihn kennt* 'him knows' is something whose most importent constituent is a verb. Therefore it has a V in its category label. Since *ihn kennt* is not a sentence but something intermediate, it gets the label V′.[1] The valency list of this V′ contains all elements that still have to be realized in order to yield a complete sentence, that is, it contains an NP with nominative case. After the combination of *ihn kennt* with *niemand* 'nobody' we get the full sentence *niemand ihn kennt* 'nobody him knows'. As an abbreviation for full sentences I use S. S stands for something whose most important element is a verb and whose valency list is empty, that is, it is fully saturated. Hence, the specification of the empty valency list in Figure 3.1 is somewhat redundant.

The nodes for V′ and S are licensed by a schema that combined a head with one element of its valence list. The full schema will be given in Chapter 9, but we will discuss a simplified version of it in Section 3.3.

[1] These labels are abbreviations for complex categories. Their internal makeup is given in Table 3.1. The labels are similar to what is known from $\overline{\text{X}}$ theory but the theory developed here is not following all the tenets of $\overline{\text{X}}$ theory. For example, simple nouns like *house* are N′ and there is no $\text{N}^0$ in the analysis of NPs like *the house*.

Section 3.3 explains why the abbreviation for *ihn kennt* 'him knows' is V′ rather than VP.

## 3.2 Scrambling

As we already saw in the data discussion in the previous chapter, some languages allow for scrambling of arguments. For those languages one can assume that heads can combine with any of its arguments not necessarily beginning with the last one as it was the case in the analysis in Figure 3.1. Figure 3.2 shows the analysis of (3).

(3) [dass] ihn niemand kennt
that him.ACC nobody.NOM knows
'that nobody knows him'

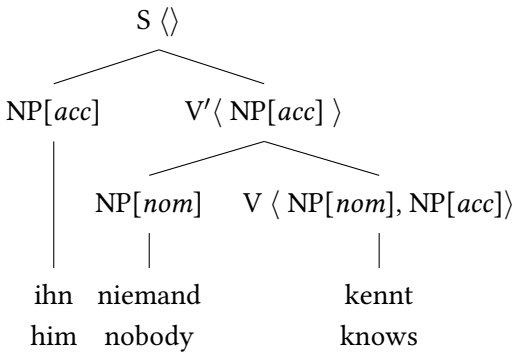



Figure 3.2: Analysis of (*dass*) *ihn niemand kennt* 'that nobody knows him', languages that allow for scrambling permit the saturation of arguments in any order

Rather than combining the verb with the accusative argument (the object) first, it is combined with the nominative (the subject) and the accusative (the object) is added in a later step.

## 3.3 SVO: Languages with fixed SV order and valence features

The last section demonstrated how verb-final sentences in German can be analyzed. Of course it is easy to imagine how this extends to VSO languages: The head is initial and combines with the first element in the valency list first and then with all the other elements. However, nothing has been said about the SVO

languages so far. In languages like Danish, English, and so on all objects are realized after the verb as in (4), it is just the subject that preceedes the verb.

(4) Kim gave Sandy the book.

The verb together with its objects forms a unit in a certain sense: It can be fronted (5a). It can be selected by dominating verbs (5b), and it is the place where adjuncts attach to (5c–d).

(5) a. John promised to read the book and read the book, he will.
b. He will [read the book].
c. He often [reads the book].
d. … often read the book slowly, he will.

This can be modeled adequately by assuming two valency lists: one for the complements (COMPS short for COMPLEMENTS) and one for the subject. The list for the subject is called SPECIFIER list (SPR ). The specifier list plays a role both in the analysis of sentences and in the analysis of noun phrases. Nouns select their determiner via SPR and all their other arguments via COMPS. Figure 3.3 shows the analysis of the sentence (6) using the features SPR and COMPS.

(6) Nobody knows him.

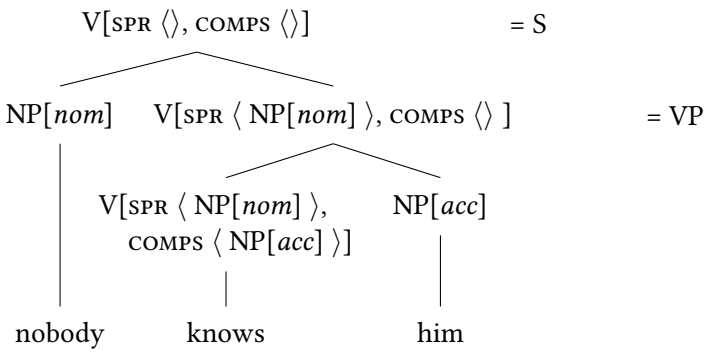



Figure 3.3: Analysis of the SVO order with two separate valency features

The COMPS list of *knows* contains a description of the accusative object and the accusative *him* is combined in a first step with *knows*. In addition to the accusative object *knows* selects for a subject. This selection is passed on to the mother node, the VP. Hence, the SPR value of *knows him* is identical to the SPR value of *knows*.

The VP *knows him* selects for a nominative NP. This NP is realized as *nobody* in Figure 3.3. The result of the combination of *knows him* with *nobody* is *nobody knows him*, which is complete: It has both an empty SPR list and an empty COMPS list. The two rules that are responsible for the combinations in Figure 3.3 are called the Specifier-Head Schema and the Head-Complement Schema. I use VP as abbreviation for something with a verbal head and an empty COMPS list and at least one element in the SPR list and S as abbreviation for something with a verbal head and empty lists for both the SPR and the COMPS value.

In Section 3.2 it was explained how scrambling can be accounted for: The rules that combine heads with their arguments can take the arguments from the list in any order. For languages with stricter constituent order requirements the rules are stricter: The arguments have to be taken off the list consistently from the beginning or from the end. So for English and Danish one starts at the beginning of the list and for head-final languages without scrambling one starts at the end of the list. Figure 3.4 shows the analysis of a sentence with a ditransitive verb. The accusative object is the first element in the COMPS list and it is combined with

provide an example of head-final language

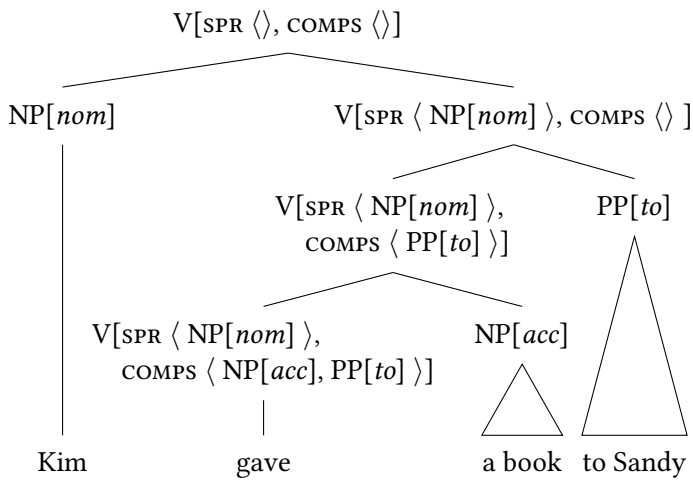



Figure 3.4: Analysis of the SVO order with two separate valency features and two elements in COMPS

the verb first. The result of the combination is a verbal projection that has the PP[*to*] as the sole element in the COMPS list. It is combined with an appropriate PP in the next step resulting in a verbal projection that has an empty COMPS list (a VP).

The analysis of our first German example in Figure 3.1 did not use a name for the valency list. So the question is: How does the analysis of German relate to the analysis of English using SPR and COMPS. A lot of researchers from various frameworks argued that it is not useful to distinguish the subjects of finite verbs from other arguments. All the tests that have been used to show that subjects in English differ from complements do not apply to the arguments of finite verbs in German. Hence, researchers like Pollard (1996), Haider (1993), Eisenberg (1994: 376), and Kiss (1995) argued for so-called subject as complement analyses. Figure 3.5 shows the adapted analysis of (2) – repeated here as (7):

(7) [dass] niemand ihn kennt
that nobody.NOM him.ACC knows
'that nobody knows him'

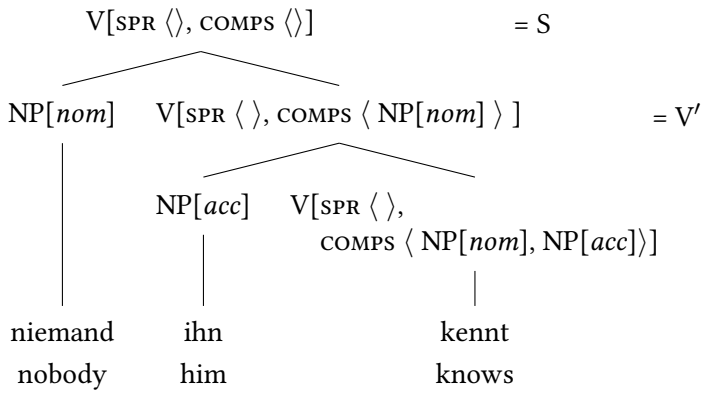



Figure 3.5: The analysis of a German sentence with SPR and COMPS list

The difference between German and English is that German contains all arguments in the COMPS list of the finite verb and no arguments in the SPR list. Since the elements in the COMPS list can be combined with the head in any order, it is explained why all permutations of arguments are possible. Specifiers are realized to the left of their head. This is the same for German and English. For German this is not relevant in the verbal domain, but the Specifier-Head Schema, which is introduced shortly, is used in the analysis of noun phrases.

Throughout the remainder of this book I use the abbreviations in Table 3.1 on the next page.

In Section 3 I already mentioned that the non-terminal nodes in a tree, that is, the nodes that do not directly dominate a lexical entry, are licensed by rules. Syn-

Table 3.1: Abbreviations for S, VP, and V′ and NP, N′

| | |
|---|---|
| S | = V[SPR ⟨⟩, COMPS ⟨⟩] |
| VP | = V[SPR ⟨ NP[*nom*] ⟩, COMPS ⟨⟩] |
| V′ | = all other V projections apart from verbal complexes |
| NP | = N[SPR ⟨⟩, COMPS ⟨⟩] |
| N′ | = V[SPR ⟨ DET ⟩, COMPS ⟨⟩] |

tactic rules are usually called schemata since they are rather abstract. The details about such schemata will be given in Chapter 9, but Figure 3.6 and Figure 3.8 on the next page provide the respective tree representations. The H stands for

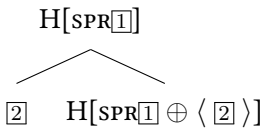



Figure 3.6: Sketch of the Specifier-Head Schema

*head. append* (⊕) is a relation that concatenates two lists. For instance the concatenation of ⟨ a ⟩ and ⟨ b ⟩ is ⟨ a, b ⟩. The concatenation of the empty list ⟨⟩ with another list yields the latter list. For such a schema to apply the descriptions of the daughters have to match the actual daughters. For instance *knows him* is compatible with the right daughter: It has an NP[*nom*] in its SPR list. When *knows him* is realized as a daughter of the schema in Figure 3.6, 2 is instantiated as NP[*nom*]. Therefore the left daughter has to be compatible with an NP[*nom*]. It can be realized as a simple pronoun like *he* or a complex NP like *the man who sold the world*. The SPR list of *knows him* is ⟨ NP[*nom*] ⟩. If this list is split up into two lists, one containing ⟨ NP[*nom*] ⟩ and another one containing the rest, the second list is the empty list. Hence 1 is instantiated as ⟨⟩ and *Nobody knows him.* corresponds to a structure with an empty SPR list. See also Figure 3.9 below.

The Specifier-Head Schema is used for subject-VP combinations in the SVO languages but it is also used for NPs in all the Germanic languages. Figure 3.7 shows the analysis of the NP *the man. man* selects for a determiner and the result of combining *man* with a determiner is a complete nominal projection, that is, an NP. There are also nouns like *picture* that take a complement:

(8) a picture of Kim

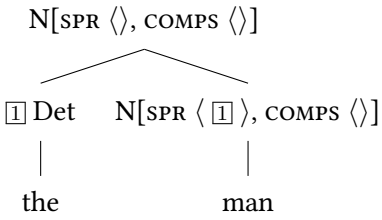



Figure 3.7: Analysis of the NP *the man*

The combination of *picture* and its complement *of Kim* is parallel to the combination of a verb with its object in VO languages with fixed constituent order. For such combinations we need a separate schema: the Head-Complement Schema, which is given in Figure 3.8. The schema splits the COMPS list of a head into an ini-

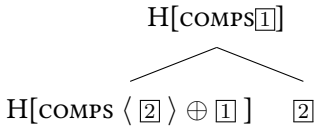



Figure 3.8: Sketch of the Head-Complement Schema

tial list with one element ( 2 ), which is realized as the complement daughter to the right.[2] This schema licenses all the non-terminal nodes in the VP in Figure 3.9 on the facing page, which shows the analysis of (9).[3]

(9) Nobody gives him the book.

## 3.4 Scrambling and free VO/OV order

Explain Initial feature

[2] In principle daughters are unordered in HPSG as they were in GPSG. Special linearization rules are used to order a head with respect to its siblings in a local tree. So a schema licensing a tree like the one in Figure 3.8 would also license a tree with the daughters in a different order unless one head linearization rules that rule this out.

[3] English nouns and determiners do not inflect for case. However, case is manifested at pronouns: *he* (nominative), *his* (genitive), *him* (accusative). Hence, verbs in double object constructions select for two accusatives.

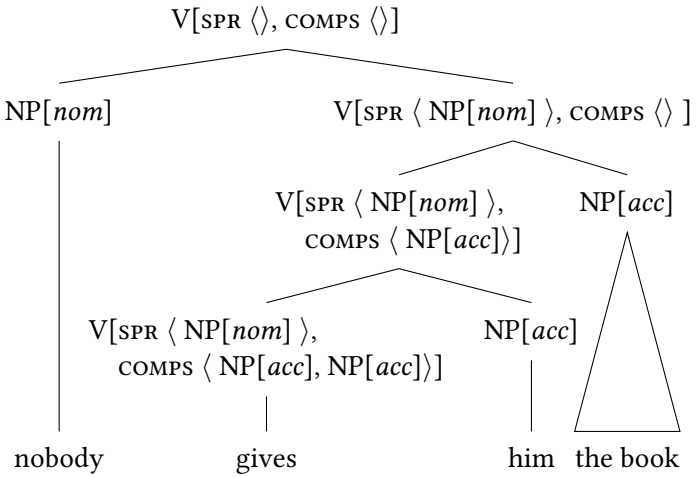



Figure 3.9: Analysis of the sentences with a ditransitive verb

Now, in order to analyze languages with free constituent order, we need a more liberal variant of the schema in Figure 3.8. Figure 3.10 splits the COMPS list of a head into three parts: a list 1, a list containing exactly one element ⟨ 3 ⟩ and a third list 2. The element of the second list is realized as the complement of the head. The length of the lists 1 and 2 is not restricted. If one restricts

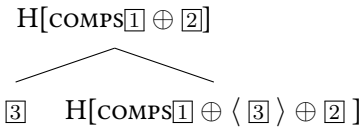



Figure 3.10: Sketch of the Head-Complement Schema for languages with free constituent order

1 to be the empty list, one gets grammars that saturate complements from the beginning of the list (like English) and if one restricts 2 to be the empty list, one gets grammars that take the last element from the COMPS list for combination with a head. Scrambling languages like German allow any complement to be combined with its head since there is neither a restriction on 1 nor one on 2.

Yiddish VO/OV

## 3.5 Adjuncts

While arguments are selected by their head, adjuncts select the head. The difference between languages like Dutch and German on the one hand and Danish and English on the other hand can be explained by assuming that adjuncts in the former languages are less picky as far as the element is concerned with which they combine. Dutch and German adjuncts can attach to any verbal projection (10), while Danish and English require a VP as in (11) (Wechsler 2015).

provide examples

(10) a. [dass] morgen jeder das Buch liest
that tomorrow everybody the book reads
'that everybody reads the book tomorrow'
b. [dass] jeder morgen das Buch liest
that everybody tomorrow the book reads
c. [dass] jeder das Buch morgen liest
that everybody the book tomorrow reads

(11) a. Kim will have been [promptly [removing the evidence]].
b. Kim will have been [[removing the evidence] promptly].

For the selection of arguments the features SPR and COMPS are used. In parallel there is a MOD feature that is part of a lexical description of a head of a phrase that can function as an adjunct (MOD is an abbreviation for *modified*). The value of MOD is a description of an appropriate head. Head-adjunct structures are licencsed by the schema in Figure 3.11.

explain why spr and comps are the empty list

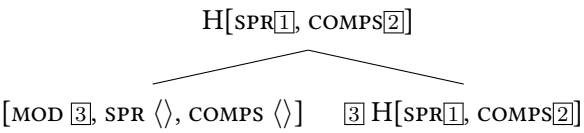



Figure 3.11: Sketch of the Head-Adjunct Schema

For instance, attributive adjectives have $\overline{\text{N}}$ as their MOD value, where $\overline{\text{N}}$ is an abbreviation for a nominal projection that has an empty COMPS list and a SPR list that contains a determiner. The analysis of the phrase *smart woman* is shown in Figure 3.12 on the next page. In languages like German in which the adjective agrees with the noun in gender, number, and inflection class, the properties that

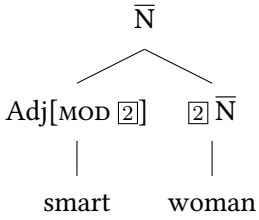



Figure 3.12: Analysis of the head-adjunct structure *smart woman*

the noun must have can be specified inside the MOD value. For instance, *kluger* selects a male noun and *kluge* selects a female one:

(12) a. ein kluger Mann
a smart man
b. eine kluge Frau
a smart woman

For German adverbials the value restricts the part of speech of the head to be verb (or rather verbal since adjectival participles can be modified as well) and the value of INITIAL to be −. This ensures that the adjunct attaches to verbs in final position only (Verb initial sentences are discussed in Chapter 5). The MOD value of English adverbials is simply VP. This allows for a pre- and a post-VP attachment of adjuncts.

- SOV (Dutch, German, ...): MOD V[INI−]
- SVO (Danish, English, ...): MOD VP

The analysis of (10a) is shown in Figure 3.13 on the following page, the one of (10b) in Figure 3.14 on the next page, and the one of (10c) in Figure 3.15 on page 43. The only difference between the figures is the respective place of attachment of the adverb.

The Figures 3.16 and 3.17 show the analysis of adjunction with the adverb in pre-VP and post-VP position respectively.

## 3.6 Linking between syntax and semantics

HPSG assumes that all arguments of a head are contained in a list that is called ARGUMENT STRUCTURE (ARG-ST). This list contains descriptions of the syntactic

references

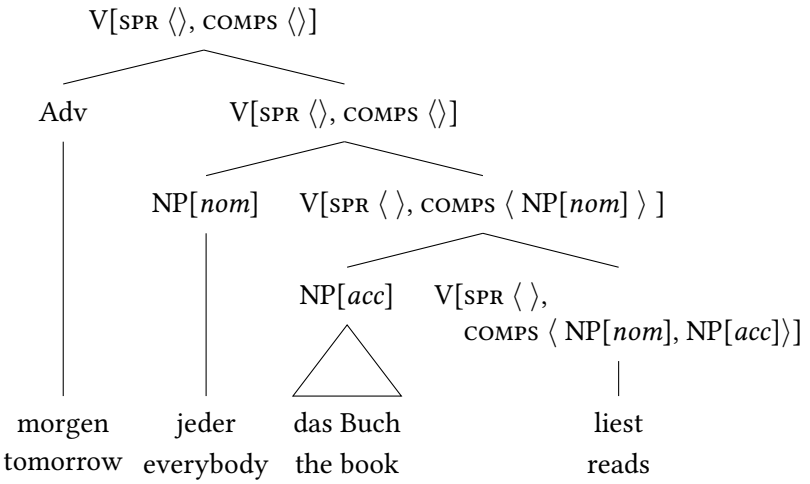



Figure 3.13: Analysis of [*dass*] *morgen jeder das Buch liest* 'that everybody will read the book tomorrow' with the adjunct attaching above subject and object

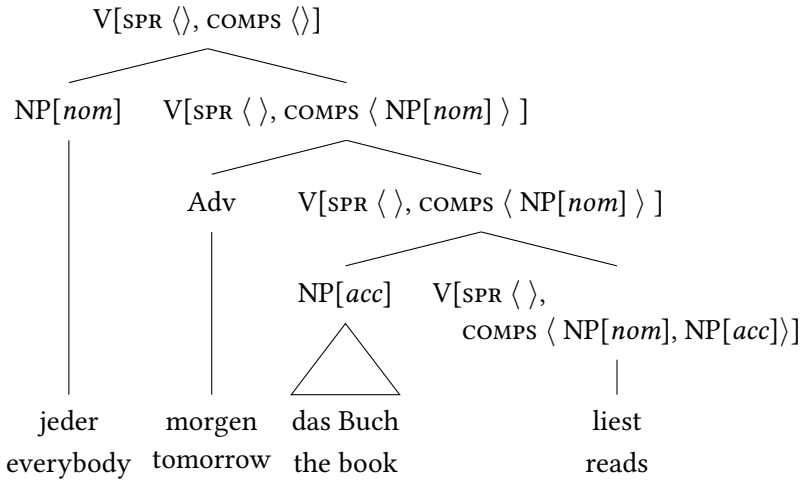



Figure 3.14: Analysis of [*dass*] *jeder morgen das Buch liest* 'that everybody will read the book tomorrow' with the adjunct attaching between subject and object

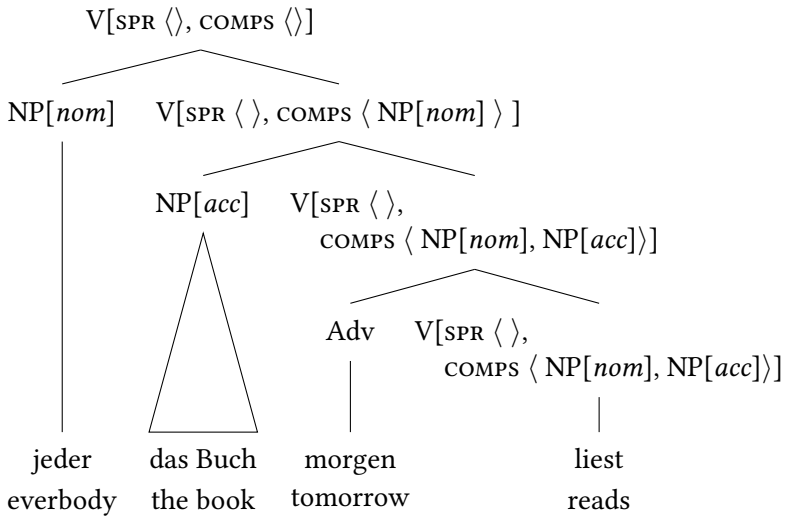



Figure 3.15: Analysis of [*dass*] *jeder das Buch morgen liest* 'that everybody will read the book tomorrow' with the adjunct attaching between object and verb

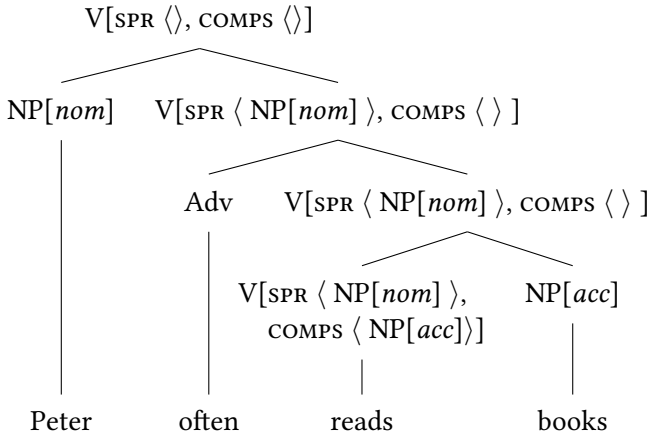



Figure 3.16: Analysis of adjuncts in SVO languages: The adjunct is realized left-adjacent to the VP.

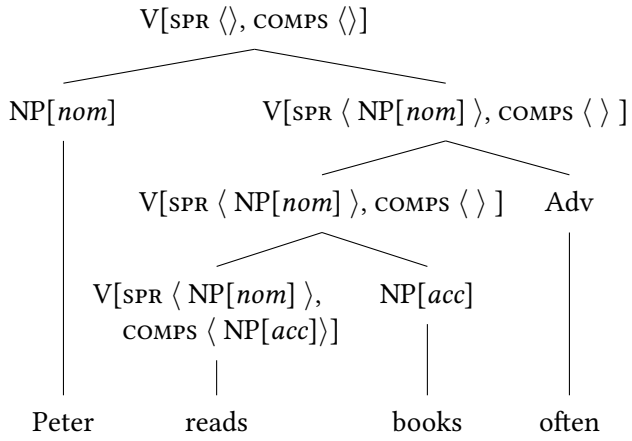



Figure 3.17: Analysis of adjuncts in SVO languages: The adjunct is realized right-adjacent to the VP.

and semantic properties of the selected arguments. For instance the ARG-ST list of English *give* and its German, Danish and Dutch and Icelandic variants is given in (13):

(13) ⟨ NP, NP, NP ⟩

The case systems of the involved languages vary a bit as will be explained in Chapter 6, but nevertheless the orders of the NPs in the ARG-ST list are the same across languages. They correspond to nom, dat, acc in German (14a) and subject, primary object, secondary object in English (14b):

(14) a. dass der Mann dem Jungen den Ball gibt
that the man the boy the ball gives
'that the man gives the boy the ball'

b. that the man gives the boy the ball

In addition to the syntactic features we have seen so far semantic features are used to describe the semantic contribution of linguistic objects. (15) shows some aspects of the description of the English verb *gives*:

(15) lexical item for *gives*:

$$\begin{bmatrix} \textsc{arg-st} & \left\langle \text{NP}_{\boxed{1}}, \text{NP}_{\boxed{2}}, \text{NP}_{\boxed{3}} \right\rangle \\ \textsc{cont} & \begin{bmatrix} \textit{give} & \\ \textsc{agens} & \boxed{1} \\ \textsc{goal} & \boxed{2} \\ \textsc{trans-obj} & \boxed{3} \end{bmatrix} \end{bmatrix}$$

The lowered boxes refer to the referential indices of the NPs. One can imagine these indices as variables that refer to the object in the real world that the NP is referring to. These indices are identified to semantic roles of the verb *give*. The representations for the other languages mentioned above is entirely parallel. Therefore it is possible to capture crosslinguistic generalizations. Nevertheless there are differences between the Germanic OV and VO languages. As was explained above the VO languages map their subject to SPR and all other arguments to COMPS, while the finite verbs of OV languages have all arguments on COMPS.

maybe add some examples

## 3.7 Alternatives

Advanced stuff. Ignore if you do not dare.

### 3.7.1 CP/TP/VP models

Grewendorf (1988; 1993), Lohnstein (2014) and many others assume that German has a structure that is parallel to the one that is assumed for English. As for English the verb is assumed to form a phrase with its objects and this VP functions as the argument of a Tense head to form a maximal projection together with the subject of the verb, which is realized in the specifier position of the TP. Figure 3.18 shows the analysis of (16) with the respective layers.

(16) dass jeder diesen Mann kennt
that everbody this man knows
'that everybody knows this man'

The problem with such proposals is that the subject does not depend on the verb but on T. Therefore there is no way of serializing the accusative object before the subject unless one assumes that the object is moved to a higher position in the tree, e.g., adjoined to TP as in Figure 3.19.

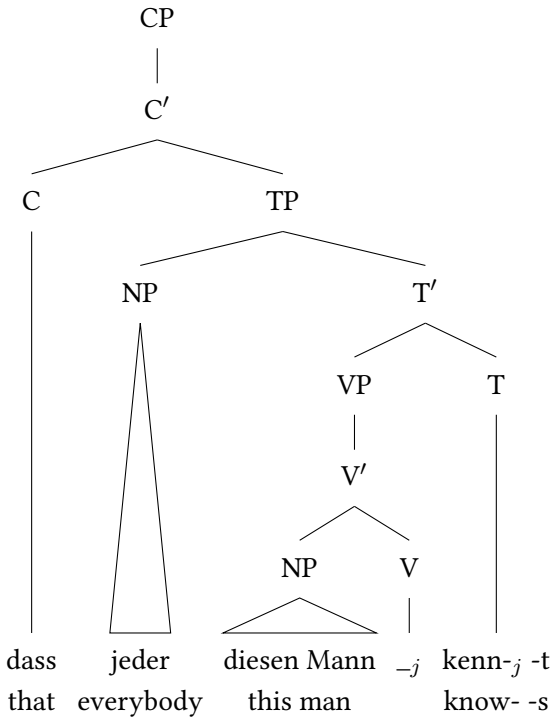



Figure 3.18: Sentence in the CP/TP/VP model

add scope discussion here

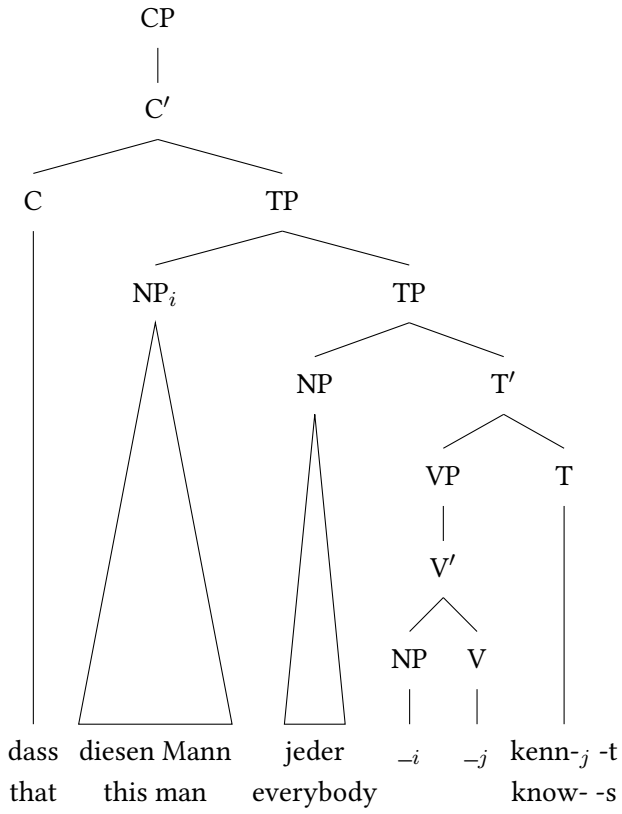



Figure 3.19: Scrambling has to be movement in the CP/TP/VP model

# 4 The verbal complex

SOV languages like Dutch and German form verbal complexes. There are several indicators for this that were worked out in detail by Gunar Bech (1955). One way to analyze such verbal complexes is to assume that the verbs in a sentence form a unit that basically behaves like a simplex verb. This explains for instance why the arguments of the three verbs in Haider's example (1990) in (1) can be scrambled:

(1) weil es ihm jemand zu lesen versprochen hat
because it him somebody to read promised has
'because somebody promised him to read it'

*es* depends on *zu lesen* 'to read', *ihm* 'him' depends on *versprochen* 'promised' and *jemand* is the subject and agrees with the finite verb *hat* 'has' (usually it is also treated as a dependent of the auxiliary *hat*).

It should be said that there is extreme variation in the German dialects as far as the serialization of elements in the verbal complex ist concerned. The governing verb is realized to the right of the embedded verb in Standard German: $V_3$ $V_2$ $V_1$ as in (1), but there are examples like (3) taken from Müller (1999: 376).[1]

(2) a. Ich hätte stapelweise Akten können haben.
b. weil ich mir das nich hab' lassen gefallen
c. wenn se mir hier würden rausschmeißen, …

The orders in (2) correspond to the order that is most natural in Dutch. (3) shows some Dutch examples:

(3) a. dat Jan het boek wil lezen
that John the book wants read
'that John wants to read the book'
b. dat Jan Marie het boek laat lezen
that John Mary the book lets read
'that John lets Mary read the book'

[1] Interview partner in: *Insekten und andere Nachbarn – ein Haus in Berlin*, ARD 15.11.1995.

c. dat Jan Marie het boek wil laten lezen
that John Mary the book wants let read
'that John wants to let Mary read the book'

SVO languages like Danish and English do not allow the arguments of embedded verbs to be scrambled with arguments of higher verbs. All arguments stay in their VP (modulo extraction, of course).

The trick that is used to analyze the verbal complexes is called *argument attraction* or *argument composition* and was developed by Geach (1970) in the framework of Categorial Grammar and adapted for HPSG by Hinrichs & Nakazawa (1994). The analysis of *lesen wird* 'read will' as it occurs in (4) is shown in Figure 4.1.

(4) dass keiner das Buch lesen wird
that nobody the book read will
'that nobody will read the book'

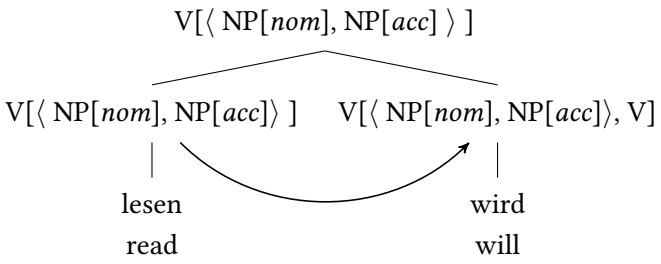



Figure 4.1: Analysis of the verbal complex formation of *lesen wird* 'read will' using argument composition

*wird* 'will' selects an infinitive without *zu* and in addition its arguments. This infinitive (*lesen* 'read') is combined with the verb and hence is not contained in the valency list of the mother node. The combination of *lesen* and *wird* behaves like a simplex verb in that it can be combined with its arguments in any order. Figure 4.2 on the facing page shows the analysis of (5a) and Figure 4.3 on the next page shows the analysis of (5b).

(5) a. [dass] keiner das Buch lesen wird
that nobody the book read will
'that nobody will read the book'

b. [dass] das Buch keiner lesen wird
that the book nobody read will
'that nobody will read the book'

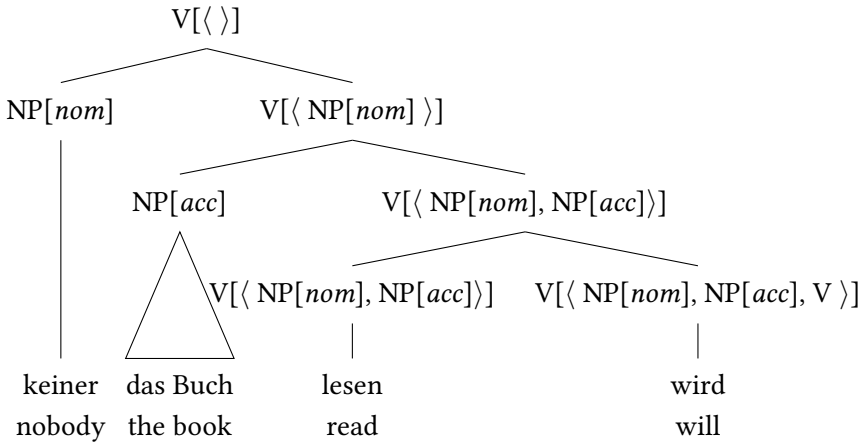



Figure 4.2: Formation of a verbal complex and realization of arguments in normal order

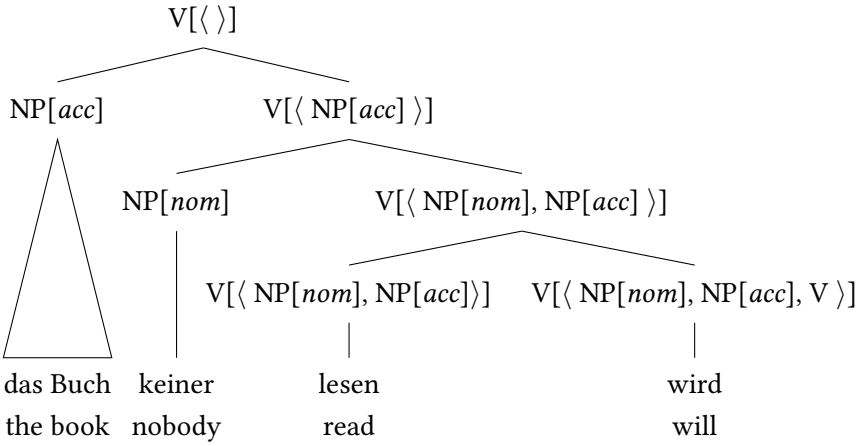



Figure 4.3: Formation of a verbal complex and scrambling of arguments

I follow Kiss (1995) and represent the subject of non-finite verbs as the value of a special feature SUBJ. SUBJ differs from SPR and COMPS in that it is not a valency

feature. The reason for this special treatment is that the subject cannot be realized as a part of a non-finite verb phrase:

(6) a. Das Buch lesen wird der Mann morgen.
the book read will the man tomorrow
'The man will read the book tomorrow.'

b. * Der Mann lesen wird das Buch morgen.
the man read will the book tomorrow

c. ?* Der Mann das Buch lesen wird morgen.
the man the book read will tomorrow

The lexical item for the non-finite form of *lesen* 'to read' is given in (7):

(7) *lesen* 'to read' non-finite form:
$$\begin{bmatrix} \textsc{subj} & \langle\ \text{NP}[\textit{nom}]\ \rangle \\ \textsc{comps} & \langle\ \text{NP}[\textit{acc}]\ \rangle \end{bmatrix}$$

The following Attribute Value Matrix (AVM) is a representation of the auxiliary verb *werden* 'will':

(8) *werden* 'will' non-finite form:
$$\begin{bmatrix} \textsc{subj} & \boxed{1} \\ \textsc{comps} & \boxed{2} \oplus \langle\ \text{V}[\ \textsc{vform}\textit{bse},\ \textsc{lex}+,\ \textsc{subj}\boxed{1},\ \textsc{comps}\boxed{2}\ ]\ \rangle \end{bmatrix}$$

*werden* selects a verb that has the *bse* form, that is an infinitive without *zu* 'to'. The embedded element has to be lexical (LEX+), that is, a single word or a verbal complex. All phrases that are licensed by the Head-Complement Schema and the Specifier-Head Schema are assumed to be LEX−. The boxes with numbers are basically variables. Their values depend on the values of the embedded verbs. Therefore this lexical item can be used with a verb like *lesen* 'to read', which takes a nominative and an accusative case but also with a verb like *helfen* 'to help', which takes a nominative and a dative object.

Before I turn to the details of the analysis, I have to provide the lexical items for the finite form of auxiliaries. Since the subject of finite verbs can of course be realized it has to be represented in one of the valency lists. As was discussed in Section 3.3, German subjects are represented in the COMPS list of finite verbs. Hence the lexical item for *wird* 'will' has the following form:

(9) *wird* 'will' finite form:
$$\begin{bmatrix} \textsc{subj} & \langle\rangle \\ \textsc{comps} & \boxed{1} \oplus \boxed{2} \oplus \langle\ \text{V}[\ \textsc{vform}\textit{bse},\ \textsc{lex}+,\ \textsc{subj}\boxed{1},\ \textsc{comps}\boxed{2}\ ]\ \rangle \end{bmatrix}$$

This basically says that the valency of *wird* consists of an embedded verb and whatever the SUBJ list of this verb is plus whatever the COMPS list of this verb is. This is exemplified for *lesen wird* in Figure 4.4. The auxiliary selects an infinitive

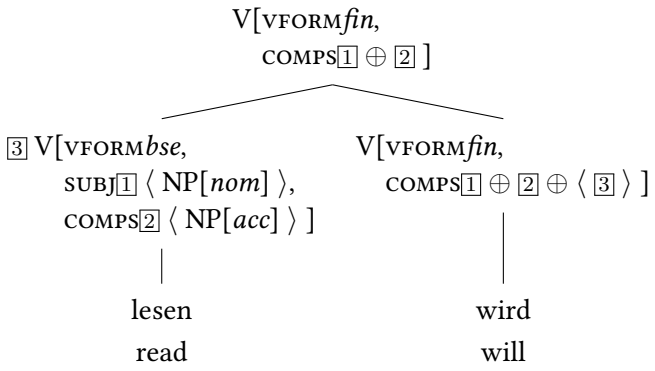



Figure 4.4: Detailed analysis of a verbal complex

without *zu* 'to' (3). This is ensured by the value *bse* for the VFORM feature of the selected verb: *bse* stands for infinitive without *to*/*zu*/..., *inf* stands for an infinitive form with marker, *ppp* stands for participle and *fin* for a finite verb. The subject of the selected infinitive (1) and the complements (2) are taken over. The result is that *lesen wird* has the same arguments as *liest* 'reads'.

To make all of this even more fun, we can make it more complex and look at verbal complexes with three verbs. Figure 4.5 on the next page shows the analysis of the verbal complex *lesen können wird* 'read can will' in sentences like (10):

(10) [dass] er das Buch lesen können wird
that he the book read can will

One interesting aspect of the analysis is that it can explain a phenomenon that is called Auxiliary Flip or *Oberfeldumstellung*. German optionally allows verbs that govern a modal to be placed to the left of the verbal complex rather than to the right of the modal. So instead of (10) one can also use the order in (11):

(11) [dass] er das Buch wird lesen können
that he the book will read can

After having discussed the analysis of verbal complexes as they are known from the OV languages like German, Dutch, and Afrikaans, I want to briefly comment on the SVO languages like Danish and English and so on. Usually a head requires its argument to be fully saturated, that is the SPR value and the

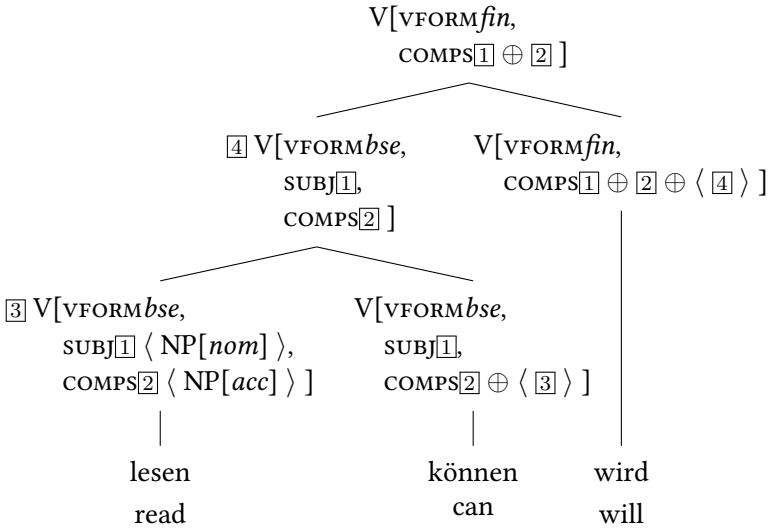



Figure 4.5: Analysis of a German verbal complex with three verbs in cannonical order

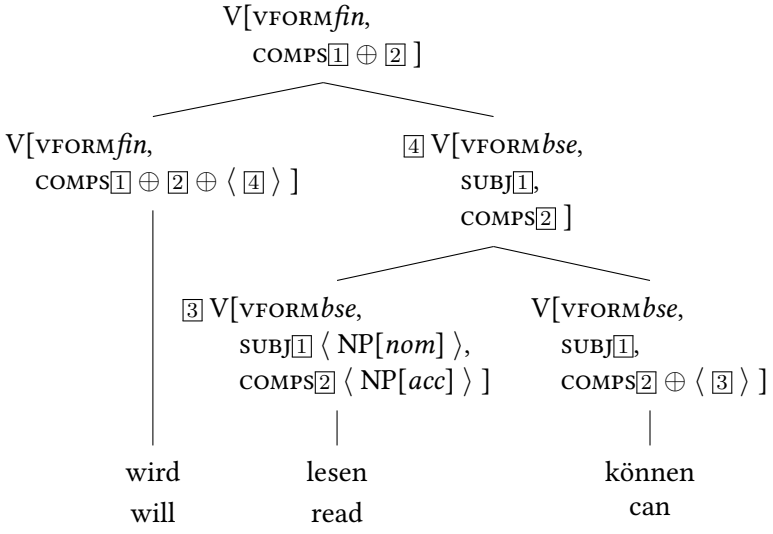



Figure 4.6: Analysis of a German verbal complex with three verbs with Auxiliary Flip

COMPS value has to be the empty list. Verbal complexes are different: Words are combined directly. The VO languages differ from the OV languages in not allowing this. In VO languages the verb forms a phrase with its complements and this verb phrase may be embedded under another verb. (12a) shows an example with auxiliary verbs, (12b) is an example with a full verb that takes an infinitive verb phrase with *to* and an object in addition.

(12) a. Peter [will [have [read the book]]].
b. Peter [promises Mary [to read the book]].

Languages like Danish and English only have the Head-Complement Schema and the Specifier-Head Schema, while languages like Dutch and German have an additional schema that can combine unsaturated words. The schema for predicate complex formation is sketched in Figure 4.7. This schema is very similar to the

check whether this has to be explained better

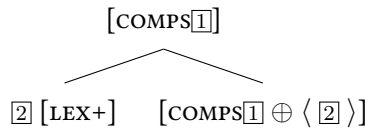



Figure 4.7: Sketch of the Predicate Complex Schema

Head-Complement Schema that was given on page 38. The difference is that the daughter in 2 has to be lexical (LEX+). Therefore words and verbal complexes are compatible with this daughter while full phrases like *das Buch lesen* 'read the book' are not.

Before turning to the next phenomenon, I want to briefly discuss the alternative to the verb complex analysis presented here. One alternative suggestion was to analyze auxiliaries in German as VP embedding verbs (Wurmbrand 2003a). Our standard example would then have the analysis in (13):

(13) dass keiner [[das Buch lesen] wird]
that nobody the book read will

The question that such analyses have to answer is how scrambling of arguments of the involved verbs can be accounted for. The answer is often that it is assumed that the object of the embedded verb is extracted from the VP and moved to the left periphery of the clause. This is shown in (14):

(14) dass [das Buch]$_i$ keiner [[ _$_i$ lesen] wird]
that the book nobody read will
'that nobody will read the book'

However, analyses that treat scrambling as movement are problematic since they predict additional readings of sentences that have quantifiers in their NPs (Kiss 2001: 146; Fanselow 2001: Abschnitt 2.6).

Before I turn to the analysis of the verb position, I want to show how sentences with several verbs in SVO languages can be analyzed. Figure 4.8 shows the analysis of the English version of sentence (5a). The verb *reads* selects a subject and an

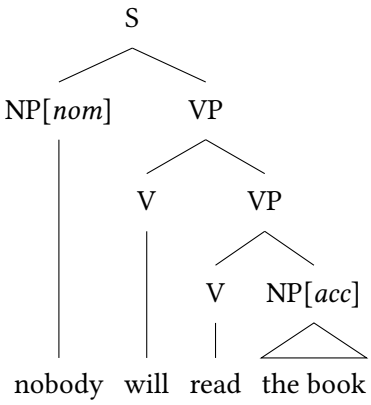



Figure 4.8: Embedding of a VP in SVO languages

object. The verb forms a VP with the NP *the book*. This VP is still lacking a subject. The auxiliary *will* selects a VP and a subject that is identical with the subject of *read*. The combination of *will* and the VP is licensed by the Head-Complement Schema that was sketched in Figure 3.8 on page 38.

The equivalent of *lesen können wird* 'read can will' cannot be given here, since English modal verbs do not have non-finite forms, but one can construct examples with modals as the highest verb:

(15) He [must [have [seen him]]]

This sentence has a structure that is similar to the one in Figure 4.8: *must* and *have* both embedd VPs.

Finally, Figure 4.9 on the next page shows the translation of (1):

(16) Somebody has promised him to read it.

*promise* is a verb that takes a subject, an object, and a VP complement. Like in the analysis of (9) on page 38 – which is repeated here as (17) for convenience – the verb *promised* is combined with its NP complement first and then with its VP

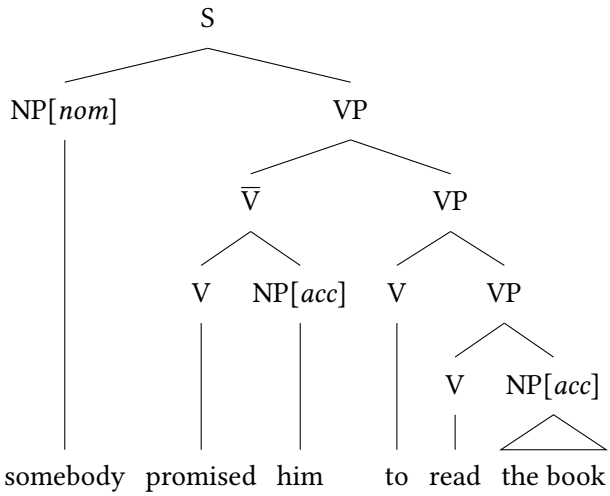



Figure 4.9: Embedding of a VP with verbs that take an additional object

argument. The VP consists of *to* and another VP with an infinitive in base form. *to* is analyzed as an auxiliary verb. It is important to note that the object *him* cannot appear in any other position (appart from extraction to the left periphery). For instance, it cannot appear in the position of *the book* and the same holds for *the book*: This phrase cannot appear in any other place than in the object position.

add references

# 5 Verb position: verb first and verb second

This chapter deals with the analysis of the verb position in V2 langauges. I will concentrate on Danish and German, which may serve as prototypical examples: Danish is an SVO language, while German is SOV. I will first discuss arguments for the classification of German as an SOV language and provide the necessary data on Danish and then explain the respective analyses.

## 5.1 The phenomenon

Section 2.1 contains a discussion of the basic order of subject, object and verb in the languages of the world and in the Germanic languages in particular. I discussed the classification provided by the World Atlas of Language Structures, which suggested that German is a language with two dominant constituent orders: SOV and SVO. Claiming that SVO is a basic order on the basis of pure counting is somehow strange given the fact that most German sentences do not have the subject in first position anyway. The following text may serve as an example:

(1) Für selbstfahrende Autos soll es in Deutschland nach Angaben von Bundesverkehrsminister Alexander Dobrindt (CSU) bald eine Teststrecke geben. Auf der Autobahn A9 in Bayern sei ein Pilotprojekt „Digitales TestfeldAutobahn“ geplant, wie aus einem Papier des Bundesverkehrsministeriums hervorgeht. Mit den ersten Maßnahmen für diese Teststrecke solle schon in diesem Jahr begonnen werden. Mit dem Projekt soll die Effizienz von Autobahnen generell gesteigert werden. „Die Teststrecke soll so digitalisiert und technisch ausgerüstet werden, dass es dort zusätzliche Angebote der Kommunikation zwischen Straße und Fahrzeug wie auch von Fahrzeug zu Fahrzeug geben wird“, sagte Dobrindt zur Frankfurter Allgemeinen Zeitung. Auf der A9 sollten sowohl Autos mit Assistenzsystemen als auch später vollautomatisierte Fahrzeuge fahren können. Dort soll die Kommunikation nicht nur zwischen Testfahrzeugen, sondern auch zwi-

> schen Sensoren an der Straße und den Autos möglich sein, etwa zur Übermittlung von Daten zur Verkehrslage oder zum Wetter. Das Vorhaben solle im Verkehrsministerium von einem runden Tisch mit Forschern und Industrievertretern begleitet werden, sagte Dobrindt. Dieser solle sich unter anderem auch mit den komplizierten Haftungsfragen beschäftigen. Also: Wer zahlt eigentlich, wenn ein automatisiertes Auto einen Unfall baut? [Mithilfe der Teststrecke] solle die deutsche Automobilindustrie auch beim digitalen Auto „Weltspitze sein können", sagte der CSU-Minister. Die deutschen Hersteller sollten die Entwicklung nicht Konzernen wie etwa Google überlassen. Derzeit ist Deutschland noch an das „Wiener Übereinkommen für den Straßenverkehr" gebunden, das Autofahren ohne Fahrer nicht zu lässt. Nur unter besonderen Auflagen sind Tests möglich. Die Grünen halten die Pläne für unnütz. Grünen-Verkehrsexpertin Valerie Wilms sagte der Saarbrücker Zeitung: „Der Minister hat wichtigere Dinge zu erledigen, als sich mit selbstfahrenden Autos zu beschäftigen." Die Technologie sei im Verkehrsbereich nicht vordringlich, auch stehe sie noch ganz am Anfang. Aus dem grün-rot regierten Baden-Württemberg – mit dem Konzernsitz von Daimler – kamen hingegen andere Töne. Was in Bayern funktioniere, müsse auch in Baden-Württemberg möglich sein, sagte Wirtschaftsminister Nils Schmid (SPD). Von den topografischen Gegebenheiten biete sich die Autobahn A81 an. (taz: 27.01.2015)

The subjects are marked in red and the non-subjects in green. I also counted subjects/non-subjects within clauses. The ratio is 10 subjects compared to 15 non-subjects. So, the question is: What does this number tell us? Of course we could now further differentiate the grammatical functions of the fronted material. We would find that we have 3 object clauses fronted, the rest of the fronted constituents is adverbials. We could conclude the SVO is more common than OVS, but saying that SVO is basic would not be appropriate. Rather Adv V S O should be regarded as a basic pattern. But would this be helpful in any way? I guess not. The general insight is that German fronts the finite verb to mark the sentence type and puts one constituent infornt of this verb. This fronted constituent can be the subject, an object or any other constituent of the sentence. It may be even a dependent of a deeply embedded element in the clause. So, the position infront of V in the V2 languages has nothing to do with the SVO/SOV dichotomy and basically disturbs the picture.

In the following I will provide facts that are seen as evidence for SOV as the basic order of German (and Dutch). Before I provide an analysis in Section 5.2, I discuss the verb position in the germanic SVO languages with Danish as an

example in Section 5.1.2.

### 5.1.1 German as an SOV language

#### 5.1.1.1 The order of particle and verb and idioms

Verb particles form a close unit with the verb. The unit is observable in verb final sentences only, which supports an SOV analysis (Bierwisch 1963: 35).

(2) a. weil er morgen anfängt
because he tomorrow at.catches
'because he starts tomorrow'

b. Er fängt morgen an.
he catches tomorrow at
'He starts tomorrow.'

The particle verb in (2) is non-transparent: its meaning is not related to the verb *fangen* 'to catch'. Such particle verbs are sometimes called mini idioms. In fact the argument above can also be made with real idioms: Many idioms do not allow rearrangement of the idiom parts:

(3) a. dass niemand dem Mann den Garaus macht
that nobody the man the GARAUS makes
'that nobody kills the man'

b. ?* dass dem Mann den Garaus niemand macht
that the man the GARAUS nobody makes

c. Niemand macht ihm den Garaus.
nobody makes him the GARAUS
'Nobody kills him.'

This is an instance of Behaghel's law (1932) that things that belong together semantically tend to be realized together. The exception is the finite verb. The finite verb can be realized in initial or final position despite the fact that this interrupts the continuity of the idiomatic material. Since the continuity can be observed in SOV order only, this order is considered basic.

#### 5.1.1.2 Verbs formed by back-formation

Verbs that are derived from nouns by backformation often cannot be separated and verb second sentences therefore are excluded (see Haider 1993: 62, who refers to unpublished work by Höhle 1991):

(4) a. weil sie das Stück heute uraufführen
because they the play today play.for.the.first.time
'because they premiered the play today'

b. * Sie uraufführen heute das Stück.
they play.for.the.first.time today the play

c. * Sie führen heute das Stück urauf.
they guide today the play PREFIX.PART

Hence these verbs can only be used in the order that is assumed to be the base order.

#### 5.1.1.3 Constructions that only allow SOV order

Similarly, it is sometimes impossible to realize the verb in initial position when elements like *mehr als* 'more than' are present in the clause (Haider 1997; Meinunger 2001):

(5) a. dass Hans seinen Profit letztes Jahr mehr als verdreifachte
that Hans his profit last year more than tripled
'that Hans increased his profit last year by a factor greater than three'

b. Hans hat seinen Profit letztes Jahr mehr als verdreifacht.
Hans has his profit last year more than tripled
'Hans increased his profit last year by a factor greater than three.'

c. * Hans verdreifachte seinen Profit letztes Jahr mehr als.
Hans tripled his profit last year more than

So, it is possible to realize the adjunct together with the verb in final position, but there are constraints regarding the placement of the finite verb in initial position.

#### 5.1.1.4 Order in subordinate and non-finite clauses

Verbs in non-finite clauses and in subordinate finite clauses starting with a conjunction always appear finally, that is, in the *rechte Satzklammer*. For example, *zu geben* 'to give' and *gibt* 'gives' appear in the *rechte Satzklammer* in (6a) and (6b):

(6) a. Der Clown versucht, Kurt-Martin die Ware zu geben.
the clown tries Kurt-Martin the goods to give
'The clown tries to give Kurt-Martin the goods.'

b. dass der Clown Kurt-Martin die Ware gibt
that the clown Kurt-Martin the goods gives
'that the clown gives Kurt-Martin the goods'

#### 5.1.1.5 Scope of adverbials

The scope of adverbials in sentences like (7) depends on their order (Netter 1992: Section 2.3): The left-most adverb scopes over the following adverb and over the verb in final position. This was explained by assuming the following structure:

(7) a. weil er [absichtlich [nicht lacht ]]
because he deliberately not laughs
'because he deliberately does not laugh'

b. weil er [nicht [absichtlich lacht]]
because he not deliberately laughs
'because he does not laugh deliberately'

An interesting fact is that the scope relations do not change when the verb position is changed. If one assumes that the sentences have an underlying structure like in (7), this fact is explained automatically:

(8) a. Lacht$_i$ er [absichtlich [nicht $\_i$]]?
laughs he deliberately not
'Does he deliberately not laugh?'

b. Lacht$_i$ er [nicht [absichtlich $\_i$]]?
laughs he not deliberately
'Doesn't he laugh deliberately?'

It has to be mentioned here, that there seem to be exceptions to the claim that modifiers scope from left to right. Kasper (1994: 47) discusses the examples in (9), which go back to Bartsch & Vennemann (1972: 137).

(9) a. Peter liest wegen der Nachhilfestunden gut.
Peter reads because.of the tutoring well
'Peter reads well because of the tutoring.'

b. Peter liest gut wegen der Nachhilfestunden.
Peter reads well because.of the tutoring

(9a) corresponds to the expected order in which the adverbial PP *wegen der Nachhilfestunden* outscopes the adverb *gut*, but the alternative order in (9b) is possible as well and the sentence has the same reading as the one in (9a).

However, Koster (1975: Section 6) and Reis (1980: 67) showed that these examples are not convincing evidence since the *rechte Satzklammer* is not filled and therefore the orders in (9) are not necessarily variants of *Mittelfeld* orders but may be due to extraposition of one constituent. As Koster and Reis showed, the examples become ungrammatical when the right sentence bracket is filled:

(10) a. * Hans hat gut wegen der Nachhilfestunden gelesen.
Hans has well because.of the tutoring read

b. Hans hat gut gelesen wegen der Nachhilfestunden.
Hans has well read because.of the tutoring
'Peter read well because of the tutoring.'

The conclusion is that (9b) is best treated as a variant of (9a) in which the PP is extraposed.

While examples like (9) show that the matter is not trivial, the following example from Crysmann (2004: 383) shows that there are examples with a filled *rechte Satzklammer* that allow for scopings in which an adjunct scopes over another adjunct that precedes it. For instance, in (11) *niemals* 'never' scopes over *wegen schlechten Wetters* 'because of the bad weather':

(11) Da muß es schon erhebliche Probleme mit der Ausrüstung gegeben
there must it PART severe problems with the equipment given
haben, da [wegen schlechten Wetters] ein Reinhold Messner
have since because.of bad weather a Reinhold Messner
[niemals] aufgäbe.
never give.up.would
'There must have been severe problems with the equipment, since someone like Reinhold Messner would never give up just because of the bad weather.'

However, this does not change the fact that the sentences in (7) and (8) have the same meaning independent of the position of the verb. The general meaning composition may be done in the way that Crysmann suggested.

Another word of caution is in order here: There are SVO languages like French that also have a left to right scoping of adjuncts (Bonami et al. 2004: 156–161). So, the argumentation above should not be seen as the only fact supporting the SOV status of German. In any case the analyses of German that were worked out in various frameworks can explain the facts nicely.

#### 5.1.1.6 Position of non-finite verbs in VO and OV languages

Before I turn to the verb position in Danish in the next subsection, I want to repeat Ørsnes' examples containing several non-finite verbs: The example in (12a) shows a German subordinate clause with a verbal complex consisting of three verbs. The level of embedding is indicated by subscript numbers. As can be seen, the verbs are added at the end of the clause. In the corresponding Danish example it is exactly the other way around: the embedding verb preceeds the embedded verb.

(12) a. dass er ihn gesehen$_3$ haben$_2$ muss$_1$ (German)
that he him seen have must
'that he must have seen him'

b. at han må$_1$ have$_2$ set$_3$ ham (Danish)
that he must have seen him

The examples in (13) shows variants with different complexity. If we exchange the simplex verb *sah* 'saw' in (13a) by the perfect form, the auxiliary is placed after the participle as in (13b).

(13) a. dass er ihn sah (German)
that he him saw
'that he saw him'

b. dass er ihn gesehen hat
that he him seen has
'that he has seen him'

If a modal is added to (13b), the modal goes to the right of the embedded verbs. This order is distorted by the placement of the finite verb in initial position, but this placement is independent of the order of the non-finite verbs. As the examples in (14) show, the finite verb is realized to the left of the subject both in German (SOV) and in Danish (SVO).

(14) a. Muss er ihn gesehen haben? (German)
must he him seen have
'Must he have seen him?'

b. Må han have set ham? (Danish)
must he have seen him
'Must he have seen him?'

### 5.1.2 Verb position in the germanic SVO languages

During the discussion of scope facts I already hinted at an analysis in which a trace marks the position of the verb in final position and the verb in initial position is coindexed with this trace. Although the SVO languages are different a similar analysis has been suggested for languages like Danish. The evidence for this is that adverbials in SVO languages usually attach to the VP, that is they combine with a phrase consisting of the verb and its object or objects. (15) gives an example:

(15) at Jens ikke [$_{VP}$ læser bogen] (Danish)
that Jens not reads book.DEF
'that Jens does not read the book'

The interesting thing now is that the finite verb is placed to the left of the negation in V2 sentences:

(16) Jens læser ikke bogen. (Danish)
Jens reads not book.DEF
'Jens is not reading the book.'

This is seen as evidence for verb fronting by many:

(17) Jens læser$_i$ ikke [$_{VP}$ _$_i$ bogen].
Jens reads not book.DEF
'Jens does not read the book.'

With this as a background it should be clear what the analysis of yes/no questions as the one in (18b) is:

(18) a. at Jens læser bogen
that Jens reads book.DEF
'that Jens reads the book'
b. Læser Jens bogen?
reads Jens book.DEF
'Does Jens read the book?'

The analysis of the first sentence involves a VP as in (19a) and the second sentence involves a VP with a verbal trace that corresponds to the verb in initial position:

(19) a. at Jens [$_{VP}$ læser bogen]
that Jens reads book.DEF
'that Jens reads the book'

b. Læser$_i$ Jens [$_{\text{VP}}$ $\__i$ bogen]?
reads Jens book.DEF
'Does Jens read the book?'

It is interesting to note that the German and the Danish question with simplex verbs have exactly the same constituent order. Compare (18b) with (20):

(20) Liest Jens das Buch? (German)
reads Jens the book
'Does Jens read the book?'

The internal structure of these sentences is quite different though. The different nature of the two langauges is of course more obvious when non-finite verbs are involved:

(21) a. Har$_i$ Jens [ $\__i$ læst bogen]? (Danish)
has Jens read book.DEF
'Has Jens read the book?'

b. Hat$_i$ Jens das Buch [gelesen $\__i$]? (German)
has Jens the book read
'Has Jens read the book?'

In (21a) the finite verb is connected to a trace in initial position of the VP and in (21b) it is connected to a verb in final position in a verbal complex.

### 5.1.3 Verb second

Even languages with rather rigid constituent order sometimes allow to front elements or to position elements at the far right, that is, extrapose them. (22) shows English examples of fronting:

(22) a. I read this book yesterday.
b. This book, I read yesterday.
c. Yesterday, I read this book.

The object *this book* and the adjunct *yesterday* are fronted in (22b) and (22c), respectively.

The Germanic languages (with the exception of English) place one constituent in front of the finite verb. As the German examples in (23) show, the fronted constituent can be of any grammatical function:

(23) a. Ich habe das Buch gestern gelesen. (German)
I have the book yesterday read
'I have read the book yesterday.'

b. Das Buch habe ich gestern gelesen.
the book have I yesterday read

c. Gestern habe ich das Buch gelesen.
yesterday have I the book read

d. Gelesen habe ich das Buch gestern, gekauft hatte ich es aber schon
read have I the book yesterday bought had I it but yet
vor einem Monat.
before a month
'I read the book yesterday, but I bought it last month already.'

e. Das Buch gelesen habe ich gestern.
the book read have I yesterday

Such frontings are not clause-bound, that is the fronting may cross one or several clause boundaries and also boundaries of other constituents. (24) shows English examples in which the object of *saw* is extracted across one and two clause boundaries:

(24) a. Chris, David saw.

b. Chris, we think that David saw.

c. Chris, we think Anna claims that David saw.

In German such extractions can be found as well:

(25) a. Wen$_i$ glaubst du, daß ich $\__i$ gesehen habe.[1] (German)
who believes you that I seen have

b. „Wer$_i$, glaubt er, daß er $\__i$ ist?“ erregte sich ein Politiker vom Nil.[2]

It is generally said that they are more common in Southern German variaties, but there are other examples that show that nonlocal dependencies are involved. In (26a) the prepositional object *um zwei Millionen Mark* 'around two million Deutsche Marks' depends on *betrügen* 'to cheat'. It does not depend on any of the verbs in the matrix clause. The phrase *eine Versicherung zu betrügen* 'an insurance to betray' is extraposed that is it is positioned to the right of the verbal braket in the so-called *Nachfeld*. The position of *um zwei Millionen Mark* cannot

[1] Scherpenisse (1986: 84).
[2] Spiegel, 8/1999, S. 18.

be accounted for by local reordering. Similarly, *gegen ihn* 'against him' depends on *Angriffe* 'attacs', which is part of the phrase *Angriffe zu lancieren* 'attacs to launch'. Again an analysis based on local reordering of dependents of a head is impossible.

(26) a. [Um zwei Millionen Mark]$_i$ soll er versucht haben,
around two million Deutsche.Marks should he tried have
[eine Versicherung $\__i$ zu betrügen].[3]
an insurance.company to deceive
'He apparently tried to cheat an insurance company out of two million Deutsche Marks.'

b. [Gegen ihn]$_i$ falle es den Republikanern hingegen schwerer,
against him fall it the Republicans however more.difficult
[ [ Angriffe $\__i$] zu lancieren].[4]
attacks to launch
'It is, however, more difficult for the Republicans to launch attacks against him.'

## 5.2 The analysis

### 5.2.1 Verb first

The analysis uses a mechanism that passes up information in a tree. The verbal trace contains the information that a verb is missing locally. This information about the missing verb is passed up to the node that dominates the verbal trace. It is represented using // (read double slash). The respective information is head-information and therefore it is passed up the head-path along with other information as for instance part of speech. Figure 5.1 on the following page illustrates. The verbal trace is missing a V, the $\overline{\text{V}}$ is missing a V and the S as well. The initial verb selects for a sentence that is lacking a V $\langle$ S//V $\rangle$. The lexical item for the verb in initial position is licensed by a lexical rule that relates a verb to a verb that selects for a sentence that is lacking the input verb. Since the selectional requirement of this verb (S//V) is identified with the sentence lacking a V (Jens das Buch $\__k$), the information about the original verb *liest* is identified with the V in S//V. Since the double slash information is head information, it percolates down along the head path to the verbal trace. The information about the initial

[3] taz, 04.05.2001, p. 20.
[4] taz, 08.02.2008, p. 9.

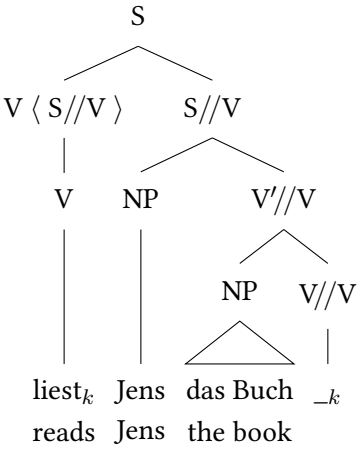



Figure 5.1: Analysis of verb position in German

V is identified with the syntactic and semantic information of the verbal trace in final position and hence this verbal trace behaves exactly like the verb in inital position that was input to the lexical rule.

Various researchers argued that the finite verb in initial position behaves like a complementizer in subordinated clauses (Höhle 1997; Weiß 2005; 2018). This is captured by the analysis. Compare Figure 5.1 with Figure 5.2. The complemen-

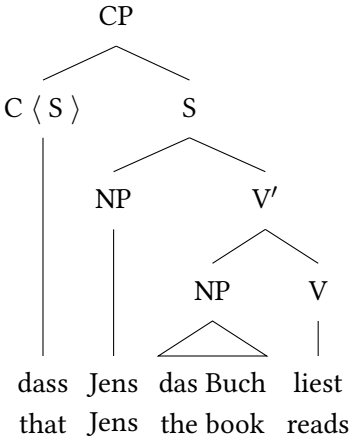



Figure 5.2: Analysis of a verb final clause with complementizer in German

tizer *dass* 'that' selects for a complete sentence, that is, a sentence that does not

have a missing verb, and the initial verb *liest* 'reads' in Figure 5.1 selects for a sentence that is missing *liest*. So apart from the overt or covert verb the structures are identical. This fact is important when it comes to the analysis of the scope facts. Since the structure is completely parallel to the one we have in verb final

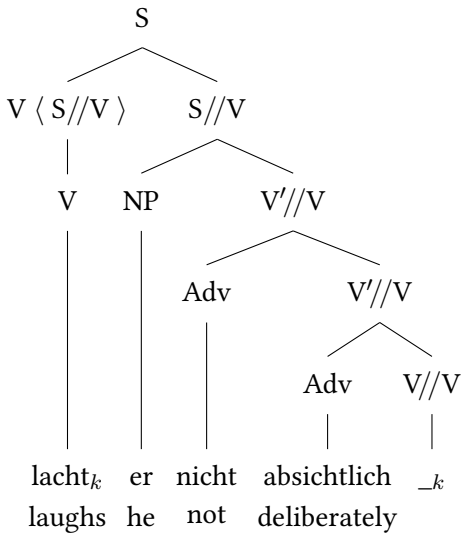



Figure 5.3: Analysis of sentences with adverbials in German

sentences, the scope facts follow immediately: The trace behaves like the verb in initial position, *absichtlich* 'deliberately' modifies the trace and the resulting semantics is passed up in the tree (see Figure 5.3). The next step is the modification by *nicht* 'not'. Again the resulting semantics is passed up. *lacht* 'laughs' combines with the clause and takes its semantics over. Since *lacht* is the head the semantics is passed on from there.

The analysis of Danish is completely parallel to the one of German. The only difference between Figure 5.1 and Figure 5.4 on the next page is the position of the verbal trace relative to the object: The trace follows the object in German and it preceeds it in Danish.

Das DEF fehlt noch in der Abbildung.

The last thing that is explained in this chapter is the analysis of negation and verb fronting in Danish. Figure 5.5 on the following page shows that the negation attaches to the VP as in verb final clauses and the verb is fronted so that it appears to the left of the negation. The next chapter explains the extraction of constituents and it will then be possible to provide the full structure for sentences like (27a) and it will become clear why the order of negation and verb differs in

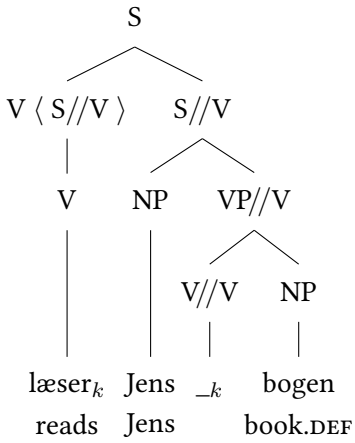



Figure 5.4: Analysis of verb position in Danish

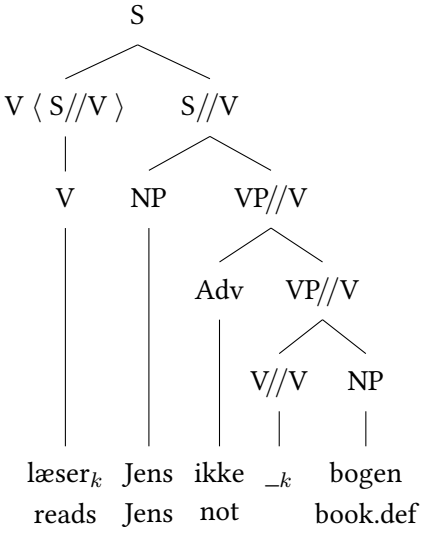



Figure 5.5: The analysis of verb fronting and negation in Danish

embedded and main clauses:

(27) a. Jens læser ikke bogen.
Jens reads not book.DEF
'Jens does not read the book.'

b. at Jens ikke læser bogen
that Jens not reads book.DEF
'that Jens does not read the book'

### 5.2.2 Verb second

The technique that is used for the analysis of nonlocal dependencies is the same that was employed for the analysis of the reorderings of verbs: an empty element takes the position of the fronted constituent and the information about the missing constituent (the so-called gap) is passed up in the tree until it is finally bound off by the fronted element, the so-called filler. Figure 5.6 illustrates the analysis of (24a).

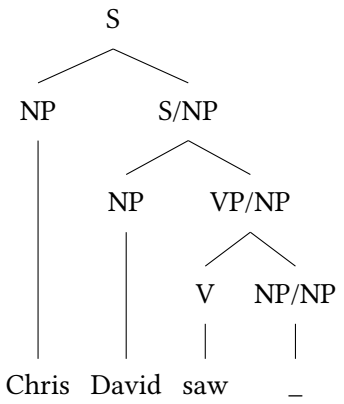



Figure 5.6: The analysis of extraction in English

Figure 5.7 on the following page shows the analysis of example (24b), which really requires a nonlocal dependency. As is shown in the figure, the information about the missing object is passed up to the sentence level (S/NP), to the CP level (CP/NP) and up to the next higher S. There it is bound off by the filler *Chris*. The binding off of the missing element is licensed by a special schema, which is called the Filler-Head Schema. Figure 5.8 on the next page provides a sketch of this schema.

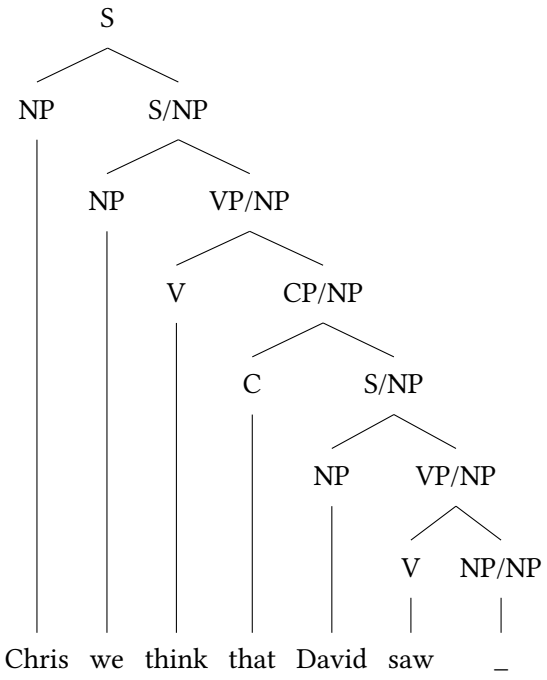



Figure 5.7: Extraction crossing the clause boundary

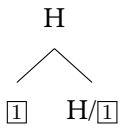



Figure 5.8: Sketch of the Head-Filler Schema

English is the only non-V2 language among the Germanic languages. In what follows I show how German (V2+SOV) and Danish (V2+SVO) can be analyzed with the techniques that were introduced so far. Figure 5.9 shows the analysis of (28):

(28) Das Buch liest Jens.
the book reads Jens
'Jens reads the book.'

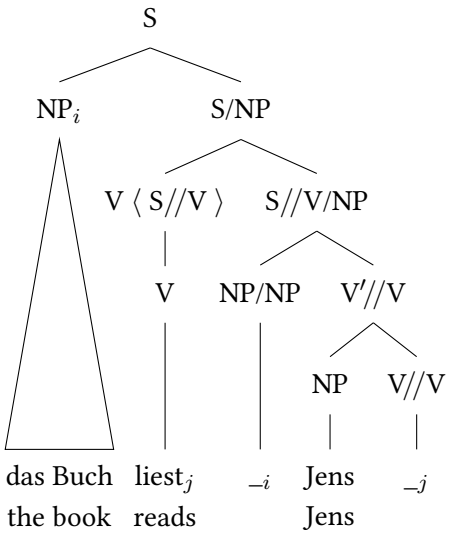



Figure 5.9: Analysis of V2 in German (SOV)

The analysis of the German example is more complicated than the English one since verb movement is involved. The verb is fronted as was explained with reference to Figure 5.1. In addition the object is realized by a trace and then filled by the filler *das Buch* 'the book', which is realized preverbally.

I follow Fanselow (2003) and Frey (2004), who assume that the position of the object is initial in the *Mittelfeld*. Since German allows for both nominative, accusative and accusative, nominative order, the position of the trace for the extracted object could be initial or final as in (29a) and (29b), respectively:

(29) a. [Das Buch]$_i$ liest$_j$ $\__i$ Jens $\__j$.
the book reads Jens

b. [Das Buch]$_i$ liest$_j$ Jens $\__i$ $\__j$.
the book reads Jens

Fanselow and Frey refer to information structural properties that elements in the initial position have and argue that fronted elements like *das Buch* have information structural properties that correspond to the ones that non-fronted elements in the initial *Mittelfeld* position have:

(30) Liest das Buch Jens?
reads the book Jens
'Does Jens read the book.'

They argue that (30) patterns with (29a) rather than with (29b).

The complete discussion will not be repeated here, since this would take us too far away, but the interested reader may consult the references given above.

The Danish example is similar. We first have the analysis of verb-initial position that involves the double slash mechanism and on top of that we have the fronting of the object using the slash mechanism. Figure 5.10 illustrates.

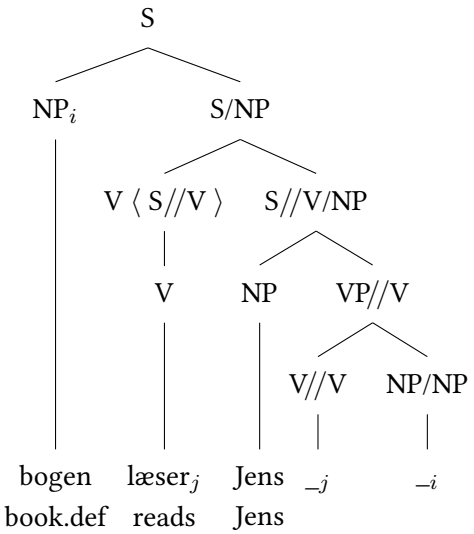



Figure 5.10: Analysis of V2 in Danish (SVO)

The careful reader will ask why we use two different mechanisms to analyze verb movement and extraction. The answer is that these movement types are different in nature: Verb movement is clause bound while the movement of other constituents may cross clause-boundaries. This is captured by the fact that the double slash information is passed up together with other head features as for

instance the part of speech information and the slash information is passed up separately.

Before we deal with passive in the next chapter, we can compare the three sentences in (31):

(31) a. Jens reads a book.
b. Jens læser en bog.
c. Jens liest ein Buch.

Again the order of the elements is the same in all three languages. However, English is an SVO non-V2 language, Danish is an SVO+V2 language and German is an SOV+V2 language. The analyses in bracket notation are given in (32):

(32) a. [$_{\text{S}}$ Jens [$_{\text{VP}}$ reads [$_{\text{NP}}$ a book]]].
b. [$_{\text{S}}$ Jens$_i$ [$_{\text{S/NP}}$ læser$_k$ [$_{\text{S/NP}}$ $\_i$ [$_{\text{VP}}$ $\_k$ [$_{\text{NP}}$ en bog]]]].
c. [$_{\text{S}}$ Jens$_i$ [$_{\text{S/NP}}$ liest$_k$ [$_{\text{S/NP}}$ $\_i$ [$_{\overline{\text{V}}}$ [$_{\text{NP}}$ ein Buch] $\_k$]]]].

It may be surprising that these three sentences get such radically different analyses although the order of elements are the same. The difference in structures is the result of the assumption that all declarative main clauses in the Germanic V2 languages follow the same pattern, namely that the finite verb is fronted and then another constituent is fronted. This particular construction is connected to the clause type, that is, to the meaning of the utterance (imperative, question, assertion). The sentences in (25) and (26) show that V2 involves a nonlocal dependency. Therefore the analysis of (32b) is more complex than (33) and involves the fronting of the finite verb to intital position with a successive fronting of the subject:

(33) [$_{\text{S}}$ Jens [$_{\text{VP}}$ læser [$_{\text{NP}}$ en bog]]].

The reason is that now all declarative main clauses are subsumed under the same structure, namely (32b). A declarative main clause in all Germanic languages is the combination of an extracted phrase with a verb initial phrase in which the extracted element is missing. Fronting of the finite verb is a way to mark the clause type: If just the finite verb is fronted, a yes/no question (34a) or imperative results (34b).[5]

(34) a. Gibt er ihm das Buch?
gives he him the book
'Does he give him the book?'

[5] Verb initial clauses may also be declarative clauses if so-called *topic drop* (Fries 1988) is involved:

b. Gib mir das Buch!
give me the book

If another constituent is fronted, a question with question word (35a), an imperative (35b) or a declarative clause (35c) results.

(35) a. Wem gibt er das Buch?
who gives he the book
'Whom does he give the book to?'

b. Jetzt gib ihm das Buch!
now give me the book
'Give me the book now!'

c. Jetzt gibt er ihm das Buch.
now gives he him the book
'He gives him the book now.'

The analysis of the semantics of clause types cannot be given here but the interested reader is referred to Müller (2016; 2017).

## 5.3 Alternatives

Advanced stuff. Ignore if you do not dare.

In the preceding section I suggested an analysis in which the basic SVO order is just that: a subject followed by the verb and a verb followed by the objects. The verb final sentences of SOV languages are analyzed as a verb that is preceded by its arguments. The position of the finite verb is accounted for by fronting it via the double slash mechanism.

There are alternative proposals to SVO and SOV order and also to the placement of the finite verb. The proposal by Kayne (1994) suggests that all languages have an underlying specifier-head-complement order. The orders we see in the Germanic SOV languages would then be derived by movement. The counterproposal by Haider (2000; 2017) does not suggest that all languages are like English

(i) Was macht Peter? Gibt ihm ein Buch.
what does Peter gives him a book
'What does Peter do? He gives him a book.'

The subject of *gibt* 'gives' is dropped. The complete sentence would be a V2 sentence: *Er gibt ihm ein Buch.*.

or Romance but instead claims that the VO languages are derived from an underlying OV order. These two approaches are discussed in the following two subsections. As will be shown, Kayne's proposal makes wrong predictions and Haider's proposal is not without problems either. For both proposals it would be unclear how they should be acquired by learners of the respective languages without the assumption of a rich Universal Grammar.

The third class of proposals to be discussed in Section 5.3.3 does not assume verb movement at all. Rather than assuming a structure with layered VPs and some sort of movement that reorders the finite verb authors like Gazdar, Klein, Pullum & Sag (1985) and **Sag2018a** assume that there are alternative linearizations for finite verbs and their subjects. The pros and cons of such analyses are the topic of Section 5.3.3.

### 5.3.1 OV derived from VO: Kayne (1994)

Kayne (1994)

Haider (2000) shows why Kayne's proposals do not work.

### 5.3.2 VO derived from OV: Haider (2017)

Haider (2000; 2017)

### 5.3.3 Analyses of verb-initial sentences in SVO languages without verb-movement

Gazdar, Klein, Pullum & Sag (1985), **Sag2018a**

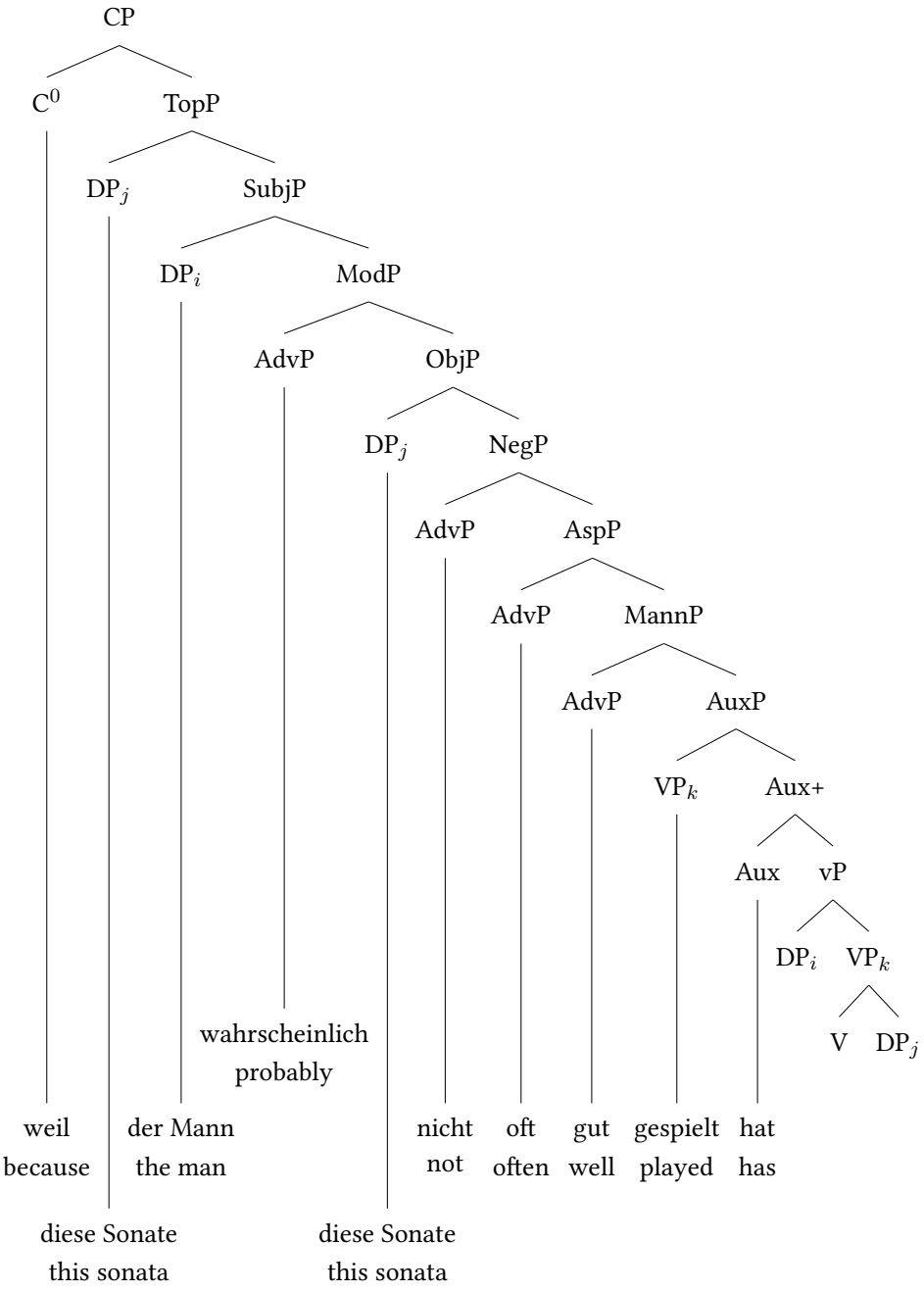



Figure 5.11: Analysis of sentence structure with leftward remnant movement and functional heads following Laenzlinger (2004: 224)

# 6 Passive

This chapter deals with the passive.[1] Passive is usually analyzed as the suppression of the subject. However, before we can develop an analysis we have to ask what it is that constitutes a subject. This is a question that is the topic of edited volumes and dissertations and modest as I am, I will try and provide an answer at least for the Germanic languages. As we will see, the situation is rather clear in languages like Danish, English, and German, but there are exciting facts to be discovered about Icelandic.

## 6.1 The phenomenon

### 6.1.1 Subjects and other subjects

The situation in languages like English, Danish, and German is rather clear. For instance, many authors assume that non-predicative NPs in the nominative are subjects in German. So, *der Mann* 'the man' is the subject of the sentences in (1):

(1) a. Der Mann lacht.
the man laughs

b. Der Mann hilft ihr.
the man helps her

c. Der Mann gibt ihr ein Buch.
the man gives her a book

The restriction to non-predicative NPs is needed since otherwise, we would have to assume that both NPs in (2) are subjects, but *ein Lügner* 'a lier' is a predicative phrase and only *der Mann* 'the man' is the subject.

(2) Der Mann ist ein Lügner.
the man is a liar
'The man is a liar.'

[1] This chapter is a rough draft. Most of the references to other literature are still missing ...

In addition certain clausal arguments are treated as subjects.

Genetives and datives as in (3) are not counted among the subjects in German.

(3) a. Ihrer wurde gedacht.
they.GEN was remembered
'They were remembered.'

b. Ihm wurde geholfen.
he.DAT was helped
'He was helped.'

Interestingly the question whether genitives and datives like those in (3) are subjects was answered quite differently for the SVO language Icelandic by researchers following the work of Zaenen, Maling & Thráinsson (1985). Although the sentences in (4) look like those in (2), the genetive and the dative element are assumed to be subjects.

(4) a. Hennar var saknað.
she.SG.GEN was missed

b. Þeim var hjalpað.
they.PL.DAT was helped

Since Icelandic is a V2 language the constituent order in such simple sentences does not help us to determine whether *hennar* 'her' and *Þeim* 'them' are subjects or not. These elements are fronted and since both subjects and objects can be fronted, the sentences in (4) do not help us in determining the grammatical function of these arguments. However, Zaenen, Maling & Thráinsson (1985) argued that these elements should be analyzed as subjects and provided several tests. Among the tests are more elaborate positional tests and omissability in so-called control constructions. I will turn to these tests now.

#### 6.1.1.1 The position of subjects in V2 and V1 sentences

The first test that was suggested uses the position of constituents in V2 sentences in which a non-subject is fronted (Zaenen, Maling & Thráinsson 1985: Section 2.3). For instance, consider the following examples:

(5) a. Meb þessari byssu skaut Ólafur refinn.
with this shotgun shot Olaf.NOM the.fox.ACC

b. * Meb þessari byssu skaut refinn Ólafur.
with this shotgun shot the.fox.ACC Olaf.NOM

The nominative can appear directly after the finite verb *skaut* 'shot' as in (5a) but it cannot appear to the right of the accusative as in (5b).

The same can be observed with *w*-questions:

(6) a. Hvenær hafði Sigga hjfilpað Haraldi?
when has Sigga.NOM geholfen Harold.DAT

b. * Hvenær hafði Haraldi Sigga hjfilpað?
when has Harald.DAT Sigga.NOM geholfen

The object has to follow the participle *hjfilpað* as in (6a) and the subject immediately follows the finite verb. Examples with the object before the subject as in (6b) are ungrammatical. The dative object can be fronted, but then it has to be realized in initial position to the left of the finite verb, not to its right:

(7) Haraldi hafði Sigga aldrei hjfilpað.
Harald.DAT has Sigga.NOM never geholfen

The same situation can be found in yes/no questions:

(8) a. Hafði Sigga aldrei hjfilpað Haraldi?
has Sigga.NOM never helped Harald.DAT

b. * Hafði Haraldi Sigga aldrei hjfilpað?
has Harald.DAT Sigga.NOM never helped

Zaenen, Maling & Thráinsson (1985: Section 2.3) observed that certain datives can appear in this postverbal position as well:

(9) a. Hefur henni alltaf þótt Ólafur leibinlegur?
has she.DAT always thought Olaf.NOM boring.NOM
'Has she always considered Olaf boring?'

b. Ólafur hefur henni alltaf þótt leibinlegur.
Olaf.NOM has she.DAT always thought boring.NOM
'She alway considered Olaf boring.'

c. * Hefur Ólafur henni alltaf þótt leibinlegur?
has Olaf.NOM her.DAT always thought boring.NOM

The German eqivalent would be the sentence in (10):

(10) ?? Mich dünkt der Mann langweilig.
I.ACC thinks the.NOM man boring
'I think the man is boring.'

However, *dünkt* is archaic and is usually used with a *dass* clause – if it is used at all. But there is a non-archaic verb that has a similar form:

(11) Mir scheint der Mann langweilig.
I.DAT seems the.NOM man boring
'The man seems boring to me.'

The experiencer of *scheinen* 'to seem' is expressed with the dative, while the subject of the embedded predicate *langweilig* 'boring' is in the nominative.

#### 6.1.1.2 Subjects in control constructions

Zaenen, Maling & Thráinsson (1985: Section 2.7) discuss control structures in which the subject of the embedded verb is not expressed. (12a) shows an example of normal control in which the subject of the matrix verb *vonast* 'to hope' refers to the same discourse referent as the subject of the embedded verb *fara* 'to go'. (12b) is an example of so-called arbitrary control. In cases of arbitrary control there is no element depending on the head that governs the infinitive that refers to the same discourse referent as the subject of the infinitive. The unexpressed subject corresponds to a pronoun *one* that is used generically. In example (22b) *óvenjulegt* 'unusual' does not select for an argument that refers to the same referent as the subject of *fara* 'to go'. The subject of *að fara heim snemma* 'to go home early' is not expressed but is understood as the indefinite pronoun *one*.

(12) a. Ég vonast til að fara heim.
I hope for to go home
'I hope to go home.'
b. Að fara heim snemma er óvenjulegt.
to go home early is unusual
'It is unusual to go home early.'

Now, it can be observed that Icelandic allows verbs that do not take a nominative in such control constructions. An example is *vantar* ('lacks'), which takes two accusatives rather than a nominative and an accusative:

(13) Mig vantar peninga.
I.ACC lack money.ACC

(14) shows that this verb can be embedded under *vonast* ('to hope'):

(14) Ég vonast til ab vanta ekki peninga.
I hope for to lack not money.ACC
'I hope that I do not lack money.'

This should be compared with German:

(15) a. Mir fehlt kein Geld.
I.DAT lacks no.a.NOM money
'I do not lack money.'

b. * Ich hoffe, kein Geld zu fehlen.
I hope not.a.NOM money to lack
Intended: 'I hope that I do not lack money.'

The question at the beginning of this section was whether the datives and genetives in sentences like (4) – repeated here as (16) – are subjects or not.

(16) a. Hennar var saknað.
she.SG.GEN was missed

b. Þeim var hjalpað.
they.PL.DAT was helped

We are now able to use the tests to answer this question: The dative is right-adjacent to the finite verb in the question in (17) and hence in subject position.

Add genetive examples

(17) Var honum aldrei hjfilpað af foreldrum sinum?
was he.DAT never helped by parents his
'Did his parents never help him?'

Similarly the dative follows the finite verb in the V2 sentence in (18):

(18) Í prófinu var honum vist hjálpað.
in the.exam was he.DAT apparently helped
'Apparently he was helped in the exam.'

In addition these datives can be omitted in control constructions as the examples in (19) show:

(19) a. Ég vonast til að verba hjálpað.
I hope for to be helped

b. Að vera hjálpað i prófinu er óleyfilegt.
to be helped in the.exam is un.allowed
'It is not allowed to be helped in the exam.'

This should be compared to German: While verbs like *unterstützen* 'to support' that govern a nominative and an accusative can appear in such control constructions, verbs like *helfen* 'to help' that take a nominative and a dative are ruled out in this construction:

(20) a. dass jemand ihm hilft
that somebody him.DAT helps

b. dass jemand ihn unterstützt
that somebody him.ACC supports

c. dass ihm geholfen wird
that him.DAT helped is

d. dass er unterstützt wird
that he.NOM supported is

(21) a. Ich hoffe unterstützt zu werden.
I hope supported to be

b. * Ich hoffe geholfen zu werden.
I hope helped to be

The dative object cannot be omitted in such control constructions as (21b) shows. The only way to realize a passive below *hoffen* is to use the dative passive with *erhalten*/*bekommen*/*kriegen*. The dative passive can turn a dative object into a nominative subject:

(22) Er bekommt geholfen.
he.NOM gets helped

Since the object of *helfen* is then nominative and hence undoubtfully a subject in German, it does not come with a surprise that it can be omitted in control constructions like (23):

(23) Ich hoffe hier geholfen zu bekommen.[2]
I hope here helped to get

## 6.2 The Case Principle

### 6.2.1 Structural and lexical case

In order to analyze the passive it is useful to distinguish between structural and lexical case. Structural case is case that depends on the syntactic structure in which arguments get realized, while lexical case is case that stays constant independent of the sytactic environment. In addition to lexical and structural case there is semantic case. This case is not assigned by a governing head like a verb,

[2] http://www.photovoltaikforum.com/sds-allgemein-ueber-solar-log-f38/solarlog-1000-mit-wifi-anschliesen-t96371.html. 10.01.2014

adjective or preposition but is due to a certain function of an adverbial. For instance time expressions like *den ganzen Tag* 'the whole day' in (24) are in the accusative in German.

(24) Er arbeitet den ganzen Tag.
he.NOM works the.ACC whole day
'He works the whole day.'

Since this chapter is about the passive and its variation in the Germanic languages, I will ignore semantic case here.

#### 6.2.1.1 Nominatives and accusative objects

Until now the case that an argument gets assigned by its head was represented in the valency list of the head. With such a representation we would need two different lexical items for the verb *lesen* ('to read'): one in which the verb takes a nominative and an accusative as in (25c) and one in which it takes two accusatives as in (25d).

(25) a. Er wird das Buch lesen. (German)
he.NOM will the.ACC book read
'He will read the book.'

b. Ich sah ihn das Buch lesen.
I saw him the book read
'I saw him read the book.'

c. ⟨ NP[*nom*], NP[*acc*] ⟩

d. ⟨ NP[*acc*], NP[*acc*] ⟩

Rather than having these two lexical items, one can have just one lexical item and leave the actual case assignment for later. So depending on whether the subject of *lesen* is realized as the subject of *wird* or as the object of *sah* 'saw', it gets nominative or accusative. Such cases are called structural cases. The distinction between structural and lexical case will play an important role in the analysis of passive. It is this distinction that makes a unified analysis of the so-called personal and impersonal passive possible.

(26) provides additional examples and involves different forms of the verb (finite vs. non-finite) and a nominalization:

(26) a. Der Installateur kommt.
the plumber comes
'The plumber comes.'

b. Der Mann läßt den Installateur kommen.
the man lets the plumber come
'The man lets the plumber come.'

c. das Kommen des Installateurs
the coming of.the plumber
'the coming of the plumber'

The example in (26c) also shows that the subject of *kommen* 'to come' can be realized as genetive. So, nominative, genitive, and accusative are structural cases in German. (The question whether some or all datives should be treated as structural case is addressed below).

The examples in (26) show that the case of subjects in German can change, those in (27) show that the case of accusative objects can change as well:

(27) a. Karl schlägt den Weltmeister.
Karl defeats the world.champion
'Karl defeats the world champion.'

b. Der Weltmeister wird geschlagen.
the world.champion is beaten
'The world champion is beaten.'

#### 6.2.1.2 Genitive objects

The examples in (28) show instances of lexical case: Genitive that depends on the verb is lexical since it does not change when the verb is passivized.

(28) a. Wir gedenken der Opfer.
we.NOM remember the victims.GEN
'We remember the victims.'

b. Der Opfer wird gedacht.
the.GEN victims is remembered
'The victims are remembered.'

c. * Die Opfer wird / werden gedacht.
the.NOM victims is are remembered

As the example in (28c) shows, the nominative is impossible. The genitive object remains in the genitive in passive constructions. Passives without a subject as in (28b) are traditionally called impersonal passives.

#### 6.2.1.3 Dative objects

Now, lets turn to the dative. If we look at examples like (29), we see that the dative does not change either in the passive:

(29) a. Der Mann hat ihm geholfen.
the$_{\text{NOM}}$ man has him.$_{\text{DAT}}$ helped
'The man helped him.'

b. Ihm wird geholfen.
him.$_{\text{DAT}}$ is helped
'He is helped.'

So in analogy to the genitive examples above, the dative should be a lexical case.

But there are examples like those in (30) and according to the view that structural cases are those cases that vary according to the syntactic environment, the dative should be a structural case.

(30) a. Der Mann hat den Ball dem Jungen geschenkt.
the man has the ball the boy given
'The man gave the boy the ball as a present.'

b. Der Junge bekam den Ball geschenkt.
the boy got the ball given
'The boy got the ball as a present.'

The question whether the dative should be seen as a structural or a lexical case is a hotly debated one. In principle there are three possibilities and all three of them were suggested in the literature. One could assume that all datives are lexical, that some are lexical and others are structural, or that all datives are structural.

update references

I follow Haider (1986a) and treat all datives as lexical cases. Under this assumption, the contrast in Haider's examples (1986a: 20) in (31) is explained immediately:

(31) a. Er streichelt den Hund.
he.$_{\text{NOM}}$ strokes the.$_{\text{ACC}}$ dog

b. Der Hund wurde gestreichelt.
the.$_{\text{NOM}}$ dog was strocked

c. sein Streicheln des Hundes
his strocking of.the.$_{\text{GEN}}$ dog

d. Er hilft den Kindern.
he helps the.$_{\text{DAT}}$ children

e. Den Kindern wurde geholfen.
the.DAT children was helped

f. das Helfen der Kinder
the helping of.the children

g. * sein Helfen der Kinder
his helping the children

The accusative object of *streicheln* 'to stroke' can be realized as nominative in the passive, so it is clearly a structural case. Nominalizations allow this object to be realized in the genitive as (31c) shows. However, this does not work with datives. The dative object of *helfen* 'to help' cannot be realized in the genitive. (31f) is possible, but only with a reading in which the children are the agents, that is, the nominalization in (31f) corresponds to (32) rather than (31d):

(32) Die Kinder helfen jemandem.
the.NOM children help somebody

If the agent is expressed by a prenominal possessive as in (31g) the genetive or dative *der Kinder* is ruled out.

The only way to express the dative at all is prenominally:

(33) das Den-Kindern-Helfen
the the-children-helping
'the children's helping'

So, authors who assume that all datives are structural have a problem explaining the differences in impersonal passives and nominalizations. In addition there is a problem with bivalent verbs. While some verbs take the dative others take the accusative although there is hardly any semantic difference or any other reason that could be made responsible.

(34) a. Er hilft ihm.
he helps him

b. Er unterstützt ihn.
he supports him

The fact that *helfen* takes a dative object, while *unterstützen* takes an accusative is just an idiosyncrasy of German that speakers of German have to learn when they acquire the language. So, the information in the lexical entry for *helfen* must be different from the one for *unterstützen*. Some authors acknowledge this difference and assume that the dative of bivalent verbs is lexical, while the dative

of ditransitive verbs is structural. The assumption is that verbs assign the nominative to their first argument, the accusative to their last argument and if there is an additional argument that is neither the first nor the last, it gets dative. The prediction that such mixed accounts make is that the dative passive should be possible with ditransitive verbs but impossible with bivalent verbs, since the dative is structural for the former verbs and lexical for the latter. The empirical situation is not as clear-cut as one might wish. Some authors accept examples like (35). Others reject them.

(35) a. Er kriegte von vielen geholfen / gratuliert / applaudiert.
he got by many helped congratulated applauded

b. Man kriegt täglich gedankt.
one gets daily thanked

However, there are attested examples:

(36) a. „Da kriege ich geholfen.“[3]

b. Heute morgen bekam ich sogar schon gratuliert.[4]

c. „Klärle“ hätte es wirklich mehr als verdient, auch mal zu einem „unrunden“ Geburtstag gratuliert zu bekommen.[5]

d. Mit dem alten Titel von Elvis Presley „I can’t help falling in love“ bekam Kassier Markus Reiß zum Geburtstag gratuliert, […][6]

I think that the verbs *kriegen*, *erhalten*, and *bekommen* are on the way to become auxiliaries. Their meaning is getting more and more bleached. Hence there are almost no selectional restrictions left on the downstairs verb. The only requirement for the dative passive to apply is of course that the embedded verb governs a dative.

Now, if the dative passive is possible with verbs bivalent like *helfen* and if *helfen* has to govern a lexical dative (since otherwise the difference between *helfen* and *unterstützen* could not be explained), it follows that the dative passive must be able to convert a lexical dative into a structural case (realized as nominative in the examples above). This means that one could assume that all datives are lexical, even the datives of ditransitive verbs. This explains why these datives are not realized as nominatives or accusatives in passives like (37):

[3] Frankfurter Rundschau, 26.06.1998, p. 7.
[4] Brief von Irene G. an Ernst G. vom 10.04.1943, Feldpost-Archive mkb-fp-0270
[5] Mannheimer Morgen, 28.07.1999, Lokales; „Klärle“ feiert heute Geburtstag.
[6] Mannheimer Morgen, 21.04.1999, Lokales; Motor des gesellschaftlichen Lebens.

(37) a. dass er dem Jungen den Ball gegeben hat
that he.NOM the.DAT boy the.ACC ball given has

b. dass dem Jungen der Ball gegeben wurde
that the.DAT boy the.NOM ball given was

c. * dass der Junge den Ball gegeben wurde
that the.NOM boy the.ACC ball given was

d. * dass den Junge der Ball gegeben wurde
that the.ACC boy the.NOM ball given was

They just stay dative. The only exception is the dative passive and this has to be analyzed as an exception.

After this discussion of lexical and structural case in German, I will provide the Case Principle, which is responsible for case assignment. As was explained in Section 3.6, it is assumed that all arguments of a head are represented in one list: the ARGUMENT STRUCTURE list (ARG-ST list). (38) shows the argument structure list of a ditransitive verb like *geben* 'to give':

(38) ⟨ NP[*str*], NP[*ldat*], NP[*str*] ⟩

As was argued above, dative is treated as a lexical case. *ldat* is an abbreviation for lexical dative and *str* stands for for structural case. The Case Principle has the following form (adapted from Przepiórkowski 1999; Meurers 1999):

**Principle 1 (Case Principle)**

- *In a list that contains both the subject and the complements of a verbal head, the first element with structural case gets nominative unless it is raised by a higher head.*
- *All other elements in this list that have structural case and are not raised get accusative.*
- *In nominal environments elements with structural case get genitive.*

This principle is inspired by Yip, Maling & Jackendoff (1987) and as will be demonstrated below it also works for the complex case system in Icelandic. It differs for in not assigning case to elements that are raised to a higher predicate. This point will be explained in more detail below.

The effect of this principle will be explained with respect to the verbs in (39):

(39) a. *schläft* 'sleep': ARG-ST ⟨ NP[*str*]$_i$ ⟩
b. *unterstützt* 'support': ARG-ST ⟨ NP[*str*]$_i$, NP[*str*]$_j$ ⟩
c. *hilft* 'help': ARG-ST ⟨ NP[*str*]$_i$, NP[*ldat*]$_j$ ⟩
d. *schenkt* 'give as a present': ARG-ST ⟨ NP[*str*]$_i$, NP[*ldat*]$_j$, NP[*str*]$_k$ ⟩

The first element in these lists that has structural case gets nominative and the second one accusative. This is exactly what one expects. The result is given in (40). *snom* stands for structural nominative.

(40)
a. *schläft* 'sleep': ARG-ST ⟨ NP[*snom*]$_i$ ⟩
b. *unterstützt* 'support': ARG-ST ⟨ NP[*snom*]$_i$, NP[*sacc*]$_j$ ⟩
c. *hilft* 'help': ARG-ST ⟨ NP[*snom*]$_i$, NP[*ldat*]$_j$ ⟩
d. *schenkt* 'give as a present': ARG-ST ⟨ NP[*snom*]$_i$, NP[*ldat*]$_j$, NP[*sacc*]$_k$ ⟩

### 6.2.2 Argument reduction and case assignment: the passive

Now, with the structural/lexical case distinction the analysis of the passive is really simple and directly corresponds to the intuition that the passive is the suppression of the subject (the most prominent, that is, the first argument in the ARG-ST list). If the first argument is removed from the lists in (39), the following lists result:

(41) a. *geschlafen*: ARG-ST ⟨ ⟩
b. *unterstützt*: ARG-ST ⟨ NP[*str*]$_j$ ⟩
c. *geholfen*: ARG-ST ⟨ NP[*ldat*]$_j$ ⟩
d. *geschenkt*: ARG-ST ⟨ NP[*ldat*]$_j$, NP[*str*]$_k$ ⟩

The NPs that are in the first position in (41) where in the second position in (40). The first NP with structural case gets nominative and hence the following case assignments result:

(42) a. *geschlafen*: ARG-ST ⟨ ⟩
b. *unterstützt*: ARG-ST ⟨ NP[*snom*]$_j$ ⟩
c. *geholfen*: ARG-ST ⟨ NP[*ldat*]$_j$ ⟩
d. *geschenkt*: ARG-ST ⟨ NP[*ldat*]$_j$, NP[*snom*]$_k$ ⟩

Lexical case as in (42c–d) is not affected by the case principle, it stays the way it was specified, namely dative.

It should be noted here that this simple approach to passive accounts both for the so-called personal and the impersonal passive. The passives of *schlafen* 'to sleep' and *helfen* 'to help' are called impersonal passives since the respective clauses do not have a subject.

(43) a. dass geschlafen wurde
that slept was
'that there was sleeping there'

b. dass dem Mann geholfen wurde
that the.DAT man helped was
'that the man was helped'

The passives of *unterstützen* 'to support' and *schenken* 'to give as a present' do have subjects, namely the arguments that are realized as accusative objects in the active:

(44) a. dass der Mann unterstützt wurde
that the.NOM man supported was
'that the man was supported'

b. dass dem Jungen der Ball geschenkt wurde
that the.DAT boy theNOM ball given was
'that the ball was given to the boy as a present'

Those analyses that assign all cases lexically would have to assume that the case of the objects (accusative) is changed into nominative in the passive. Hence there would be two variants of the passive: The impersonal passive just suppresses the subject and the personal one suppresses the subject and additionally changes the case of the object into nominative. The analysis using the structural/lexical case distinction just postpones the case assignment until the point where it is clear what the right case will be. If we have a participle and use it with the passive auxiliary it is clear what the case of the arguments has to be.

### 6.2.3 Argument extension and case assignment: AcI constructions

The case principle contains restrictions on case assignment that prohibits the assignment to elements that are raised. These restrictions have not been explained yet. Consider the examples in (45):

(45) a. Der Junge liest den Aufsatz.
the.NOM boy reads the.ACC paper
'The boy reads the paper.'

b. Der Mann läßt den Jungen den Aufsatz lesen.
the.NOM man lets the.ACC boy the.ACC paper read
'The man lets the boy read the paper.'

The example (45a) shows that the subject of *lesen* is assigned nominative. However, the subject of *lesen* gets accusative in (45b). So, if one would assign case on the basis of the argument structure of *lesen* in (45b), one would assign nominative, but the AcI verb *lassen* 'to let' assigns accusative to its object. The point is that the subject of *lesen* is raised to the object of *lassen*. The Case Principle is set up in a way such that case is assigned only to those arguments that are not raised to a higher head. Hence, *den Jungen* does not get case from *lesen*, but from *lässt*.

The analysis of (45b) is given in Figure 6.1. The arguments of *lesen* 'to read'

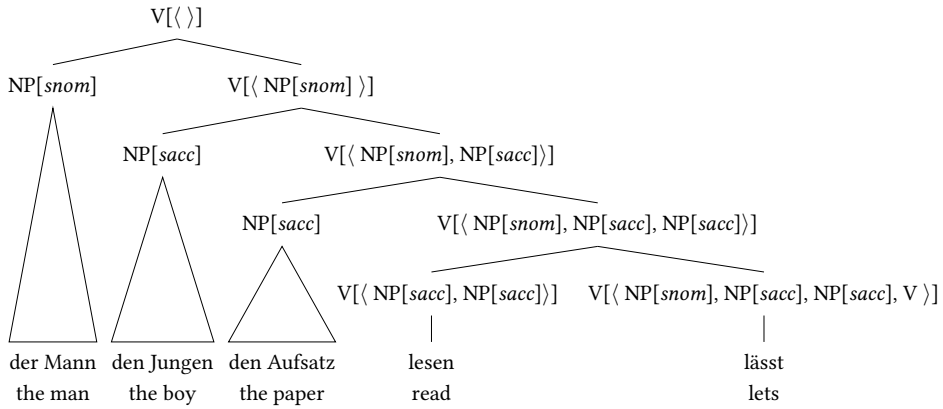



Figure 6.1: Analysis of AcI constructions as raising constructions and the verbal complex in German

are taken over by *lässt*. Since *lässt* contributes its own argument, the causer or the one who gives the permission, *lässt* selects for three NPs with structural case and a verb in the specific sentence depicted in Figure 6.1. According to the Case Principle the first NP with structural case gets nominative and the other NPs with structural case get accusative. This results into a list with one NP in the nominative and two NPs in the accusative.

(46) shows the ARG-ST list of *lässt* when it is combined with *schlafen*, *unterstützen*, *helfen*, or *schenken*, respectively.

(46)

a. *läßt* with *schlafen*: ARG-ST $\langle$ NP[*str*]$_l$, NP[*str*]$_i$, V$\rangle$

b. *läßt* with *unterstützen* : ARG-ST $\langle$ NP[*str*]$_l$, NP[*str*]$_i$, NP[*str*]$_j$, V $\rangle$

c. *läßt* with *helfen*: ARG-ST $\langle$ NP[*str*]$_l$, NP[*str*]$_i$, NP[*ldat*]$_j$, V $\rangle$

d. *läßt* with *schenken*: ARG-ST $\langle$ NP[*str*]$_l$, NP[*str*]$_i$, NP[*ldat*]$_j$, NP[*str*]$_k$, V $\rangle$

The NP that is added has the index *l*. As the first NP with structural case on these lists it gets nominative. All other elements of this list that have structural case get accusative. Hence the subject of the embedded verb is assigned accusative, the lexical cases stay the same and the accusative objects of the embedded verb get accusative as well, since their case is structural too.

Note that the question of whether a language has a verbal complex or not is orthogonal to issues of case assignment. Figure 6.2 shows the analysis of the English translation of (45b). *let* selects for the subject, the object and a VP. The subject of *read* is simultaneously the object of *let* and hence the Case Principle does not assign nominative to the subject of the embedded verb *read*, but accusative to the object of the matrix verb *let*.

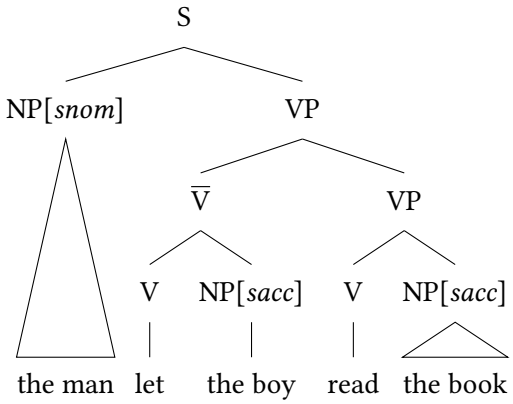



Figure 6.2: AcI constructions in English

## 6.3 Comparison German, Danish, English, Icelandic

In the following subsections I want to compare several dimensions in which the Germanic languages vary:

- Danish has a morphological passive, English, German, and Icelandic do not.
- German, Icelandic allow for subjectless constructions, Danish and English do not.
- Danish, German and Icelandic allow for impersonal passives, English does not.
- Danish and Icelandic allow both objects to be promoted to subject, English and German do not.
- German has the so-called remote passive, Danish the so-called complex passive and Danish and English have the so-called reportive passive.

### 6.3.1 Morphological and Analytic Forms

Danish allows for a morphological passive. It is formed by appending the " *s* suffix and there are present tense (47b) and past forms (47c):

(47) a. Peter læser avisen. (Danish)
Peter reads newspaper.DEF
'Peter is reading the newspaper.'

b. Avisen læses af Peter.
newspaper.DEF read.PRES.PASS by Peter
'The newspaper is read by Peter.'

c. Avisen læstes af Peter.
newspaper.DEF read.PAST.PASS by Peter
'The newspaper was read by Peter.'

Danish also allows for the analytic form with *blive* 'be' and participle:

(48) Avisen bliver læst af Peter.
newspaper.DEF is read by Peter
'The newspaper is read by Peter.'

The morphological passive may also apply to infinitives:

(49) Avisen skal læses hver dag.
newspaper.def must read.INF.PASS every day
'The newspaper must be read every day.'

English and German only have the analytic variant:

(50) a. The paper was read.
b. Der Aufsatz wurde gelesen. (German)
the.NOM paper was read

### 6.3.2 Personal and impersonal Passive

All languages under consideration allow for the promotion of an accusative object to subject. As the following examples show, the subject can be an S or a VP:

show that these are really subjects. We have V2 here, could be objects.

(51) a. At regeringen træder tilbage, bliver påstået.
that government.DEF resigns PART is claimed
'It is claimed that the government resigns.'
b. At reparere bilen, bliver forsøgt.
to repair car.DEF is tried
'It is tried to repair the car.'

In addition to such personal passives, Danish, German, and Icelandic allow for impersonal passives. Since German does not require a subject, impersonal passives like (52) are expected:

(52) weil noch getanzt wurde (German)
because still danced was
'because there was still dancing there'

The following two examples from Icelandic show that Icelandic also knows impersonal constructions (Thráinsson 2007: 264):

(53) a. Oft var talað um þennan mann. (Icelandic)
often was talked about this Mann.ACC.SG.M
b. Aldrei hefur verið sofið í þessu rúmi.
never has been slept in this bed.DAT
'This bed has never been slept in.'

Danish also allows for impersonal passives but it differs from the languages discussed so far in that it requires an expletive subject:

(54) a. at der bliver danset
that EXPL is danced
'that there is dancing'

b. at der danses
that EXPL dance.PRES.PASS
'that there is dancing'

c. * Bliver danset?
is danced

d. * Danses?
dance.PASS

So Danish is like English in always requiring a subject, but while this constraint results in the impossibility of impersonal passives in English, Danish found a solution to the subject problem by inserting an expletive.

Expletives are excluded in German impersonal constructions:

(55) * weil es noch gearbeitet wurde
because it still worked was
Intended: 'because there was still working there'

### 6.3.3 Promotion of the primary and secondary object

English and German allow the promotion of one of the objects of a ditransitive verb only. (56) shows that the accusative object can be realized as subject, but the dative cannot:

(56) a. weil der Mann dem Jungen den Ball schenkt
because the.NOM man the.DAT boy the.ACC ball gives
(German)
'because the man gives the boy a ball as a present'

b. weil dem Jungen der Ball geschenkt wurde
because the.DAT boy the.NOM ball given was
'because the ball was given to the boy'

c. * weil der Junge den Ball geschenkt wurde
because the.NOM boy the.ACC ball given was

Similarly, English can realize the first object as subject, but the second object cannot be promoted to subject:

(57) a. because the man gave the boy the ball
b. because the boy was given the ball
c. * because the ball was given the boy

The information structural effect can be reached with a different lexical variant of *give* though. *give* can be used with an NP object and a *to* PP instead of two NPs as in (58a). The first object of the ditransitive *give* is realized as PP in (58a) and the second object *the ball* is the first object in (58a). This alternation is also called dative-shift.

(58) a. because the man gave the ball to the boy
b. because the ball was given to the boy

(59b) is the passive variant of (58a). As in (57b), the primary object is promoted to subject.

Danish and Icelandic differ from English and German. In the latter languages both objects can be promoted to subject without any previous alternation of valence frames like dative shift.

(59) a. fordi manden giver drengen bolden (Danish)
because man.DEF gives boy.DEF ball.DEF
'because the man gives the boy the ball'
b. fordi drengen bliver givet bolden
because boy.DEF is given ball.DEF
'because the boy is given the ball'
c. fordi bolden bliver givet drengen
because ball.DEF is given boy.DEF
'because the ball is given to the boy'

One could assume that it is always the first object (the primary object) that is promoted to subject and that Danish does not have an order of the objects, so that both objects are equally prominent and can be promoted to subject. Moro is a language that is said to have such properties (Ackerman et al. 2018). However, Danish differs from Moro in that the order of the objects in sentences is clearly fixed: While (59a) is possible, the reverse order of the objects is ungrammatical as (60) shows.

(60) * fordi manden giver bolden drengen

As far as Icelandic is concerned, Zaenen, Maling & Thráinsson (1985: 460) note that apart from the possibility to promote the accusative to subject, the dative can become a quirky subject:

(61) Konunginum voru gefnar ambáttir.
the.king.DAT were given.F.PL maidservants.NOM.F.PL
'The king was given female slaves.'

The structure of (61) is sketched in (62):

(62) [$S_i$ Aux $\__i$ V O]

Since the nominative is serialized after the participle it cannot be the subject, which implies that the fronted dative element is the subject.

Alternatively the accusative object is promoted to subject:

(63) Ambáttin var gefin konunginum.
the.maidservant.NOM.SG was given.F.SG the.king.DAT
'The female slave was given to the king.'

This sentence also has the structure in (62).

In order to show that the dative is really promoted to subject in (61) and the accusative is promoted to subject in (63), Zaenen, Maling & Thráinsson (1985: 460) apply a battery of tests. I only give the V2 examples with an adjunct in initial position, the questions, and the control structures here. The examples in (64) and (65) show that the sentences above really have the structure in (62). The first position in (64) is filled by an adjunct, which entails that the subject remains in subject position and hence shows that the dative *konunginum* 'the king' is the subject. Similarly the nominative *ambfittin* is the subject in (63b).

(64) a. Um veturinn voru konunginum gefnar ambfittir.
in the.winter were the.king.DAT given slaves.NOM
'In the winter, the king was given (female) slaves.'

b. Um veturinn var ambfittin gefin konunginum.
in the.winter was the.slave.NOM given the.king.NOM
'In the winter, the slave was given to the king.'

The questions in (65) are further evidence. The initial position is not filled and the dative in (65a) and the nominative in (65b) is realized prenominally.

(65) a. Voru konunginum gefnar ambfittir?
were the.king.DAT given slaves.NOM
'Was the king given slaves?'

b. Var ambfittin gefin konunginum?
was the.slave.NOM given the.king.DAT
'Was the slave given to the king?'

(66) shows the respective control examples:

(66) a. Að vera gefnar ambáittir var mikill heiður.
to be given slaves.NOM was great honor
'To be given slaves was a great honor.'

b. Að vera gefin konunginum olli miklum vonbrigðum.
to be given the.king.DAT caused great disappointment
'To be given to the king caused great disappointment.'

In (66a) the dative is not expressed and in (66b) the nominative is omitted. This shows that both the primary and the secondary object can be promoted to subject in Icelandic, even though one of them has structural and the other one lexical case.

### 6.3.4 Theoretical analysis of the crosslinguistic differences

Argument reduction and case assignment was already explained for German in Section 6.2.2. I want to get a little bit more explicit now and provide lexical items for the passive and perfect auxiliary for German. After this I discuss the other languages and explain how the differences can be dealt with in a worked out analysis.

#### 6.3.4.1 Designated Argument Reduction

Haider (1986a) suggested marking the argument of a verb that has subject properties. He calls these special arguments *designated argument*. Heinz & Matiasek (1994) transferred this idea to HPSG and Müller (2003) modified it slightly to get certain facts with modal infinitives right. One important use of the designated argument is to distinguish so-called unaccusative verbs from unergative verbs. Perlmutter (1978) pointed out that unaccusative verbs have remarkable properties and argued that their subjects are not really subjects but behave more like objects. One of their properties is that they do not allow for passives. Furthermore their participles can be used attributively which is usually not possible:

check

(67) a. der angekommene Zug
the arrived train
'the arrived train'

b. * der geschlafene Mann
the slept man

This is explained if one assumes that the subject of *ankommen* 'arrive' is indeed like an object. As an object it patterns with the object of transitive verbs:

(68) der geliebte Mann
the beloved man

*Mann* 'man' fills the object slot of *geliebte*. If the sole argument of *ankommen* is treated as an object, the similarity to the transitive *lieben* is explained immedeately. Similarly the fact that unaccusatives do not allow for passives is explained: If passive is the suppression of the subject and *ankommen* does not have a subject in that sense, passive cannot apply.

(69) a. Der Zug ist angekommen.
the train is arrived
'The train arrived.'

b. * weil angekommen wurde
because arrived was

In the HPSG analyses the authors assume that there is a list-valued feature DESIGNATED ARGUMENT (DA). This list contains the subject of transitive and unergative verbs (intransitive verbs that are not unaccusative). The DA value of unaccusative verbs is the empty list, since these verbs do not have an argument with subject properties.

The passive is analyzed as a lexical rule that licences a lexical item for the participle. The ARG-ST list of the particple is the ARG-ST list of the verb stem that is the input to the lexical rule minus the DA list. Since this is not the focus of this book, I will not discuss unaccusative verbs in the following. (70) provides some prototypical examples for unergative and transitive verbs:

(70)

| | ARG-ST | DA |
|---|---|---|
| a. tanzen (dance): | ⟨ 1NP[*str*] ⟩ | ⟨ 1 ⟩ |
| b. lesen (read): | ⟨ 1NP[*str*], NP[*str*] ⟩ | ⟨ 1 ⟩ |
| c. schenken (give as a present): | ⟨ 1NP[*str*], NP[*ldat*], NP[*str*] ⟩ | ⟨ 1 ⟩ |
| d. helfen (help): | ⟨ 1NP[*str*], NP[*ldat*] ⟩ | ⟨ 1 ⟩ |

The lexical rule that forms the participle is sketched in (71):

(71) Lexical rule for the formation of the participle (preliminary):

$$\begin{bmatrix} \textit{stem} \\ \textsc{head} \quad \begin{bmatrix} \textit{verb} \\ \textsc{da} \ \boxed{1} \end{bmatrix} \\ \textsc{arg-st} \ \boxed{1} \oplus \boxed{2} \end{bmatrix} \mapsto \begin{bmatrix} \textit{word} \\ \textsc{arg-st} \ \boxed{2} \end{bmatrix}$$

This rule splits the ARG-ST list of the input into two lists 1 and 2. 1 is identical to the DA value. Therefore the designated argument is taken off the ARG-ST list and is not present in the lexical item that is licensed by the rule.

The ARG-ST list of the participle that is licensed is either empty (72a) or starts with an object of the active form:

(72)

| | ARG-ST |
|---|---|
| a. getanzt (danced, unerg): | $\langle\rangle$ |
| b. gelesen (read, trans): | $\langle \text{NP}[\textit{str}] \rangle$ |
| c. geschenkt (given, ditrans): | $\langle \text{NP}[\textit{ldat}], \text{NP}[\textit{str}] \rangle$ |
| d. geholfen (helped, unerg): | $\langle \text{NP}[\textit{ldat}] \rangle$ |

As was explained above, the first element in the ARG-ST list with structural case gets nominative and hence the accusative object of *lesen* in (73a) is realized as nominative in (73b):

(73) a. Er liest den Aufsatz.
he.NOM reads the.ACC paper

b. Der Aufsatz wurde gelesen.
the.NOM paper was read

English differs from German in not having a dative case at all. I am talking about morphological markings here, not about semantics. Therefore both objects of English ditransitive verbs are accusative objects. However, only one of the objects can be promoted to subject. This is modeled in the analysis at hand by assuming that the secondary object bears lexical accusative (see also Grewendorf (2002: 57) for the assumption of lexical accusative for the secondary object in English).[7]

[7] Admittidly this is just a restatement of the facts, since assigning lexical case means that the argument under consideration cannot have another case. But taken together with constraints on subjects in English the facts about promotion or non-promotion of arguments follow nicely.

(74) ARG-ST

b. dance (unerg): $\langle \text{NP}[str] \rangle$

c. read (trans): $\langle \text{NP}[str], \text{NP}[str] \rangle$

d. give (ditrans): $\langle \text{NP}[str], \text{NP}[str], \text{NP}[LACC] \rangle$

e. help (trans): $\langle \text{NP}[str], \text{NP}[str] \rangle$

German can promote the second object (accusative) and English the first one. The commonality is that the object that is closer to the verb can be promoted. This is the accusative for German since nominative, dative, accusative is the unmarked order and German is a OV language and the first accusative in English since English is a VO language.

(75) a. dass dem Jungen der Ball gegeben wurde
that the.DAT boy the.NOM ball given was
'that the ball was given to the boy'

b. because the boy was given the ball

A further difference is the lexical item for *help*. Since there is no dative in English, the object is marked accusative as it is the case for *read*. Interestingly, English allows for the personal passive of *help*, while this is not possible in German:

(76) a. because he was helped

b. weil ihm geholfen wurde
because he.DAT helped was

c. * weil er geholfen wurde
because he.NOM helped was

#### 6.3.4.2 Primary and secondary objects

In this section I want to look at languages that allow both objects to be promoted. Danish is like English in not having a dative. This is refelcted in the following ARG-ST values:

(77) ARG-ST

a. danse (dance, unerg): $\langle \text{NP}[str]_i \rangle$

b. læse (read, trans): $\langle \text{NP}[str]_i, \text{NP}[str]_j \rangle$

c. give (give, ditrans): $\langle \text{NP}[str]_i, \text{NP}[str]_j, \text{NP}[str]_k \rangle$

d. hjælpe (help, trans): $\langle \text{NP}[str]_i, \text{NP}[str]_j \rangle$

Danish has two objects with structural case, English and German have just one object with structural case and the other one with lexical accusative and lexical dative, respectively. Since English and German do not allow for subjects with lexical case it is clear that the promotion to subject of the argument that bears lexical case is excluded. Danish also disallows subjects with lexical case, but since the two objects have structural case anyway, they both can be promoted.

Note however that the lexical rule in (71) does not account for the promotion of the secondary object. What it does is suppressing the subject. Under the assumption that the first NP with structural case is the subject, the secondary object could never be realized as subject. Note that it would not help to say any NP with structural case can be the subject, since this would admit wrong realizations. In addition to the correct (59a), the following two sentences would be admitted:

(78) a. * fordi drengen giver manden bolden
because boy.DEF gives man.DEF ball.DEF

b. * fordi bolden giver manden drengen
because ball.DEF gives man.DEF boy.DEF

(78a) is ungrammatical with *drengen* 'boy' the recipient of the giving. Similarly the transfered object *bolden* cannot be realized as subject in active sentences. This means that the promotion to subject has to be a part of the lexical rule that licences the participle that is used in the passive. The lexical rule in (79) takes the ARG-ST list and splits it into two lists. The first list 1 is identical to the value of DA. The second list 2 is the remainder of the ARG-ST list. 2 is related to 3 by the relational constrint `promote`. 3 is either eaqual to 2 or additional provides a list in which another NP with structural case is positioned at the beginning of 3.

(79) Lexical rule for the passive for Danish, English, German, and Icelandic:

$$\left[\begin{array}{ll} \textsc{head} & \left[\begin{array}{l} \textit{verb} \\ \textsc{da}\ \boxed{1} \end{array}\right] \\ \textsc{arg-st}\ \boxed{1} \oplus \boxed{2} & \end{array}\right] \mapsto \left[\textsc{arg-st}\ \boxed{3}\right] \wedge \text{promote}(\boxed{2}, \boxed{3})$$

(80) shows the ARG-ST values of our prototypical verbs:

(80) ARG-ST

a. danset/-s (dance, unerg): $\langle\rangle$

b. læst/-s (read, trans): $\langle \text{NP}[str]_j \rangle$

c. givet/-s (give, ditrans): $\langle \text{NP}[str]_j, \text{NP}[str]_k \rangle$

$\langle \text{NP}[str]_k, \text{NP}[str]_j \rangle$

d. hjulpet/-s (help, trans): $\langle \text{NP}[str]_j \rangle$

The $\text{NP}[str]_i$ that is the first element in (77) is suppressed. The effect of `promote` is that there are two different ARG-ST values for the passive variants of *givet* 'to give': one with an ARG-ST list in which $\text{NP}[str]_j$ preceedes $\text{NP}[str]_k$ and another one in which $\text{NP}[str]_j$ follows $\text{NP}[str]_k$. The first order corresponds to (59b) – repeated here as (81a) – and the second corresponds to (59c) – repeated here as (81b):

(81) a. fordi drengen bliver givet bolden
because boy.DEF is given ball.DEF
'because the boy is given the ball'

b. fordi bolden bliver givet drengen
because ball.DEF is given boy.DEF
'because the ball is given to the boy'

Before turning to impersonal passives in Danish in the next subsection, I discuss the passive in double object constructions in Icelandic.

The distribution of structural/lexical case in Icelandic is basically the same as in German. The difference is that Icelandic allows for subjects with lexical case and German does not. (82) shows our standard examples in Icelandic:

(82) ARG-ST

a. dansa (dance, unerg): $\langle \text{NP}[str] \rangle$

b. lesa (read, trans): $\langle \text{NP}[str], \text{NP}[str] \rangle$

c. gefa (give, ditrans): $\langle \text{NP}[str], \text{NP}[ldat], \text{NP}[str] \rangle$

d. hjálpa (help, trans): $\langle \text{NP}[str], \text{NP}[ldat] \rangle$

The lexical rule in (79) licences the following participles:

(83)

| | ARG-ST | SPR | COMPS |
|---|---|---|---|
| a. dansað (danced, unerg): | $\langle\rangle$ | $\langle\rangle$ | $\langle\rangle$ |
| b. lesið (read, trans): | $\langle \mathrm{NP}[str]_j \rangle$ | $\langle \mathrm{NP}[str]_j \rangle$ | $\langle\rangle$ |
| c. gefið (given, ditrans): | $\langle \mathrm{NP}[ldat]_j, \mathrm{NP}[str]_k \rangle$ | $\langle \mathrm{NP}[ldat]_j \rangle$ | $\langle \mathrm{NP}[str]_k \rangle$ |
| | $\langle \mathrm{NP}[str]_k, \mathrm{NP}[ldat]_j \rangle$ | $\langle \mathrm{NP}[str]_k \rangle$ | $\langle \mathrm{NP}[ldat]_j \rangle$ |
| d. hjálpað (helped, trans): | $\langle \mathrm{NP}[ldat]_j \rangle$ | $\langle \mathrm{NP}[ldat]_j \rangle$ | $\langle\rangle$ |

Check *read*

In addition to the ARG-ST list (83) shows the mapping to the SPR and COMPS features. Since Icelandic allows for quirky subjects the dative argument of 'to help' can be mapped to the SPR list (Wechsler 1995: 147–148). Similarly the two orders of the ARG-ST of 'to give' result in participles with a dative subject and a nominative subject as it is required for the analysis of (65a) and (65b) repeated here as (84):

(84) a. Voru konunginum gefnar ambfittir?
were the.king.DAT given slaves.NOM
'Was the king given slaves?'

b. Var ambfittin gefin konunginum?
was the.slave.NOM given the.king.DAT
'Was the slave given to the king?'

The impersonal passive with 'to dance' is parallel to the German impersonal passive, but the passivization of 'to help' differs since this is an instance of the personal passive in Icelandic.

#### 6.3.4.3 Impersonal passive

As a final point in this subsection let us have a look at the impersonal passive. German and Icelandic do not insist on subjects. So if there is no NP with structural case, the construction in German is subjectless. Similarly Icelandic does not require a subject: If there is no NP argument, the result is an impersonal passive. An example of the latter case is the passivization of *dansa* 'to dance'. The ARG-ST list is the empty list and therefore the SPR list and the COMPS list are empty as well. Passive participles of verbs that govern an NP and a PP object will have an ARG-ST list that just contains the PP argument. This PP argument will be mapped to the COMPS list and hence a subjectless construction will result.

English does not allow for impersonal passives since it requires an NP or a sentential argument that can serve as a subject. Danish requires a subject as well, but allows for impersonal constructions. The trick that Danish employs is the insertion of an expletive. I assume that the expletive insertion happens during the mapping of the ARG-ST elements to SPR and COMPS. If there is an NP/VP/CP at the beginning of the ARG-ST list, it is mapped to SPR and all other elements are mapped to COMPS. If there is no element that can be mapped to SPR, an expletive is inserted.

(85) shows the mappings for Danish.

(85)

| | ARG-ST | SPR | COMPS |
|---|---|---|---|
| a. danset/-s (unerg): | $\langle\rangle$ | $\langle \mathrm{NP}_{expl} \rangle$ | $\langle\rangle$ |
| b. læst/-s (trans): | $\langle \mathrm{NP}[str]_j \rangle$ | $\langle \mathrm{NP}[str]_j \rangle$ | $\langle\rangle$ |
| c. givet/-s (ditrans): | $\langle \mathrm{NP}[str]_j, \mathrm{NP}[str]_k \rangle$ | $\langle \mathrm{NP}[str]_j \rangle$ | $\langle \mathrm{NP}[str]_k \rangle$ |
| | $\langle \mathrm{NP}[str]_k, \mathrm{NP}[str]_j \rangle$ | $\langle \mathrm{NP}[str]_k \rangle$ | $\langle \mathrm{NP}[str]_j \rangle$ |
| d. hjulpet/-s (trans): | $\langle \mathrm{NP}[str]_j \rangle$ | $\langle \mathrm{NP}[str]_j \rangle$ | $\langle\rangle$ |

#### 6.3.4.4 The passive auxiliary

- Das Passivhilfsverb ist für alle behandelten Sprachen ähnlich:

  (86) Passivhilfsverb für Dänisch, Deutsch, Englisch:

$$\left[\text{ARG-ST } \boxed{1} \oplus \boxed{2} \oplus \left\langle \left[\begin{array}{ll} \text{VFORM} & \textit{ppp} \\ \text{DA} & \langle\, \mathrm{XP}_{ref} \,\rangle \\ \text{SPR} & \boxed{1} \\ \text{COMPS} & \boxed{2} \end{array}\right] \right\rangle\right]$$

- DA"=Wert schließt unakkusatische Verben und Wetterverben aus
- Deutsch bildet Verbalkomplex: Argumente des Partizips (1 and 2) werden vom Passivhilfsverb angezogen (Hinrichs & Nakazawa 1989c).
- Verbalkomplexschema erlaubt ungesättigte Nicht-Kopftochter.
- Funktioniert auch für Sprachen, die keine Verbalkomplexe bilden: 2 ist dann die leere Liste.

#### 6.3.4.5 Das morphologische Passiv

- Lexikonregel funktioniert auch für das morphologische Passiv. Es wird einfach ein " *s* angehängt.

#### 6.3.4.6 Perfect

- Deutsch: Nur ein Partizip für Passiv und Perfekt (Haider 1986a).
- Das designated argument wird blockiert, ist aber im Lexikonelement enthalten
- Perfekthilfsverb deblockiert es.

(87) a. Der Aufsatz wurde gelesen.
b. Er hat den Aufsatz gelesen.

$$\left[\text{ARG-ST } \boxed{1} \oplus \boxed{2} \oplus \boxed{3} \oplus \left\langle \begin{bmatrix} \text{VFORM} & \textit{ppp} \\ \text{DA} & \boxed{1} \\ \text{SPR} & \boxed{2} \\ \text{COMPS} & \boxed{3} \end{bmatrix} \right\rangle\right]$$

- Bei einer Analyse mit Argumentdeblockierung müsste man Struktur in (88a–b) annhemen:

(88) a. He [has given] the book to Mary.
b. The book [was given] to Mary.
c. He has [given the book to Mary].
d. The book was [given to Mary].

Sonst wüssten wir zu spät vom deblockierten Subjekt, denn das Partizip würde ja nur – wie in (88d) eine PP verlangen.

- Meurers (1999) hat einen Trick gefunden, wie man die Kasuszuweisung in (89) analysieren kann:

(89) a. Gelesen wurde der Aufsatz schon oft.
b. Der Aufsatz gelesen wurde schon oft.
c. Den Aufsatz gelesen hat er schon oft.

- Das funktioniert aber nicht für Dänisch/Englisch, denn hier haben wir nicht nur Kasus- sondern auch Positionsunterschiede:

  (90) a. The book should have been given to Mary and [given to Mary] it was.
  b. He wanted to give the book to Mary and [given the book to Mary] he has.

  Wenn sich keine ausgeklügelten Mechanismen für die Unterspezifikation verschiedenenr Mappings finden lassen, müssen wir wohl zwei verschiedene Partizipformen annehmen. for the participle form.

#### 6.3.4.7 The remote passive

- Höhle (1978: 175–176): in bestimmten Kontexten Objekte von *zu*-Infinitiven im Nominativ.

  Die folgenden Sätze sind Beispiele für das sogenannte Fernpassiv:

  (91) a. daß er auch von mir zu überreden versucht wurde[8]
  b. weil der Wagen oft zu reparieren versucht wurde

Akkusativobjekte eingebetteter Verben können im Passiv zum Nominativ werden:

(92) a. Dabei darf jedoch nicht vergessen werden, daß in der Bundesrepublik, wo ein Mittelweg zu gehen versucht wird, die Situation der Neuen Musik allgemein und die Stellung der Komponistinnen im besonderen noch recht unbefriedigend ist.[9]
b. Noch ist es nicht so lange her, da ertönten gerade aus dem Thurgau jeweils die lautesten Töne, wenn im Wallis oder am Genfersee im Umfeld einer Schuldenpolitik mit den unglaublichsten Tricks der sportliche Abstieg zu verhindern versucht wurde.[10]
c. Die Auf- und Absteigenden erzeugen ungewollt einen Ton, der bewusst nicht als lästig zu eliminieren versucht wird, sondern zum Eigenklang des Hauses gehören soll, so wünschen es sich die Architekten.[11]

[8] Oppenrieder (1991: 212).
[9] Mannheimer Morgen, 26.09.1989, Feuilleton; Ist's gut, so unter sich zu bleiben?
[10] St. Galler Tagblatt, 09.02.1999, Ressort: TB-RSP; HCT und das Prinzip Hoffnung.
[11] Züricher Tagesanzeiger, 01.11.1997, p. 61.

#### 6.3.4.8 Beispiele mit *beginnen*, *vergessen* und *wagen*

Wurmbrand (2003b):

(93) a. der zweite Entwurf wurde zu bauen begonnen,[12]

(94) a. Anordnungen, die zu stornieren vergessen wurden[13]
b. Aufträge [...], die zu drucken vergessen worden sind[14]

(95) a. NUR Leere, oder doch noch Hoffnung, weil aus Nichts wieder Gefühle entstehen, die so vorher nicht mal zu träumen gewagt wurden?[15]
b. Dem Voodoozauber einer Verwünschung oder die gefaßte Entscheidung zu einer Trennung, die bis dato noch nicht auszusprechen gewagt wurden[16]

- Objekt eines Verbs, das unter ein Passivpartizip eingebettet ist, wird zum Subjekt des Satzes:

  (96) a. weil er den Wagen oft zu reparieren versucht hat
  b. weil der Wagen oft <2>zu reparieren versucht wurde

- Fernpassiv nur bei Verbalkomplexbildung möglich:

  (97) a. weil oft versucht wurde, den Wagen zu reparieren
  b. * weil oft versucht wurde, der Wagen zu reparieren
  c. Den Wagen zu reparieren wurde oft versucht
  d. * Der Wagen zu reparieren wurde oft versucht

- Erklärung: Fernpassiv = Passivierung des Prädikatskomplexes

  (98) weil der Wagen oft [[zu reparieren versucht] wurde]

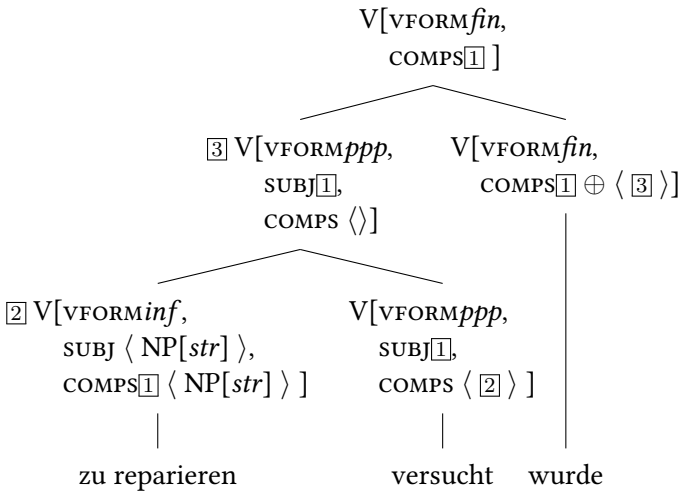
- In (99a,c) liegen keine Verbalkomplexe vor.

  (99) a. weil oft versucht wurde, <2>den Wagen zu reparieren

[12] http://www.waclawek.com/projekte/john/johnlang.html, 28.07.2003.
[13] http://www.rlp-irma.de/Dateien/Jahresabschluss2002.pdf, 28.07.2003.
[14] http://www.iitslips.de/news.html, 28.07.2003.
[15] http://www.ultimaquest.de/weisheiten_kapitel1.htm, 28.07.2003.
[16] http://www.wedding-no9.de/adventskalender/advent23_shawn_colvin.html, 28.07.2003.

b. * weil oft versucht wurde, der Wagen zu reparieren
c. <2>Den Wagen zu reparieren wurde oft versucht
d. * Der Wagen zu reparieren wurde oft versucht

Objekt von *zu reparieren* ist Teil der VP → bekommt Akkusativ
Die Passive in (99a,c) sind unpersönliche Passive.




- *versuchen* zieht Argumente von *reparieren* an: ARG-ST"=Wert ⟨ NP[*str*], NP[*str*], V[*inf*] ⟩
- Passiv-LR unterdrückt erstes Argument: *versucht* hat ARG-ST"=Wert ⟨ NP[*str*], V[*inf*] ⟩
- *zu reparieren versucht*: ARG-ST"=Wert ⟨ NP[*str*] ⟩ und *zu reparieren versucht wurde* auch
- Fernpassiv auch mit Objektkontrollverben möglich:

  (100) a. Keine Zeitung wird ihr zu lesen erlaubt.[17]
  b. Der Erfolg wurde uns nicht auszukosten erlaubt.[18]

- Passiv der Konstruktion ohne Verbalkomplex ist ein unpersönliches Passiv:

[17] Stefan Zweig. *Marie Antoinette*. Leipzig: Insel-Verlag. 1932, p. 515, zitiert nach Bech (1955: 309). Siehe Askedal (1988: 13).
[18] Haider (1986b: 110).

(101) Uns wurde erlaubt, den Erfolg auszukosten.

- Generalisierung: In Passivkonstruktionen, in denen ein Verbalkomplex unter das Passivhilfsverb eingebettet ist, wird das Subjekt unterdrückt und von den verbleibenden Argumenten wird das erste Argument mit strukturellem Kasus zum Subjekt und bekommt Nominativ.

(102) Keine Zeitung wird ihr zu lesen erlaubt.[19]

*erlauben*: $\langle\ \text{NP}[str]_i, \text{NP}[ldat]_j\ \rangle \oplus \boxed{1} \oplus \langle\ \text{V}[\textsc{comps}\boxed{1}]\ \rangle$
*zu lesen erlauben*: $\langle\ \text{NP}[str]_i, \text{NP}[ldat]_j, \text{NP}[str]_k, \text{V}[\textsc{comps}\ \langle\ \text{NP}[str]_k\ \rangle]\ \rangle$
*zu lesen erlaubt wird*: $\langle\ \text{NP}[ldat]_j, \text{NP}[str]_k, \text{V}[\textsc{comps}\ \langle\ \text{NP}[str]_k\ \rangle\ ]\ \rangle$
Erste NP mit strukturellem Kasus ist Subjekt.

#### 6.3.4.9 Summary

- account for the Danish, Englisch and German passive
- LRs for morphological and analytical passives
- first element on the ARG-ST list is suppressed
- *promote* promotes any NP with structural case
- languages differ in cases and the lexical/structural distinction
- expletive is inserted in the ARG-ST mapping in Danish.
- SVO languages seem to require different items for the perfect/passive participles, but analysis for German can be maintained.

[19] Stefan Zweig. *Marie Antoinette*. Leipzig: Insel-Verlag. 1932, p. 515, zitiert nach Bech (1955: 309). Siehe Askedal (1988: 13).

# 7 Clause types and expletives

Yiddish besseres Beispiel nehmen, das wirklich V2 zeigt.

# 8 Raising

**AdamP2018a** raising and quirky case.

# 9 HPSG Light

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# Language index

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# Germanic syntax

This book is an introduction to the syntactic structures that can be found in the Germanic languages. The analyses are couched in the framework of HPSG light, which is a simplified version of HPSG that uses trees to depict analyses rather than complicated attribute value matrices.

The book is written for students with basic knowledge about case, constituent tests, and simple phrase structure grammars (advanced BA or MA level) and for researchers with an interest in the Germanic languages and/or an interest in Head-Driven Phrase Structure Grammar/Sign-Based Construction Grammar without having the time to deal with all the details of these theories.