Specification of Processability Theory's Developmental Stages

Anomyized

October 20, 2023

Contents

1	Ovei	rview	4
2	Торо	ological field theory	5
3	Abbi	reviations	7
4	Nota 4.1 4.2	Constellations	
5	5.1 5.2 5.3 5.4 5.5 5.6	Core SVO in declarative clauses	13 15 17 19
6	ADV	<i>,</i>	22
7	SEP 7.1		26 29
8	INV		32
9	VEN 9.1 9.2		36 39 39
10	10.1 10.2 10.3 10.4	Spoken language phenomena	41 42 43
11	11.1 11.2 11.3	WH-questions	44 44 45
	11.4	Polar questions	45

List of Tables

2.1	Verb placement and topological fields	
	VF =Vorfeld (prefield); LSK=Linke Satzklammar (left sentence bracket);	
	$\label{eq:main_main_main} \text{MF} = \text{Mittelfeld (midfield)}; \\ \text{RSK} = \text{Rechte Satzklammer (right sentence bracket)}; \\ \text{NF} = \text{Nachfeld (postfield)}; \\ \text{NSK} = \text{Rechte Satzklammer (right sentence bracket)}; \\ \text{NF} = \text{Nachfeld (postfield)}; \\ \text{NF} = \text$	
	$VVF = Vorvorfeld \; (pre-prefield) \qquad . \; . \; . \; . \; . \; . \; . \; . \; . \; .$	(
5.1	SVO as canonical word order in declaratives	12
5.2	SVO with clause as S or O in declaratives	14
5.3	Orders other than SVO in declaratives	16
5.4	Orders in copular clauses	18
5.5	Orders in intransitive clauses	2(
6.1	Adverbial phrase preceding SVO)	23
7.1	Separation of finite verb non-finite verb form(s)	27
7.2	Separation of finite verb non-finite verb form(s)	
8.1	Inversion of subject and finite verb	33
8.2	Cases similar to but distinguished from inversion	
9.1	Final placement of verbs in subordinate clause	37
11.1	Word orders in polar questions	16
	Expletives in argument positions	
	• •	

1 Overview

This document provides a specification that fleshes out Processability Theory's definitions of the developmental stages for German verb placement. The core set of stages / verb placement types that Processability Theory (PT) recognizes for German are:

- (i) SVO
- (ii) ADV
- (iii) SEP
- (iv) INV
- (v) VEND

We will discuss these in detail in the following sections. We begin with some general information about the verb placement types and our understanding of them.

- Types (i)–(iv) are mainly associated with main clauses, whereas the final type (v), VEND, is normally found in subordinate clauses. These associations are, however, not exceptionless as will be detailed below.
- The literature on PT does not spell this out but we assume that the orderings that are indicated by the stages are implicitly to be understood against the background of topological field theory or some other theory that associates syntactic constituents (or subtrees in dependency terms) with specific positions in a tree or a sequence or some such configuration. In other words, the orderings are not just to be seen as orderings of elements relative to each other but as elements occupying slots in structured sequences or positions in trees that are ordered relative to each other.
- For our purposes, we will assume that these slots can be thought of as the fields of topological field theory for German. For overviews and discussion of that theory we refer the reader to [Wöllstein(2010), Müller et al.(2019)Müller, Höhle, Reis, and Richter].

2 Topological field theory

Table 2.1 briefly illustrates the connection between topological field theory and PT's stages. Note the following points:

- In terms of topological field theory, stages (i)—iv share as a common feature that the finite verb occupies the so-called left sentence bracket (Linke Satzklammer, abbreviated: LSK).
- VEND is a distinct case in that the finite verb then occupies the right sentence bracket (Rechte Satzklammer, abbreviated: RSK).
- If the finite verb in LSK is a tense auxiliary or a modal verb, then the associated participle or infinitive (or in some cases, a sequence of such elements) occupies RSK (cf. (d)–(g)).
- The Vorfeld (VF) slot normally allows only a single element / constituent, which is why the ADV constellation is (usually) ungrammatical relative to the L1 German grammar.
- In terms of topological field theory, the slots are always there even if not filled: for instance, in (a) we have an empty VVF and in all examples except (j) we have an empty NF (Nachfeld).
- We take case (j) to be a case of VEND even though the finite verb *habe* is not truly final if we consider the overall sequence, where the NF is filled by the infinitival verb phrase *ein Auto zu kaufen*. Cases like this show that VEND cannot mean that the verb occupies the final position in the sequence of all its arguments and modifiers. Instead, VEND implicitly refers to the RSK slot: within that slot, the finite verb has to occur right-most.
- The verb constellations are not all exclusive: some of them can co-occur. In such cases, the clause at issue receives multiple labels rather than a new single one that would represent a particular combination.
- It is worth considering the relation between verb constellations / topological field theory and sentence types.
- There are certain major, if not exceptionless, regularities to observe.
 - Verb-first (V1) sentences are normally no declarative. The one exception are the narrative V1
 - Verb-second sentences (V2) are mainly used as declaratives. One exceptions are, e.g. echo questions such as 1.
 - (1) Du hast das Buch gelesen? 'You've read the book?'

		(VVF)	VF	LSK	MF	RSK	NF
1.	SVO	,	Ich	suche	eine neue Wohnung		
1a			I	look-	a new flat		
	ar ro			for	****		
2b	SVO	Aber	ich	suche	eine neue Wohnung		
		But	I	look-	a new flat		
				for			
2c	SVO		Ich	kenne	ihn gut		den Peter
			I	know	him well		Peter
3	ADV		Darum	suche	eine neue Wohnung		
			ich	, ,	a .		
			Therefore I	look-	a new flat		
	CED		I -	for		1	
4a	SEP		Ich	muss	eine neue Wohnung	suchen	
			I	must	a new flat	look-for	
4b	SEP	Und	ich	habe	eine neue Wohnung	gesucht	
		And	I	have	a new flat	looked-for	
5a	INV		Darum	muss	ich eine neue Woh-	suchen	
000					nung		
	TATE	D	Therefore	must	I a new flat	look-for	
6a	INV	Den Peter	den	kenn	ich schon sehr lange		
		Peter	that guy	know	I already for a long		
		1 0001	linat gay	i i i i i i i i i i i i i i i i i i i	time		
6b	INV	Und	darum	muss	ich eine neue Woh-	suchen	
					nung		
		And	therefore	must	I a new flat	find	
7a	VEND			weil	ich eine neue Woh-	suche	
14				,	nung		
				be-	I a new flat	look-for	
7b	VEND		-	cause	ich eine neue Woh-	gesucht	
10	ARIND			wen	nung	habe	
				be-	I a new flat	looked-for	
				cause		have	
7c	VEND			weil	ich gestern	versucht	ein Auto zu
						habe	kaufen
				be-	I yesterday	tried have	a car to buy
				cause			
8	V1-imp			Suche	eine neue Wohnung		
				Look-	a new flat		
				for			

Table 2.1: Verb placement and topological fields

VF =Vorfeld (prefield); LSK=Linke Satzklammar (left sentence bracket);

MF = Mittelfeld (midfield); RSK = Rechte Satzklammer (right sentence bracket); NF = Nachfeld (postfield);

VVF = Vorvorfeld (pre-prefield)

3 Abbreviations

 ${f E}$

 \mathbf{X}

 \mathbf{S} Subject O Object \mathbf{A} Argument, including oblique arguments Modifier/Adjunct \mathbf{M} \mathbf{K} Copula \mathbf{V} Verb Conjunction \mathbf{J} \mathbf{C} Complementizer

non-lexical expletive

Modifier or Argument

4 Notation

4.1 Constellations

In Table 2.1, we used simple tags to name the verb placement constellations that the relevant examples instantiate. In the discussion in the sections below, we will present what we call a Fine Tag in the tables in which we discuss examples. The fine tags are structured as follows.

- The core block of the tag is usually the coarse or basic tag, for instance, VEND or SVO.
- In the tags for constellations that name elements by abbreviated grammatical relations, we sometimes add subscripts to the elements to indicate more specific subtypes. For instance, $S_{expl}VO$ means that the subject of an SVO instance is an expletive; SVO_{Cl} means that the object is a clause rather than an NP. In the case of INV, a subscript may be used to indicate whether the element that has been moved into VF is an argument or an adjunct.
- Appended to the first block, the next block of a fine tag is used to provide detail on the finite verb involved in the pattern. SEP-AUX, for instance, indicates that the finite verb is an auxiliary rather than a modal, which would be indicated by SEP-MOD.
- The third block is optionally present and indicates passive voice, SEP-AUX-P indicates that the finite verb is an auxiliary and that the verb phrase is in passive voice.
- Another block may be used to indicate a specific sentence type. For instance, WH indicates that the clause is a wh-question.
- Finally, the feature ROOT with values ± is used to indicate whether a clause is subordinate or not, contrary to expectation. That is, for most cases of VEND Root- is implied but in exceptional constructions where a VEND clause is used in a freestanding manner, we indicate this by Root+. Similarly, SVO by default implied Root+ but for the cases where SVO occurs in subordinate clauses, we mark Root-.
- Note that we also introduce some tags for verb constellations beyond SVO, ADV etc that are not covered explicitly by Processability Theory but which are encountered in L1 or L2 German data.
- In some cases, these new tags take the form NO+X where X is a basic tag such as SVO. This notation indicates that the verb constellation has similarities with what is covered by the basic tag but is treated distinctly from it. I.e. NO-SEP marks clauses that in some sense look like SEP but are not directly classed under that rubric.

4.2 Elements: Expletives as S or O

• German features various cases in which expletive pronouns occupy core grammatical slots.

• Expletive subjects

- Lexically specific expletives, e.g. with weather-related predicates: these are said to
 have no semantic role relative to their predicates. These instances of es cannot be
 eliminated by, for instance, re-ordering sentence constituents.
- One class of lexically specific expletives is separated out from the general case and treated under the heading of presentational constructions.
- So-called correlate es occupies a slot and co-occurs with an extraposed clause that
 provides the semantic argument to the predicate. This kind of es can be eliminated
 if the correlated clause is instead moved into its place.
- So-called Vorfeld (pre-field) es occupies the slot before the verb for informationstructural reasons while the subject is displaced into a position after the verb. That this type of es is not really a subject can also be seen by the fact that it can oc-occur with plural form verbs with which it disagrees in number.

• Expletive objects

- Among these cases, we again find correlate es, which occupy the object slot but co-occur with an extraposed clause that provides the semantic argument to the predicate. This kind of es can be eliminated if the correlated clause is instead moved into its place.
- Another common type of expletive objects consists of reflexive pronouns that are lexically specific for certain verbs.
- Lexically conditioned expletives are represented as S_{expl} or O_{expl} . The other expletives that do not depend on particular verbs are and that co-occur with a displaced S or O are represented as E.

5 SVO

5.1 Core SVO in declarative clauses

- For the purposes of analyzing developmental stages of verb placement in the framework of processability theory, the notion of canonical word order is applicable only to **declarative** main clauses with a single **finite lexical** verb.
- In such clauses, the prototypical word order in German as an L2 is **SVO** (subject-verbobject).
 - Clauses with complex tense or voice constructions (esp. passive) featuring finite modal or auxiliary verbs are not covered by this category. This means that, for instance, transitive sentences such as in (2) are to be assigned solely to the category SEP.
 - (2) [Hans S] [hat V_{aux}] [Schokolade O] [gekauft $V_{non-fin}$]. 'Hans has bought chocolate.'
 - Copular clauses such as 3 are not included in the SOV category since they do not feature a lexical verb.
 - (3) [Hans S] [ist V_{aux}] [Krankenpfleger Pred]. 'Hans is a nurse.'

It is important to be sure what verbs / constructions are meant to be considered copulas in one's own annotation and to see what verbs are treated as copulas by any automatic tools one might use.

- The presence of **local subjects and objects** is required. That is, clauses such as the right coordinate in (4) which share an argument with another clause (typically, the subject) via coordination are excluded.
 - (4) Yuuka hörte gespannt zu und [aß V] [dabei M] [ihr Eis O] 'Yuka listened attentively and ate her ice-cream all the while'
- The structural description SVO (and others) is to be taken as a partial specification:
 SVO sentences may contain further material between V and O or following O.
- German has multiple types of objects (requiring different cases). While accusative-case direct objects are prototypical, we also accept dative-case indirect object as well as the rarer genitive-case objects.
- Cases with **clausal subjects and objects** are recorded but not currently treated as simple instances of SVO.
- Clauses with expletives in core argument positions are also treated in a special way.

- Further, some verbs don't have objects but oblique arguments (typically prepositional phrases) as part of their valence requirements. We also subsume these cases under SVO.
- The verb is in second position as defined by traditional German grammar and the single slot preceding it, the VORFELD (prefield) is occupied by the subject. No further slot preceding the verb is filled.¹
- L2-speakers may use a different default word order such as SOV.
- Sentence types other than declaratives have their own canonical or default orders. We register these separately.
- SVO does not cover intransitive clauses that feature a subject and adjuncts. However, there is some uncertainty how to deal with clauses headed by transitive verbs that leave an object unexpressed.
- Table 5.1 provides examples of the core instances of SVO, where both S and O are realized by lexical NPs or pronouns.
- This category includes subcategorized obliques as well, even though these often have the form of a prepositional phrase.

¹In topological field theorizing for German, there is no firm agreement on how many field there are to the left of the left sentence bracket in addition to VF (see [Wöllstein(2010)]). For our purposes, it is sufficient to assume a single slot preceding the VORFELD that we will call the VORVORFELD (pre-prefield). Processability theory describes such a slot with reference to X-bar theory simply as an XP, though the specific phrase types that can constitute that XP are formally and functionally limited, most centrally to adverbials. A filled XP slot is defined at PT's stage ADV.

Table 5.1: SVO as canonical word order in declaratives

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
1a	SVO	S in VF ; direct O in MF	Hannelore kauft Haarfarbe 'Hannelore buys hair dye'	[Die Katze S] [freßt V] [eine Maus O]. 'The cat is eating a mouse.' (Augsburger-Korpus DN Ka8 (D9))	SVO
1b	SVO	S in VF ; direct O in MF	Hannelore kauft es 'Hannelore buys it'		SVO
2a	SVO	subject in VF ; indirect O in MF	[Das S] [half V] [mir O]. 'That helped me'		SVO
2b	SVO	subject in VF ; indirect O in MF ; adverb in MF	[Das S] [half V] [mir O] [oft X]. 'That often helped me'		SVO
3a	SVO	subject in VF ; genitive O in MF	[Wir S] [gedenken V] [der Verstorbenen O]. 'We remember the deceased'		SVO
3b	SVO	subject in VF ; genitive O in MF ; adjunct in MF	[Wir S] [gedenken V] [heute X] [der Verstorbenen O]. 'Today, we remember the deceased'		SVO
4	SVO	Subcategorized S in VF; oblique rather than object in MF	[Die Redaktion S] [besteht V] [aus unabhängigen MitarbeiterInnen A]. 'The editorial team consists of independent contributors.'	[Mein Mutte S] [wohn V] [noch M] [in Vietnam A], deshalf ich immer besuchen kann. 'My mother still lives in Vietnam, therefore I can always visit.' (Merlin 1061_0120274) [Die Ingenieurberufe S] [gilt V] [normalerweise M] [als sehr nützlich für die Gesellschaft A], und in Norwegen gibt es zur zeit viele Ingenieurjobbs. 'Engineering jobs are usually seen as very useful for society, and in Norway there are a lot of engineering jobs at this time.' (Falko fu128_2006_10a_L2v2.4)	SVA SVA

5.2 SVO with clausal S or O in declarative clauses

- Either S or O or both may take the form of a finite clause.
- S may also take the form of a non-finite (infinitival) verb phrase (cf. row 12 in Table 5.2)
- These cases are handled under separate headings.

Table 5.2: SVO with clause as S or O in declaratives

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
9	SVO_{Cl}	finite clause as O in NF	[Alle S] [glauben V], [dass die Hoffenheimer Herbstmeister werden \mathcal{O}_{Cl}]. 'Everybody believes that Hoffenheim will be autumn champions'	[Ich S] [glaube V], [dass jede Lehrerin ihren Unterricht interessant gestalten sollte \mathcal{O}_{Cl}]. (Falko usb012_2006_10_L2v2.4) 'I believe that every teacher should make their lessons interesting.'	NO+SVO _{Cl}
10	$S_{Cl}VO$	finite clause as S in VF	[Daß er nicht kommt S_{Cl}] [überrascht V] [micht O] nicht 'That he won't come doesn't surprise me'	[Dass die Quelle dafür die Steuern sind , die jeder von uns zahlt S_{Cl}] , [lässt V] [sie O] [kalt Pred] . (Falko hu $005_2006_09_L2v2.4$) 'The fact that the source of this is the taxes that each of us pays, leaves them cold.'	$NO+S_{CL}VO$
11	$S_{Cl}VO$	finite clause as S in VF	[Wer sie kennt S_{Cl}], hat mehr Freude am Vogelsang. 'Whoever knows them, gets greater enjoyment from bird song'.		$NO+S_{Cl}VO$
12	$S_{Cl}VO$	non-finite clause as S in VF	[Dies zu wissen S_{Cl}] [macht V] [mir O] [Freude O] 'Knowing this makes me happy'		$NO+S_{Cl}VO$

5.3 Non-L2 orders in declarative clauses

- German does have some limited use of orders other than SVO in declarative clauses. However, these are heavily restricted to certain special genres. For instance, jokes told in German can feature so-called narrative V1-sentences, as shown in (5).
 - (5) [Sagt V] [der Arzt S] [zum Kleinkünstler M]: "Sie haben noch 6 Monate zu leben."

 Darauf der Kleinkünstler: 6 Monate? So lange kann ich mir nicht leisten!"

 'The doctor says to the cabaret artist: "You have another 6 months to live. To which the cabaret artist replies, "Six months? I can't afford that long!"
- However, most learner corpus data is unlikely to contain any such uses.
- Instead, other word orders used in declarative clauses are most likely influenced by learner's L1 or constitute Interlanguage orders.

Table 5.3: Orders other than SVO in declaratives

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
1	VSO	S and O following clause-	n/a	[Hast V] [du S] [der Hunt	VSO
		initial V		O].	
				'You have a dog.' (DiGS EP4b/5b SV6/8)	
				[Ansehen V] [wir S] [das	
				Völkerschlachtdenkmal O].	
				'We'll look at the Monu-	
				ment to the Battle of the	
				Nations.'	
2	VSA	S and A following clause-	Kommt ein Mann in eine		VSO_{narr}
		initial V	Bar und		
			'A man comes into a bar		
			and'		

5.4 Copular clauses

- Prototypical present tense or preterite copular clauses of all types are not treated as instances of SVO.
- Likewise, perfect tense copular clauses are not cases of SEP.
- Copular clauses are instead give their own category.
- The one exception are copular clauses in VEND: for that placement constellation, copulas count just like other verbs.
- Note that word order variation exists in copular clauses as well, although the order S
 V_{cop} Pred is very prototypical.
- While moving the subject away from the slot preceding the finite verb is possible for copular clauses, for the purposes of PT's developmental stages that does not constitue inversion.
- Note that the specific configuration where the predicative of a copular clause is questioned (cf 4 in Table 5.4) is discussed under the label Pseudo-inversion. See [Pienemann(1998)].

Table 5.4: Orders in copular clauses

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
1	$S V_{cop} Pred$	Pred in MF; S in VF; K in	Der Mann ist Arzt.		SV_{cop} Pred
	-	LSK	'The man is a doctor'		-
			Die Frau ist berühmt.		
			'The woman is famous'		
			Der Zaun ist aus Holz.		
			'The fence is made of wood'		
2	$M V_{cop} S Pred$	M in VF; K in LSK; S in	Heute ist Kim ganz		$NO+INV_{cop}$
		MF; Pred in MF	entspannt.		
			'Today Kim is very relaxed'.		
3	$\operatorname{Pred} V_{cop} S M$	Pred in VF; K in LSK; S in	Entspannt ist Kim ganz und		$NO+INV_{cop}$
		MF; M in MF	gar nicht.		
			'Relaxed Kim isn't at all'.		
4	$Pred_{WH} V_{cop}$	$Pred_{WH}$ in VF; K in LS; S	Wo ist Kim heute?		$NO+INV_{pseudo}$
	SM	in MF; M in MF	'Where is Kim today'.		

5.5 Intransitive sentences

- We treat as intransitive those clauses featuring a verb that requires only a subject but which can otherwise be modified by optional adjuncts.
- This means that clauses with verbs that have subcategorized prepositional phrases will be treated under the SVO-category (see above Section §5.1).

2

Table 5.5: Orders in intransitive clauses

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag		
1a	SV	S in VF; V in LSK	[Peter S] [schläft V] .		SV		
			'Peter is asleep / is sleeping.'				
1b	SVM	S in VF; V in LSK; M in MF	[Ich S] [laufe V] [manchmal		SVM		
			M].				
			'Sometimes I jog.'				

5.6 SVO in subordinate clauses

- In some cases, SVO can be found in non-root clauses.
- One example of this are so-called presentational relative clauses such as the one shown in 6.
- Another case involves dependent clauses of reporting verbs. If a complementizer is present, VEND is the only grammatical option (7). But if none is present, as in (8) then SVO must be used and VEND cannot be used.
- We tag such cases with the extended annotation block ROOT-
- (6) Ich habe einen Kunden, der möchte alle Daten auf seinen MS 2008 SQL laufen I have a friend who wants all data on his MS 2008 SQL run haben .

have .

'I have a customer who wants to have all his data run on his MS 2008 SQL.'

(7) Er sagt, dass er morgen kommt.

He says that he comes tomorrow.

'He says that he'll come tomorrow.'

(8) Er sagt, er kommt morgen.

He says, he comes tomorrow.

'He says he'll come tomorrow.'

6 ADV

- ADV is like SVO except that at least one additional element precedes the Subject within the Vorfeld (VF).
- The extra element may be an adjunct or an argument.
- Formally, the extra element typically is an adverb, a PP or an adverbial clause.
- Cases of ADV where the extra element is a question word are subtyped.

Table 6.1: Adverbial phrase preceding SVO)

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
1a	O + SVO	V in LSK; O in MF; S in	*[Meiner Mutter O] [ich S]		ADV
		$VF; O_2 \text{ in } VF$	[kaufe V] [Blumen O]		
1b	M + SVO	Vin LSK; O in MF; S in	*[Heute M] [ich S] [kaufe V]	[Leider M] [einige Leute	ADV
		VF; additional M in VF	[Blumen O]	S] [verstehen V] [es	
				O] [nicht X]. (Falko	
				usb015_2006_10_L2v2.4)	
				'Unfortunately, some people	
				don't undersand it'	
				[Wenn wir erlauben , alle	
				Frauen sich zu befreien	
				X_{-arg} , [wir S] [mussen	
				V_{fin} [solche Problemen	
				O [erwarten $V_{non-finite}$].	
				(Whig BNG2-2011-02-175)	
				'If we allow all women to lib-	
				erate themselves we have to	
				expect such problems'	
				*[Heute X] [ich S]	
				[fühlen V] [mich O] [gar-	
				nicht gut X] (Twitter	
				257757464706052096)	
				'Today I am not feeling well	
1	M + CVO	N. ICIZ MD	*[337:1 : 0]	at	ADV
1c	M + SVO	V in LSK; MF not empty;	*[Weil sie Geburtstag hat		ADV
		two additional M in VF	M, [heute M] [ich S] [kaufe		
			V] [meiner Mutter O] [Blumen O]		

Continued on next page

Table 6.1 – Continued from previous page

	(Order	Features displayed	L1-German illustration	Learner use	Fine Tag
2	1	$M_{Wh} + SVO$	wh-M in VF, in addition to	*[Warum M_{WH}] [Hannelore		ADV-WH
			S; V in LKS; O in MF	S] [kauft V] [Haarfarbe O]?		
				'Why is Hannelore buying		
				hair dye?'		
3		$M_{Wh} + SOV$	wh-M preceding an SOV se-	*[Warum M_{WH}] [Hannelore		XSOV-
			quence	S][Haarfarbe O] [kauft V]?		WH
				'Why is Hannelore buying		
				hair dye?'		

- The presence of two items in VF normally results in ungrammaticality so that use of such structures is mostly an L2 phenomenon. However, it is known that L1 German does feature certain cases where a so-called doubly filled pre-field is perfectly ok (cf. 9) At this point we're not attempting any automatic disambiguation of the two cases but we simply note that ADV is not uniformly an L2-structure.
 - (9) [Vermutlich] [ein Defekt an der Gashauptleitung] hat ... eine Gasexplosion ... Presumably a leak on the gas main line has ... a gas explosion ... verursacht . caused .
 - 'Presumably a defect in the gas main line caused a gas explosion .. .'
- Regarding example 3 in Table 6.1: it looks superficially like a straightforward parallel to ADV except that instead of the adverbial preceding SVO, in 3 an adverbial precedes SOV. However, SOV is not a word order of German. Instances of SOV may occur as part of VEND in subordinate clauses but not in main clauses and so it is not clear to which slots the elements of a main clause use of SOV should be assigned: either S and O could be in VF and precede a V that is in LSK or they could be in MF and precede a V that is in RSK. For that reason, we refrain from making any claims about the topology of cases like 3.

7 SEP

- SEP is characterized by the non-contiguous placement of the finite verb in LSK and the non-finite verb (or verb cluster) in RSK, with MF not being empty.
- Importantly, SEP is not present when a separable verb particle is placed clause-finally, separately from its finite lexical verb. These cases are headed under a related category (see 7.1 for more details).
- We don't require an object in MF; MF can just as well be filled be by an oblique argument or by a modifier.
- In some prior studies, the negator *nicht* as the sole element in MF wasn't considered as sufficient for assigning a clause to SEP. We consider *nicht* to be sufficient in that case, too.
- Typical combinations of finite and non-finite verb forms in SEP involve complex verb tenses, modal verb constructions, and the passive construction.
- These three constructions can also combine in certain ways, giving rise to complex verb clusters in the right sentence bracket (RSK).
- Note that SEP says nothing about the subject; accordingly certain subject-less constructions found especially in spoken German are considered SEP as well (cf. 3 in Table 7.1).
- SEP can be combined together with INV (inversion), ADV and SVO.
- SEP is not limited to declaratives, it can also occur in polar as well as WH-questions.
- SEP is, however, defined as occurring only in main clauses. Uses in subordinate clauses are treated separately.

Table 7.1: Separation of finite verb non-finite verb form(s)

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
1a	$V_{fin(AUX/MOD)}$	finite verb form in LSK;	[Der Vater S] [hat V_{fin}]	[Ich S] [habe V_{fin}] [deine	SEP-AUX
	OBJ1(OBJ2)	non-finite verb (cluster) in	[eine Mütze O] [gekauft		
	$(X)V_{non-finite}$	RSK; MF not empty	$V_{non-finite}$].	loren $V_{non-finite}$. (Merlin	
			'Father bought a cap'	1091_0000274)	
1b	$V_{fin(AUX/MOD)}$	finite verb form in LSK;		Sie S] [wird V_{finite}] [immer]	SEP-AUX-
	$X V_{non-finite}$	non-finite verb (cluster) in		X [kritisiert $V_{non-finite}$],	P
		RSK; MF not empty	[schwer X] [beschädigt	aber der Vater, welcher das	
			$V_{non-finite}$].	macht, nie.	
				She is always criticized	
				but the father who	
				does it never is.' (Falko	
				fkb035_2008_07_L2v2.4)	
2a	$V_{fin(AUX/MOD)}$		Die Mutter S [will V_{fin}]	Es scheint mir sehr schlecht	SEP-MOD
	OBJ1(OBJ2)	non-finite verb (cluster) in	[das Auto O] [reparieren	1	
	$(X)V_{non-finite}$	RSK; MF not empty	$V_{non-finite}$.	$\begin{bmatrix} [er \ S] \ [kann \ V_{fin}] \end{bmatrix}$ $[jeder]$	
			'Mother wants to repair the	, , , , , , , , , , , , , , , , , , , ,	
			car'	[um seine eigene Wohl	
				zu verbessern X] . (Whig	
				BNG2-2011-02-176) 'It	
				seems very bad to me when	
				a person thinks they can ex-	
				ploit everybody to improve	
				their own well-being'	

Continued on next page

¹Note that German wollen is a modal unlike English want to.

Table 7.1 – Continued from previous page

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
2b	$V_{fin(AUX/MOD)}$	finite verb form in LSK;		Also , [das Gefühl vom	SEP-
	$X V_{non-finite}$	non-finite verb (cluster) in		Guten S] [muss V_{fin}] [von	MOD-P
		RSK; MF not empty		Jugend an X] [gegeben wer-	
				den $V_{non-finite}$] . (Falko	
				$usb004_2006_10_L2v2.4)$	
				'Well the feeling about what	
				is good must be passed on	
				from youth onwards'	
3	$V_{fin(AUX/MOD)}$	finite verb form in LSK;	[Dürften V_{fin}] [preislich X]		SEP-MOD
	A	non-finite verb (cluster) in	so um die 70-100€/Stück		
	$(X)V_{non-finite}$	RSK; MF not empty	A] [liegen $V_{non-finite}$]		
			. 'Should be about 70-100		
			Euros per piece.'		
4a	Wh	finite verb form in LSK;	[Wann X] [bist V_{fin}] [du S]		SEP-AUX-
	$V_{fin(AUX/MOD)}$	non-finite verb (cluster) in	[heute X] [aus der Schule X]		WH
	A	RSK; MF not empty	[gekommen $V_{non-finite}$]?		
	$(X)V_{non-finite}$		'When did you get back		
			from school today?'		
4b		finite verb form in LSK;	[Darf V_{fin}] [ich S] [fragen	Aber [kann V_{fin}] [man S]	
	A	non-finite verb (cluster) in	$V_{non-fin}$], wie du heißt?	[aus diesem A] [Schließen	WH
	$(X)V_{non-finite}$	RSK; MF not empty	'May I ask what your name	Vnon - finite [dass diese]	
			is?'	Studien von geringem	
				wert ist CCOMP]? (Falko	
				fu128_2006_10a_L2v2.4)	

7.1 Structures to be distinguished from SEP

- Some structures that could be considered to be candidates for SEP, are not treated as such but analyzed separately.
- The first important case are verbs with separable parts (often separable prefixes) (cf. 1 in Table 7.2).
- Topological field analysis assumes that the slots, including MF, the midfield, are always present, even if they are not filled. However, processability theory sees the left and right bracket as contiguous when MF is not filled, calling this constellation Nähestellung 'close positioning'.
- Close / contiguous positioning occurs automatically when the verb takes only a subject(2c).
- Close / contiguous positioning is sometimes called for by L1 German, in particular when the verb takes only an object clause: such a clause cannot be placed into MF but must go into NF. Placing it into MF is either exceedingly dispreferred or outright ungrammatical (cf. 2e).
- With object NPs, by contrast, Nähestellung is grammatically incorrect: an object NP should be placed into MF (cf. 2a in Table 7.2).
- For adjunct PPs, placement into MF or NF is acceptable (cf. 2d in Table 7.2).
- SEP is felicitous in at least some subordinate clauses in L1 German. These uses may be associated primarily with the spoken modality (3a). However, SEP is by no means universally acceptable in L1 subordinate clauses: 3b may be a plausible interlanguage utterance but it is not grammatical in L1 German.

Table 7.2: Separation of finite verb non-finite verb form(s)

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
1a	V_{Lex}	finite lexical verb form in	[Ich S] [hat V_{Lex}] [das		NO-SEP-
	OBJ1(OBJ2)	LSK; verb particle in RSK;	häßliche Kleid O] [nicht X]		LEX-S
	$(X)V_{Part}$	MF not empty	[an V_{Part}].		
			'I am not putting on that		
			ugly dress '		
2a	S	finite verb form in LSK;	*[Ich S] [habe V_{fin}] [gekauft	[dann habens] - [er S] [hat	NO-SEP-
	$V_{fin}V_{non-finite}$	non-finite verb in RSK; MF	$V_{non-finite}$ [ein Brot O].	V] [gefahren V_n f] [den Bub	AUX
	OBJ	empty; Object in NF	'I bought a loaf of bread '	O] (AUGS pl_Ka08)	
				'then they have - he has	
				driven the boy'	
2b	S	finite verb form in LSK;	*[Ich S] [will V_{fin}] [kaufen		NO-SEP-
		non-finite verb in RSK; MF	$V_{non-finite}$ [ein Brot O].		MOD
	OBJ	empty; Object in NF	'I want to buy a loaf of		
			bread '		
2c	S	finite verb form in LSK;	[Ich S] [bin V_{fin}] [gelaufen		NO-SEP-
	$V_{fin}V_{non-finite}$		$V_{non-finite}$.		AUX
	~	empty; NF empty	'I have run'		
2d	S	finite verb form in LSK;	[Ich S] [habe V_{fin}] [getanzt		NO-SEP-
	$\int V_{fin} V X_{non-fin}$	itenon-finite verb in RSK; MF	$V_{non-finite}$ [vor Freude X].		AUX
		empty; NF filled by adverb	'I danced from joy'		
	C	or PP; NF empty	[T.1 C] [1.1.X7] [.1.1.		NO CED
2e	S	finite verb form in LSK;	[Ich S] [habe V_{fin}] [gedacht		NO-SEP-
	$V_{fin}V_{non-finite}$	non-finite verb in RSK; MF	$V_{non-finite}$ [dass du nicht	$V_{non-finite}$, [dass Schlecht	AUX
	O_{Cl}	empty; NF filled by object	kommst O_{Cl}].	und Gut stammt nur aus	
		clause	'I thought you wouldn't	zwei Gruppen O_{Cl}]. (Whig	
			come'	BNG2-2010-11-149)	on nert nage

Continued on next page

Table 7.2 – Continued from previous page

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
3a	$V_{fin,-ROOT}$	non-root finite verb form in	Er sagt, [der Vater S]		NO-SEP-
	OBJ1(OBJ2)	LSK; non-finite verb (clus-	[hat V_{fin}] [eine Mütze O]		ROOT-
	$(X)V_{non-finite}$	ter) in RSK; MF not empty	[gekauft $V_{non-finite}$].		
			'He says father bought a		
			cap'		
3b	$V_{fin,-ROOT}$	non-root finite verb form in	*Er erinnert sich, [was O]		NO-SEP-
	OBJ1(OBJ2)	LSK; non-finite verb (clus-	$[\text{hat V}_{fin}]$ $[\text{der Vater S}]$		$ROOT^-$
	$(X)V_{non-finite}$	ter) in RSK; MF not empty	[gekauft $V_{non-finite}$].		
			'He remmebers what father		
			bought'		

8 INV

- For INV it is necessary that S is not in VF but instead in MF (or rarely in NF), whereas another element occupies VF.
- INV can combine with SEP.
- INV cannot co-occur either with SVO, ADV or with VEND.
- INV also doesn't cover so-called Pseudo inversion (see §5.4).
- Copular clauses where the predicative element precedes the finite verb are assigned to a separate type.
- Similarly, existential clauses exhibiting inversion are treated separately.
- As noted in §7, inversion and VP separation may apply simultaneously.
- In case of complex verb phrases, the non-finite verb (cluster) may be moved into VF, before the finite verb. We treat such cases under a special heading, too.

Table 8.1: Inversion of subject and finite verb $\,$

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
1a	$ \begin{array}{ccc} O & V_{fin}S & X \\ V_{nonfin} \end{array} $	finite lexical verb form in LSK; Subj in MF	[Den Onkel O] [habe V_{fin}] [ich S] [nie X] [wiedergesehen $V_{non-finite}$]. 'I never saw that uncle again.'		INV_{+arg}
1b	$O V_{fin}S X V_{nonfin}$	finite lexical verb form in LSK; Subj in MF	[Aber J] [den Onkel O] [habe V_{fin}] [ich S] [nie X] [wiedergesehen $V_{non-finite}$]. 'But I never saw that uncle again'		INV_{+arg}
1c	$X + V_{fin}S$ O	finite lexical verb form in LSK; MF not empty	[Gern X] [helfe V_{fin}] [ich S] [Ihnen O] [weiter Prt]. 'I'll be happy to help you'.	Sehr geehrte Damen und Herren , [Vom April 2011 M] [lerne V] [Ich S] [Deutsch O], und gestern Aben las ich Ihre Anzeige in der Zeitung . (Merlin 1023_0111896) 'Dear Ladies and Gentle- men, I have been study- ing German since April 2011 and last night I read your advertisement in the paper	INV_{-arg}
1d	$X + V_{fin}S O_1$ O_2	finite lexical verb form in LSK; MF not empty	[Heute M] [kaufe V] [ich S] [meiner Mutter O] [eine Blume O].		INV_{-arg}
2	$X_{wh} V_{fin} S O$	finite verb in LS; S and O in MF; adjunct Wh-word in VF	[Warum M] [kauft V_{fin}] [Hannelore S] [Haarfarbe O]? 'Why is Hannelore buying hair-dye?'	[Wann M] [hast V] [du S] [Zeit uns zu treffen O]? (Merlin 1091_0000274) 'When do you have time to meet us?'	INV_{-arg} -WH

Continued on next page

Table 8.1 – Continued from previous page

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
3	$X V_{fin} S$	finite lexical verb in LSK; X	*[Heute X] [kaufe V] [ich S].		$NO-INV_{-1}$
		in VF; only S in MF			

Table 8.2: Cases similar to but distinguished from inversion

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
1	X V fin, cop S	copular in LSK; S and Pred	[Heute X] [ist $V_{fin,cop}$] [Otto	[Aber CCONJ] [heute X]	$NO-INV_{cop}$
	Pred	in MF; X in VF	S] [Sieger Pred]	[ist $V_{fin,cop}$] [alles S] [anders	
			'Today, Otto is the winner.'	als es damals war Pred].	
				(fk006_2006_08_L2v2.4)	
				'But today everything is dif-	
				ferent from what it was like	
				then.'	
2a	$\mid X \mid V_{fin,exist} \mid S \mid$	modifier in VF; existential	Bald X] [wird $V_{fin,exist}$] [es	[Rechts M] [gibt V] [es S_{expl}]	NO-
	Pred	verb in LSK; S in MF; de-	S] [Winter Pred]	[eine Zahbürste O].	$ INV_{exist-cxn} $
		pending on V, either Pred	'Soon, it'll be winter'	On the right there is a	
		or O in MF		toothbrush.	
2b	$\mid X \mid V_{fin,exist} \mid S \mid$	modifier in VF; existential	[Heute X] [gibt $V_{fin,exist}$] [es		NO-
	О	verb in LSK; S and O in MF	S] [Kuchen Pred]		$ INV_{exist-cxn} $
			'There's cake today'		
3a	$V_{nonfinite}$	infinitive in VF; modal verb	[Feiern $V_{nonfinite}$] [kann		$ $ NO-INV $_{Inf}$
	$V_{finite} S O X$	in LSK; S and at at least one	$\left[\begin{array}{cc} V_{fin} \end{array}\right] \left[\begin{array}{cc} \operatorname{man} & \operatorname{S} \end{array}\right] \left[\begin{array}{cc} \operatorname{den} & \operatorname{Tag} \end{array}\right]$		
		other element in MF	O [mit dem Verzehr von		
			Pfannkuchen X]		
			'You can celebrate the day		
			by eating pancakes.'		
3a	$V_{nonfinite}$	participle in VF; tense aux-	[Produziert $V_{nonfinite}$] [hat		$NO-INV_{Part}$
	$V_{finite} S O X$	iliary in LSK; S and at at	V_{fin} [er S] [in Tschechien O]		
		least one other element in	'He produced in the Czech		
		MF	Republic.'		310
3b	$V_{nonfinite}$	participle in VF; passive	[Gedreht $V_{nonfinite}$] [wurde		NO-
	$V_{finite} S X$	auxiliary in LSK; S and at	V_{fin} [der Film S] [im Jahr		$ INV_{Part} - P $
		at least one other element in	[1975 X]		
		MF	'The film was made in 1975.'		

9 VEND

- Finite verbs are placed in the right sentence bracket of subordinate clauses.
- If the verb is a complex one, consisting of an auxiliary or modal and a non-finite verb, the whole verb cluster goes into the right sentence bracket and the finite verb goes last.
- VEND placement in principle applies to all types of subordinate clauses:
 - relative clauses with antecedents
 - free relative clauses
 - adverbial clauses
 - object or complement clauses
 - …
- Importantly, we also treat as VEND any cases where we have a copular verb (cluster) in the right sentence bracket of a subordinate clause (cf. 2b in Table 9.1). (Recall that we don't treat SV_{cop} Pred as an instance of SVO.)
- Also, we also use the VEND rubric for certain sentence types that are used as ungoverned main clauses but which structurally look like subordinate clauses.
- As we noted in earlier sections, there are exceptions where, for instance, SEP or SVO may be found in subordinate clauses under certain circumstances.

Table 9.1: Final placement of verbs in subordinate clause

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
1a	COMP-	finite lexical verb form in	Ich bin froh, dass [ich	Zweitens kommt es darauf	$VEND_{ccomp}$
	ROOT=-	RSK; Complementizer in	S] [meine Hausaufgaben O]	an , [ob COMP] [er/ sie	
	NPsubj	LSK; MF not empty	[gefunden $V_{non-finite}$] [habe	S] [BA oder eine höhere	
	(NPobj1) (X)		V_{fin}].	Stufe O] [studiert V]. (Falko	
	(NPobJ2)		'I am glad that I found my	cbs007_2006_09_L2v2.4)	
	(ADJ)		homework '	'Secondly it depends on	
	(V)INF=-			whether he or she studies at	
	V INF=+			the BA- or a higher level.'	
1b	COMP-	finite lexical verb form in		Die Feministinnen waren	$VEND_{ccomp}$
	ROOT=-	RSK; Complementizer in		der Ansicht , [dass COMP]	
	NPsubj	LSK; MF not empty		[die Frauen S] [die gleichen	
	(NPobj1)(X)			Rechte mit den Männern	
	(NPobJ2)			O] [haben V_{finite}] (Falko	
	(ADJ)			fk006_2006_07_L2v2.4)	
	(V)INF=-			'The feminists were of the	
	V INF=+			view that the women had	
				the same rights as the man	
				have.	
2a	COMP-	Complementizer in LSK;		Ich kann nicht bei dir	$VEND_{advcl}$
	ROOT=- S	non-finite and finite verbs in		besuchen, [weil COMP]	
	$O V_{nonfinite}$	RSK; MF not empty		[ich S] [Deutsch O] [lernen	
	V_{fin}			$V_{nonfinite}$ [muss V_{fin}].	
				(Merlin 1061_0120274)	
				'I can't visit you because I	
				have to study German.'	

Continued on next page

Table 9.1 – Continued from previous page

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
2b		Complementizer in LSK;		bis Du wieder praktisch äh	$VEND_{advcl}$
		finite-verb in RSK; MF not		schräg über dem Kopf der	
		empty		Dame bist (HaMaTaC 20)	
				'until you're practically um	
				diagonally above the head	
				of the lady.'	
3	$S_{relpron}$ O	S in VF; finite V in RSK;		[Wer S] [das Gegen-	_
	$\mid V_{fin} \mid$	MF not empty		teil O] [behauptet S]	$VEND_{free_rel}$
				, der lügt. (Falko	
				fkb058_2008_08_L2v2.4)	
				(Falko	
				nz002_2007_05_L2v2.4)	
				'Whoever claims the oppo-	
				site, they're lying.	
4	COMP-	C in LSK; MF contains S		[Ob COMP] [die Ver-	VEND-YN-
	ROOT=+S	and A; finite V in RSK		schlechterung der Beziehun-	ROOT ⁺
	\mid A V_{fin}			gen , die viele Scheidun-	
				gen S] [am Feminismus	
				A] [liegen V] ? (Falko	
				fkb032_2008_07_L2v2.4)	
				'Whether the deteriora-	
				tion of relationships, the	
				many divorces are due to	
				feminism?'	
5	$M_{WH} S V_{fin}$	M in VF; S in MF; V in		[Wie X] [er S] [rastet V]	VEND-
		RSK;		? (KiDKo_mu_v2.0 >	EXCL-
				MuH11MD_07-1)	ROOT+
				'How he's resting!'	

9.1 Free-standing subordinate clauses

- German allows the use of subordinate clauses without explicit governors in certain contexts.
- That kind of use occurs, for instance, when the subordinate clause is the focus of a preceding question question that it answers.
 - (10) Warum will man das? Weil die Gemeinden nicht das Geld für reguläre Auftragsvergaben haben.
 - 'Why do people want this? Because the municipalities do not have the money for regular contract awards.'
- But in addition there are cases that require no such interactional context. Subordinate clauses may be used imperative-like (11), question-like (12) or exclamative like (13).
 - (11) Dass du mir ja brav bist! 'Be a good boy/girl now!'
 - (12) Ob der Name Lyra noch bekannt ist?
 'I wonder if the name Lyra is still known?'
 - (13) Dass Berliner immer so neidisch auf die tollsten Städte der Welt sein müssen. 'That Berliners always have to be so envious of the greatest cities in the world.'
- We mark such uses with extra information rather than assigning them to the general VEND category. For illustration, see Table 9.1 of VEND.

9.2 Non-VEND subordinate clauses

- German has some specialized subordinate sentence types in which the verb is not in final position.
- One consists of verb-first conditional (protasis) sentences as in (14)–(15). Such conditional sentences must precede their main (apodosis) clauses, unlike conditional sentences that are marked by a complementizer and which exhibit VEND.
 - (14) Überquert man den Fluss Khodar findet man noch Überreste des Crosses one the river Khodar finds one still remains of-the Chaturbuja-Tempels . Chaturbuja-temple .

'If you cross the river Khodar, you can still find remains of the Chaturbuja temple.'

(15) Hat man die Höhle verlassen , dann liegt noch ein kleiner Fußmarsch vor Has one the cave left , then lies a small walk before one einem .

'Once you have left the cave, there is still a short walk ahead of you.'

- Formally, the conditional protasis clauses in (14)–(15) have the same structure as polar Yes/No questions (cf. 11.4). Accordingly, an example like 14 should, for instance, be labeled as VSO_{Cond}
- V2-sentences introduced by *kaum* can occur as subordinate clauses in the VF of main clauses. Depending on the arguments and modifiers present, kaum-sentences may be treated as cases of INV. An example is (16).
 - (16) Kaum hatte der Bundesrat sein Okay für Kulturveranstaltungen gegeben ,
 Hardly had the federal-council its Okay for cultural-events given ,
 fragte Matthias Peter Ostschweizer Künstlerinnen und Künstler an .
 asked Matthias Peter East-Swiss artists-female and artists-mal to .
 'No sooner had the Federal Council given its okay for cultural events than Matthias Peter enquired with eastern Swiss artists.'

10 Special syntactic contexts

10.1 Spoken language phenomena

Several of PT's verb constellations require elements that unspecified as to whether they should be arguments or adjuncts. For instance, INV requires another element after the finite verb in addition to the subject.

In spoken language, we do not consider fillers like $\ddot{a}h$ (\sim EN 'um', 'uh', 'hmm') (and its variants) as possible slot fillers. Likewise, in the case of repairs, we count only the repair but not the reparandum. (This is compatible with, for instance, UD's policy of attaching the reparandum to the repair so that only the latter has a relation to a potential governing predicate. As a consequence, the sentence in (17) exhibits SVO: Also is in VVF, the subject ich in VF, vom Toaster is in MF, the modal particle ja is in MF but the filler $\ddot{a}h$ is not assigned to any field.

```
(17) Also äh ich kam ja vom Toaster.So um I came MP from toaster.'So uh I came from the toaster, tho.' (HaMaTac)
```

As the discussion of the above example illustrates, modal particles do count as elements occupying slots. In the example below, *halt* would occupy the MF and give rise to SEP.

```
(18) Du musst halt warten .
You must MP wait .
'You just have to wait.'
```

10.2 Argument omissions

- German like many other languages allows for the omission of arguments under specific circumstances.
- These cases pose the question whether one should assume that there are phonetically empty elements present in the syntactic structure that factor into the analysis of transitivitiy and verb placement.
 - In some cases, the objects of specific verbs can be omitted under an indefinite interpretation.

```
(19) Ich lese gern.I read happily/willingly.'I like to read (things/stuff).'
```

 In other cases, the objects of specific verbs can be omitted under an anaphoric interpretation.

```
(20) Ich weiß \emptyset.
I know \emptyset.
'I know/I know that.'
```

 In addition to lexically licensed omissions, there are particular constructions that license the omission of arguments. One important such case in spoken German is topic drop.

```
(21) \emptyset Kenn ich . \emptyset know I . 'I know that/him/her/them'.
```

```
(22) \emptyset Mag ich nicht . \emptyset like I not . 'I don't like that/him/her/them'.
```

• Practically speaking, we currently lack reliable analysis tools that could identify the cases above as anything other than intransitive verb uses.

10.3 Split arguments

In a way that is somewhat complementary to argument omission, we sometimes get two elements in the syntax where semantically there is only one. Typically, a part of a unit is extracted an used independently. For instance, in 23 the item davon 'thereof' is split up and the first part, da is moved to the VF (Historically, davon is the fusion of a pronoun and an adposition.) In spoken language, such items composed of da and a preposition can be split up. Note that there is, however, no general preposition stranding in German. That is, in case of PPs with a lexical NP, no splitting up is possible.

The sequence that results from the split looks like INV. If all of *davon* had been moved to VF (cf. 24), we would not have INV since we require another element in MF besides the subject!

(23) Da träumst du von.

There dream you of.

lit. 'You're dreaming thereof.'

(24) Davon träumst du.
Thereof dream you.'That's what you're dreaming of.'

Other examples involve NPs from which the head noun is extracted, leaving behind modifiers or quantifiers, as illustrated in (25).

(25) Bücher hat er keine.Books has he no.'Books he doesn't have any'

In cases like the above, we accept the parts as full tokens for our purposes. That is, we would treat both 23 and 25 as cases of INV.

10.4 Clauses that are part of larger structures

- There are certain syntactic constructions that contain whole clauses of a certain types as their parts.
- For instance, in (26) we see an unexpected (pseudo-)coordination of an NP and SVO clause that has a conditional meaning.
- Within this and other similar constructions, the form of the contained clause is usually constrained and the speaker has no choice but to use a certain expected verb constellation. That is, in the case of 26 use of INV in the right coordinate would be unacceptable.
- We treat such clauses as if they were regular instances of their surface clause type.
- (26) Noch ein Wort und ich rede nie wieder mit Dir. Another word and I talk never again with you. 'Another word and I'll never talk to you again.'

10.5 Parenthetical sentences

By parentheticals we prototypically mean expressions which can be inserted parenthetically into a host clause (27) but which also have a non-parenthetical use in which they take a content clause as complement (29).

- (27) 2017 sei das "Jahr der Entscheidung", heißt es, was die Zukunft der EU, 2017 is the "year of decision", is-said it what the future of-the EU, wenn nicht gar der Demokratie betrifft. if not even the democracy concerns.
 '2017 is the "year of decision", they say, for the future of the EU, if not for democracy.'
- (28) Zwischen Staaten, so sagte es Charles de Gaulle, gibt es keine Freundschaft between states, so said it Charles de Gaulle, gives it no friendship 'Between states, so said Charles de Gaulle, there is no friendship.'
- (29) Es heißt , daß dort einmal eine Burg gewesen sei. It is-said , that there once a caste been has. 'It is said that there had once been a castle there.'

For the purposes of analyzing verb constellations, we set the parenthentical uses aside, including the ones like (28) that have an anaphoric element (above: so) inside the parenthentical clause.

11 Sentence types in main clauses other than declaratives

- We focus here on sentence types that can occur as main clauses.
- For the most part, subordinate clauses in L1 German exhibit verb-final order (VEND). Subordinate clauses that deviate from that regularity are discussed in the chapter on VEND.

11.1 WH-questions

- Most types of wh-questions clearly do not fall under SVO .
- The one type that structurally might be considered a good candidate for SVO are subject questions such as (30).
 - (30) [Wer S] [ruft V] [das Restaurant O] [an V_{prt}]? 'Who is going to call the restaurant?'
- However, SVO is restricted to declaratives. We use a different type for subject questions.

11.2 Imperatives

- Imperatives are normally used sentence-initially in German.
 - (31) Gebt den Leuten Zucker. 'Give the people sugar'
- Informal imperatives (32) rarely feature an overt subject (though they can), whereas formal imperatives (33) must have one.
 - (32) Geh du mal alleine. 'You go alone'
 - (33) Machen Sie mit! 'Participate!'
- Inflected imperatives are given a special category.
- Imperative verb forms are not the only construction available for making requests or giving orders. German also frequently uses non-finite forms (cf. 34) for that purpose. These latter are outside the scope of PT. According to Wöllstein's topological analysis, they are VEND.
 - (34) Bitte warten. 'Please wait.'

11.3 Exclamatives

- Exclamatives are formally quite varied in German.
- One prominent type of exclamative is verb-initial.
 - (35) Redet der einen Stuss!

 'The nonsense that that guy is talking!'

11.4 Polar questions

- Neutral (or: unbiased) polar (or: Yes/No) questions in German have verb-first (V1) order.
- Core arguments following the verb can vary in their order based on various factors , including their length (or 'weight') , their morphosyntax and their information structural properties. In other words, we find both VSO and VOS sentences.
 - (36) [Kauft V] [Hannelore S] heute [Haarfarbe O]? 'Is Hannelore buying hair dye?'
 - (37) [Kauft V] [das O] [jemand S]? 'Is anybody buying that?'
- Note that we capture not only polar questions with direct objects but also other polar question types, including clauses with intransitive verbs and clauses headed by verbs taking an obligatory oblique argument.
- In addition to V1 we also find other orders for polar questions in learner language.
- In some cases, there may be ambiguity as to whether a polar question is an IL or L1-influenced form or represents a so-called biased Yes/No-question, which cannot be uttered out of the blue but encodes that the speaker has prior assumptions about the expected answer. Biased L1-questions in German (cf. 38) do not exhibit V1.
 - (38) Peter kommt auch? 'Peter is coming as well?'

Table 11.1: Word orders in polar questions

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
1	VSO	V in LSK; S and O in MF	[Kauft V] [Hannelore S] [Haarfarbe O]? 'Is Hannelore buying hair dye?'	[Macht V] [der Mitarbeiter S] [einen Unterschied für die Gesellschaft O] ? 'Is the employee making a difference for society?' (Whig BNG2-2011-03-208)	VSO-YN
2	XSVO	V in LSK; S in VF along with M; O in MF	n/a	[Heute M] [Hannelore S] [kauft V] [Haarfarbe O] ? 'Is Hannelore buying hair dye today?'	ADV-YN
3	XSOV	non-verb-initial	n/a	[Heute M] [Hannelore S] [Haarfarbe O] [kauft V]? 'Is Hannelore buying hair dye today?'	XSOV-YN
4	XVSO	non-verb-initial	n/a	[Heute M] [kauft V] [Hannelore S] [Haarfarbe O]? 'Is Hannelore buying hair dye today?'	XVSO-YN
5	XVSO	non-verb-initial	[Heute M] [decken V] [Sie S] [diesen schwarzen Machtmissbrauch O]? 'Today you're covering up this abuse of power by the conservative party?'		$XVSO-YN_{biased}$

 $^{$^{-1}$}$ Note the identical form to L1-appropriate biased YN-questions.

Table 11.2: Expletives in argument positions

	Order	Features displayed	L1-German illustration	Learner use	Fine Tag
1	$S_{expl} V$	lexically specific expletive	[Es S_{expl}] [regnet V].		$S_{expl}V$
			'It's raining'		
2	$S_{expl} V O A$	lexically specific expletive	[Es S_{expl}] [geht V] [mir O]		$S_{expl}VO$
			[gut A].		
			'I'm doing fine'		
3	$S_{expl} V O$	presentational construction	[Es S_{expl}] [gibt V] [Kuchen		$S_{exist}VO$
			O].		
			'There's cake'		
4	$S V O_{expl}$	lexically specific reflexive	[Die Windschutzscheibe S]		SVO_{expl}
			[verbog V] [sich O_{expl}]		
			[stärker als erwartet ADJ]		
			'The windshield bent more		
			than expected'		
5	Expl V S A	pre-field es	[Es E] [leben V] [viele Fam-		EVSA
			ilien S] [hier A].		
			'There are many families		
		_	living here'		
6	Expl V O S_{Cl}	correlate es	[Es E] [stört V] [mich O],		$EVOS_{Cl}$
			[dass Peter nie anklopft		
			$[S_{Cl}].$		
			'It bothers me that Peter		
	CVE	1.4	never knocks'		GMEO
7	$S V Expl O_{Cl}$	correlate es	[Ich S] [verstehe V] [es E],		$SVEO_{Cl}$
			[daß es Menschen gibt, die		
			Peter nicht mögen O_{Cl}].		
			'I get it that there are peo-		
			ple who don't like Peter'		

Index

argument omission, 41
filler, 41
modal particles, 41
parenthetical sentences, 43
preposition stranding, 42
pseudo inversion, 17, 32
pseudo-coordination, 43
repair, 41
split NP, 42
spoken language, 41

Bibliography

- [Müller et al.(2019)Müller, Höhle, Reis, and Richter] Stefan Müller, Tilman N. Höhle, Marga Reis, and Frank Richter, editors. 2019. *Beiträge zur deutschen Grammatik*. Language Science Press, Berlin.
- [Pienemann(1998)] Manfred Pienemann. 1998. Language processing and second language development. Processability theory. Benjamins, Amsterdam [u.a.].
- [Wöllstein(2010)] A. Wöllstein. 2010. Topologisches Satzmodell. Kurze Einführungen in die germanistische Linguistik. Winter.