

ARTICLE

Clausal Postpositioning in German Regional Language

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This article presents the results of a corpus study of clausal postpositioning, that is, the occurrence of a sentential constituent in the postfield of the matrix clause to which it is syntactically linked, in German regional language. Analysis of 11,027 clauses from 60 spoken regiolect and dialect texts reveals that clausal postpositionings occur most frequently as non-relative finite clauses, followed by relative clauses, and lastly, infinitival constructions. Notably, while non-relative finite clauses comprise a smaller proportion of postpositionings in regiolect compared to dialect, relative clauses and infinitival constructions show the opposite trend. Adjunct clauses occur most frequently, followed by complement clauses, in both regiolect and dialect. Furthermore, in both varieties, postpositioning is more prevalent in verb-first and verb-second clauses than in verb-final clauses. This finding is attributed to restrictions on syntactic subordination. Finally, non-relative finite clause and relative clause types that may be embedded in both the postfield and inner field are center-embedded at mean relative frequencies of 13.42% and 28.17%, respectively. These findings shed light on contradictory claims in the literature regarding the possibility and frequency of clausal embedding in the inner field.

Keywords: German; regional language; dialect; regiolect; postpositioning; postfield

1. Introduction

In this article, I present the results of a corpus study of clausal postpositioning in German regional language. This phenomenon, exemplified in (1)–(3) and defined more precisely below, involves the occurrence of a sentential constituent in the postfield of the matrix clause to which it is syntactically linked.¹

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¹ The labels that appear next to the examples throughout the article refer to recordings in the Zwirner (ZW) and Pfeffer (PF) Corpora from which the data for the present study were drawn. See section 2.1 for further details on these corpora. The examples utilize standardized renderings of the original data.

- (1) er wird dabei andere Jugendliche finden |²
 he will thereby other youths find
die er bereits kennt (PF019)
 whom he already knows
 ‘in doing so, he will find other
 young people whom he already
 knows’
- (2) da habe ich nun gefunden |
 then have I PART found
dass das Kind auch wunderschön schreiben lernt (PF196)
 that the child also wonderfully write learns
 ‘I found then that the child also learns to write wonderfully’
- (3) da haben sie vergessen gehabt |
 then have they forgotten had
die Löcher zuzustopfen (ZW1P3)
 the holes to.plugin
 ‘they forgot to plug the holes’

In these examples, the three clausal forms under examination in this study—relative clauses (RCs), non-relative finite clauses (NRFCs), and infinitival constructions (ICs)—occur after the right boundary of the matrix clause’s inner field, which is framed by *wird* ‘will’ . . . *finden* ‘find’, *habe* ‘have’ . . . *gefunden* ‘found’, and *haben* ‘have’ . . . *vergessen gehabt* ‘forgotten had’. In this placement, they display clause-final embedding.³

The empirical focus of the present study is spoken VARIETIES, defined as “subsystem[s] of a language characterized by internal linguistic cohesion, clear system boundaries (separating [them] from other varieties), well-defined pragmatic functions and an emic status” (Lenz 2010:295–296; see also Schmidt 2005 and Schmidt & Herrgen 2011:49–53). The relationships between such varieties can be modeled in terms of their relative positions in dimensions along two axes, namely a horizontal-areal (diatopic) axis representing geographic space and a vertical-social (diastratic) axis extending from the lowest pole, the dialect, to the highest pole, the standard variety (see, for example, Bellmann 1986, Auer & Hinskens 1996, and Herrgen 2010 for discussion of bidimensionality). I limit my study to REGIONAL LANGUAGE, which I understand as the areally bound, regionally marked aggregate of spoken forms “beneath” the codified standard language on the vertical axis ranging from dialect to the “regional accent” or “regional standard,” situated closest to the standard pole (Lenz 2007:169, 2008:2, Schmidt & Herrgen 2011:63–67). In particular, I examine postpositioning in BASE DIALECTS, the most geographically restricted varieties with the greatest linguistic

² I employ the vertical line throughout the article to indicate a relevant topological boundary, for example, between the inner field and postfield as in (1)–(3). See section 2.3 for a detailed discussion of the Topological Field Model.

³ Postpositioned ICs as in (3) are sentential/incoherent (Duden 2006:860–866, 2016:862) and are considered reduced clauses (Helbig & Buscha 2013:574, Durrell 2017:282). As these are embedded in a matrix clause like RCs and NRFCs, I refer to them along with the RCs and NRFCs as subordinate clauses throughout the article. See, for example, Helbig & Buscha (2013:573–574) for a discussion of syntactic similarities and differences between ICs and finite subordinate clauses.

divergence from the standard language (Lenz 2010:296, Schmidt 2010:217), and REGIOLECTS, “standard-divergent varieties with broader regional distribution that can be located between dialects and standard varieties” (Lenz 2010:302).⁴

A survey of the literature (see Vinckel-Roisin 2015 for an overview) reveals that most investigations of the postfield and postpositioning in modern German deal with the spoken and written standard (for example, Lambert 1976, Hoberg 1981, Zahn 1991, Filpus 1994, Vinckel 2006, Żebrowska 2007). A few works treat postpositioning in spoken regional German, specifically dialects and regiolects, yet each offers only partial insights: Brode (1971) investigates the whole German linguistic area, but only regiolects; Patocka’s (1997) study is limited to Bavarian dialects spoken in Austria; and Westphal Fitch (2011) considers both dialect and regiolect but juxtaposes the dialect of one linguistic region with the regiolect of another. In addition, many studies (for example, Brode 1971, Zahn 1991, Westphal Fitch 2011) examine only non-clausal postpositioning since subordinate clauses display a strong affinity for the postfield of the matrix clause (Zifonun, Hoffmann & Strecker 1997:1650–1654) and a high degree of grammaticalization, particularly of complement clauses, in that position. However, there is a lack of consensus in the literature about where various subordinate clause types may or must occur, in particular which types may or may not appear in the matrix clause’s inner field, the region of the clause bounded by the left and right brackets. Eisenberg (1994:415, 1999:391), for example, contends that attributive clauses, but not complement or adverbial clauses, may be embedded in the inner field. Similarly, Dürscheid (2012:103) claims that conjunctive clauses, including complement and adverbial clauses, as well as ICs only occur in the pre- or postfield. Helbig & Buscha (2013:477) go a step further by characterizing the occurrence of subordinate clauses in the postfield of the matrix clause, including RCs, as “*grammatikalisierte Ausrahmung*” ‘grammaticalized exbraciation’. By contrast, Patocka (1997:129) argues against Eisenberg’s (1994:415) assertion that only attributive clauses may occur in the inner field. Duden (2016:1067–1069) also demonstrates that RCs and adverbial clauses can readily appear not only in the postfield, but in the inner field as well (see also Zifonun, Hoffmann & Strecker 1997:2348, 2352). This holds for the present dataset, as the following examples demonstrate.⁵

Relative clause

- (4) das haben dann zwei Schauspieler
 that have then two actors
die da auch mitgewirkt haben übernommen (PF160)
 who there also participated have taken over
 ‘two actors, who also participated, took responsibility for that’

⁴ As Lenz (2010:302) points out, there is no consistent nomenclature for varieties and speech levels situated between the dialect and standard on the vertical axis; in the German context, alternative labels for ‘regiolect’ encountered in the literature include *Neuer Substandard* ‘new substandard’ (Bellmann 1983), (*regionale*) *Umgangssprache* ‘regional colloquial’ (Dittmar 2004), and *Alltagssprache* ‘everyday language’ (Elspaß 2007).

⁵ It is, of course, possible for sentential constituents, including subject and object clauses, to appear initially embedded in the prefield of the matrix clause as, for example, in *Dass das Lämpchen flackerte, fiel dem Techniker sofort auf* ‘That the light was flickering was immediately apparent to the technician’ (Duden 2016:1068). In the current work, the primary focus is finally embedded clauses; center-embedded clauses are also of secondary concern.

Non-relative finite adverbial clause

- (5) dann durften wir weil wir so weit aus dem Ort wohnten
 then were.allowed we because we so far out the-DAT place lived
 nochmal ein bisschen Luft schnappen (ZWX71)
 again a little air grab
 'then we were allowed to get a little air again because we lived so far out of town'

Given the disagreement in the literature regarding subordinate clause embedding, specifically the occurrence of clausal constituents in the inner field of the matrix clause (see Sahel 2015:169–170 for further discussion), the distribution of these constituents merits further elucidation.

To gain new insight into clausal postpositioning in regional varieties, the present investigation examines 11,027 clauses in 60 spoken regiolect and dialect texts of the Pfeffer and Zwirner Corpora (Institut für Deutsche Sprache) from the North Low German, West Central German, and East Upper German linguistic areas. The following research questions are addressed:

1. Which forms and functions of clausal postpositioning are attested in the dataset?
2. How are postpositioned clauses distributed in dialects and regiolects according to form and function?
3. To what extent can clausal constituents that appear in the postfield also appear in the inner field?
4. What is the frequency of clausal postpositioning according to variety?

Besides addressing these questions, the current study establishes a methodology not only for this work, but also for further examinations of both clausal and non-clausal postpositioning.

The present investigation is part of a larger project on both non-clausal and clausal postpositioning in German regional language that complements studies of the phenomenon in standard German (for example, Lambert 1976, Filpus 1994) and recent works that examine syntactic phenomena on the vertical spectrum (for example, Lenz 2013, Kallenborn 2019). As this study draws on data that were collected in the mid-twentieth century, the results can also serve as a baseline to which examinations of postpositioning in contemporary German regional language can be compared. More generally, the study fits into the larger context of research on German regional language variation (for example, REDE - *Regionalsprache.de*, Schmidt & Herrgen 2011, Kehrein, Lameli & Rabanus 2015), syntactic variation in particular (for example, SADS - *Syntaktischer Atlas der deutschen Schweiz*, SynAlm - *Syntax des Alemannischen*, SyHD - *Syntax hessischer Dialekte*), as well as projects on the syntax of other Germanic languages (for example, DynaSAND - *Dynamische Syntactische Atlas van de Nederlandse Dialecten*, FRED - *Freiburg English Dialect Corpus*, ScanDiaSyn - *Scandinavian Dialect Syntax*, YGDP - *Yale Grammatical Diversity Project*).⁶

⁶ The links to the project websites are as follows: DynaSAND - <https://sand.meertens.knaw.nl/zoeken/>, FRED - <https://freidok.uni-freiburg.de/proj/1>, REDE - www.regionalsprache.de, SADS - www.dialektsyntax.uzh.ch/de.html, ScanDiaSyn - <http://websim.arkivert.uit.no/scandiasyn/>, SyHD - www.syhd.nl.

The remainder of the article is outlined as follows. In section 2, I present the methodology, which lays the groundwork for the current investigation and further studies of postpositioning in German regional language. This is followed by a typology of clausal postpositionings and an analysis of variation in section 3. In this context, I discuss the results of other studies that deal with postpositioning, primarily Patocka (1997), and compare them to those of the current study. Section 4 concludes the article.

2. Methodology

This section introduces the methodology employed in the present study. After describing the corpora from which the data are drawn (2.1), I discuss the linguistic areas and recordings under investigation (2.2), the criteria for analysis (2.3), the procedure for data collection (2.4), and the presentation of results in section 3 (2.5).

2.1. Corpora

The primary repository of German dialect data is the Zwirner Corpus, which was compiled between 1955 and 1972 under the direction of Eberhard Zwirner and is currently maintained online by the Institut für Deutsche Sprache (IDS) in the Datenbank für Gesprochenes Deutsch (DGD).⁷ The corpus comprises 5,796 recordings of speakers from approximately 1,000 locations in Austria (Vorarlberg), France (Alsace), Liechtenstein, The Netherlands, and former West Germany. The majority of recordings (58%) are 9 to 12 minutes in duration.

Where feasible, one autochthonous speaker from each of three generations (c. 20 years old, c. 40 years old, above 60 years old), as well as three repatriates from former German settlements in the east (for example, Silesia) were selected and interviewed in each location using professional recording equipment. To date, 2,922 of the recordings in the corpus have been transcribed using standard German orthography and aligned electronically with the transcriptions. The vast majority of these primarily narrative texts, elicited through interview prompts and questions, reflect speech situated near the bottom of the vertical-social spectrum, while approximately 6% have been classified as “colloquial” and a handful as standard.

For regiolect data, I draw on material from the Pfeffer Corpus following, for example, Lenz (2013). This corpus, which is also accessible through the DGD, was compiled in 1961 by Alan Pfeffer and Walter F. W. Lohnes (see Wagener & Bausch 1997:120–121 for further information). It includes 398 recordings, with the majority (55%) lasting between 11 and 13 minutes, collected from 57 cities in Austria, former East and West Germany, and Switzerland. As with the Zwirner Corpus, the consultants were interviewed and professionally recorded. All of the spoken texts have been transcribed and aligned with standardized transcriptions.

info/startseite/index.html, *SynAlm* – <https://cms.uni-konstanz.de/fileadmin/archive/syntax-alemannisch/index.html>, *YGDP* – <https://ygdpyale.edu/project-description>.

⁷ For detailed information on the corpus, see Zwirner & Bethge (1958), Haas & Wagener (1992, vol. 1), Wagener & Bausch (1997:112–114), and Lenz (2007).

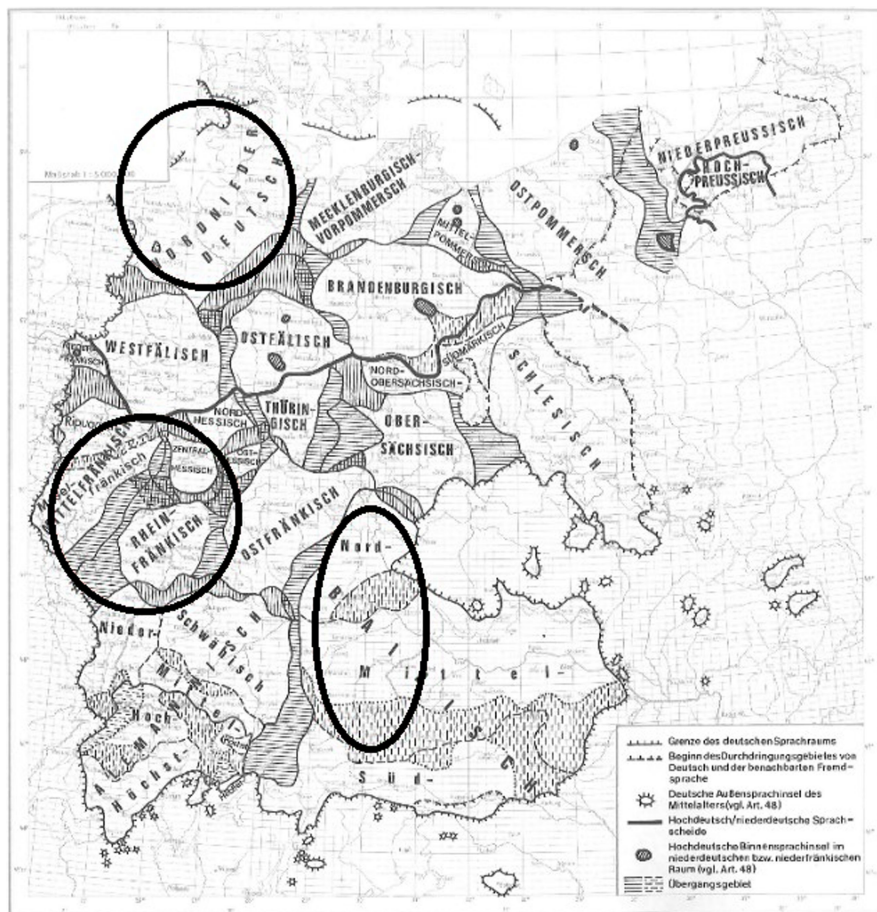


Figure 1. German dialect space, first decades of the twentieth century (Wiesinger 1983:831).

Although the project leaders’ goal was to capture the urban “colloquial” speech of consultants from different age groups, levels of education, and professions, the texts in the corpus represent a wider range of varieties, from dialect to the standard (see Spiekermann 2005:107). Nonetheless, Lenz (2007, 2013) demonstrates that the Pfeffer Corpus recordings generally represent varieties much closer to the standard language on the vertical-social spectrum compared to those from the Zwirner Corpus.

2.2. Linguistic Areas and Recordings

To provide a cross-regional perspective, I analyze data from the three non-contiguous linguistic areas shown in figure 1, namely North Low German (NLG), West Central German (WCG), and East Upper German (EUG), which were chosen as representatives of the Low German, Central German, and Upper German regions, respectively.

Low German dialects distinguish themselves from Central and Upper German dialects through the absence of the High German consonant shift, while Upper and Central German dialects differ most prominently in the shift of *p*- and *-pp-* to *pf*² and *-pf-* in the former but not the latter (see Niebaum & Macha 2014:250–253).

With respect to the analyses in section 3, the patterns of frequency for the individual linguistic areas mirror those for the three areas combined. Therefore, the areas are treated in aggregate in the present study.

Sixty recordings from the Zwirner and Pfeffer Corpora, 10 per linguistic area/variety combination, serve as the empirical basis for the study.⁸ These were randomly selected from the pool of recordings delimited according to the criteria discussed below, namely variety, age, and gender. The recording IDs, with the corresponding information on linguistic area, speaker age, and speaker gender, are presented in table A1 of the appendix.

As noted in section 2.1, the Zwirner and Pfeffer Corpora were both compiled using professional recording equipment in interview settings. Interviewers elicited speech from each consultant through a question/prompt (or series of questions/prompts, depending on the length of the consultant's responses) until the target recording length had been reached.⁹ With one exception, the recordings selected for the current study were made in localities in former West Germany.¹⁰ All Zwirner consultants are autochthonous, while the Pfeffer consultants, in nearly all cases, originate from the city or near the city whose "colloquial speech" the researchers intended to capture.¹¹

The recordings I selected to represent dialect are classified in the database catalogue (Haas & Wagener 1992) exclusively as *Vollmundart* 'base dialect' according to the designations set forth by the Deutsches Spracharchiv (see Pfeffer & Lohnes 1984, vol. 1:53). As for regiolect, recall from section 2.1 that the recordings from the Pfeffer Corpus represent a relatively wide range of varieties. I narrowed the pool of potential recordings to only those that are designated in the database catalogue (Pfeffer & Lohnes 1984, vol. 1) as *Umgangssprache* 'colloquial speech' with the subcategorizations *landschaftliche Bildungssprache* 'regional educated speech', *allgemeine Umgangssprache* 'general colloquial speech', and *landschaftlich gefärbte Umgangssprache* 'regionally colored colloquial speech', excluding all those coded as *Hochsprache* 'standard language' or *Mundart* 'dialect'. Of those recordings selected for the study, 20% (6/30)

⁸ The Zwirner recordings used here were made between 1955 and 1959, while the Pfeffer recordings were all completed in 1961.

⁹ The interviewers also occasionally make comments on the consultants' responses, particularly in the Pfeffer interactions. These are followed by a new prompt or question to propel the interview forward.

¹⁰ The single exception is a recording from the Pfeffer Corpus, PF384, made in Innsbruck, Austria. This interaction was chosen because of the city's close proximity to the recording location for ZWF65 (Trauchgau/Bavaria) from the Zwirner Corpus.

¹¹ There are three exceptions: Consultant PF_S_00026 (PF026 – Emden) was raised in the Eastphalian (though nonetheless Low German) linguistic area, consultant PF_S_00167 (PF165 – Passau) is from a locality on the border between the East Upper Franconian and Bavarian linguistic areas, and consultant PF_S_00175 (PF173 – Regensburg) hails from the German-speaking area of Bohemia, which is associated with what Pfeffer & Lohnes (1984, vol. 1:54) designate as *Sudetenbairisch* 'Bavarian of the Sudetenland'. The inclusion of these speakers' interviews was necessary since the remaining available recordings are of speakers in their teens and 20s, not classified as "colloquial," or from cities in central and eastern Austria, far from the locations for the Zwirner recordings in the EUG linguistic area.

Table 1. Average speaker age, by linguistic area and variety

Variety	Area		
	NLG	WCG	EUG
Regiolect	54	62	56
Dialect	66	63	64

are classified as *landschaftliche Bildungssprache* or *landschaftlich gefärbte Umgangssprache* (in one case both), while 80% (24/30) are assigned to the category *allgemeine Umgangssprache* alone or together with one of the other ‘colloquial’ designations. Although a complete homogenization of the Pfeffer data with respect to variety was not feasible because of restrictions on age and gender (see below), this narrowing maximizes the comparability of data across linguistic areas and varieties.¹²

To control for the possible influence of age on patterns of postpositioning, I aimed to limit the inclusion of recordings to those from what Spiekermann (2008:92–93) terms the “old generation” of speakers above 50 years old. This goal proved particularly difficult in the selection of recordings from the Pfeffer Corpus since relatively few recordings also meet the above criteria for geographic area and variety. As a result, it was necessary to include nine Pfeffer recordings from speakers in their 40s, and in one case, late 30s. However, the patterns of frequency with respect to the analyses in section 3 remain the same both with and without the data from the younger regiolect speakers. Thus, I contend that the inclusion of these data is unproblematic for the present study. Table 1 shows the average age per linguistic area/variety.

Still more difficult to achieve was an even distribution of male and female speakers by linguistic area and variety. It was not possible to find suitable recordings of five males and five females for each linguistic area/variety combination, but the distribution of speakers by gender is the same for both varieties (19 males and 11 females), and for each linguistic area, I aimed to keep the ratio of male to female speakers in regiolect and dialect as close to identical as possible. As with the factor “linguistic area,” the patterns of frequency with respect to the analyses in section 3

¹² Despite the exclusion of recordings from the Pfeffer Corpus designated in the database catalog as *Hochsprache* ‘standard language’ (Pfeffer & Lohnes 1984: vol. 1), one anonymous reviewer raises the question of which variety some of the selected recordings from the corpus represent, in particular, whether they are, in fact, regiolectal. In this regard, I follow Lenz (2013), who takes a relatively broad view of what types of data the designation *regiolect* encompasses and, as such, classifies data from recordings (for example, PF020) with variety designations (nearly) identical to those that the reviewer calls into question (see also Lenz 2008, 2010) as regiolectal. Lenz acknowledges the fact that the Pfeffer Corpus includes *recht standardsprachnahes Datenmaterial* ‘data that are quite close to the standard’ (p. 181) and notes that speakers often produce language *im “oberen” Bereich der Regiolekte* ‘in the “upper” speech level of the regiolects’ (p. 440). I likewise acknowledge here the inclusion of data from this upper speech level that might not be classified as regiolectal by authors who take a narrower view. (See Lenz 2004 and 2010:302–303 for further information on the relevant terms *Verdichtungsbereich* ‘concentration zone’ and *Sprechlage* ‘speech level’.)

prefield left bracket **inner field** right bracket **postfield**

Figure 2. Topological Field Model.

for male and female speakers alone reflect those for speakers of both genders combined. Therefore, the genders are treated in aggregate in the present study.

2.3. Criteria for Analysis

As has been discussed in the literature (for example, Zahn 1991:68, Patocka 1997:318, 329, Ágel 2000:1873–1874), studies on postpositioning vary widely in how the unit of measurement is defined and what counts as a case of postpositioning, which greatly complicates the comparison of results. In the present work, the analysis of the data according to predetermined criteria allows for the direct juxtaposition of findings by variety. I lay out these criteria in the following paragraphs.

The theoretical framework for the present study is the TOPOLOGICAL FIELD MODEL, an early formulation of which dates back to Drach (1937). A revised version of this model, presented in figure 2, is commonly employed in modern treatments of the German clause (for example, Patocka 1997; see Wöllstein 2014 for a detailed introduction to the model; see also Dalmas & Vinckel 2006 and Vinckel 2006:57–62 for an alternative view).

The clause may be divided into three fields (PREFIELD, INNER FIELD, POSTFIELD), which are separated by the LEFT and RIGHT BRACKETS. The left bracket houses finite verbs and conjunctions, while the right bracket is overtly filled by (non-)finite verbs and separable elements such as prefixes. In main clauses, the right bracket may also be left empty, represented by a null element. The prefield is typically occupied in main clauses by subjects, adverbial phrases, and embedded clauses and is the position for relative and interrogative words/phrases in subordinate clauses.¹³ When clausal material ends at the right bracket, the remaining constituents occupy the inner field. The primary focus of the present study is material that appears in the postfield,¹⁴ which I understand here as the slot after the right bracket where postpositioned constituents that are syntactically linked to the matrix clause are located.¹⁵ By way of illustration, (6) and (7) demonstrate how a verb-second (V2) and verb-final (VF) matrix clause are parsed within the Topological Field Model:

¹³ Following Wöllstein (2014), I assume that relative and interrogative words/phrases occupy the postfield, not the left bracket. For the alternative analysis, see, for example, Meibauer et al. (2007: 121–125). See Altmann & Hofmann (2008) and Wöllstein (2014) for a detailed discussion of the types of constituents that can and cannot appear in the prefield and inner field.

¹⁴ The postfield can be subdivided; for example, Zifonun, Hoffmann & Strecker (1997:1644–1650) split the postfield into an *enges Nachfeld* ‘near postfield’ and *weites Nachfeld* ‘far postfield’. Reis (1997) proposes the *Nachfeld* ‘postfield’, *Nachstellung* ‘postpositioning’, and *Schlussstellung* ‘end positioning’ for sentential constituents depending on their degree of integration into the matrix clause, which, according to Wöllstein (2014:76), can be viewed as further articulations of the *weites Nachfeld* in Zifonun, Hoffmann & Strecker (1997). Such subdivisions of the postfield are not crucial for the present study; however, I do distinguish between the postfield and a field for right dislocations, following Wöllstein (2014:73) (see example (40)).

¹⁵ The concept of “syntactic linkage” is defined in the current subsection below.

(6) V2 matrix clause (PF019)

Prefield	Left bracket	Inner field	Right bracket	Postfield
er	wird	dabei andere Jugendliche	finden	die er bereits kennt
he	will	thereby other youths	find	whom he already knows
'in doing so, he will find other young people whom he already knows'				

(7) VF matrix clause (PF023)

Prefield	Left bracket	Inner field	Right bracket	Postfield
∅	wenn	die Zeit	ist	wo die Hühner tüchtig legen
∅	when	the time	is	where the hens actively lay
'when it's the time when the hens are busy laying eggs'				

Most important for the current investigation are the postpositioned clauses *die er bereits kennt* 'whom he already knows' and *wo die Hühner tüchtig legen* 'when the hens are busy laying eggs'; both constituents occur in the postfield of the matrix clause to which they are syntactically linked, namely *er wird dabei andere Jugendliche finden* 'in doing so, he will find other young people' and *wenn die Zeit ist* 'when it's the time', respectively.

To determine unequivocally whether a constituent is postpositioned, it is necessary to identify the right boundary of the matrix clause's inner field. This is clearly marked by an overtly filled right bracket, which forms a BRACKET CONSTRUCTION in conjunction with the element in the left bracket (or prefield in the case of relative and interrogative clauses). This boundary can also be signaled by a constituent in the inner field itself. However, as Patocka (1997:235–243) discusses, there is no clear consensus regarding which such elements may serve this purpose.

After consulting five works that deal in part or exclusively with postpositioning in modern standard German or German regional language (Brode 1971, Lambert 1976, Zahn 1991, Filpus 1994, Patocka 1997), I selected seven V2, three non-infinitival VF, and two infinitival VF bracket types for inclusion in the catalog of bracket constructions (henceforth BCs), the closing element of which denotes the end of the inner field.¹⁶

I begin with the V2 constructions, which are illustrated in (8)–(16) below.¹⁷ The elements that open and close the BC are underlined.¹⁸

¹⁶ With the exception of the adverbial BC, the V2 types also occur as V1 BCs in the dataset, for example, in questions: *Darf ich mal mit deinem Puppenwagen bisschen ausfahren?* 'May I take a little walk with your dolly stroller?' (ZW9J1). Such clauses are quite rare in the dataset.

¹⁷ The first three of these constructions are included in the inventory of BCs in all the works I consulted, while the next three appear in a subset: statal passive (Brode 1971, Lambert 1976, Zahn 1991), finite verb + zu infinitive (Brode 1971, Zahn 1991, Filpus 1994, Patocka 1997), and light verb construction (Lambert 1976, Zahn 1991, Patocka 1997). For further information on the last of the V2 constructions, namely the adverbial BC, see below.

¹⁸ In the present study, I count as BCs also those constructions that display ellipsis of the left bracket, which is common in cases of clausal coordination, for example, *wir haben dann jeden Tag gespielt und ∅ immerhin jeden Tag zweitausend Menschen als Zuschauer gehabt* 'then we performed every day and still had two thousand audience members every day' (PF160).

Auxiliary + past participle

- (8) wir haben dann schwer gearbeitet (PF160)
 we have then hard worked
 'we worked hard then'

Finite verb (modal/lexical) + infinitive¹⁹

- (9) sie können sich auf diese Leute verlassen (PF014)
 they can REFL on these people rely
 'they can rely on these people'

- (10) die bleibt dann sitzen (PF023)
 it stays then sit
 'then it stays sitting'

Finite verb + separable element (*Verbpartikel*)²⁰

- (11) da machen sie schon die Kartoffeln aus (ZW1H8)
 then make they already the potatoes out
 'they are harvesting the potatoes already'

Statal passive

- (12) hier ist die Kameradschaft großgeschrieben (PF149)
 here is the camaraderie large.written
 'camaraderie is very important here'

Finite verb + *zu* infinitive

- (13) an Erntearbeiten haben wir noch zu tun (ZWZ36)
 on harvest.work have we still to do
 'we still have work to do for the harvest'

Light verb construction (*Funktionsverbgefüge*)²¹

- (14) wir wussten alle mit ihm Bescheid (ZW018)
 we knew all with him-DAT information
 'we all knew how to deal with him'

Adverbial bracket construction (stranding, doubling construction)

- (15) da gehört auch viel Denken zu (PF024)
 there belongs also much thinking to
 'a lot of thought goes into it'

¹⁹ In the constructions "auxiliary + past participle" and "finite verb (modal/lexical) + infinitive," the right bracket can be filled by a single participle/infinitive or multiple forms in a cluster, for example, *es ist ja viel von ihm erzählt worden* 'there has been a lot told about him' (ZW9B3), *da muss erst das Kabel gelegt werden* 'first, the cable has to be laid' (PF155).

²⁰ Following Patocka (1997:242), I include here also adverb-like separable elements, for example, *hinein* 'into it' and *hinunter* 'down it': *macht frisches Wasser hinein* 'put fresh water into it' (ZWX06). See Zahn (1991:66) for an alternative view.

²¹ Patocka (1997) also includes in this category phraseologisms such as *Schlag die guten Ratschläge doch nicht einfach in den Wind!* 'Don't just cast the good advice to the wind!' (1997:238, example 21). I did not encounter BCs of this type in my dataset.

- (16) da erlebt man nichts mehr davon (ZWC38)
 there experiences one nothing more of.it
 'one doesn't experience any of that anymore'

In the first five BC types, the construction is opened and closed by an element in the left and right bracket, respectively. Light verb constructions, by contrast, are closed not by the right bracket, but by a non-verbal constituent at the right periphery of the inner field.²² Finally, the adverbial BC, formed by a discontinuous pronominal adverb in a stranding or doubling construction, differs from all the other types in that neither the left nor the right bracket is part of the BC; instead, the split components of the pronominal adverb that form the BC occupy the prefield and inner field.²³ Although this bracket type is not included in the inventory of BCs in any of the works on postpositioning that I surveyed, it is considered a BC elsewhere in the literature (for example, Ronneberger-Sibold 1991:216–218, Otte-Ford 2016:291) and functions analogously to the other constructions by separating the inner field from the postfield.²⁴ Thus, I include it in the present study.

In contrast to the V2 BCs, non-infinitival VF BCs display a right bracket filled exclusively by a finite verb form (including a fused separable prefix, as the case may be). The constructions are opened by an element in the left bracket (conjunction) or prefield (relative or interrogative word/phrase):

Conjunction + finite verb

- (17) das erlaube ich nicht dass du abends aufs Schloss gehst (PF107)
 that allow I not that you evenings to.the palace go
 'I won't allow you to go to the palace in the evenings'

Relative word + finite verb

- (18) es sind zum größten Teil Handwerker
 it are to.the-DAT most part craftsmen
die in diesem Beruf drinstehen (PF019)
 who in this-DAT profession stand.in
 'it's mostly craftsmen who are in this profession'

Interrogative word + finite verb

- (19) da kann man anfangen was man will (ZWZ36)
 there can one start what one wants
 'one can start what one wants'

²² The non-verbal complement (for example, noun or PP) of the light verb carries the main lexical meaning in these constructions. See Lambert (1976:49), Zahn (1991:66–68), Patocka (1997:237–238), and Winhart (2002) for discussion.

²³ This BC type is rare and is relevant only in clauses without an overtly filled right bracket. If, for example, *erleben* 'to experience' in (16) were in the present perfect (*da hat man nichts mehr davon erlebt* 'one didn't experience any of that anymore') with the past participle *erlebt* 'experienced' in the right bracket, the BC would be classified as the type "auxiliary + past participle."

²⁴ For a detailed overview of the complex distribution of these constructions in German dialects and regiolects, see Fleischer (2002), Spiekermann (2010), Negele (2012), Jürgens (2013), and Otte-Ford (2016).

Finally, in infinitival VF BCs, the infinitive with *zu* forms the right bracket, analogously to the finite verb in non-infinitival VF BCs.²⁵ The left bracket may be filled by a null element or a conjunction:

- Ø + *zu* infinitive
- (20) er hat immer schon mal die Pläne gehabt
 he has always already PART the plans had
Ø nach Amerika zu kommen (PF154)
 Ø to America to come
 'he always had plans to come to America'
- Conjunction + *zu* infinitive
- (21) dann habe ich sofort alles in Bewegung gesetzt
 then have I immediately everything in motion set
um Urlaub zu kriegen (ZW210)
 in.order leave to get
 'then I set all the wheels in motion to get leave'

In all of the BCs just introduced, some overt constituent serves to close the construction, thereby clearly marking the right boundary of the inner field and facilitating the identification of postpositioned constituents. With regard to V2 clauses in which the right bracket is not overtly filled, Patocka (1997:52) questions whether any constituent that occurs after the finite verb (after the left bracket) would necessarily be located in the inner field. He argues, following Reis (1980), that postpositioning is, indeed, possible and can be clearly identified even when the BC is closed by a null element (pp. 52–54). In the following, I summarize Patocka's argumentation, beginning with the following examples:

- (22) a. Hans hat wegen des Tadels sorgfältig geschrieben.
 Hans has because.of the-GEN reprimand carefully written
 b. *Hans hat sorgfältig wegen des Tadels geschrieben.
 Hans has carefully because.of the-GEN reprimand written
 'Hans wrote carefully because of the reprimand.'
 (Bartsch & Vennemann 1972:137; cited in Patocka 1997:53, examples 15 and 15'; glosses by SADS)

²⁵ Patocka (1997) does not count ICs as BCs, presumably for two reasons: First, he does not consider them clauses (*Sätze*) in their own right because they lack a finite verb (p. 38); and second, they occur very rarely in his dialectal dataset (p. 160). By contrast, I follow Lambert (1976) and Filipus (1994) and consider ICs to be BCs because constituents can appear postpositioned in ICs, as they can in BCs that involve a finite verb. Moreover, these constructions occur not infrequently in the dialect and regiolect data for the current study. Note also that the designation "verb-final clause" traditionally refers only to clauses with a finite verb in final position, alone or with (a) non-finite verb(s) in a cluster (for example, Duden 2006: 875–878). In the present work, however, I designate not only clauses with a finite verb in final position, that is, in the right bracket, but also ICs as verb final. Although the verb form in ICs is non-finite, it also appears in the right bracket. Furthermore, ICs, like canonical VF clauses, are usually embedded in a matrix clause. For present purposes, this parallelism warrants the designation of both types of structures as VF.

- (23) a. Hans schreibt wegen des Tadels sorgfältig.
 Hans writes because.of the-GEN reprimand carefully
- b. Hans schreibt sorgfältig wegen des Tadels.
 Hans writes carefully because.of the-GEN reprimand
 ‘Hans writes carefully because of the reprimand.’
 (Bartsch & Vennemann 1972:137; cited in Patocka 1997:53, examples 14 and 14’; glosses by SADS)

In (22a,b), the adverbial phrases *wegen des Tadels* ‘because of the reprimand’ and *sorgfältig* ‘carefully’ appear unambiguously in the inner field, as indicated by the presence of the past participle *geschrieben* ‘written’ in the right bracket. At first blush, the grammaticality difference between these sentences would appear to follow from a violation of the rule “causal before modal,” that is, the requirement that a causal adverbial phrase (here: *wegen des Tadels*) appear before the modal one (here: *sorgfältig*). However, (23a,b) seem to be counterevidence to this account because both sentences are grammatical, regardless of the ordering of the adverbial phrases.

To explain the different patterns of grammaticality in (22a,b) vs. (23a,b), Patocka contends that *wegen des Tadels* in (23b) must be postpositioned, appearing after the right bracket, which is filled by a null element. This structure directly parallels corresponding sentences in the present perfect in which the right bracket is overtly realized:

- (24) a. Hans schreibt wegen des Tadels sorgfältig \emptyset .
 b. Hans hat wegen des Tadels sorgfältig geschrieben.
- (25) a. Hans schreibt sorgfältig \emptyset wegen des Tadels.
 b. Hans hat sorgfältig geschrieben wegen des Tadels.

While this argumentation is sound given the assumption that the order of adverbials is fixed, it is well known that German word order is sensitive to information structure and prosody and that constituents in the inner field may undergo scrambling and/or appear in multiple positions (for example, Frey & Pittner 1998). Therefore, it is possible that the grammaticality of (23b) is attributable not to the postpositioning of *wegen des Tadels*, but to the variable placement of the adverbial phrases—both of which remain in the inner field—for information structural reasons. Similarly, for all four native German speakers whom I consulted, (22b) is grammatical given the proper information structural context and prosodic pattern.²⁶

Patocka (1997:54) makes an additional argument for postpositioning in the absence of an overtly filled right bracket, based on clausal data such as the following:

- (26) a. Ich habe genau gewußt, was los war.
 I have exactly known what wrong was

²⁶ There does appear, however, to be variability among native speakers regarding the grammaticality of (22b); one anonymous reviewer, who self-identifies as a native German speaker, judges the sentence to be ungrammatical under all circumstances.

- b. Ich wußte genau, was los war.
 I knew exactly what wrong was
 'I knew exactly what was wrong.'

(Patocka 1997:54, examples 17 and 17'; glosses by SADS)

In (26a), the phrase *was los war* 'what was wrong' is clearly postpositioned, as indicated by the presence of an overtly filled right bracket, *gewußt* 'known', in the matrix clause. Patocka contends that it is implausible to assume that the phrase *was los war* in (26b) is located in the inner field of the matrix clause as it may at first appear, but rather that it is also postpositioned as in (26a), in this case after a right bracket filled by a null element.

However, recall from section 1 that one clause may be embedded in the inner field of another, as the following example from the present dataset shows:

- (27) das haben dann zwei Schauspieler
 that have then two actors
die da auch mitgewirkt haben übernommen (PF160)
 who there also participated have taken.over
 'two actors, who also participated, took responsibility for that'

Example (27) corresponds to a theoretical (unattested) sentence like (28) in which the verb *übernehmen* 'to take over' is in the preterite. In this case, the right bracket of the matrix clause is not overtly filled.

- (28) das übernahmen dann zwei Schauspieler
 that took.over then two actors
die da auch mitgewirkt haben
 who there also participated have

If the argument is made that the dependent clause in (26b) should be considered postpositioned in alignment with (26a), then a parallel argument can be made taking the center-embedded clause as a starting point: Since in (27) the dependent clause appears unambiguously in the inner field of the matrix clause, then for consistency's sake, it could be considered to be located in the inner field in (28) as well. In other words, the assignment of the dependent clause to the inner field or postfield of the matrix clause in cases such as (26b) or (28) depends on the construction to which it is compared.

I agree with Reis (1980) and Patocka (1997:52–54) that the right bracket need not be overtly filled for a constituent to occupy the postfield and, furthermore, that the adverbial phrase *wegen des Tadels* in (23b) and the clause *was los war* in (26b) may well be located in the postfield after a right bracket filled by a null element. However, as I have demonstrated, this is not necessarily the case. To avoid the problem of ambiguity with respect to the position of constituents in clauses without an overtly realized right bracket, I therefore limit my analyses, unless otherwise noted, to structures in which the BC is overtly closed, following, for example, Engel (1970).

With the catalog of BCs in place, it is necessary to establish what constitutes a unit of measurement in the current work and further related studies of postpositioning (see Lambert 1976:51–52, Zahn 1991:31–60, and Patocka 1997:33–38 for discussion). Defining this unit is not entirely straightforward because of the possibility of clausal

embedding in the prefield, inner field, or postfield. This can lead to ambiguity regarding the number of units at hand.²⁷ Consider the following examples:

- (29) sie fahren einfach weg weil Emden nicht genug bieten könnte (PF026)
 they go simply away because Emden not enough offer could
 'they are leaving because Emden couldn't offer enough'
- (30) deshalb hat sie aber auch nachdem wir alle größer waren
 thus has she but also after we all bigger were
 auch schöne Tage erlebt (PF088)
 also nice days experienced
 'but, after we were all bigger, that's why she had some good days, too'

In (29), the subordinate clause *weil Emden nicht genug bieten könnte* 'because Emden couldn't offer enough' appears after the right bracket of the matrix clause to which it is syntactically linked and is therefore clause-finally embedded. On the other hand, the subordinate clause *nachdem wir alle größer waren* 'after we were all bigger' in (30) is center-embedded within its associated matrix clause. It is possible to count both cases as one unit of measurement corresponding to the matrix clause only, the first with postpositioning and the second without. However, a constituent may be postpositioned in a subordinate clause that itself occurs in the prefield, inner field, or postfield of its matrix clause, as in (31)–(34):

- (31) wenn sie dann kommen am anderen Morgen
 when they then come on.the-DAT other morning
 können sie was kriegen (ZWX06)
 can they something get
 'when they come the next morning then, they can get something'
- (32) man muss bei dreißig Mann wie ich seinerzeit beschäftigte
 one must with thirty men like I back.then employed
vor sieben Jahren verdammt Menschenkenntnisse haben (PF024)
 ago seven years damn people.knowledge have
 'when you employ thirty men, like I had back then seven years ago, you have to have damn (good) people skills'
- (33) es sind auch Pläne aufgestellt worden
 it are also plans established been
wie man den Verkehr gestalten soll in Zukunft (PF169)
 how one the-ACC traffic manage should in future
 'there were also plans put into place regarding how one should manage the traffic in the future'

²⁷ I employ the term "embedding" throughout the article to refer to all cases in which a VF subordinate clause is located in the prefield, inner field, or postfield of its matrix clause, along the lines of Dürscheid (2012:57–58), Wöllstein (2014:13–14, 65–67, 73–77), Duden (2016:1067–1069), and Wöllstein (2018), regardless of the precise degree of integration of the clause into the matrix structure. Crucially, I distinguish these clauses from right dislocations and coordinated clauses. See Reich & Reis (2013) for discussion of degrees of integration and the distinction between subordination and coordination.

- (34) heute zum Beispiel würde man einen ... mit paar Monat Gefängnis
 today to.the-DAT example would one one-ACC with few months prison
 bestrafen wenn er das täte **was** **wir** **manchmal** **taten** (PF088)
 punish if he that did-SBJV what we sometimes did
 'today, for example, you would punish someone to a few months of prison if
 they did what we sometimes did'

The postpositioning of a constituent in the subordinate clauses—non-clausal in (31)–(33), clausal in (34)—indicates that these clauses should be counted as units of measurement in their own right. Therefore, I count each instance of a clause as one unit regardless of its relationship to other clauses and whether or not the right bracket is overtly filled. Accordingly, (29)–(33) each contain two units of measurement, while (34) contains three.

So far, I have referred to constituents located in the postfield as “postpositionings.” In the remainder of this subsection, I aim to give a more precise definition of this concept as utilized in the present article.

Various terms appear in the literature to describe the types of material that occur after the right boundary of the inner field according to their grammatical and functional status as well as the degree of prosodic integration into the preceding structure. As Vinckel (2006:26–30, 53–55) points out, however, there is a lack of terminological consistency; different terms are used to denote one particular type, while at the same time, a single term may be used as a label for different types, according to criteria that vary by author. Therefore, it is imperative to clarify precisely which constructions are the object of study. To begin, I describe and illustrate the two types of constituents that are the foci of my investigations of non-clausal and clausal postpositioning.

With respect to non-clausal material, I examine constituents, for example PPs (see Dubenion-Smith 2020), that by default reside in the inner field or, rarely, the prefield but instead occur in the postfield where they are integrated into the prosodic structure of the preceding clausal material (see Auer 1991, Schwitalla 2012:114–117, Kleemann-Krämer, Kügler & Pötzl 2015, and Duden 2016:1227–1229 for discussion of the prosodic integration of non-clausal postfield constituents), as the following examples illustrate:

- (35) das hat sonst doch nachgelassen **in den letzten Jahren** (PF256)
 that has besides PART let.up in the last years
 ‘besides, that has let up in recent years’
- (36) die Mutter war so früh totgeblieben **von acht Kindern** (ZW5F6)
 the mother was so early died of eight children
 ‘the mother of eight died so young’

In (35), the default placement of the PP *in den letzten Jahren* ‘in recent years’ is the inner field, while in (36), the PP *von acht Kindern* ‘of eight children’ is expected to appear in the prefield as an attribute to the DP *die Mutter* ‘the mother’.

As for clausal constituents, I include in the analyses of postpositioning in the present article exclusively VF clauses without a preceding pronominal or adverbial correlate that appear in the postfield of a matrix clause. In the case of RCs and clausal

nominal attributes, the antecedent or modified noun usually occurs in the inner field, such as *Jugendliche* ‘youths’ in (37):

- (37) er wird dabei andere Jugendliche finden **die er bereits kennt** (PF019)
 he will thereby other youths find whom he already knows
 ‘in doing so, he will find other young people whom he already knows’

Rarely, the RC antecedent or the noun modified by the clausal nominal attribute, for example, *Hemmungen* ‘inhibitions’ in (38) and *Gefahr* ‘danger’ in (39), is located in the prefield:

- (38) Hemmungen stellen sich ein **die auch wieder im späteren**
 inhibitions set REFL in that also again in.the-DAT later
Leben kaum noch auszumerzen sind (PF065)
 life hardly still to.eradicate are
 ‘inhibitions set in that can hardly be eradicated again later in life’
- (39) die Gefahr liegt allerdings nahe **dass diese Kartoffeln**
 the danger lies however close that these potatoes
 ... **zu Schaden kommen** (PF065)
 ... to damage come
 ‘there is an acute danger, however, that these potatoes will get damaged’

Following Patocka (1997:105, 116, 118–120, 161, 193–194), I do not consider here as cases of clausal postpositioning those clauses after the right bracket with a correlate in the prefield or inner field of the matrix clause, such as a demonstrative pronoun:

- (40) **das** haben wir gar nicht empfunden **dass das so wenig war** (ZW9J1)
 that have we at.all not felt that that so little was
 ‘we didn’t feel that, that that was so little’

Such clauses function analogously to instances of right dislocated non-clausal constituents (see Altmann 1981:54–55 and Patocka 1997:368–377), as illustrated in (41).

- (41) **die** müssen auch locker gehackt werden **die Kartoffeln** (ZW1H8)
 they must also loose hacked be the potatoes
 ‘they have to be loosened up too, the potatoes’

Finally, I also exclude V2 complement clauses, V2 clauses with a paratactic conjunction (for example, *weil* ‘because’ and *obwohl* ‘although’), and V2 RCs, which differ from embedded VF clauses in the type and degree of syntactic linkage to the matrix clause (see, for example, Gärtner 2001, 2002, Catasso 2014, Freywald 2016, 2018). A V2 RC is illustrated in (42).²⁸

²⁸ There are no instances of V1 subordinate clauses in the dataset, for example, *Anna war so betrunken, als wäre das Bier Wodka gewesen* ‘Anna was so drunk as if the beer had been vodka’ (Blühdorn 2013:165, example 44).

- (42) wir haben schon mal eine Henne gehabt | die ist vierzehn
 we have PART PART a hen had that is fourteen (PF023)
 Jahre alt geworden
 years old become
 'we once had a hen that lived to the age of fourteen'

The types of postpositioned non-clausal and clausal constituents that I have chosen to examine in the current and related studies correspond most closely to the terms *Ausklammerung* 'exbraciation' and *Extraposition* 'extraposition' as described in overviews of terminology in the literature, such as Altmann (1981:54–72), Auer (1991), Zifonun, Hoffmann & Strecker (1997:1644–1675), Bußmann & Gerstner-Link (2002:106), Vinckel (2006:13–55), and Duden (2016:1227–1229).²⁹ For three reasons, however, I have decided to adopt the term "postpositioning," akin to the German designation *Nachfeldbesetzung* employed in some studies (for example, Patocka 1997). First, the term "exbraciation" implies the movement of a non-clausal constituent from the inner field, where it is generated, outside of the bracket into the postfield.³⁰ Yet, as (36) above demonstrates, a constituent that appears in the postfield may be syntactically linked to the prefield as well. Only one such case occurs in the present dataset, indicating that the postpositioning of non-clausal prefield constituents is very rare. Nonetheless, the phenomenon is possible and not accurately captured by the label "exbraciation." Second, the designation "postpositioning" is neutral with respect to the syntactic derivation of these structures in the postfield, which has been debated in the literature (for instance, Büring & Hartmann 1995, Inaba 2007, Haider 2010, and Frey 2015). Specifically, it is debated whether they occur in the postfield of the matrix clause as the result of movement or are base-generated there. For present purposes, what is important is the constituents' appearance in the postfield. Third, this single label can be used to refer to both non-clausal and clausal constituents, highlighting the similarity between both types and unifying them.

The unifying characteristic of both non-clausal and clausal postpositionings, as defined in the current study, is their syntactic linkage to a matrix clause. In the case of non-clausal postpositioning, the linkage arises through a constituent's potential occurrence in the prefield or inner field of the matrix clause where it fulfills a syntactic function. Such elements include adjuncts, attributive phrases, comparatives, complements, and modal modifiers (see Dubenion-Smith 2020). With clausal postpositionings, the syntactic linkage arises through their dependence on and structural relationship to the matrix clause. Like non-clausal postpositionings, they may fulfill a syntactic function, for example, as an object complement (see Dürscheid 2012:59–61 and Duden 2016:1030–1031, 1038–1040). Consecutive clauses and continuative *w*-word RCs (see (60) and (76) below) do not fulfill a syntactic function in the matrix clause, but nonetheless refer back to the matrix structure. In the present work, adjunct (adverbial) clauses, complement clauses, clausal nominal attributes, comparative clauses, continuative clauses, and RCs are attested (see section 3.2 below).

²⁹ The usual English equivalent of the German term *Ausklammerung* is "extraposition," but I prefer here the less commonly used term "exbraciation" (see Burridge 1993) to differentiate *Ausklammerung* from cases of *Extraposition*.

³⁰ Syntactic movement is, of course, a theoretical construct. See Auer (1991) for a critique of theoretical syntactic approaches to postpositioning and a typology from the perspective of conversation analysis.

2.4. Procedure

With all preliminaries in place, I turn now to a description of the procedure for data collection. After selecting the recordings according to the criteria laid out in section 2.2, I listened to each in its entirety to verify the accuracy of the standardized transcription.³¹ I then parsed the transcriptions, excluded all material produced by the interviewers, classified all clauses according to their clausal status (V1/V2 or VF), and identified cases of V1/V2 clauses without an overtly filled right bracket.³² I also catalogued all clauses with an empty inner field or only a pronoun or negation, including modified negators such as *gar nicht* 'not at all', which may not be postpositioned, as in (43)–(45).

- (43) wir sind Ø gefahren (ZWH55)
 we are Ø gone
 'we went'
- (44) da habe ich einrücken müssen (ZWC84)
 then have I move.in must
 'then I had to join the war'
- (45) das soll nicht sein (PF154)
 that shall not be
 'that should not be that way'

These include cases in which a PP nominal attribute or RC occurs in the prefield or a clause is postpositioned:

- (46) das Leben **in diesen Straßen** hat sich verändert (PF018)
 the life in these-DAT streets has REFL changed
 'life in these streets has changed'
- (47) eine Zeitkrankheit **die ... durch unsachgemäße Ernährung**
 an era.illness that ... through improper nutrition
hervorgerufen wird muss nicht sein (PF081)
 evoked is must not be
 'an illness of the times that is caused by improper
 nutrition doesn't have to be'
- (48) da haben sie vergessen gehabt **die Löcher zuzustopfen** (ZW1P3)
 then have they forgotten had the holes to.plugin
 'they forgot to plug the holes'

Since the spoken texts were elicited through interview questions and prompts, it is possible that the word order in the first clause uttered by a consultant in response to a question or prompt may have been affected by syntactic priming. That is, the

³¹ All transcriptions and recordings used in the study can be accessed through the DGD at http://dgd.ids-mannheim.de/dgd/pragdb.dgd_extern.welcome

³² Because of its length (22 minutes), only the first 10 minutes of ZW1P3 were parsed.

consultant may have reproduced the syntactic structure of the interviewer's utterance. This is exemplified in (49).

(49)

Interviewer: Da hat er sich als Dame verkleidet? (PF107)

Consultant: Ja, hat er sich als Dame verkleidet.

'He dressed as a lady?'

'Yes, he dressed as a lady.'

I therefore identified potentially syntactically primed structures in the dataset and excluded them from further analysis.

Finally, I created databases to organize all cases of non-clausal and clausal postpositioning according to their form and function and whether they are postpositioned in a V1/V2 or VF clause, as well as all instances of a clause embedded in the inner field of a matrix clause.

2.5. Presentation of Results

The analyses presented in section 3 are based on the 11,027 clauses in the current dataset, which are drawn from 60 spoken regiolect and dialect texts containing a varying number of clauses.³³ Although the large size of the current dataset is advantageous, the extraction of multiple units of measurement from 60 different sized units of sampling poses two challenges. First, distributional patterns present in individual units of sampling can be under- or overrepresented in the dataset as a whole, depending on the relative size of those units. Second, the units of measurement, that is, clauses in a given unit of sampling, are not independent of one another since they are produced by the same speaker. However, the assumption of independence of data points underlies many statistical tests that might be applied to the data.

To address these challenges, Baroni & Evert (2008:798) propose that the data points for analysis not be the individual units of measurement (in this case, the 11,027 clauses), but rather the units of sampling themselves (in this case, 60 texts), with each data point expressed as a proportion of the tokens that display the linguistic phenomenon in question to the total number of units of measurement in each sample. For the results of the analyses presented in section 3, I therefore do not present pooled percentages, which would be calculated by summing the number of units of measurement that display a particular linguistic phenomenon, across all texts, and dividing the sum by the total number of units of measurement in these texts. Rather, I present equally weighted mean relative frequencies, which I calculate by first determining for each text the percentage of the total number of units of measurement that display a particular linguistic phenomenon (the relative

³³ Because of practical limitations, it was not possible or prudent to extract the same number of clauses from each text. Without parsing a recording transcription completely, it is impossible to know how many clauses it comprises. Thus, there was no way to easily pre-select texts for analysis. Furthermore, the number of clauses to be included from each text could not exceed the number in the text with the fewest clauses, severely limiting the number of clauses that could be included in the analyses.

frequency), then averaging the percentages across all texts in a given group, for example, all regiolect texts or all dialect texts. I provide the standard error (*SE*) for each mean value as a measure of the precision of the sample mean.

Since each unit of sampling (that is, each spoken text) represents one independent data point, the equally weighted mean relative frequencies in different groups of texts can also be compared to determine if there is a statistically significant difference between the means. Following the guidance of Baroni & Evert (2008:798), the primary statistical test employed in the current study is Student's *t*-test for independent samples.³⁴ To ensure the validity of the results, this test requires that three conditions for the data be met, namely the absence of outliers, the normal distribution of data points, and the homogeneity of variances.³⁵ Unless otherwise stated, these conditions are met in the analyses to follow. I also utilize a related test, the paired *t*-test, to compare the equally weighted mean relative frequencies in the same group of texts under two conditions. In cases in which the requirement of the normal distribution of data points is not met, I perform the non-parametric counterpart to Student's *t*-test, the Mann-Whitney *U* test. This test does not allow for the direct comparison of means but determines via mean ranks whether the values in one group (that is, the relative frequencies for the individual texts) are statistically significantly higher or lower than the values in the other group (Laerd 2022).

Finally, to control for false-positive results in the face of multiple pairwise comparisons, I apply the Bonferroni-Holm correction (Holm 1979) and present adjusted *p*-values. Results are considered statistically significant when $p < .05$.

3. Analyses of Clausal Postpositioning

This section begins with an overview of the distribution of clauses in the dataset (3.1), followed by a typology of clausal postpositionings and analyses of their distribution by form and function in regiolect and dialect (3.2). I then examine the frequency of center-embedding of NRFCs and RCs (3.3). The section concludes with an analysis of the frequency of clause-final embedding and a discussion of restrictions on syntactic subordination (3.4).

3.1. Distribution of Clauses

As table 2 shows, the set of data derived from 60 spoken regiolect and dialect texts comprises 11,027 clauses, 6,868 (62.28%) of which have an overtly filled right bracket. The distribution of the 6,868 clauses with an overtly filled right bracket, according to the presence or absence of constituents in the inner field and postfield, is displayed in table 3.

³⁴ I also follow the model of Westphal Fitch (2011), who proceeds in a similar fashion through the use of the related one-way analysis of variance in her comparison of postpositioning in multiple groups of speakers.

³⁵ Outliers are identified through the inspection of boxplots, data are normally distributed when the *p*-value from the Shapiro-Wilk test for normality is greater than .05, and the homogeneity of variances is met when the *p*-value from Levene's test for homogeneity of variances is greater than .05.

Table 2. Distribution of clauses according to right bracket status

Clauses with an overtly filled right bracket	6,868 (62.28%)
Clauses without an overtly filled right bracket	4,159 (37.72%)
Total	11,027 (100%)

Table 3. Distribution of clauses with an overtly filled right bracket, by inner field and postfield constituent

Clauses with \emptyset , a pronoun, or negator in the inner field and no postfield constituent	945 (13.76%)
Clauses with other constituent(s) in the inner field and/or (a) postfield constituent(s)	5,923 (86.24%)
Total	6,868 (100%)

Table 4. Distribution of clauses with (a) constituent(s) other than \emptyset , a pronoun, or negator in the inner field and/or (a) postfield constituent(s), by clause type

V1/V2	3,684 (62.20%)
VF	2,239 (37.80%)
Total	5,923 (100%)

Finally, table 4 shows the distribution of the 5,923 clauses with (a) constituent(s) other than \emptyset , a pronoun, or negator in the inner field and/or (a) postfield constituent(s) according to clause type (V1/V2 and VF).

For the purpose of comparability to examinations of non-clausal postpositioning (Dubenion-Smith 2020), I determine the equally weighted mean relative frequencies of clausal postpositioning in section 3.4 on the basis of clauses with an overtly filled right bracket that have any constituent besides \emptyset , a pronoun, or negator in the inner field and/or any postfield constituent (5,923), whether non-clausal or clausal. Notably, I do not limit my calculations to only those cases in which a clausal constituent appears in the inner field and/or postfield.

3.2. Typology and Distribution of Clausal Postpositionings

Referring to the classification systems in Engel (2009a, 2009b), Patocka (1997), who bases his categorization primarily on earlier editions of Engel's works, Zifonun, Hoffmann & Strecker (1997:1026–1118, 1448–1473, 2275–2332), and Meibauer, Steinbach & Altmann (2013), I identified the form and function of the 612 cases of clausal postpositioning in the dataset (351 regiolect, 261 dialect) to address research questions 1 and 2.³⁶ These include 610 instances with syntactic linkage to

³⁶ I follow, for example, Zifonun, Hoffmann & Strecker (1997:1651–1654) in the inclusion of RCs and ICs that occur after the right bracket as clausal postpositionings, in contrast to Patocka (1997:38, 139, 159–160), who does not consider them as such because of structural differences to finite adjunct and complement clauses.

the inner field and two instances of linkage to the prefield, presented in (38) and (39) above.³⁷

In the examples below, I present each function in only its most frequent form in the dataset. These are followed by table 5, which shows the equally weighted mean relative frequency for each form in regiolect and dialect.³⁸ The relative frequencies in each text are calculated by dividing the number of postpositionings of each type by the total number of postpositionings.³⁹

Adjunct (Adverbial) Clauses

Causal

- (50) sie fahren einfach weg **weil Emden nicht genug bieten könnte** (PF026)
 they go simply away because Emden not enough offer could
 'they are leaving because Emden couldn't offer enough'

Comitative

- (51) um ... sich auch des Sports erfreuen zu können
 in.order REFL also the-GEN sport-GEN enjoy to can
ohne dass irgendwelche Hemmungen auftreten (PF081)
 without that some inhibitions arise
 'in order to enjoy sports without having any inhibitions'

Concessive

- (52) zum Beispiel durften ... die Städte überhaupt keine Anleihen
 to.the-DAT example were.allowed ... the cities at.all no loans
 aufnehmen **obwohl die Möglichkeit gewesen wäre** (PF198)
 take.out although the possibility been be-SBJV
 'for example, the cities weren't allowed to take out any loans even though it would have been possible'

Conditional

- (53) das kann man erst mal herausfinden
 that can one only PART find.out
wenn man richtig den Käswein mal getrunken hat (ZW1P3)
 if one really the-ACC Käs.wine PART drunk has
 'one can only find that out if one has really drunk the Käs-wine [= wine from the Käs wine-producing area]'

³⁷ In four cases, a clause after the right bracket is linked to the prefield through a demonstrative pronoun (2 dialect, 2 regiolect), as in (40), and there are six cases of linkage through the cataphoric pronoun *es* 'it' (1 dialect, 5 regiolect), for example, *es ist mir zum Beispiel passiert, dass ein Mädchen in meine Klasse kam* 'for example, it happened to me that a girl came into my class' (PF196). Following Patočka (1997:116, 118–120, 161, 193–194), I do not include these clauses as postpositionings in the present article but will treat them in a further study.

³⁸ See table A2 of the appendix for token counts of postpositionings for each function.

³⁹ Since clausal postpositionings are unattested in recording ZW0M8, it has been excluded from the analyses presented in the current subsection.

Final

- (54) heute wollen sie Frühkartoffeln setzen
 today want they early.potatoes set
dass sie viel verdienen können (ZW1H8)
 that they much earn can
 'they want to plant early potatoes today so they can earn a lot'

Modal

- (55) es kann jeder arbeiten wie er will (PF196)
 it can everyone work how he wants
 'everyone can work how they want'

Temporal

- (56) das wird auf die Seite gestellt
 that is onto the side placed
bis den anderen Morgen der Schlächter kommt (ZWX06)
 until the-ACC other morning the butcher comes
 'that gets set aside until the butcher comes the next morning'

Complement Clauses

Subject (nominative)

- (57) da kommt mir jetzt zustatten
 there comes me-DAT now stead
dass die Geschäfte ... über Mittag offenhalten (PF090)
 that the shops ... over noon keep.open
 'it's very convenient for me that the shops stay open over the noon hour'

Object (accusative)⁴⁰

- (58) die hat ergeben **dass die Durchschnittssumme**
 that has resulted that the average.sum
ungefähr bei 1200 Mark liegt (PF255)
 about at 1200 Marks lies
 'the results of that showed that the average amount is about 1,200 Marks'

⁴⁰ In contrast to Patočka (1997) and Engel (2009a, 2009b), but following Zifonun, Hoffmann & Strecker (1997:1074), I consider sentential complements such as *wir finden alle, daß der Vorschlag akzeptabel ist* 'we all find that the suggestion is acceptable' (p. 1118) not as verbative, but rather as accusative (object) complements. There are no attestations of verbative complements as narrowly defined in Zifonun, Hoffmann & Strecker, such as *sie muß auch anerkennen, daß es Mayer-Vorfelder besser als andere verstanden hat, die Stellen im Schulbereich (...) zu schützen*. 'she must also recognize that Mayer-Vorfelder understood better than others the importance of protecting the positions in the school domain' (Zeit, October 4, 1985, 50; cited in Zifonun, Hoffmann & Strecker 1997, vol. 2:1118).

Prepositional object⁴¹

- (59) in Köln bei der Umformation wurden ... die aktiven Offiziere
 in Cologne at the-DAT reconfiguration were ... the active officers
 wieder angefordert **herauszukommen** (ZW210)
 again requested to.come.out
 'at the reconfiguration in Cologne, the active officers were requested again to
 come out'

Continuative Clauses

- (60) frisst dem Pferd die Mücken vom Rücken weg
 eats the-DAT horse the mosquitoes from.the-DAT back away
so dass das Pferd also unbeschwert fressen kann (PF096)
 so that the horse thus undisturbed eat can
 'eats the mosquitoes off the horse's back so the horse can eat undisturbed'

Comparative Clauses

- (61) hat besser gestanden **als wie wenn unsere Buben gesät haben** (ZW2K7)
 has better stood than like when our boys sowed have
 'was in better shape than when our boys planted crops'

Attributive Clauses

- (62) deswegen ist ja ... immer der Appell gestellt **dass jeder**
 hence is PART ... always the plea placed that everyone
zweimal im Jahr wenigstens zum Arzt gehen soll (PF081)
 twice in.the-DAT year at.least to.the-DAT doctor go should
 'that's why we always urge everyone to go to the doctor at least twice a year'

Relative Clauses

- (63) er wird dabei andere Jugendliche finden **die er bereits kennt** (PF019)
 he will thereby other youths find whom he already knows
 'in doing so, he will find other young people whom he already knows'

Multiple Clauses

- (64) dass ich den Leuten erkläre **wo sie's einrichten müssen**
 that I the-DAT.PL people explain where they.it install must
 und **wie's die Teilnehmer das haben wollen** (PF155)
 and how.it the customers that have want
 'that I explain to the people where they have to install it and how the customers
 want to have it'

⁴¹ In (59), the preposition zu 'to' is implied in the matrix clause. If it appeared as the correlate *dazu* 'to it' (that is, *in Köln bei der Umformation wurden ... die aktiven Offiziere wieder dazu angefordert*), then the IC *herauszukommen* 'to come out' would have been considered a case of right dislocation and not included in the set of postpositionings.

Table 5. Distribution of clausal postpositionings, by form and variety

Forms	EWM relative frequencies	SE ⁴²	Forms	EWM relative frequencies	SE
Non-relative finite clauses	57.09%	2.94	Non-relative finite clauses	74.23%	4.09
Relative clauses	21.27%	2.01	Relative clauses	14.49%	2.68
Infinitival constructions	13.31%	1.73	Infinitival constructions	6.08%	1.97
Multiple clauses	8.33%	1.18	Multiple clauses	5.20%	1.55
Total regiolect	100%		Total dialect	100%	

- (65) von diesen dreiunddreißig wurden nach dem ersten halben Jahr sechs wieder
of these-DAT thirty.three were after the-DAT first half year six again
abgeschoben weil sie sich für den Lehrerberuf nicht
shunted.off because they REFL for the-ACC teaching.profession not
eigneten nach Urteil der Lehrer | die allerdings nachher
were.suited.for according.to judgment the-GEN teachers who however afterwards
einen weit besseren Beruf im Leben ausübten
a-ACC far better profession in.the-DAT life carried.out
als ich später als Lehrer (PF065)
than I later as teacher
‘of these thirty-three, another six were weeded out after the first semester because they were not suited for the teaching profession, according to the teachers, but who afterwards had much better careers in life than me as a teacher’

The group “multiple clauses” comprises all cases of postpositioning that involve more than one clause, regardless of whether they are of the same type (for example, two NRFCs as in (64) or one NRFC and one RC as in (65)). Setting these aside, table 5 shows that both regiolect and dialect display the same cline in equally weighted mean relative frequencies with respect to the three forms: NRFC > RC > IC. However, the distribution of these forms differs by variety, with NRFCs occurring at a lower equally weighted mean relative frequency and comprising a smaller proportion of the postpositionings in regiolect than in dialect, and RCs and ICs occurring at higher equally weighted mean relative frequencies and comprising larger proportions of the postpositionings. Mann-Whitney *U* tests indicate that for NRFCs, the relative frequencies in the individual dialect texts are statistically significantly higher than in the regiolect texts (mean rank dialect 37.00, regiolect 23.23; $U = 232, z = 3.09, p = .002, \text{adjusted } p = .016$), while the opposite holds for RCs (mean rank dialect 24.52, regiolect 35.30; $U = 594, z = -2.42, p = .015, \text{adjusted } p = .045$) and ICs (mean rank dialect 23.38, regiolect 36.40; $U = 627, z = -3.05, p = .002, \text{adjusted } p = .016$).

With respect to the NRFCs, this difference is likely attributable in part to the fact that such clauses are center-embedded at a higher equally weighted mean relative frequency (and consequently postpositioned at a lower frequency) in regiolect than in

⁴² The standard error is expressed in percentage points throughout.

Table 6. Distribution of clauses in the dataset, by clause type and variety

Regiolect	EWM relative frequencies	SE	Dialect	EWM relative frequencies	SE
V1/V2	69.29%	1.85	V1/V2	81.85%	1.43
VF	30.71%	1.85	VF	18.15%	1.43
Total	100%		Total	100%	

dialect and therefore comprise a relatively smaller proportion of total postpositionings in the former. I examine center-embedded clauses in detail in section 3.3 below. The difference also follows from a less frequent occurrence of ICs in the postfield in dialect than in regiolect as a result of the tendency for dialect speakers to produce functionally equivalent clauses in the form of NRFCs, as Patocka (1997:162) points out in the context of adjunct ICs with final semantics. Patocka (1997:160) notes that incoherent ICs, that is, ICs that form their own predicate in the postfield, are only roughly 1/50 as frequent as NRFCs in his corpus of Bavarian dialects spoken in Austria. In the current dialect data, the ratio of NRFCs to ICs is roughly 12:1 (74.23% vs. 6.08%), though in EUG dialect alone, the ratio is similar to Patocka's finding: NRFCs and ICs comprise 75.82% and 1.25% of postpositionings, respectively, yielding a ratio of approximately 60:1.

The smaller proportion of postpositioned RCs in dialect than in regiolect likely follows from the greater use of V2 RCs (see (42) above) as a relativization strategy by dialect speakers than by regiolect speakers.⁴³ These RCs occur in the current dataset nearly 2.5 times more frequently in dialect ($n = 73$) than in regiolect ($n = 30$).⁴⁴ As discussed in section 2.3 above, such RCs are excluded from the counts of clausal postpositioning; the VF RCs alone make up a relatively smaller proportion of postpositionings in dialect.

The greater tendency among dialect speakers to use V2 RCs instead of their embedded VF counterparts is also reflected in the overall distribution of the 11,027 clauses in the dataset according to clause type (V1/V2 vs. VF), as seen in table 6. Note that these include V1/V2 clauses without an overtly filled right bracket. The equally weighted mean relative frequency of VF clauses is 12.56 percentage points (ppts) lower in dialect than in regiolect; accordingly, the degree of VF embedding is also lower. This difference is statistically significant as assessed by Student's *t*-test, $t(58) = 5.38$, $p < .0005$, adjusted $p < .0005$, [95% CI, 7.89 to 17.25].⁴⁵

⁴³ The syntactic status of V2 RCs and their relationship to the matrix clause, for example, whether they are paratactic structures or embedded root clauses, have been the subject of debate in the literature. See, for example, Gärtner (2001, 2002), Catasso (2014), and Sanfelici, Schulz & Trabandt (2017).

⁴⁴ The ratio of clauses in dialect (5,934/53.81%) vs. regiolect (5,093/46.19%) is 1.17:1. Therefore, the more frequent occurrence of V2 RCs in dialect cannot be attributed to the fact that the dataset contains more dialectal material.

⁴⁵ Shapiro-Wilk regiolect $p = .46$, dialect $p = .47$; Levene $p = .10$. The values for the confidence intervals (CI) are expressed in percentage points throughout.

Table 7. Distribution of clausal postpositionings, by function and variety

Function	EWM relative frequencies	SE	Function	EWM relative frequencies	SE
Adjunct clauses	37.95%	4.06	Adjunct clauses	42.47%	4.66
Complement clauses	20.46%	2.49	Complement clauses	22.66%	3.83
Relative clauses	19.70%	2.23	Continuative clauses	16.08%	4.08
Continuative clauses	11.80%	2.18	Relative clauses	12.68%	2.75
Attributive clauses	7.63%	1.47	Attributive clauses	3.35%	1.36
Multiple functions	1.26%	.54	Comparative clauses	2.18%	.93
Comparative clauses	1.20%	.65	Multiple functions	0.58%	.45
Total regiolect	100%		Total dialect	100%	

I now turn to the distribution of clausal postpositionings by function. The relative frequencies in each text are calculated by dividing the number of postpositionings of each type by the total number of postpositionings. The attested functions and their equally weighted mean relative frequencies are presented in table 7.

The group “multiple functions” comprises only those cases of postpositioning that consist of multiple clauses, each with a different function. I assign cases of multiple adjunct and complement clauses to their respective categories. Furthermore, I group non-continuative RCs separately and classify clausal nominal attributes, such as (62) above, as attributive, in contrast to Patocka (1997:137), who considers only RCs to be attributive and nominal attributive clauses to be “*Übergangsformen zwischen Ergänzungs- und Attributsätzen*” ‘transitional forms between complement and attributive clauses’. Finally, I include in the category “continuative clauses” continuative RCs and adverbial clauses that are traditionally classified as consecutive, such as (60) above, since these occur obligatorily in the postfield.

Table 7 indicates that in both regiolect and dialect, adjunct clauses occur at the highest equally weighted mean relative frequency and comprise the largest proportion of postpositionings, followed by complement clauses. This pattern also holds for Dubenion-Smith’s (2020:244) analysis of non-clausal postpositioning in dialect. In regiolect, the equally weighted mean relative frequency for complement clauses is only slightly higher than that for RCs. However, if the attributive clauses are categorized as complements, the latter group comprises 28.09% and 26.01% of clauses in regiolect and dialect, respectively, 8.39 and 9.93 ppts higher than the next largest group in these varieties, respectively.

Patocka (1997:117) includes in his counts of clausal constituents after the right bracket cases with a correlate in the matrix clause, which he considers right dislocations; nonetheless, a comparison of the more detailed breakdown of clausal postpositionings presented in table A2 of the appendix of the present study to Patocka’s results reveals several similarities. First, in both the current dialect data and Patocka’s data for Bavarian dialects spoken in Austria, accusative complement clauses occur as the most frequent complement type by far. Second, causal, final, and

temporal adjuncts are the three most common adjunct clause types in both corpora. Third, locative adjunct clauses are not attested in either dataset. This is consistent with Pittner's (2013:502) assessment of such clauses as marginal structures (*Randerscheinungen*).

Returning now to the equally weighted mean relative frequencies in table 7, for all functions except for RCs, the frequencies in regiolect vs. dialect are close, within between .68 and 4.52 ppts of each other. The greater difference for RCs here—7.02 ppts—mirrors the difference for RCs in the context of clausal forms, namely 6.78 ppts.

3.3. Center-embedding

In the previous subsection, I proposed that the lower equally weighted mean relative frequency of postpositioned NRFCs in regiolect than in dialect is at least partly attributable to a higher degree of center-embedding of these clauses in regiolect. In this subsection, I take a closer look at the embedding of clauses in the inner field, addressing research question 3.

As I discuss in section 1, there is disagreement in the literature regarding the placement of clausal constituents in the inner field, for example, whether adverbial clauses are barred from occurring in this position (Dürscheid 2012:103) or may readily appear there (Duden 2016:1067–1069). Eisenberg (1994:415, 1999:391) notes that adverbial and complement clauses may appear in the inner field if they are considered parenthetical, that is, if a small pause occurs before and after the clause that sets it apart from the surrounding material of the matrix clause. However, Patocka (1997:129) argues that such pauses do not run counter to the embedding of clauses in the matrix structure. He considers constructions as parenthetical only if they cannot be interpreted as embedded, meaning that they are not syntactically linked to the matrix clause, a stance that I adopt in the current work. The goal in what follows is to determine, for the current dataset, what types of clausal constituents occur in the inner field and to what extent. Before moving into the analysis, I shall note that I aim to contrast the placement of clausal constituents in the inner field with placement in the postfield, the primary focus of the current study. As such, I do not consider in this subsection the placement of clauses in the prefield.

To measure the degree of center-embedding in the dataset, it is necessary in an initial step to take stock of where embedded clauses occur, whether only in the postfield, or in both the postfield and inner field.⁴⁶ First, all clauses introduced by the complementizer *dass* 'that', regardless of their function (for example, final adjunct or object complement as in (54) and (58) above), as well as comparative and complement clauses, are attested only in the postfield. Second, some matrix verbs such as *glauben* 'to believe', *versuchen* 'to try', and *wagen* 'to dare', allow for both coherent and incoherent ICs, that is, constructions that are integrated into the predicate of the matrix verb or that form their own predicate (Durrell 2017:283, Rapp & Wöllstein

⁴⁶ No types occur only in the inner field.

2013). Those ICs that could occur as either coherent or incoherent constructions are attested only as the latter, in the postfield:

- (66) ich musste versuchen einen anderen Beruf zu ergreifen (PF088)
 I had.to try a-ACC different occupation to seize
 'I had to try to take up a different occupation'

Center-embedded ICs appear only with matrix verbs that require the coherent construction, such as *brauchen* 'need' and *haben* 'have' in the sense of *müssen* 'must', which Durrell (2017:286–289) terms "semi-auxiliaries":

- (67) hat gar nicht zu rammen brauchen (PF026)
 has even not to pile.drive need
 '(it) didn't even need to pile-drive'
- (68) wenn man etwas zu erledigen hatte (PF020)
 when one something to accomplish had
 'when one had something to take care of'

Third, a subset of NRFCs, namely adjunct clauses with causal, conditional, and temporal semantics as well as attributive clauses, are attested not only in the postfield (see examples in section 3.2 above), but also in the inner field, as illustrated in (69)–(72).

Causal

- (69) dann durften wir weil wir so weit aus dem Ort wohnten
 then were.allowed we because we so far out the-DAT place lived
 nochmal ein bisschen Luft schnappen (ZWX71)
 again a little air grab
 'then we were allowed to get a little air again because we lived so far out of town'

Conditional

- (70) dass sie ... vor allen Dingen wenn sie auf Flaschen
 that they ... before all things if they on bottles
oder auch Holz oder Metall gedruckt sind unlösbar sind (PF149)
 or also wood or metal printed are permanent are
 'that, above all, they are permanent if they are printed on bottles, or on wood or metal'

Temporal

- (71) deshalb hat sie aber auch nachdem wir alle größer waren
 thus has she but also after we all bigger were
 auch schöne Tage erlebt (PF088)
 also nice days experienced
 'but, after we were all bigger, that's why she had some good days, too'

Table 8. Frequencies of center-embedding, by variety—all NRFC types

Variety	EWM relative frequencies	SE
Regiolect	6.34%	1.71
Dialect	2.27%	1.12

Attributive

- (72) dass diese Hand voll Menschen ein solches Reich **wie der Napoleon**
 that this hand full people a such empire like the Napoleon
es unter sich gehabt hat bekämpfen konnten (PF384)
 it under REFL had has combat could
 ‘that this handful of people could battle against an empire such as the one that Napoleon ruled over’

Finally, non-continuative RCs occur both in the postfield (see (63) above) and the inner field:

Relative clause

- (73) das haben dann zwei Schauspieler
 that have then two actors
die da auch mitgewirkt haben übernommen (PF160)
 who there also participated have taken.over
 ‘two actors, who also participated, took responsibility for that’

Now that I have established in which fields clausal constituents are attested in the dataset, I may examine the frequency of center-embedding. First, I calculate equally weighted mean relative frequencies taking all NRFCs into account, those that occur only in the postfield and those that occur both in the inner field and postfield. I determine the relative frequency in each text by dividing the number of clauses with a center-embedded NRFC (across all texts: 16 regiolect, 4 dialect) by the total number of clauses with an NRFC in the inner field or postfield. I exclude cases in which a clause in the inner field can be interpreted as parenthetical, such as (74).⁴⁷

- (74) so müsse man | **wie ich vorhin gesagt habe** | den Kafka
 thus must.SBJV one like I before said have the Kafka
 mit Kubin vergleichen (PF164)
 with Kubin compare
 ‘one has to compare Kafka with Kubin in that way, as I said before’

This yields low equally weighted mean relative frequencies of center-embedding, as shown in table 8.

⁴⁷ Since text ZW0M8 displays no center- or final embedding, it is excluded from the following analyses.

Table 9. Frequencies of center-embedding, by variety—only NRFCs with optional embedding

Variety	EWM relative frequencies	SE
Regiolect	19.07%	4.98
Dialect	6.39%	3.17
Combined	13.42%	3.13

In a second step, I consider only those types of NRFCs that display both center-embedding and embedding in the postfield and exclude from analysis all texts (3 regiolect, 6 dialect) in which such NRFCs are attested in neither the inner field nor the postfield. When only those constructions for which center-embedding is clearly optional are included in the analysis, the equally weighted mean relative frequencies, based on the relative frequencies in the individual texts calculated as above, are higher in both regiolect and dialect, with a combined frequency of 13.42% (see table 9). Mann–Whitney *U* tests indicate that for these NRFCs, the relative frequencies in the individual regiolect texts are statistically significantly higher than in the dialect texts (mean rank regiolect 29.69, dialect 21.85; $U = 423.5$, $z = 2.24$, $p = .025$, adjusted $p = .045$).

The relatively low frequency of embedding and low frequency of occurrence in dialect (four cases) is consonant with Patocka's (1997:129–131) findings for Bavarian dialects spoken in Austria; in his dataset, four instances are attested, one temporal and conditional adjunct clause each as well as a second temporal clause and a subject complement clause, both with a pronominal correlate in the inner field.

To conclude, the present findings support the proposal in section 3.2 that the smaller proportion of NRFCs, among all postpositioned clauses, in regiolect than in dialect is partly attributable to the fact that these are center-embedded more frequently in the former than in the latter.

I now turn to the center-embedding of RCs, of which 38 cases are attested in regiolect and 7 in dialect. Here I exclude from analysis all texts (1 regiolect, 13 dialect) in which embedded RCs are attested in neither the inner field nor the postfield. I also eliminate all cases in which the antecedent to the relative pronoun occurs in the postfield, known in the literature as the *Attraktionsprinzip* 'attraction principle' (Kromann 1974:67, Zahn 1991:217, Filpus 1994:157–159, Patocka 1997:352–353, Vinckel 2006:79–81), which contributes to what Uhlig (1972) terms *blockbildendes Sprechen* 'block-forming speech' and Zifonun, Hoffmann & Strecker (1997:1669–1671) call *Informationsentflechtung* 'disentanglement of information', illustrated in (75) (antecedent *das Leinenzeug* 'the linen', relative pronoun was 'that').

- (75) die hatten besondere Vorliebe gehabt | für das Leinenzeug, was hier die
 they had special preference had | for the linen that here the
 Bauern so in den Koffern ... hatten (ZWT38)
 farmers so in the trunks had
 'they had a special preference for the linen that the farmers had in their trunks'

Table 10. Frequencies of center-embedding, by variety—RCs

Variety	EWM relative frequencies	SE
Regiolect	35.49%	5.58
Dialect	15.68%	5.62
Combined	28.17%	4.29

Likewise, I exclude cases of RC postpositioning with an antecedent in the prefield, as in (38) above, as well as continuative RCs such as *was eigentlich schade ist* ‘which is too bad, actually’ in (76), which occur obligatorily in the postfield.

- (76) es ist bei uns in unserer Gegend schon viel verloren gegangen
 it is at US-DAT in our-DAT area already much lost gone
was eigentlich schade ist (ZWF65)
 what actually too.bad is
 ‘a lot has gotten lost already where we live, which is too bad, actually’

The results show that the equally weighted mean relative frequency of RC embedding is 28.17% in regiolect and dialect combined and that regiolect displays a higher equally weighted mean relative frequency than dialect (see table 10). A Mann-Whitney *U* test indicates furthermore that the relative frequencies in the individual regiolect texts are statistically significantly higher than in the dialect texts (mean rank regiolect 26.86, dialect 17.76; $U = 344$, $z = 2.31$, $p = .021$, adjusted $p = .045$).

Considered together with the cases of clausal postpositioning in the dataset, the center-embedded NRFCs and RCs comprise 9.93% of all embeddings. The analysis has revealed that certain clause types, for example, complement clauses, appear to be fully grammaticalized in the postfield. However, the overall equally weighted mean relative frequencies of center-embedding for NRFCs that exhibit optional center-embedding and for RCs, 13.42% and 28.17%, respectively, indicate that such embedding is not a marginal phenomenon in the dataset. Furthermore, the findings contradict claims by some scholars regarding the placement of embedded clauses, such as Dürscheid’s (2012:103) assertion that conjunctive clauses may only appear in the pre- or postfield and Rath’s (1965:231) remark that RCs and conjunctive clauses “‘fast immer’ ausgeklammert werden” ‘are almost always postpositioned’. The results also indicate that the relative frequencies of center-embedding in the individual texts, for both NRFCs and RCs, are statistically significantly higher in regiolect than in dialect. In the case of NRFCs, this finding provides explanatory evidence for the fact that these clauses constitute a lower proportion of all postpositionings in regiolect than in dialect.

3.4. Final Embedding

To address research question 4, I examine more closely the frequency of final embedding, that is, embedding in the postfield.

Table 11. Frequencies of final embedding, by variety

Variety	EWM relative frequencies	SE
Regiolect	13.03%	.95
Dialect	8.79%	1.00

Recall from section 3.1 that the dataset contains 5,923 clauses with (a) constituent(s) other than \emptyset , a pronoun, or negator in the inner field and/or (a) postfield constituent(s). To determine for each text the relative frequency of postpositioning in V1/V2 clauses, I divide the number of VF clauses that are embedded in the postfield of a V1/V2 clause with an overtly filled right bracket by the total number of such V1/V2 clauses in the text (3,684 clauses across all texts). The calculations of final embedding in VF clauses, on the other hand, are less straightforward since a VF clause that embeds a VF clause may be embedded in a VF clause itself. To control for this, I calculate for each text the relative frequency of postpositioning in VF clauses by dividing the number of VF clauses that are embedded in a VF clause by the total number of VF clauses (2,239 across all texts) minus the number of VF clauses that are embedded in another VF clause (164 across all texts). In other words, the denominator for the calculations reflects only the number of VF clauses that are syntactically linked to a V1/V2 clause. Finally, to calculate the overall relative frequencies, I divide the sum of the number of VF clauses that are embedded in the postfield of a V1/V2 clause with an overtly filled right bracket and the number of VF clauses that are embedded in the postfield of a VF clause by the total number of V1/V2 and VF clauses minus the number of VF clauses that are embedded in another VF clause. That is, I sum the numerators from the separate calculations for final embedding in V1/V2 and VF clauses alone and divide this value by the sum of the denominators for these calculations.

The overall equally weighted mean relative frequencies in regiolect and dialect are presented in table 11. The equally weighted mean relative frequency is 4.24 ppts higher in regiolect than in dialect, a difference that is statistically significant as assessed by Student's *t*-test, $t(57) = 3.09$, $p = .003$, adjusted $p = .018$, [95% CI, 1.50 to 7.00].⁴⁸

Table 12 shows that the higher equally weighted mean relative frequency of postpositioning in regiolect than in dialect also holds for V1/V2 and VF clauses separately. Mann-Whitney *U* tests indicate that the relative frequencies of postpositioning in both V1/V2 and VF clauses are statistically significantly higher in the individual regiolect texts than in the dialect texts (V1/V2: mean rank regiolect 36.17, dialect 23.62; $U = 250$, $z = 2.81$, $p = .005$, adjusted $p = .025$; VF: mean rank regiolect 35.60, dialect 24.21; $U = 267$, $z = 2.57$, $p = .01$, adjusted $p = .04$).

While the equally weighted mean relative frequency of postpositioning in V1/V2 clauses is higher in regiolect than in dialect, this holds here only for V1/V2 clauses with an overtly filled right bracket, not for V1/V2 clauses on the whole, including

⁴⁸ Shapiro-Wilk regiolect $p = .66$, dialect $p = .23$; Levene $p = .97$.

Table 12. Comparison of frequencies of clausal postpositioning, by clause type and variety

Variety	Clause type			
	V1/V2		VF	
	EWM relative frequencies	SE	EWM relative frequencies	SE
Regiolect	17.56%	1.54	8.64%	1.07
Dialect	11.00%	1.32	5.03%	1.01

Table 13. Frequencies of embedding in V1/V2 clauses without an overtly filled right bracket, by variety

Variety	EWM relative frequencies	SE
Regiolect	21.26%	1.83
Dialect	9.51%	1.06

those in which the right bracket is not overtly filled. To determine whether the finding holds for all V1/V2 clauses, I examine in a subsequent step the occurrence of VF clauses after V1/V2 clauses without an overtly filled right bracket to which they are syntactically linked. Granted, the status of such VF clauses as center- or finally embedded is ambiguous, as I discussed in section 2.3 above, yet embedded in some way nonetheless. For each text, I calculate the relative frequency of postpositioning by dividing the number of VF clauses that occur after V1/V2 clauses without an overtly filled right bracket to which they are syntactically linked by the number of such V1/V2 clauses in each text. The equally weighted mean relative frequencies in regiolect and dialect are shown in table 13. As with the V1/V2 clauses with an overtly filled right bracket, the equally weighted mean relative frequency is higher in regiolect than in dialect. The 11.75 ppt difference is statistically significant as assessed by Welch's *t*-test, $t(46.61) = 5.55$, $p < .0005$, adjusted $p < .0005$, [95% CI, 7.49 to 16.00].⁴⁹

Taken together, the findings presented in tables 11–13, in tandem with the results shown in table 6 above, suggest that dialect displays more parataxis (or less hypotaxis) than regiolect, as the frequency of (final) VF embedding, in both V1/V2 and VF clauses, is lower in dialect. A tendency toward parataxis in dialect has been noted in the literature, for example, Löffler (1990, 2003) (see also Patocka 1997:89–91). Löffler (2003:110) contends that some syntactic features that have been described as specific to dialect, such as a tendency toward parataxis, are, rather, characteristics of spoken (as opposed to written) language (for related discussion, see Lötscher 2004,

⁴⁹ Shapiro–Wilk regiolect $p = .102$, dialect $p = .053$; Levene $p < .0005$. As the assumption of equality of variances has not been met, I report here the results of Welch's *t*-test.

Table 14. Frequencies of final embedding, by clause type

Clause type			
V1/V2	SE	VF	SE
EWM relative frequencies		EWM relative frequencies	
14.33%	1.10	6.86%	.77

Louden 2005, and Schwitalla 2012:26–35, 129–135). While this is accurate to a certain degree, as Patocka (1997:89) remarks, the present study indicates, through the juxtaposition of spoken regiolect and dialect data, that the observed frequency of VF clause embedding in dialect is not solely a consequence of its spoken nature but is partly attributable to variety. Löffler (2003:5) also attributes differences between dialect and the standard language with respect to parataxis versus hypotaxis to differences in the frequency of use of various grammatical constructions that are available to the speaker, an assessment consistent with Patocka (1997:91). One such example in the current dataset is dialect speakers' more frequent use of V2 RCs instead of VF RCs, discussed in section 3.2. As noted there, however, the exact syntactic status of V2 RCs and nature of the linkage to the matrix clause is a matter of debate in the literature. In addition, certain V2 clauses such as complement clauses, for example, *ich glaube, er hat recht* 'I believe he's right', can be considered semantically subordinate, regardless of what their precise syntactic relationship to the matrix clause may be. Therefore, to make a more definitive statement regarding the degree of parataxis in dialect vs. regiolect in the current dataset, it would be necessary to account for and quantify such cases. This must be left to future work; for now, it may be noted that the frequency of embedding of VF clauses is lower in dialect than in regiolect.

The results in table 12 above also indicate for both regiolect and dialect that the equally weighted mean relative frequencies of final embedding are higher in V1/V2 clauses with an overtly filled right bracket than in VF clauses. This holds for all three clause forms: NRFCs, RCs, and ICs. The values for V1/V2 clauses and VF clauses, for regiolect and dialect combined, are presented in table 14. A paired *t*-test indicates that the 7.47 ppt difference in equally weighted mean relative frequencies is statistically significant, $t(58) = 7.60$, $p < .0005$, adjusted $p < .0005$, [95% CI, 5.50 to 9.44].⁵⁰

One possible explanation for this finding is that VF clauses, which can serve themselves as matrix clauses for further VF embedding, may appear not only in the postfield of a V1/V2 clause, but also in the inner field, as discussed in section 3.3 above, or in the prefield of a V2 clause, such as *nachdem die Gerüste gefallen sind* 'after the scaffolding fell' in (77).

⁵⁰ Shapiro–Wilk $p = .86$.

- (77) nachdem die Gerüste gefallen sind | habe ich mich bereits
 after the scaffoldings fallen are have I REFL already
 in das Treppenhaus begeben (PF156)
 into the stairwell made.way
 ‘after the scaffolding fell, I entered into the stairwell already’

Material from the (V1)/V2 clause immediately follows a VF clause embedded in its prefield or inner field, but this is typically not the case when the VF clause is embedded in its postfield.⁵¹ Therefore, final embedding in VF clauses that are themselves embedded in the prefield or inner field of a (V1)/V2 clause may be more restricted than in VF clauses that are embedded in the postfield of a V1/V2 clause. This restriction could lead to an overall lower relative frequency of embedding in VF clauses vs. V1/V2 clauses. Indeed, the dataset contains only 8 cases (5 dialect, 3 regiolect) of a VF clause finally embedded in a VF clause that, in turn, is located in the prefield of a V2 clause, as illustrated in (78).

- (78) wenn ich heute nochmal einmal die Wahl hätte | Beruf zu wählen |
 if I today again PART the choice had-SBJV occupation to choose
 würde ich nicht Beamter werden (ZW210)
 would I not civil.servant become
 ‘If I had the chance again today to choose an occupation, I wouldn’t become a civil servant’

Cases of a VF clause finally embedded in a VF clause that, in turn, is located in the inner field of a V1/V2 clause, are unattested.

Although only 8 cases such as (78) occur in the dataset, VF clauses occur infrequently in the prefield of V2 clauses in the first place. Since the focus of the current study is postpositioning, I have not yet examined clausal placement in the prefield exhaustively; however, a preliminary analysis of the prefield in 24 randomly selected texts from the dataset (12 regiolect, 12 dialect) reveals that the equally weighted mean relative frequency of clausal embedding in the prefield is 4.91% in regiolect and 2.98% in dialect. Therefore, matrix VF clauses in this position would be expected to have a minimal effect on the overall frequency of postpositioning in VF clauses.

A more likely explanation for the difference between V1/V2 and VF clauses with respect to the frequency of final embedding lies in restrictions on syntactic subordination. A VF clause postpositioned in a V1/V2 clause results in a single level of final embedding, as illustrated in the following example:

- (79) die wollen gerne mal sehen | wie es heute in Hamburg aussieht (PF018)
 they want gladly PART see how it today in Hamburg looks
 ‘they would like to see what it looks like in Hamburg today’

⁵¹ It is possible, however, for non-clausal material such as afterthoughts to occur after a postpositioned clause.

A VF clause postpositioned in another VF clause, on the other hand, typically entails two levels of final embedding since the higher VF is syntactically linked to a V1/V2 clause, as in (80).

- (80) heute zum Beispiel würde man einen ... mit paar Monat
 today to.the-DAT example would one one-ACC with few months
 Gefängnis bestrafen | wenn er das täte | was wir manchmal taten (PF088)
 prison punish if he that did-SBJV what we sometimes did
 'today, for example, you would punish someone with a few months of prison if
 they did what we sometimes did'

Laury & Ono (2010:76–79) demonstrate that cross-linguistically, the frequency of embedding in spoken language drops off steeply after a single level, which they attribute to processing constraints and the lack of a functional need for multiple embeddings (see also Chafe 1994, Gibson 1998, and Cowan 2000). Their findings align with those presented in Karlsson (2010), an analysis of final embedding. Less frequent clausal postpositioning in VF clauses than in V1/V2 clauses would therefore be expected since minimally two levels of embedding are usually involved in the former but only a single level in the latter.

The levels of embedding in the current dataset clearly reflect this tendency. If only cases of final embedding in both V1/V2 clauses with an overtly filled right bracket and VF clauses are considered, regiolect exhibits up to four levels of syntactic embedding and dialect up to two.⁵² The four levels are illustrated in the following examples:

One level

- (81) da fängt das Korn an |
 there begins the grain PART
 reif zu werden (ZW1H8)
 ripe to become
 'then the grain starts to ripen'

Two levels

- (82) ich tu Ihnen das bloß erzählen |
 I do you-DAT that only tell
 dass Sie hören |
 that you hear
 wie wir früher gelebt haben (ZWC84)
 how we earlier lived have
 'I'm telling you that just so you hear how we used to live'

⁵² If the final potential level of embedding involves a right-dislocated clause, this level is disregarded in the determination of the number of levels of embedding. For example, a case involving three postpositionings and a final right dislocation is classified as exhibiting three levels of embedding in the current work. If, however, in a sequence of clauses, a right dislocation exhibits further final embedding, all levels of embedding are counted. (See (84) and (88).)

Three levels

- (83) die hat mitgeholfen |
 she has helped.out |
 als das Theater noch in der Turnhalle war |
 when the theater still in the-DAT gymnasium was |
 weil das das einzige war |
 because that the only.thing was |
 was es hier gab (PF026)
 what it here gave
 'she helped out when the theater was still in the gymnasium because that was
 the only thing that there was here'

Four levels⁵³

- (84) das nicht sehr geliebte Skatspielen ist zum Beispiel |
 the not very popular scat.playing is to.the-DAT example |
 mächtig in das Heim der offenen Tür reingerutscht |
 abundantly into the home the-GEN open door slipped.in |
 weil offensichtlich die Jugendlichen auch ein Interesse dran haben |
 because apparently the youth also an interest on.it have |
 etwa eine Beschäftigung zu machen |
 for.example an activity to do |
 die ihnen aber auch noch Zeit lässt |
 that them-DAT but also still time leaves |
 Witze zu machen oder sich ganz aufgelockert zu unterhalten (PF019)
 jokes to make or REFL quite relaxed to converse
 'for example, the not very popular card game scat has really made its way into the
 youth meeting center (lit. Home of the Open Door) because the youth apparently
 also are interested, for example, in doing an activity that also leaves them time to
 make jokes or to have quite relaxed conversation'

The equally weighted mean relative frequencies of these levels of embedding are shown in table 15. As the table indicates, both regiolect and dialect exhibit final embedding predominantly at the single level, consistent with Laury & Ono's (2010) findings. These results support the hypothesis that the higher degree of postpositioning in V1/V2 than in VF clauses is attributable to constraints on syntactic embedding.

Patocka (1997:149–158) presents the results of an analysis of clausal embedding in his dataset to which the current dataset may be compared. Since he includes VF clauses that appear after V1/V2 clauses without an overtly filled right bracket in

⁵³ The IC *etwa eine Beschäftigung zu machen* 'for example, to do an activity' qualifies as a right dislocation because of the occurrence of the anticipatory *dran* 'on it' in the preceding clause. This sequence of clauses is considered to involve four levels of embedding, however, since the right dislocation exhibits further embedding.

Table 15. Frequencies of levels of final embedding, by variety—Embedding in V1/V2 clauses with an overtly filled right bracket and VF clauses

Levels of embedding	Variety			
	Regiolect		Dialect	
	EWM relative frequencies	SE	EWM relative frequencies	SE
1 level	88.92%	1.95	95.00%	1.48
2 levels	9.08%	1.70	5.00%	1.48
3 levels	1.76%	.75	0%	
4 levels	.24%	.24	0%	
Total	100%		100%	

his analyses, I also examine such cases to ensure better comparability. However, it must be noted that the exact status of VF clauses occurring after a V1/V2 clause without an overtly filled right bracket is ambiguous, as discussed in section 2.3 above. If V1/V2 clauses without an overtly filled bracket are also taken into account, maximally five levels of embedding are attested in regiolect and two in dialect. These levels of embedding after such V1/V2 clauses are illustrated in (85)–(88).⁵⁴

One level

(85) nun erzähle mir mal |
 now tell me-DAT PART
 wie ihr das gemacht habt (ZWX71)
 how you that made have
 ‘now tell me how you did that’

Two levels

(86) ich habe zur Zeit zwei türkische Helfer |
 I have to.the-DAT time two Turkish assistants
 die freiwillig von der Türkei gekommen sind |
 who voluntarily from the-DAT Turkey come are (PF155)
 um bei uns zu arbeiten
 in.order at us-DAT to work
 ‘I have two Turkish assistants who voluntarily came from Turkey to work for us’

⁵⁴ Cases of four levels of embedding in a V1/V2 clause without an overtly filled right bracket are unattested in the dataset.

Three levels

- (87) denn ist eine übliche vierteljährliche Zeit erforderlich |
 then is a usual quarter.year time required |
 wo jeder sich nochmal entschließen kann |
 where everyone REFL again decide can |
 ob er das Lehrverhältnis eingehen will ... oder ob der Lehrmeister |
 whether he the apprenticeship assume wants ... or whether the master |
 irgendwie geistige oder körperliche Schwächen entdeckt hat |
 somehow intellectual or physical weaknesses discovered has |
 dass er nicht schwindelfrei ist (PF024)
 that he not dizziness.free is
 'Then a usual quarter of a year is required in which everyone can decide
 again if he wants to assume the apprenticeship ... or whether the master
 has discovered some intellectual or physical weaknesses that indicate that
 he is prone to vertigo'

Five levels⁵⁵

- (88) weitere versorgungsärztliche Betreuung liegt darin |
 further medical care lies in.it |
 dass ... der Versehrten sport in Anspruch genommen wird |
 that the disabled.sport in claim taken is.being |
 wo die Kriegsbeschädigten insonderheit Amputierte |
 where the war.disabled.persons particularly amputees |
 und auch Blinde sich zusammenfinden |
 and also blind.persons REFL meet |
 um in einer Schicksalsgemeinschaft sich auch |
 in.order in a-DAT community.of.destiny REFL also |
 des Sports erfreuen zu können |
 the-GEN sport-GEN enjoy to can |
 ohne dass irgendwelche Hemmungen auftreten |
 without that some inhibitions arise |
 oder Schockwirkungen erzielt werden |
 or shock.impacts effectuated are |
 wenn Außenstehende oder streng gesunde Menschen |
 when outsiders or strictly healthy people |
 ... diesem Spiel beiwohnen würden (PF081)
 this-DAT game attend would
 'further medical care manifests itself in the taking advantage of sports for
 disabled persons where persons disabled in war, particularly amputees and blind
 persons, meet to also enjoy sports in a community of fate without having any
 inhibitions or there being any negative impact as might be the case if outsiders or
 very healthy people participated in the game'

⁵⁵ Parallel to (84), the clause *dass der Versehrten sport in Anspruch genommen wird* 'that sports for disabled persons are being taken advantage of' is classified as a right dislocation because of the occurrence of the anticipatory *darin* 'in it' in the preceding clause. This sequence of clauses is considered to involve five levels of embedding, however, since the right dislocation exhibits further embedding.

Table 16. Frequencies of levels of embedding, by variety—embedding in V1/V2 clauses with and without an overtly filled right bracket and VF clauses

Levels of embedding	Variety			
	Regiolect		Dialect	
	EWM relative frequencies	SE	EWM relative frequencies	SE
1 level	89.08%	1.50	95.70%	1.14
2 levels	9.38%	1.34	4.30%	1.14
3 levels	1.31%	.39	0%	
4 levels	.10%	.10	0%	
5 levels	.13%	.13	0%	
Total	100%		100%	

The equally weighted mean relative frequencies of these levels of embedding are shown in table 16. As the results indicate, the equally weighted mean relative frequencies of levels of embedding, including cases after a V1/V2 clause without an overtly filled right bracket, are nearly identical to the frequencies when embedding in V1/V2 clauses only in which the right bracket is overtly filled is taken into account.

For his Bavarian dialect data, Patocka (1997:149) finds that 82.3% of constructions with at least one embedded subordinate clause involve one clause, 13.4% involve two, 3.1% three, and 1.2% more than three. It is important to note that the number of subordinate clauses does not necessarily correspond directly to the level of embedding as Patocka counts multiple clauses at the same level of embedding as individual instances and remarks that in roughly 60% of cases that involve two or three subordinate clauses, these occur at the same level of embedding (p. 150). Furthermore, Patocka includes in his analysis right dislocations without further embedding. As such, his results are not directly comparable to those for the current dataset, even after inclusion of cases of embedding in V1/V2 clauses without an overtly filled right bracket. Nonetheless, in both studies, the vast majority of cases of embedding involve one clause, which corresponds to a single level, a finding consistent with Laury & Ono (2010).

4. Summary and Outlook

In this final section, I summarize the main findings related to the four research questions presented at the outset and discuss some avenues for further research.

RQ1: Which forms and functions of clausal postpositioning are attested in the dataset?

RQ2: How are postpositioned clauses distributed in dialects and regiolects according to form and function?

With respect to research questions 1 and 2, the results in section 3.2 showed that in both regiolect and dialect, clausal postpositionings most frequently take the form of NRFCs, followed by RCs then ICs. However, NRFCs comprise a smaller proportion of

postpositionings in regiolect than in dialect, while RCs and ICs make up a smaller proportion in dialect than in regiolect. I attributed the lower equally weighted mean relative frequency of NRFCs in regiolect and higher frequency in dialect to the fact that these clauses are center-embedded more frequently (and consequently postpositioned less frequently) in regiolect than in dialect, which I demonstrated in section 3.3, and that dialect speakers tend to produce functionally equivalent NRFCs in place of ICs, thereby resulting in a greater proportion of NRFCs among all postpositioned clauses in dialect. As for the larger proportion of RCs in regiolect than in dialect, I argued that the observed difference follows from a greater tendency among dialect speakers to produce V2 RCs rather than embedded VF RC structures. The analysis of postpositionings by function revealed that adjunct, attributive, comparative, complement, continuative, and relative clauses are attested in the dataset, with adjunct clauses occurring at the highest equally weighted mean relative frequency in both regiolect and dialect, followed by complement clauses. In contrast to the forms, the equally weighted mean relative frequencies for the functions in regiolect vs. dialect, except for RCs, are close, within 4.52 ppts or less.

RQ3: To what extent can clausal constituents that appear in the postfield also appear in the inner field?

The analysis of center-embedding in section 3.3 showed that all clauses introduced by the complementizer *dass* ‘that’, comparative and complement clauses, and all ICs that can occur as either coherent or incoherent constructions are attested only in the postfield. By contrast, a subset of NRFCs, namely adjunct clauses with causal, conditional, and temporal semantics as well as attributive clauses, and non-continuative RCs appear both finally and center-embedded in the dataset. For those NRFCs that display optional center-embedding and for RCs, the overall equally weighted mean relative frequencies of center-embedding are 13.42% and 28.17%, respectively. These findings indicate that embedding in the inner field is possible and not a marginal phenomenon, contradicting some claims in the literature.

RQ4: What is the frequency of clausal postpositioning according to variety?

To address research question 4, I calculated equally weighted mean relative frequencies of postpositioning in both V1/V2 clauses and VF clauses. The results indicated that clausal postpositioning occurs more frequently in regiolect than in dialect, in both V1/V2 and VF clauses. In addition, an analysis showed that postpositioning is more frequent in V1/V2 clauses with an overtly filled right bracket than in VF clauses. I proposed that this finding is attributable to restrictions on syntactic subordination and to the cross-linguistic tendency, demonstrated in Laury & Ono (2010), for the frequency of embedding to drop off steeply after a single level; while final embedding in V1/V2 clauses involves a single level, embedding in a VF typically involves minimally two levels since the VF matrix clause is usually embedded in a V1/V2 clause itself. Detailed examinations of levels of embedding demonstrated that regiolect exhibits up to five levels and dialect up to two and that the vast majority of embeddings (c. 90–95%) exhibit a single level, consistent with the

findings in Laury & Ono (2010) and with Patocka's (1997) analysis of levels of clausal embedding in Bavarian dialects spoken in Austria.

The present study contributes to our knowledge of the clausal syntax of spoken German varieties. It also serves to document the clausal postpositionings that occur in German regional language and lays the methodological groundwork for ongoing investigations of non-clausal postpositioning that build on Dubenion-Smith (2020) and for future related studies. For example, since the present article focuses primarily on postpositionings and secondarily on center-embedded constituents, the investigation could be expanded to include right- and left-dislocated constituents and a detailed analysis of the prefield. Given the high degree of variation in the placement of RCs, particularly in regiolect, a more detailed, multi-causal analysis of RC placement that is based on a larger set of regiolect data and that takes into account various RC subtypes (for example, restrictive vs. non-restrictive RCs) would be a fruitful avenue for research. Finally, since the data utilized in this study were collected over 60 years ago, it would be beneficial to compare the results with examinations based on more recently collected data to assess the continued validity of the findings and to what extent they hold true. Indeed, as Schmidt (2011) and Schmidt & Herrgen (2011) demonstrate (see also, for example, Auer & Schmidt 2010, Herrgen & Schmidt 2019, and Christen et al. 2020), German regional varieties have long undergone significant reevaluation processes and changes, which continue today. Thus, diachronic examinations may yield valuable new insights.

References

- Ágel, Vilmos. 2000. Syntax des Neuhochdeutschen bis zur Mitte des 20. Jahrhunderts. In Werner Besch, Anne Betten, Oskar Reichmann, & Stefan Sonderegger (eds.), *Sprachgeschichte. Ein Handbuch zur Geschichte der deutschen Sprache und ihrer Erforschung*, 2nd edn., vol. 2, 1855–1903. Berlin and New York: De Gruyter.
- Altmann, Hans. 1981. *Formen der "Herausstellung" im Deutschen: Rechtsversetzung, Linksversetzung, freies Thema und verwandte Konstruktionen*. Tübingen: Max Niemeyer Verlag.
- Altmann, Hans & Ute Hofmann. 2008. *Topologie fürs Examen: Verbstellung, Klammerstruktur, Stellungsfelder, Satzglied- und Wortstellung*, 2nd edn. Göttingen: Vandenhoeck & Ruprecht.
- Auer, Peter. 1991. Vom Ende deutscher Sätze. *Zeitschrift für Germanistische Linguistik* 19, 139–157.
- Auer, Peter & Frans Hinskens. 1996. The convergence and divergence of dialects in Europe: New and not so new developments in an old area. In Peter Auer, Frans Hinskens, & Klaus Mattheier (eds.), *Konvergenz und Divergenz von Dialekten in Europa*, 2–30. Tübingen: Max Niemeyer Verlag.
- Auer, Peter & Jürgen Erich Schmidt. 2010. *Language and space. An international handbook of linguistic variation*, vol. 1: *Theories and methods*. Berlin: De Gruyter Mouton.
- Baroni, Marco & Stefan Evert. 2008. Statistical methods for corpus exploitation. In Anke Lüdeling & Merja Kytö (eds.), *Corpus linguistics: An international handbook*, 777–803. Berlin: De Gruyter Mouton.
- Bartsch, Renate & Theo Vennemann. 1972. The grammar of relative adjectives and of comparison. *Linguistische Berichte* 20, 19–32.
- Bellmann, Günter. 1983. Probleme des Substandards im Deutschen. In Klaus Mattheier (ed.), *Aspekte der Dialekttheorie*, 105–130. Tübingen: Max Niemeyer Verlag.
- Bellmann, Günter. 1986. Zweidimensionale Dialektologie. In Günter Bellmann (ed.), *Beiträge zur Dialektologie am Mittelrhein*, 1–55. Stuttgart: Fritz Steiner Verlag.
- Blühdorn, Hardarik. 2013. Syntaktische Nebensatzklassen im Deutschen. *Pandaemonium* 16(21), 149–189.
- Brode, Kenneth. 1971. Ausklammerung, or the debracketing effect in modern spoken German. PhD dissertation, University of Pittsburgh.
- Büring, Daniel & Katharina Hartmann. 1995. All right! In Uli Lutz & Jürgen Pafel (eds.), *On extraction and extraposition in German*, 179–211. Amsterdam: John Benjamins.

- Burridge, Kate. 1993. *Syntactic change in Germanic: Aspects of language change in Germanic with particular reference to Middle Dutch*. Amsterdam and Philadelphia: John Benjamins.
- Bußmann, Hadumod & Claudia Gerstner-Link. 2002. *Lexikon der Sprachwissenschaft*, 3rd edn. Stuttgart: Kröner.
- Catasso, Nicholas. 2014. Wie viele Jungs haben Anna geküsst? Zum besonderen Status von V2-Relativsätzen im gesprochenen Deutsch. *Linguistik Online* 66(5), 45–67.
- Chafe, Wallace. 1994. *Discourse, consciousness, and time*. Chicago: University of Chicago Press.
- Christen, Helen, Brigitte Ganswindt, Joachim Herrgen, & Jürgen Erich Schmidt. 2020. *Regiolekt – der neue Dialekt? Akten des 6. Kongresses der Internationalen Gesellschaft für Dialektologie des Deutschen (IGDD)*. Stuttgart: Fritz Steiner Verlag.
- Cowan, Nelson. 2000. The magical number 4 in short-term memory: A reconsideration of mental storage capacity. *Behavioral and Brain Sciences* 24(1), 87–114.
- Dalmas, Martine & Hélène Vinckel. 2006. Wenn die Klammer hinkt ... Ein Plädoyer für das Prinzip "Abgrenzung". In Antoni Dębski & Norbert Fries (eds.), *Deutsche Grammatik im europäischen Dialog. Beiträge zum Kongress Krakau 2006*. Online publication.
- Dittmar, Norbert. 2004. Umgangssprache – Nonstandard/Vernacular – Nonstandard. In Ulrich Ammon, Norbert Dittmar, & Klaus Mattheier (eds.), *Soziolinguistik. Ein internationales Handbuch zur Wissenschaft von Sprache und Gesellschaft*, vol. 1, 251–262. Berlin: De Gruyter Mouton.
- Drach, Erich. 1937. *Grundgedanken der deutschen Satzlehre*. Frankfurt am Main: M. Diesterweg.
- Dubenion-Smith, Shannon. 2020. A typology of non-clausal postpositioning in German dialects. In Janet Z. Xing (ed.), *Typological perspectives of grammaticalization & lexicalization: East meets west*, 231–254. Berlin: De Gruyter Mouton.
- Duden – Grammatik der deutschen Gegenwartssprache. *Der Duden in zwölf Bänden*, vol. 4, 7th edn. 2006. Mannheim: Bibliographisches Institut.
- Duden – Grammatik der deutschen Gegenwartssprache. *Der Duden in zwölf Bänden*, vol. 4, 9th edn. 2016. Mannheim: Bibliographisches Institut.
- Durrell, Martin. 2017. *Hammer's German grammar and usage*, 6th edn. Abingdon and New York: Routledge.
- Dürscheid, Christa. 2012. *Syntax: Grundlagen und Theorien*. 6th edn. Göttingen: Vandenhoeck & Ruprecht.
- Eisenberg, Peter. 1994. *Grundriß der deutschen Grammatik*, 3rd edn. Stuttgart & Weimar: J. B. Metzler.
- Eisenberg, Peter. 1999. *Grundriß der deutschen Grammatik*, vol. 2. Stuttgart & Weimar: J. B. Metzler.
- Elsaß, Stephan. 2007. Variation and change in colloquial (standard) German. In Christian Fandrych & Reinier Salverda (eds.), *Standard, Variation and Sprachwandel in germanischen Sprachen/Standard, variation and language change in the Germanic languages*, 201–216. Tübingen: Gunter Narr Verlag.
- Engel, Ulrich. 1970. Regeln zur Wortstellung. *Forschungsberichte des Instituts für deutsche Sprache* 5, 7–148.
- Engel, Ulrich. 2009a. *Syntax der deutschen Gegenwartssprache*, 4th edn. Berlin: Erich Schmidt Verlag.
- Engel, Ulrich. 2009b. *Deutsche Grammatik*, 2nd edn. Munich: Iudicum Verlag.
- Fleischer, Jürg. 2002. *Die Syntax von Pronominaladverbien in den Dialekten des Deutschen: Eine Untersuchung zu Preposition Stranding und verwandten Phänomenen*. Stuttgart: Steiner Verlag.
- Filpus, Raija. 1994. *Die Ausklammerung in der gesprochenen deutschen Sprache der Gegenwart*. Tampere: University of Tampere.
- Frey, Werner. 2015. Zur Struktur des Nachfelds im Deutschen. In Hélène Vinckel-Roisin (ed.), *Das Nachfeld im Deutschen: Theorie und Empirie*, 53–75. Berlin and New York: Walter de Gruyter.
- Frey, Werner & Karin Pittner. 1998. Zur Positionierung der Adverbiale im deutschen Mittelfeld. *Linguistische Berichte* 176, 489–534.
- Freywald, Ulrike. 2016. "V2-Nebensätze" – ein eigener Satztyp? In Rita Finkbeiner & Jörg Meibauer (eds.), *Satztypen und Konstruktionen*, 326–372. Berlin and Boston: De Gruyter.
- Freywald, Ulrike. 2018. *Parataktische Konjunktionen. Zur Syntax und Pragmatik der Satzverknüpfung im Deutschen – am Beispiel von obwohl, wobei, während und wogegen*. Tübingen: Stauffenburg.
- Gärtner, Hans-Martin. 2001. Are there V2 relative clauses in German? *The Journal of Comparative Germanic Linguistics* 3(2), 97–141.
- Gärtner, Hans-Martin. 2002. On the force of V2 declaratives. *Theoretical Linguistics* 28, 33–42.
- Gibson, Edward. 1998. Linguistic complexity: Locality and syntactic dependencies. *Cognition* 68, 1–76.
- Haas, Walter & Peter Wagener. 1992. *Gesamtkatalog der Tonaufnahmen des Deutschen Spracharchivs*. Tübingen: Max Niemeyer Verlag.

- Haider, Hubert. 2010. *The syntax of German*. Cambridge: Cambridge University Press.
- Helbig, Gerhard & Joachim Buscha. 2013. *Deutsche Grammatik: Ein Handbuch für den Ausländerunterricht*. Munich: Klett-Langenscheidt.
- Herrgen, Joachim. 2010. The Linguistic Atlas of the Middle Rhine (MRhSA): A study on the emergence and spread of regional dialects. In Peter Auer & Jürgen Erich Schmidt (eds.), *An international handbook of linguistic variation*, vol.1: *Theories and methods*, 201–225. Berlin: De Gruyter Mouton.
- Herrgen, Joachim & Jürgen Erich Schmidt. 2019. *Sprache und Raum. Ein internationales Handbuch der Sprachvariation*, Band 4: *Deutsch*. Berlin: De Gruyter Mouton.
- Hoberg, Ursula. 1981. *Die Wortstellung der geschriebenen Deutschen Gegenwartssprache: Untersuchungen zur Elementfolge im einfachen Verbalsatz*. Munich: Max Hueber Verlag.
- Holm, Sture. 1979. A simple sequentially rejective multiple test procedure. *Scandinavian Journal of Statistics* 6(2), 65–70.
- Inaba, Jiro. 2007. *Die Syntax der Satzkomplementierung: Zur Struktur des Nachfeldes im Deutschen*. Berlin: Akademie Verlag.
- Jürgens, Carolin. 2013. Kontakt – Spaltung – Dopplung. Zur Variation der Pronominaladverbien in der norddeutschen Umgangssprache. In Yvonne Hettler, Carolin Jürgens, Robert Langhanke, & Christoph Purschke (eds.), *Variation, Wandel, Wissen: Studien zum Hochdeutschen und Niederdeutschen*, 129–143. Frankfurt am Main: Peter Lang.
- Kallenborn, Tim. 2019. *Regionalsprachliche Syntax. Horizontal-vertikale Variation im Moselfränkischen* (ZDL Beihefte, 176). Stuttgart: Fritz Steiner Verlag.
- Karlssohn, Fred. 2010. Multiple final embedding of clauses. *International Journal of Corpus Linguistics* 15(1), 88–105.
- Kehrein, Roland, Alfred Lameli & Stefan Rabanus (eds.). 2015. *Regionale Variation des Deutschen: Projekte und Perspektiven*. Berlin and Boston: Walter de Gruyter.
- Kleemann-Krämer, Anja, Frank Kügler, & Sarah Pötzl. 2015. Zur Anbindung extraponyierter PPn an ihre Bezugsstruktur. In Hélène Vinckel-Roisin (ed.), *Das Nachfeld im Deutschen. Theorie und Empirie*, 299–318. Berlin and Boston: Walter de Gruyter.
- Kromann, Hans-Peder. 1974. Satz, Satzklammer und Ausklammerung. *Kopenhagener Beiträge zur Germanistischen Linguistik* 4, 7–82.
- Laerd Statistics. 2022. *Statistical tutorials and software guides*. Last accessed on August 15, 2022. <https://statistics.laerd.com>
- Lambert, Pamela. 1976. *Ausklammerung in modern standard German*. Hamburg: Helmut Buske Verlag.
- Laury, Ritva & Tsuyoshi Ono. 2010. Recursion in conversation: What speakers of Finnish and Japanese know how to do. In Harry van der Hulst (ed.), *Recursion and human language*, 69–92. Berlin: De Gruyter Mouton.
- Lenz, Alexandra. 2004. Verdichtungsbereiche und Varietätengrenzen im Methodenvergleich. In Helen Christen (ed.), *Dialekt, Regiolekt und Standardsprache im sozialen und zeitlichen Raum*, 199–220. Vienna: Edition Praesens.
- Lenz, Alexandra. 2007. Zur variationslinguistischen Analyse regionalsprachlicher Korpora. In Werner Kallmeyer & Gisela Zifonun (eds.), *Sprachkorpora. Datenmengen und Erkenntnisfortschritt. IDS-Jahrbuch 2006*, 169–202. Berlin and New York: Walter de Gruyter.
- Lenz, Alexandra. 2008. Vom Dialekt zur regionalen Umgangssprache – Zur Vielfalt regionaler Sprechweisen. In Horst Haider Munske (ed.), *Sterben die Dialekte aus? Vorträge am Interdisziplinären Zentrum für Dialektforschung an der Friedrich-Alexander-Universität Erlangen-Nürnberg, 22.10.–10.12.2007*, 1–14. Online publication: www.dialektforschung.phil.fau.de/startseite/publikationen-2/sterben-die-dialekte-aus/
- Lenz, Alexandra. 2010. Emergence of varieties through restructuring and reevaluation. In Peter Auer & Jürgen Erich Schmidt (eds.), *Language and space: An international handbook of linguistic variation*, vol. 1: *Theories and methods*, 295–315. Berlin: De Gruyter Mouton.
- Lenz, Alexandra. 2013. *Vom >kriegen< und >bekommen<. Kognitiv-semantische, variationslinguistische und sprachgeschichtliche Perspektiven*. Berlin and New York: Walter de Gruyter.
- Löffler, Heinrich. 1990. *Probleme der Dialektologie. Eine Einführung*, 3rd edn. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Löffler, Heinrich. 2003. *Dialektologie. Eine Einführung*. Tübingen: Gunter Narr Verlag.

- Lötscher, Andreas. 2004. Dialektsyntax oder Syntax der gesprochenen Sprache? Eine Fallstudie anhand von Nebensatzproblemen im Schweizerdeutschen. *Zeitschrift für Dialektologie und Linguistik* 71(2), 156–179.
- Louden, Mark L. 2005. The logic of nonstandard syntax. *Zeitschrift für Dialektologie und Linguistik* 72(2), 167–182.
- Meibauer, Jörg, Ulrike Demske, Jochen Geilfuß-Wolfgang, Jürgen Pafel, Karl Heinz Ramers, Monika Rothweiler, & Markus Steinbach. 2007. *Einführung in die germanistische Linguistik*, 2nd edn. Stuttgart and Weimar: J. B. Metzler.
- Meibauer, Jörg, Markus Steinbach, & Hans Altmann (eds.). 2013. *Satztypen des Deutschen*. Berlin and New York: De Gruyter.
- Negele, Michaela. 2012. *Varianten der Pronominaladverbien im Neuhochdeutschen. Grammatische und soziolinguistische Untersuchungen*. Berlin: Germanica.
- Niebaum, Hermann & Jürgen Macha. 2014. *Einführung in die Dialektologie des Deutschen*, 3rd edn. Berlin and New York: Walter de Gruyter.
- Otte-Ford, T. Clinton. 2016. Discontinuous pronominal adverbs as the result of topic indication in immediate language contexts and syntactic shift towards bracketing typology. *Zeitschrift für Dialektologie und Linguistik* 83(3), 263–292.
- Patocka, Franz. 1997. *Satzgliedstellung in den bairischen Dialekten Österreichs*. Frankfurt am Main and New York: Peter Lang.
- Pfeffer, J. Alan & Walter F. W. Lohnes. 1984. *Grunddeutsch: Texte zur gesprochenen deutschen Gegenwartssprache. Überregionale Umgangssprache aus der Bundesrepublik Deutschland, der Deutschen Demokratischen Republik, Österreich und der Schweiz*. Tübingen: Max Niemeyer Verlag.
- Pittner, Karin. 2013. Adverbialsätze. Satzwertige zu-Infinitivkonstruktionen. In Jörg Meibauer, Markus Steinbach, & Hans Altmann (eds.), *Satztypen des Deutschen*, 501–525. Berlin and New York: De Gruyter.
- Rapp, Irene & Angelika Wöllstein. 2013. Satzwertige zu-Infinitivkonstruktionen. In Jörg Meibauer, Markus Steinbach, & Hans Altmann (eds.), *Satztypen des Deutschen*, 338–355. Berlin and New York: De Gruyter.
- Rath, Rainer. 1965. Trennbare Verben und Ausklammerung. *Wirkendes Wort* 15(4), 217–232.
- Reich, Ingo & Marga Reis. 2013. Koordination und Subordination. In Jörg Meibauer, Markus Steinbach, & Hans Altmann (eds.), *Satztypen des Deutschen*, 536–569. Berlin and New York: De Gruyter.
- Reis, Marga. 1980. On justifying topological frames: ‘Positional Field’ and the order of nonverbal constituents in German. *DRLAV Revue de Linguistique* 22/23, 59–85.
- Reis, Marga. 1997. Zum syntaktischen Status unselbständiger Verbzweit-Sätze. In Christina Dürscheid, Karl-Heinz Ramers, & Monika Schwarz (eds.), *Syntax im Fokus. Festschrift für Heinz Vater*, 121–144. Tübingen: Max Niemeyer Verlag.
- Ronneberger-Sibold, Elke. 1991. Funktionale Betrachtungen zu Diskontinuität und Klammerbildung im Deutschen. In Norbert Boretzky, Werner Enninger, Benedikt Jessing, & Thomas Stolz (eds.), *Sprachwandel und seine Prinzipien. Beiträge zum 8. Bochum-Essener Kolloquium über Sprachwandel und seine Prinzipien*, 206–236. Bochum: Brockmeyer.
- Sahel, Said. 2015. Zur Ausklammerung von Relativsätzen und Vergleichsphrasen im frühen Neuhochdeutschen (1650–1800). In Héléne Vinckel-Roisin (ed.), *Das Nachfeld im Deutschen. Theorie und Empirie*, 165–183. Berlin and Boston: Walter de Gruyter.
- Sanfelici, Emanuela, Petra Schulz, & Corinna Trabandt. 2017. On German V2 “relative clauses”: Linguistic theory meets acquisition. In Elisa Di Domenico (ed.), *Syntactic complexity from a language acquisition perspective*, 63–104. Newcastle upon Tyne: Cambridge Scholars Press.
- Schmidt, Jürgen Erich. 2005. Versuch zum Varietätenbegriff. In Alexandra Lenz & Klaus Mattheier (eds.), *Varietäten: Theorie und Empirie*, 61–74. Frankfurt am Main: Peter Lang.
- Schmidt, Jürgen Erich. 2010. Language and space: The linguistic dynamics approach. In Peter Auer & Jürgen Erich Schmidt (eds.), *Language and space: An international handbook of linguistic variation*, vol.1: *Theories and methods*, 201–225. Berlin: De Gruyter Mouton.
- Schmidt, Jürgen Erich. 2011. Formation of and change in regiolects and (regional) dialects in German. *Taal en Tongval* 63(1), 143–173.
- Schmidt, Jürgen Erich & Joachim Herrgen. 2011. *Sprachdynamik: Eine Einführung in die moderne Regionalsprachenforschung*. Berlin: Erich Schmidt Verlag.
- Schwitalla, Johannes. 2012. *Gesprochenes Deutsch. Eine Einführung*, 4th edn. Berlin: Erich Schmidt Verlag.

- Spiekermann, Helmut. 2005. Regionale Standardisierung, nationale Destandardisierung. In Ludwig Eichinger & Werner Kallmeyer (eds.), *Standardvariation: Wie viel Variation verträgt die deutsche Sprache?*, 100–125. Berlin and New York: Walter de Gruyter.
- Spiekermann, Helmut. 2008. *Sprache in Baden-Württemberg. Merkmale des regionalen Standards*. Tübingen: Max Niemeyer Verlag.
- Spiekermann, Helmut. 2010. Pronominaladverbien im Niederdeutschen und in der norddeutschen Regionalsprache. In Dagmar Bittner & Livio Gaeta (eds.), *Kodierungstechniken im Wandel. Das Zusammenspiel von Analytik und Synthese im Gegenwartsdeutschen*, 179–198. Berlin and New York: De Gruyter.
- Uhlig, Eckhard. 1972. *Studien zu Grammatik und Syntax der gesprochenen politischen Sprache des Deutschen Bundestages. Ein Beitrag zur deutschen Sprache der Gegenwart*. Marburg: N. G. Elwert.
- Vinckel, Hélène. 2006. *Die diskursstrategische Bedeutung des Nachfelds im Deutschen: Eine Untersuchung anhand politischer Reden der Gegenwartssprache*. Wiesbaden: Deutscher Universitäts-Verlag.
- Vinckel-Roisin, Hélène. 2015. Facetten des Nachfelds im Deutschen. In Hélène Vinckel-Roisin (ed.), *Das Nachfeld im Deutschen. Theorie und Empirie*, 1–22. Berlin and Boston: Walter de Gruyter.
- Wagner, Peter & Karl-Heinz Bausch (eds.). 1997. *Tonaufnahmen des gesprochenen Deutsch: Dokumentation der Bestände von sprachwissenschaftlichen Forschungsprojekten und Archiven*. Berlin and New York: Walter de Gruyter.
- Westphal Fitch, Gesche. 2011. Changes in frequency as a measure of language change: Extraposition in Pennsylvania German. In Michael T. Putnam (ed.), *Studies on German-language islands*, 371–384. Amsterdam and Philadelphia: John Benjamins.
- Wiesinger, Peter. 1983. Die Einteilung der deutschen Dialekte. In Werner Besch, Klaus Brinker, Armin Burkhardt, Hugo Steger, Gerold Ungeheuer, & Herbert Ernst Wiegand (eds.), *Dialektologie: Ein Handbuch zur deutschen und allgemeinen Dialektforschung*, 2. Halbband, 807–900. Berlin and New York: Walter de Gruyter.
- Winhart, Heike. 2002. Funktionsverbgefüge im Deutschen zur Verbindung von Verben und Nominalisierungen. PhD dissertation, University of Tübingen.
- Wöllstein, Angelika. 2014. *Topologisches Satzmodell*. Heidelberg: Universitätsverlag Winter.
- Wöllstein, Angelika. 2018. Topologisches Satzmodell. In Jörg Hagemann & Sven Staffeldt (eds.), *Syntaxtheorien. Analysen im Vergleich*, 145–166. Tübingen: Stauffenburg.
- Zahn, Günther. 1991. *Beobachtungen zur Ausklammerung und Nachfeldbesetzung in gesprochenem Deutsch*. Erlangen: Palm & Enke.
- Żebrowska, Eva. 2007. Korpusgestützte Syntaxforschung am Beispiel der Ausklammerung im Deutschen. *Sprachwissenschaft* 32, 101–121.
- Zifonun, Gisela, Ludger Hoffmann, & Bruno Strecker. 1997. *Grammatik der deutschen Sprache*. Berlin and New York: Walter de Gruyter.
- Zwirner, Eberhard, & Wolfgang Bethge. 1958. *Erläuterungen zu den Texten*. Göttingen: Vandenhoeck & Ruprecht.

Appendix**Table A1.** Recording and speaker information

Regiolect				Dialect			
Linguistic Area	Recording ID	Speaker Age	Speaker Gender	Linguistic Area	Recording ID	Speaker Age	Speaker Gender
NLG	PF014	47	m	NLG	ZW018	72	m
NLG	PF018	71	m	NLG	ZW0G2	61	f
NLG	PF019	50	f	NLG	ZW0M8	72	f
NLG	PF020	54	f	NLG	ZW0Q6	68	m
NLG	PF023	58	f	NLG	ZW210	76	m
NLG	PF024	48	m	NLG	ZW3L0	51	m
NLG	PF026	63	f	NLG	ZW5F6	70	f
NLG	PF255	55	m	NLG	ZW9J1	57	f
NLG	PF256	59	f	NLG	ZWT38	74	m
NLG	PF258	37	f	NLG	ZWX71	58	m
WCG	PF065	71	m	WCG	ZWIH8	55	f
WCG	PF069	56	m	WCG	ZWIP3	54	m
WCG	PF081	59	m	WCG	ZW2K7	86	f
WCG	PF088	54	m	WCG	ZW8O8	80	f
WCG	PF090	44	f	WCG	ZW9B3	54	m
WCG	PF096	80	m	WCG	ZWH55	58	f
WCG	PF107	65	f	WCG	ZWI96	55	m
WCG	PF120	61	f	WCG	ZWQ52	67	m
WCG	PF196	62	f	WCG	ZWW61	62	m
WCG	PF198	70	m	WCG	ZWX06	59	f
EUG	PF149	43	m	EUG	ZW910	69	f
EUG	PF154	48	f	EUG	ZWC38	59	m
EUG	PF155	48	m	EUG	ZWC84	65	m
EUG	PF156	47	m	EUG	ZWE07	76	m
EUG	PF160	57	m	EUG	ZWE70	86	f
EUG	PF164	61	m	EUG	ZWF65	54	m
EUG	PF165	47	m	EUG	ZWK68	63	m
EUG	PF169	67	m	EUG	ZWK82	60	m
EUG	PF173	72	m	EUG	ZWL44	57	m
EUG	PF384	69	m	EUG	ZWZ36	55	m

Table A2. Token counts of clausal postpositionings, by function

PF		ZW	
Adjunct (adverbial) clauses	122 (100%)	Adjunct (adverbial) clauses	118 (100%)
causal	37 (30.33%)	causal	28 (23.73%)
comitative	2 (1.64%)	comitative	0 (0%)
concessive	1 (0.82%)	concessive	2 (1.69%)
conditional	12 (9.83%)	conditional	12 (10.17%)
final	34 (27.87%)	final	37 (31.36%)
modal	6 (4.92%)	modal	5 (4.24%)
temporal	30 (24.59%)	temporal	34 (28.81%)
Complement clauses	83 (100%)	Complement clauses	65 (100%)
subject (nominative)	4 (4.82%)	subject (nominative)	1 (1.54%)
object (accusative)	74 (89.16%)	object (accusative)	59 (90.77%)
prepositional object	5 (6.02%)	prepositional object	5 (7.69%)
Continuative clauses	43	Continuative clauses	29
Comparative clauses	4	Comparatives clauses	6
Attributive clauses	29	Attributive clauses	10
Relative clauses	65	Relative clauses	31
Multiple functions	5	Multiple functions	2
Total regiolect	351	Total dialect	261

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