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Adverbial clause combining in Latgalian: temporal, conditional, causal and concessive relations in spontaneous speech

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1. Introduction

This paper investigates techniques of clause combining in spontaneous spoken Latgalian, based on a corpus of 5 hours of recorded interviews with ten speakers from different parts of Latgalia. The study focuses on inter-clausal relations that are most typically expressed by adverbial clauses, and in grammars of European languages are largely associated with adverbial subordinators such as English *when*, *if*, *because*, or *although*. Following the terminological distinctions made by many linguists with a functional-typological approach (for example, Lehmann 1988; Halliday 1994; Croft 2001; Dixon 2006), I use the term CLAUSE COMBINING for a subset of what is subsumed under the broader term CLAUSE LINKAGE, excluding constructions where a clause is embedded in another clause, either as a complement of the main predicate or as a modifier of one of its arguments. ADVERBIAL CLAUSE COMBINING in turn refers to constructions where one clause modifies a clause or another part of discourse without being syntactically embedded. A more detailed discussion of the term will be given in Section 3.1.

Adverbial clauses have been traditionally studied as part of complex sentences. This tradition is still noticeable in some recent typological research, for example, in Gast & Diessel's (2012) overview of clause linkage. The term "complex sentence" is however problematic when studying unplanned speech: the sentence as a textual, let alone a syntactic, construction is a unit of written texts, and the concept is inadequate for the description of the syntax of spontaneous spoken language (see Miller & Weinert 1998; Biber et al. 1999, Ch. 14.3). While a framework for the adequate study and comparison of clause linkage in different modalities is still lacking, there is at least a wide consent that the combination of clauses to larger units employs different techniques in unplanned spoken versus planned written registers of languages with a considerable history of standardization. Linguists disagree however when characterizing the nature of this difference. According to a widespread view, structures in spontaneous spoken language are less complex and intricate, and can often be described as "incomplete" when compared to elaborate written texts. This view has also been expressed (surprisingly) by Wallace Chafe, one of the pioneers of spoken language research, in several publications of the 1980s; see also Miller & Weinert (1998: 78-79). At the same time, the opposite view was put forward by M.A.K Halliday, who maintains that spoken language has more intricate grammatical structures than written language (Vries, Lourens de, 1992). The units to which clauses are being combined in spontaneous speech, or, as Halliday puts it, "unself-monitored discourse", can be very complex and their on-line construction follows elaborate rules. These regularities cannot be seen when trying to describe these units after the model of written sentences, which are the result of planning and revising. Of course, there are constructions which appear in both modes. Spoken and written registers are not isolated from each other, especially in modern societies with rich and widespread literacy practices. But one should not forget that historically writing has been modeled after speaking, not the other way around.

One reason for the failure to see the intricacies of clause linkage in spontaneous spoken language is a neglect of prosodic features such as pitch contour, intensity and pauses, and/or to deny prosody a place in grammar (Couper-Kuhlen, 2015). Since the 1990s, a growing number of studies on clause linkage in unplanned spoken language has provided us with

important insights about the role of such features in distinguishing types of linked clauses, as well as about the emergent nature of clause-linkage patterns and their functions in discourse (see, among many others, Couper-Kuhlen 1996; Hopper & Thompson 2008; Mithun 2009; Laury & Ono 2014; contributions to the volume edited by Laury & Suzuki 2011 or the thematic issue edited by Ehmer & Barth-Weingarten 2016). Most of these studies are based on conversations, and they often focus on patterns of interactions between participants. My current study is different in that I chose a less interactive register and concentrate on monologic stretches: sequences of utterances produced by one speaker without paying much attention to the listener's immediate reaction. While interactional approaches view language in use as produced by several, interacting participants, I focus on linguistic structure as it unfolds in undisturbed production by an individual. It is in these stretches that we can best see the complexity Halliday had in mind when writing:

The complexity of spoken language is in its flow, the dynamic mobility whereby each figure provides a context for the next one, not only defining its point of departure but also setting the conventions by reference to which it is to be interpreted. (Halliday, Webster, & Halliday, 2002)

Starting with the complex sentence as unit of analysis implies a top-down approach from whole sentences to their parts. Studies of spontaneous spoken language in general proceed bottom-up, starting with individual clauses (or utterances, or turns, or actions, etc.) and exploring their relation to preceding and following parts of the discourse. The unit that will finally be arrived at (the whole to which the parts combine) is less predictable and will largely depend on the perspective. From the perspective of the speaker producing structures, clause complexes can be detected by prosodic and lexical cues. A prosodic cue found in many languages is final (decidedly falling) intonation at the end of a sequence of clauses with continuing (level or slightly rising) intonation. Lexical cues in Latgalian are text structuring particles such as a, vot, at the beginning, less often also at the end of clause complexes. Clause complexes are also distinguished by thematic coherence – their parts all belong to the same thought expressed. This may be marked by words or phrases that appear both at the beginning and the end of a complex. In the course of this paper examples of such clause complexes will appear and I will point to cues by which they are delimited. More often however my examples will be only parts of a clause complex, as I am mostly interested in the marking of relations between two clauses within such a complex.

The clause combining techniques that I found in my sample will be described in detail in three subsections of Section 3. In Section 3.2 I will discuss patterns of asyndetic clause combining where one clause modifies another clause and thus may qualify as an adverbial clause. Section 3.3 is devoted to clause combining with connectives that (more or less) correspond to the traditional concept of adverbial subordinator. Adverbs and particles that serve as connectives in a main clause, often as correlates of an adverbial subordinator, are in turn the subject of Section 3.4.

In the following Section 2, I will describe my data and the ways they were gathered and processed.

2. Data and methodology

For this research I used recordings of interviews from the collection made within the project *TriMCo Triangulation Approach for Modelling Convergence with a High Zoom-In Factor* (Johannes Gutenberg University in Mainz, 2013-2017; see http://www.trimco.uni-mainz.de/), short "TriMCo corpus". I chose interviews of 10 main speakers, of which 6 are female and 4 are male. In one of the recordings another male speaker (the son of the interviewee) is present with several utterances, so there are 11 speakers in sum. The total length of my selection is about 5 hours. The speakers belong to two generations: 5 speakers were born between 1928 and 1937 (G1), and 6 speakers were born between 1955 and 1965 (G2). They may further be grouped along geographical criteria which roughly correspond to dialect areas of Latgalian: Northern Latgalia (NL; 2 hours, 4 speakers from Viļaka and Baltinava), Eastern Central Latgalia (EL; 1 hour, 2 speakers from Melnava and Cibļa), and Southern Latgalia (SL; 2 hours, 5 speakers from Andrupene, Dagda, and Auleja). The speakers are coded here according to these criteria, for example SL-G1-VP for a speaker from Southern Latgalia born between 1928 and 1937, with VP the abbreviation used for this speaker in the TriMCo corpus.

For all speakers Latgalian is a native language, acquired during childhood as a home language, though for the second generation it may not have been the main home language. Some speakers of the first generation did not pass on Latgalian to their children, who learnt it instead from their grandparents and other relatives and friends. All speakers have spent their childhood as well as most of their adult life in Latgalia, interrupted by some years in Riga or other places in Latvia, typically for (higher) education or first professional activities. Within Latgalia, they have lived within one region, moving only between neighboring parishes. All speakers are trilingual: for most of their life they have used Latgalian, Latvian, and Russian to varying degrees depending on the situation and the interlocutor. All speakers are well educated (several work or worked as teachers). The interviews were conducted between 2009 and 2014 either by researchers and students of Rezekne Academy of Technologies during their annual folklore expeditions, or by a member of the TriMCo project. All interviewers spoke Latgalian. The interviews took place in a familiar environment, most often the speaker's home. The topics spoken about vary, but mostly they concern aspects of the speaker's life (childhood memories, life and traditions in the village, experiences in professional life). However, the interviews also differ according to several parameters, for example, the way of recording (only audio recording with a less intrusive small device vs. parallel video recording with a professional camera), the degree of familiarity between the participants (in one case the interviewer was the speaker's daughter, in other cases the participants were strangers, or knew each other from previous occasions), or the degree to which they use Latgalian outside of the circle of family and friends (two interviewees are cultural activists, one writes plays in Latgalian). While these parameters undoubtedly have an influence on the language use, they will not be regarded here.

Within the TriMCo project, a time-aligned orthographic transcription with ELAN was prepared by several students and other young adults, all speakers of Latgalian. Prosody was not marked in the transcription; the transcribers used punctuation marks at liberty, mostly guided by the rules for written standard Latvian. No guidelines for the segmentation of the speech flow were given, and the transcriptions differ widely in this respect. Despite this and some other inconsistencies, these first transcriptions are very useful for working with the

interviews as texts. A corpus compiled of these transcriptions¹ made it easier to find answers to quantitative research questions such as the frequency of certain linking morphemes. More important in my research however are qualitative questions which require longer contexts and information about prosody. Therefore I first went through all transcripts (recordings and transcripts were known to me before this study) and extracted short samples (reaching from combinations of 2 clauses to paragraphs of up to 2 minutes) which I found good illustrations of clause combining techniques within the speech of one speaker (excluding interviewers). I focused on less interactive, more monologic parts of the interviews, which in any case prevail in the recordings: the interviewees are privileged speakers who by default hold the floor, and there is little negotiation of turn taking, or co-constructing of syntactic structures, etc.

Of these samples I then prepared improved transcriptions in the following way:

- segmenting the transcription syntactically into clauses;
- correcting possible errors in the transcription;
- analyzing and notating prosodic border signals (pauses, pitch contour and intensity at the end of a clause)²;
- uniting clauses into one segment in case of a total lack of border signals, or segmenting clauses into two lines if there were clear border signals clause internally (both situations were however rare in my samples).

The prosodic analysis and notation of the material is not very detailed. It is based on the recommendations and conventions for the GATR system (Selting, Margret et al., 2009), but, for example, I did not mark phrasal accents consequently. They were marked only when they were clearly pronounced, which however was most often the case. I marked phrasal accents according to the feature that in my impression was most salient, which could be loudness (marked by capital letters) or a step up in pitch (marked by the symbol \uparrow).

The first step in data collection was onomasiological, as it consisted in detecting combinations of clauses where a given semantic relation was detected (temporal, conditional, causal, concessive). In a second step, I searched for more instances of the use of expression means that marked these relations. Such semasiological approach is most easily followed where the expression means is lexical — in my material it was not possible to automatically search for word order patterns or prosodic cues. As a result, I will present some statistical data on the use of lexical markers and on the use of converbs which have a clear morphological marker, but not on other expression means. My analysis includes also instances where words which are typically used as "adverbial subordinators" mark clauses that are not directly linked to a main clause.

Examples are given as they appear in the corpus, so spelling shows dialectal and individual variation. When I needed a citation form for words that have variants in my corpus, I chose the form given as the main form in the Lithuanian-Latvian-Latgalian dictionary (LLL).

¹ I used Sketch Engine (https://www.sketchengine.co.uk/) to compile this corpus.

² For the prosodic analysis, I used PRAAT (Boersma, Paul & Weenink, David, 2016) to complement my auditive, subjective, judgment by visualizations of pitch and intensity.

3. Techniques of adverbial clause combining

3.1 What is an adverbial clause?

Adverbial clauses are generally understood as clauses that modify clauses or verb phrases (Hetterle, 2015; Thompson, Longacre, & Hwang, 2007). Syntactically, adverbial clauses are often negatively defined: as neither complement nor relative clauses, or as dependent, but not embedded into another clause. Many linguists acknowledge that a straightforward distinction of adverbial clauses is problematic. For example Diessel (2013) concludes:

adverbial clauses constitute a very heterogeneous class of subordinate clauses with fuzzy boundaries to coordinate sentences and other types of clause-linkage constructions (Diessel, Holger, 2013).

When dealing with spontaneous spoken language (but not only), even the label "subordinate clause" is questionable (Miller, J[im], 2006). The concept of subordination has been much discussed during the last 30 years (Cristofaro, 2003, 2014; Haiman, John & Thompson, Sarah A., 1984), but there seems to be no definition that would exactly match the heterogeneous class of semantically defined adverbial clauses. For my research, a strict distinction of coordination and subordination is not important, but I will sometimes speak of structures being "more coordinative" or "more subordinative", having in mind criteria that have been discussed as distinguishing the two types of clause combining (such as flexible order with respect to the modified clause, or the possibility to extract arguments).

From a semantic point of view, authors commonly specify the vague notion of "modification" by listing concepts that are expressed by adverbial clauses, as in the following definition:

Adverbial clauses are clausal entities that modify, in a very general sense, a verb phrase or main clause and explicitly express a particular conceptual-semantic concept such as simultaneity, anteriority, causality, conditionality, and the like. (Hetterle 2015: 2.3.2)

For Hetterle, the semantic criterion is necessary to distinguish adverbial clauses from the three traditional types of coordination (conjunction, disjunction, and adversative coordination), as well as from clause combining where the semantic relation between clauses is not explicit, though it can be inferred from the context. To the latter belong juxtaposed clauses without any marker (*She was cold – she went inside*) or with a semantically empty or vague linking morpheme, and probably also sentence relative clauses (*She went inside*, *which annoyed him*), which are not mentioned by Hetterle.

Hetterle's definition is well suited as a starting point for a typological investigation of adverbial clauses in languages with very different structures, including standardized written varieties as well as varieties of spontaneous spoken language. It does not presuppose the sentence as a syntactic or textual unit and does not rely on the problematic concept of subordination. The category of adverbial clause as defined by Hetterle includes not only the finite adverbial clauses with a semantic subordinator that are listed in school grammars of European standard languages, but also a range of other constructions, where the semantic relation between clauses is expressed by non-lexical means: grammatical categories such as tense and mood, word order, or intonation. It is however not always easy to draw a clear line by the criterion of "explicit marking". For example, we still know very little about the possibilities of marking a specific semantic relation by prosodic means. Existing studies usually analyze prosodic characteristics of constructions containing a lexical linker, such as

English *because* (Chafe, Wallace, 1984; Couper-Kuhlen, 1996; Karpiński, 2006). But is there something like a typical "causal intonation", distinct from a "conditional intonation", so that causal and conditional relations could be distinguished by intonation alone (without lexical or grammatical means)? I have no answer to this question, but I suppose that "semantically explicit" prosody as a sole marker of a relation between clauses is at least rare. Rather, lexical, grammatical and prosodic means are likely to co-occur, to "conspire" in the marking of semantic relations between clauses. However, the neglect, in descriptive grammars, of prosody and constructional expression means that are not tied to specific morphemes, and the fact that such means cannot be detected by corpus searches, may be one of the reasons why it is generally assumed that explicit marking of inter-clausal semantic relations requires lexical or morphological subordinators. Another problem for distinguishing adverbial clauses according to Hetterle's definition is the distinction between semantically vague marking (which would be excluded) and polysemy of markers. The Latgalian converbs, which will be discussed in the next section, can be analyzed in either way, and the same holds for the linker *ka* 'that; when, if, because' discussed in section 3.3.

Whether semantically specific or not, prosodic means are doubtlessly of great importance in marking that two clauses are related in a way that allows us to speak of clause combining. The mere fact of a semantic relation is not sufficient. In the following example, clause (d) stands in a causal relation to clause (a) – the regular drinking of schnapps is given as the reason for never falling ill. However, the two clauses are prosodically clearly separated – they belong to two different clause complexes. Clause (a) is the coda of a paragraph where the speaker told about his hard work and that he had often wished to fall ill in order to be able to stay at home. Its intonation contour (noted with the full stop) is a clear indicator of an ending³, and the next thought follows only after a considerable pause. In my analysis, (d) does not count as an adverbial clause (at least as long as we cannot detect a specific "causal intonation"). In contrast, clauses (e) and (f) are prosodically integrated⁴. They are also grammatically marked in a way conventionally associated with a specific semantic relation, namely, counterfactuality. Note however that there is no inversion in the Latgalian version of (e) and that the verb form (past active participle) is also used in independent sentences. Clause (e) alone is thus not explicitly marked for its function as a counterfactual conditional clause. Only in the combination of (e) and (f), with the adequate intonation, do we find a construction that can be said to contain an adverbial clause.

(1) Speaker SL G1 VP

(a) *i nikuo nasaslymu*.

and no_way NEG.fall_ill.PST.1SG

'and I never fell ill.'

(b) (2.7)

(c) *↑nui* (0.7) yes

³ Actually, in the pause in (b) the interviewer starts a comment to clause (a), saying "thank God [you did not fall ill]". The speaker however completely ignores this contribution and continues his line of thought with (c). I therefore did not include the interviewer's utterance in the transcription.

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⁴ The clause in lines (d)-(f) form a clause complex in my understanding.

- (d) *šņabeiti* vysod izdzieru— (0.8) schnapps.DIM.ACC.SG always PVB.drink.PST.1SG 'I always drank schnapps'
- (e) nu šņaba nadziers=
 PTC schnapps.GEN.SG NEG.drink.PST.PA.NOM.SG.M
 'well, had (I) not drunk schnapps'
- (f) byutu seņ nūmiers.
 be.IRR long_ago PVB.die.PST.PA.NOM.SG.M
 'I would have died long ago.'

When deciding whether a pair of clauses qualify as an instance of clause-combining in the way that interests me in this study, I used the following cues. None of them, however, is a sufficient, and only the first may be a necessary criterion.

- There is a logical/semantic/rhetoric relation between the clauses. For adverbial clauses, a specific semantic relation is a necessary criterion according to the definitions discussed above, but, as shown with the above example, it is not sufficient. Kortmann (Kortmann, 1997) has compiled a useful list of semantic relations found with adverbial clauses in European languages. When referring to his terms I will use capital initials (for example, Simultaneity, Anteriority). For rhetorical relations between clauses in general see Longacre (Longacre, 2007).
- Modifying and modified clause are often adjacent, though they may be separated by linguistic and non-linguistic material. In conversations they may belong to different turns and/or be produced by different speakers. In the latter case (so called coconstructions) they usually are adjacent.
- In an "ideal" instance of clause-combining, the clauses are prosodically integrated. This may mean that there is no prosodic end signal (especially: no final intonation contour; less reliable: no distinct pause) in or after the first clause, or that there is a typical pattern for first and second clause in a combination, such as the "comma intonation" (slightly rising) for the first clause and the "full stop intonation" (clearly falling) for the second; examples will be given below. Prosodic patterns may have a crucial role in the emergence of complex structures, cf. Mithun's (2009) insightful paper on complementation and relativization in Mohawk.
- The presence of dedicated linking morphemes is an obvious and easily detected cue. I will call this type of marking LEXICAL MARKING. In European standard languages, adverbial clauses are most often marked by an adverbial subordinator which expresses the semantic relation (English *if*, *because*, etc.). There is also a range of lexical items (traditionally classified as adverbs or particles) that appear in a main or independent clause (that is, a clause that does not modify another clause), such as English *however*, *therefore*, *then*. The umbrella term for different kinds of lexical markers of interclausal relations is CONNECTIVE (Fabricius-Hansen, Cathrine, 2000; Pander Maat, H & Sander, T, 2006)⁵.
- Under the cover term of GRAMMATICAL MARKING I subsume different techniques, such as special verb-forms (in my research converbs and participles), the use of verbal categories (tense and mood) as part of a pattern, word order, and other. A distinction

⁵ Pander Maat & Sander (2006: 33) define connectives as follows: "one-word items or fixed word combinations that express the relation between clauses, sentences, or utterances in the discourse of a particular speaker".

between finite and infinite form, or considerations of the grade of deranking of verb forms, are of minor importance for the analysis. Rather than use such generalizations, I will name the individual forms that are used in constructions under discussion.

As mentioned above, my primary goal is to investigate techniques by which clauses are combined in spontaneous spoken Latgalian in situations where one clause can be said to modify another clause. During this journey I will also consider some instances which do not exactly meet this characterization. Suzuki and Thompson (Suzuki & Thompson, 2016) have challenged the traditional definition of adverbial clause as 'a clause modifying a clause'. Analyzing the use of temporal, causal, and conditional clauses with explicit lexical markers in Japanese conversations, they find that these clauses also appear in patterns where they do not modify a clause. In my eyes, this is not a problem, as long as we accept that there could be two different understandings of ADVERBIAL CLAUSE: first, we define the category functionally ('a clause modifying a clause'), then we expand the use of the term to instances where a form typically fulfilling the defining function is used elsewhere. Such a situation is well known in linguistics with the category of relative clause. Relative clauses by definition are clauses modifying a noun or noun phrase, but clauses of this type are often also found in other functions and the term is expanded accordingly (as in FREE RELATIVE CLAUSE, SENTENCE RELATIVE) without changing the initial definition. In the same way we could deal (and I will do so) with adverbial clauses that do not modify a clause. For example, we may speak of FREE or INDEPENDENT ADVERBIAL CLAUSES with reference to those that do not modify any other linguistic unit (Laury, Ritva, Lindholm, Camilla, & Lindström, Jan, 2013)⁶. Analyzing spoken language, one should be aware that sameness of form only regards lexical and grammatical form, while prosodically constructions may differ in different uses. For example, Elvira-García et al. (Elvira-García, Roseano, & Fernández-Planas, 2017) show prosodic differences in English conditional clauses in their dependent and independent use.

3.2 Asyndetic clause combining: linking clauses without lexical markers

In the absence of lexical markers that spell out the semantic relation between adverbial clause and modified clause, grammatical marking on the verb and prosody can give certain cues for the interpretation of this relation. They are however seldom completely specific (cf. Hetterle 2015, Section 3.51). In this section I will first discuss converb clauses and participles and then turn to clauses with finite verbs.

Macrolatvian has two dedicated converbs for simultaneous actions, both derived from present participles. One contains the morph -dam-, attached to the infinitive stem of a verb and followed by agreement markers for gender and number. The other converb is marked by the ending -uot in Latvian, $-\bar{u}t$ in Latgalian, which is attached to the present stem and does not have agreement markers. The use of these forms differs slightly in the two languages. In

⁶ For constructions that formally resemble dependent (subordinate) clauses but are used independently (as "main clauses"), Evans (Evans, Nicholas, 2007) introduced the cover term INSUBORDINATION. This term has become quite fashionable and has initiated a range of interesting research, especially on spoken varieties of languages (Evans, Watanabe, & Tōkyō Gaikokugo Daigaku, 2016). However, I am hesitant to use it, as it presupposes the primacy of complex constructions: the independent use of a pattern is claimed to be both historically and synchronically secondary, derived or derivable from its dependent use. This is a very strong claim for which I do not find evidence in my data. See also Traugott (Traugott, 2017) for a critique of insubordination as degrammaticalization.

Latvian, the converb with -uot (writen <ot>) is used much more often and in a variety of semantic relations, which makes it semantically vague, if not empty⁷. The dam-converb most often marks a relation of Manner, Instrument, or Concomittance, more rarely a purley temporal relation of simultaneous action. Its use in different registers varies greatly. Most often we find it in fiction and other elaborated written texts (but not formal registers such as academic or legal texts), while it is rare in spontaneous spoken language. In Latgalian, on the other hand, the dam-converb is more usual (at least in traditional variants which are less influenced by Standard Latvian) and often used for purely temporal relations ('while'), as well as expressing Manner, Instrument, and Concomittance. The $\bar{u}t$ -converb is used in Latgalian mainly for temporal relations. My small corpus reflects the situation in Latgalian quite well. The dam-converb is used slightly more often, by more speakers and with more different lexical verbs, while the $\bar{u}t$ -converb is used by fewer speakers, all of the second generation, and with a lexical preference: 3 out of 6 verbs (4 of 8 tokens) contain the stem brauk- 'go by transport' (tokens: braucūt (2x), atbraucūt 'arriving by transport', ībraucūt 'entering by transport'). Forms with other verbs are only used by one speaker. The following table shows the figures:

Table 1. Converbs used in the 10 interviews

	tokens	verbs	speakers	comment
-dam-	13	11	7 (2 G1, 5 G2)	
$-\bar{u}t$	8	6	3 (G2)	1 speaker produced 5 tokens

In sum, clause combining with converbs is not frequent in these interviews. The number of tokens is too small to draw generalizations about preferred semantic relations, prosodic patterns, or word order. The converb clause may appear before or after the main clause, or interrupt it, usually after the subject. I noticed at least three different prosodic patterns: (a) the converb clause is within the same intonation unit as the main clause (example 2; converb clause preceding main clause); (b) the converb clause is uttered as a separate intonation unit, but combines with the main clause in a way typical for adverbial clauses, for example, by "comma intonation" (ex. 3; converb clause following main clause subject); (c) the converb clause is prosodically separated from the main clause (ex. 4, converb clause following the main clause).

(2) EL_G2_VG

bet tod brauc-**ūt** pa celi es saceju; but then go-CVB away 1SG.NOM say.PST.1SG

'but then, going away (= when leaving), I said'

(3) EL_G2_VG

(a) i vot es $tym\bar{a}$ $d\bar{n}\bar{a}$ — and PTC 1SG.NOM that.LOC.SG day.LOC.SG 'and so I, on that day'

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⁷ It mostly retains the meaning of 'simultaneous action' and allows additional interpretations as manner, instrument, cause, etc. However, it has also been found denoting an anterior action (with a preverb, for example, *at-brauc-ot* 'having arrived' besides 'arriving').

- (b) $s\bar{a}d\bar{a}$ -dam-a $s\bar{u}l\bar{a}$, sit-CVB-SG.F bench.LOC.SG 'sitting on my bench (in class)'
- (c) tai padūmou. so PVB.think.PST.1SG 'thought that way'
- (4) SL_G1_VL3 (enacting the speech of her father-in-law, a builder)
 - (a) ar ↑TRAKtori tik zemis nikas nav with tractor.ACC.SG so earth.GEN.SG no_one.NOM NEG.be.PST.3 ↑PUORracs kā as;
 PVB.dig.PST.PA.SG.M as 1SG.NOM 'nobody has dug over with a tractor as much earth as I (did)'
 - (b) (0.3)
 - (c) taisie-dam-s fundamentus; make-CVB-SG.M foundation.ACC.PL 'making the foundations'

There is no dedicated converb for anteriority, but the past active participle can be used in this function. Again, there are not many examples in my sample (they cannot be found automatically), and the degree of prosodic integration with the environment varies greatly. Semantically the relation between the two clauses is purely temporal (Anteriority). Syntactically we may distinguish two different patterns. In the first pattern, the clause with the participle behaves as the converb clauses described above: it may precede, follow, or interrupt the main clause and be pronounced as a more or less separate unit. In the following example, the main clause subject, the participle clause, and the rest of the main clause are in three different intonation units (similar to example 3 above).

- (5) EL_G2_JK (for the full clause complex see 29 below)
 - (a) par tū ka (0.6) nu myusu (0.5) SAIMINĪKI, because PTC 1PL.GEN famer.NOM.PL 'because, well, our farmers'
 - (b) puordavuši (0.6) sovu ražu $t\bar{\imath}=$ sell.PST.PL.PL.M RPOSS.ACC.SG harvest.ACC.SG here 'having sold their harvest here'
 - (c) voi tī ↑syvānus apriņķa centrā Ludzā—
 or here piglet.ACC.PL district.GEN.SG center.LOC.SG Ludza.LOC.SG
 'or piglets in the district center Ludza'
 - (d) brauca uz SĀTU i; go.PST.3 to home.ACC.SG and 'were driving home and'

With the second pattern, the two clauses seem to be rather coordinated: the clause with the participle can only precede the other clause, the information it provides is on the same level

(not backgrounded), and the shared subject is not separated by intonation. Consider the following example with two possible English translations⁸.

- (6) NL_G2_AL2
 - (a) *a mes juos aiz-dadz-yn-ov-ušs*(=)
 PTC 1PL.NOM 3.ACC.PL.F PVB-burn-CAUS-PST-PA.PL
 - (b) i $\uparrow \bar{u}$ denie $\uparrow pyl$ -yn-ov-am. PTC water.LOC.SG dribble-CAUS-PST-1PL

'and we set them on fire and dribbled (it) into the water' (bottles with washing powder); or: 'and, having set them on fire, we dribbled (it) into the water'

The presence of the conjunction / particle *i* 'and' suggests that the first translation is more adequate, but the conjunction is not obligatory. The transcription was made by the person who also conducted the interview, a very reliable transcriber. Another interpretation of the speech sound is however possible: [i] could be the agreement marker for PL.M, thus part of the participle: *aizdadzynav-uš-i* 'set.on.fire-PST.PA-PL.M'; forms ending in *-uši* and *-ušs* are free variants in Latgalian dialects⁹. My inclination to follow the transcriber's interpretation is based on the fact that I have come across such constructions in Latgalian, although in my current sample it is the only example of this kind. In this construction, the use of the past active participle signals anteriority, but not subordination, therefore a coordinating conjunction may be used to link it to the following clause. The order of the two clauses cannot be reversed. The subject, which both clauses share, is within the same intonation unit as the first clause.

However, the distinction between the two patterns is not always as neat as in the above examples. Maybe there is a continuum between subordinated and coordinated participle clauses. More research with a larger corpus of spoken Latgalian is needed to decide this point.

Another pattern with the past active participle is in imaginative (counterfactual) conditional clauses. As already remarked above when discussing ex. (1), the cues for the interpretation of the construction are spread over both clauses. In the clause expressing the protasis (= the adverbial clause), explicit markers are the participle as the form of the predicate without an auxiliary and the negation, while the clause expressing the apodosis (= the main clause) contains the irrealis form of the auxiliary 'be', which cannot be omitted, and the past active participle of the main verb.

- (7) SL_G1_VP (= lines (e) and (f) of example 1 above)
 - (a) *nu šņaba nadziers*=

 PTC schnapps.GEN.SG NEG.drink.PST.PA.NOM.SG.M

 'well, had (I) not drunk schnapps'
 - (b) byutu seņ nūmiers.

 be.IRR long_ago PVB.die.PST.PA.NOM.SG.M

 '(I) would have died long ago.'

⁸ The preceding utterance established the complex discourse referent 'bottles with washing powder', of which one part is the formal antecedent of the pronoun ('bottles' = PL.F) and another part the logical object of the two verbs (it was the powder that was burned and dribbled).

⁹ The two versions should also differ in the length of the fricative [I] at the end of the participle: it is long in -ušs but short in -uši. I am unable to decide whether in this example it is long or short.

Comparing this construction with the two anteriority constructions, I argue that it resembles the second, coordinated, more than the first pattern. The participle in these constructions is not a typical nonfinite form¹⁰: it contains tense and subject agreement markers, and a clause with this verbform as the predicate may express an independent proposition about a past action. We may compare the counterfactual construction with another construction expressing an imagined situation, where the verbforms are finite by all criteria (marked for person and tense). The speaker of the following example speaks about his attitude towards shooting animals and reports a situation where he had joined a hunting party but was unable to shoot the game. He concludes with the following general remark, of which lines (c) and (d) contain a conditional construction.

(8) NL_G1_SD

- (a) es gribu paskatities uz dzīvnieku; 1SG.NOM want.1SG look.INF.RFL at animal.ACC.SG 'I want to look at animals'
- (b) voi iz ALni or at elk.ACC.SG 'or at an elk'
- (c) brīžu muotes stav PRĪKšā, deer.GEN.PL mother.NOM.PL stand.PRS.3 front.LOC.SG 'does stand in front (of me)'
- (d) es šau-š-u. 1SG.NOM shoot-FUT-1SG 'I will shoot'
- (e) nu KUO tu ŠAUsi,
 PTC how 2SG.NOM shoot.FUT.2SG
 'how will you shoot'

The two clauses (c) and (d) are combined by intonation (the first clause ending with a comma intonation and the second with a final intonation), and the first clause can be understood as modifying the second clause by presenting an imagined situation – a condition. The combination may be freely translated as 'Imagine does are standing in front of me and I shoot them' or 'If does are standing in front of me I will shoot them'. The intonation and the context make it clear that this situation is impossible for the speaker to imagine. Grammatically the first clause is unmarked, but the future tense in the second clause is a marker of the construction, as it is conventionally used in the apodosis of a conditional construction of possiblity (see next section for examples with a subordinator 'if'). Another example of a conditional relation marked by future tense is the following. The interviewer had asked the speaker about recomendations for beekeeping: how best to approach the bees and what to avoid. The speaker responds with a list of conditions, varying the syntactic construction (with and without an explicit 'if'). The clause preceding the example ended with a final intonation.

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¹⁰ See Arkadiev, submitted, on finiteness of Lithuanian participles in various constructions; Nau, forthcoming, on finiteness in Latvian.

(9) NL_G1_SD

- (a) uz POHMELIM ar naej kluot on hangover.DAT.PL also NEG.go.2SG near 'don't approach (the bees) with a hangover'
- (b) tevi sa-kūs-s ((laughs)) uzreiz. 2SG.ACC PVB-bite-FUT(3) at_once '(they) will bite you up at once'

Summing up the findings of this section:

Among constructions with no lexical marker, anteriority constructions with the past active participle are the most specific and thus meet the description for adverbial clauses well. They may be more coordinative or more subordinative, but under the current approach this is not a criterion for their status as adverbial clauses.

Conditional constructions also provide good examples for adverbial clause combining with prosodic and grammatical marking and a specific semantic meaning. Here, the grammatical marking is in the main clause.

Clauses with a dedicated converb are semantically less specific, but more clearly marked as syntactically dependent than the clauses in the other constructions. A possible thesis that has to be investigated empirically on a larger basis is that for this reason converb clauses may be more easily separated prosodically (especially by pauses) from the modified clause than the other types. The more coordinative anteriority and conditional clauses seem to rely more on adjacency and prosodic integration.

3.3 Lexical markers in the adverbial clause

Lexical elements with the function to link an adverbial clause to a main clause (or to other units of the text) can be distinguished along several parameters: their form, their semantics, their position in the adverbial clause, grammatical marking in the clause, and the position of the adverbial clause within the text. There are some correlations between these parameters which have been observed in many languages (see Hetterle 2015 for the broadest typological investigation). The findings presented in this section are in line with such general tendencies.

In Macrolatvian, as in many other languages, we find morphologically simple and complex markers, the latter consisting in more than one word. In general, complex markers are semantically more specific, while simple markers are often polysemous. In the following tables I list the connectives found in my material in temporal, conditional, causal, or concessive adverbial clauses¹¹.

Table 2. Simple connectives for the investigated relations

relation	connective (phonetic variants in brackets)					
temporal	ka 'when', 'if', 'as, because' (+ other, e.g. result, purpose, + complementizer) kai (kei, kuo, kā) 'when', 'as' (+ other, eg. comparison, + complementizer) kod 'when'					

¹¹ These are the most frequent connectives anyhow.

^{&#}x27;Don't approach them with a hangover or/because you will be bitten up at once.'

^{&#}x27;If you approach them with a hangover, you will be bitten up at once.'

	cikam, kamer (komer, kamēr) 'as long as', 'until', 'while'
conditional	ka 'if' etc. see above
	ja, jesli 'if'
	kab 'if only', 'even if' (+ purpose, + complementizer)
causal	$jo (juo, j\bar{u})$ 'for, because'
	ka 'because, since' etc. see above
	kai 'because, since' etc. see above
concessive	lai (?) – used as 'although, even if' by one speakers; more frequent in purpose
	clauses and as a complementizer

The possible lack of a simple connective for concessive clauses is partly due to the size of my corpus. I am not sure that the use of *lai* in the meaning 'although/even if' found with one speaker is a conventionalized usage or at least a recurring pattern. Usually the concessive meaning requires the addition of a particle (such as *lai gon*, *lai i* 'although'; see below). In other Latgalian texts we find *koč* in this function. In my sample *koč* is used only as part of an indefinite pronouns, such as *koč kai* 'somehow'(*kai* 'how'), *koč kur* 'somewhere', etc. However, concessive connectives are generally not as frequent as connectives for the other three functions analyzed here. In Latgalian, as in other languages (Barth, 2000; Biber, Johanssson, Stig, Leech, Geoffrey, Conrad, Susan, & Finegan, Edward, 1999; Miller & Weinert, 1998), adversative clauses with 'but' are by far preferred to concessive clauses with 'although' in spontaneous spoken language. That is, an opposition is usually expressed as 'p BUT q' and not as 'ALTHOUGH p, q' (cf. English *It is Sunday but she is working* vs. *Although it is Sunday she is working*).

Most of the simple connectives are etymologically derived from an inherited pronominal root (*k- and *j-), and most are shared with Latvian and Lithuanian. The only simple connective with inherited material not found in Latvian is *cikom* 'until, as long as, while'. In addition, we find two simple connectives borrowed from Slavic: *jesli* 'if', a more recent borrowing used mostly in Eastern parts of Latgalia (in my sample found only by one speaker from Eastern Latgalia), and *kab* 'if', 'even if', 'in order to', an older borrowing found in many varieties of Latgalian. The latter may also be explained as made of inherited material.

Table 3. Complex connectives for the investigated relations

relation	connective
temporal	piec tam ka, piec tam kai 'after' tod kod 'when'
conditional	-
causal	partū ka, deltuo ka(m) 'because, for' par cik 'since'
	tai kai 'as, since'
concessive	kaut gon, lai gon 'although'
	lai i, lai jou 'although, even if'

The complex connectives are less frequent than the simple connectives in my data. None is used by all speakers and some are used by only one or two speakers. The most active user of connectives is one second generation speaker from Eastern Latgalia (a teacher of English), and she produced most of the tokens of temporal and concessive complex connectives.

Complex connectives are formed along the following patterns:

- preposition + demonstrative + simple connective: $piec\ tam$ 'after that' + ka or kai; diel tuo or $par\ t\bar{u}$ 'for that' + ka or kam^{12} ;
- demonstrative adverb and corresponding question word (which is also used as simple connective): *tai kai* 'so + how', *tod kod* 'then + when';
- combination of particles, or of a simple connective with a particle: all concessive connectives.

The connective *par cik* 'for + how much' shows a pattern not found with other connectives. It is also found in Latvian and is assumed to be a calque from Russian *поскольку*, and therefore not recommended for use in standard varieties.

Temporal and conditional connectives: items and meanings

Of all connectives, ka is by far the most frequent. There are 566 tokens of the word ka in my corpus, which makes it number five of the most frequent words¹³. About half of the tokens of ka I identified as the complementizer 'that'. Of the rest, I filtered out utterances made by the interviewer, repetitions of ka (typical for hesitation), fixed combinations such as the complex connectives, and some unclear uses. I further left aside result clauses ('so that', mostly introduced by the combination tai ka, but sometimes by ka alone), purpose clauses (rare), constructions expressing extent (of the type she was so hungry that...), and clauses modifying a noun (all temporal, as in English the moment (when) I saw you). I ended up with 142 adverbial clauses for further analysis. The overwhelming majority express either a temporal or a conditional relation, and often it is not easy to decide which of these is focused. I divided these clauses into two temporal and two conditional subgroups:

- when I clauses that name a situation or event to indicate the time when the event of the main clause took place ('when I was a child'); including immediate anteriority ('as soon as'); typically both the *ka*-clause and the modified clause are in past tense;
- when adverbial clause and modified clause are set into a regular temporal relation, which often can also be interpreted as real conditional ('when/if X happened, we did Y'); including immediate anteriority ('as soon as'); the two clauses are in the same tense (usually past or present, but future also occurs);
- clauses expressing a condition which is depicted as possible ('if p then q'; real or predictive); usually the verbs in the *ka*-clause and in the modified clause show different tense/mood marking: PRS FUT, PST FUT, PST PRS, or PST/PRS IMPERATIVE;
- clauses expressing an imagined, unreal condition; in the *ka*-clause the verb is in the irrealis mood, in the modified clause it is either in the irrealis mood or in past tense.

¹² The word *kam* (originally the dative of *kas* 'what, who') is used as a simple causal connective 'because, for' in Latgalian, but not in my sample.

¹³ In my corpus, ka is preceded in the frequency list by two particles, nu and vot, the particle and coordinator i 'and', and the pronoun es 'I' in the nominative. In MuLa, a corpus of contemporary written Latgalian with one million wordforms, ka is number seven in the frequency list, which starts like this: i PARTICLE and 'and', ir be.PRS.3, un 'and', ar PARTICLE and PREPOSITION, nu PARTICLE, par PREPOSITION, ka, kai.

The following table shows the frequency with which the functions distinguished here appear in my sample. The first three are clearly the most frequent and we may describe *ka* in adverbial clauses as mainly a marker of temporal/conditional relations. The distinction between when 1 and when 2 as well as that between WHEN 2 and IF1 is not always clear.

Table 4.

semantic group	clauses
WHEN1	46
WHEN2	65
IF1	20
IF2	5
BECAUSE	6
sum	142

Examples for the three most frequent semantic relations:

(10) NL G2 AL: WHEN1

- (a) tuodu katlini tīši es īraudzeju ↑KRĪvejā— such.ACC.SG pot.DEM.ACC.SG just 1SG.NOM discover.PST.1SG Russia.LOC.SG 'I saw exactly such a pot in Russia'
- (b) *ka* bejam ekskursejā kaut kur tī Novgorodas apgabalā.

 KA be.PST.1PL tour.LOC.SG somewhere PTC Novgorod.GEN.SG district.LOC.SG 'when we were on a guided tour somewhere in Novgorod district'

(11) SL G1 VL3: WHEN2

- (a) *ka LATVĪšim leldine*—

 KA Latvian.DAT.PL Easter.NOM.SG

 'when Latvians had Easter (holydays)'
- (b) KRĪVI nastruodova toža tuos dīnys.

 Russian.NOM.PL NEG.work.PST.3 also DEM.ACC.PL.F day.ACC.PL 'Russians, too, did not work those days'
- (c) *i* **ka** krīvim leldinis bea—and KA Russians.DAT.PL Easter.NOM.PL be.PST.3 'and when Russians had Easter (holydays)'
- (d) *latvīši toža nastruodova*. Latvian.NOM.PL also NEG.work.PST.3 'Latvians did not work as well'

(12) NL_G1_SD, IF1 (explaining the meaning of dreams)

- (a) pimāram ka es (0.5) pa ŪDENI staigu; example.DAT.SG KA 1SG.NOM over water.ACC.SG walk.PRS.1SG 'for example, if I walk over water'
- (b) (0.4)
- (c) tad nūteikti ((laughs)) dzeršana būs; then surely drink.ACN.NOM.SG be.FUT.3 'then there surely will be drinking'

(d) ((laughs) pa skaidru ūdeni.
over clear.ACC.SG water.ACC.SG
'over clear water'

The function IF2 was found only 5 times in my sample and the tokens differ from each other considerably. The following two examples show that the same structure (ka + simple irrealis¹⁴) is used in hypothetical and in counterfactual conditional clauses. These two meanings are here differentiated by the form the verb of the main clause takes: simple irrealis in ex. (13) (hypothetical) and simple past in (14) (counterfactual). However, this may be a coincidence: from other texts we know that irrealis is commonly used in the main clause of counterfactual constructions; see Nau (2011: 99-101) on conditional clauses with examples from written Latgalian.

- (13) SL_G2_AL3, IF2

 - (b) tai pastuosteitu ((laughs))
 COPTC tell.IRR
 'then I would tell [these stories]'
 - (c) tok pastuosteitu;
 COPTC tell.IRR

 'then I would tell for sure'
- (14) SL_G1_VL, IF2 (lines g-i). Context: the interviewer asked whether the speaker went dancing in her youth
 - (a) *ṇā*. 'no'
 - (b) man mama slymova $\uparrow c\bar{\imath} \dot{s}$, 1SG.DAT mom.NOM.SG be_ill.PST.3 very 'my mother was very ill'
 - (c) (0.7)
 - (d) i es struodovu, and 1SG.NOM work.PST.1SG 'and I was working'
 - (e) (0.3)

(f) *puorejī*

četri

muocējās,

other.NOM.PL.M.DEF four.NOM.PL.M study.PST.3 'the other four (= my brothers and sisters) went to school'

(g) *i* **ka** *es naspātu struoduot*—
and KA 1SG.NOM NEG.be_able.IRR work.INF

'and if I could not work' = 'if I had not been able to work'

and if I could not work in I had not been able to work

(h) VYSS— ((speaker smacks her hand on the table)) (0.7) all.NOM.SG.M 'that's it!'

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¹⁴ "Simple irrealis" as in the given examples, opposed to a "compound irrealis" with an auxiliary in the irrealis mood and the main verb as past active participle.

(i) $t\bar{t}m$ vajadzēja muoceibus puortraukt; DEM.DAT.PL.M be_necessary.PST.3 education.ACC.PL interrupt.INF 'they had to (= would have had to) interrupt their education'

In conditional clauses, connectives other than ka are used only by individual speakers. The connective ja is used by three speakers (of which one produced it only once) in a total of 13 clauses. As ja is the common word for 'if' in Standard Latvian, this may be a case of interference or even code-switching; for example, one of the speakers used it three times (of six) in a report of a conversation with a school director, which probably was conducted in Standard Latvian. Ja instead of ka for 'if' is also used several times by interviewers. The connective jesli 'if', borrowed from Slavic (probably Russian), is used one time by one speaker from Eastern Latgalia.

For the temporal relations WHEN1 and WHEN2, two further simple connectives are common and in these functions more or less synonymous with ka. The first one is kai, used by all speakers in this form and additionally in its regional variants kei (Eastern Latgalian), kuo (Northern Latgalian), $k\bar{a}$ (Southern Latgalian, also Standard Latvian). The word has many functions, among them as a question word 'how' and as a complementizer, and its total number of tokens (all variants together) in my corpus is 568. Of these, 34 introduce a temporal adverbial clause and one seems to mark a causal relation¹⁵. The second one is kod (44 tokens) or kad (15 tokens); the variants do not show a regional distribution in my sample. This word is used in the meaning 'when' in questions (mostly produced by interviewers) and in adverbial clauses. There are also some idiomatic uses (for example, nabeja kod 'there was no time (for something)'). Adverbial clauses produced by interviewees make up almost half of the total amount of tokens, which is a much higher proportion than with kai or ka. In the following table, the figures for the three connectives are compared

Table 5. Simple connectives in temporal adverbial clauses ('when'-clauses); all variants

	ka	kai	kod	
WHEN1	46	23	12	81
WHEN2	65	11	17	93
sum	111	34	29	174
wordforms in the corpus	570	568	59	

The semantic differences between the three connectives in these functions are not clear to me; in many contexts they seem to be interchangeable. The connective *kod* differs from the other two as it is restricted to temporal meanings and does not seem to induce, non-temporal inferences. Constructions with *kai* often include a notion of immediateness and may invite a causal interpretation as inference, but as the same is possible with *ka*, this is not a categorial difference between these two markers. Such constructions most often contain a correlative element and will be discussed in the Section 3.4 below. An example without correlative element is given here:

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 $^{^{15}}$ Only counting utterances made by the speaker interviewed. A considerable part of the tokens of kai are found in utterances made by interviewers, often as question word or adverb/connective of manner.

(15) NL_S2_AL2

- (a) mes kuo liecem-1PL.NOM KAI jump.PST.1PL 'when/as soon as we jumped' (= with the sleigh over a rock)
- (b) rogovas salyuza sleigh.NOM.PL PVB.break.PST.3 'the sleigh broke'

The temporal relations (in Kortmann's 1997 terminology) Simultaneity overlap ('while'), Simultaneity co-extensiveness ('as long as'), and Terminus ad quem ('until') are expressed by two synonymous connectives: cikom (in my sample only in the variant cikam, 3 tokens)¹⁶ and kamer (variants in my sample: kamer, kamēr, komer, komēr, 13 tokens in total).

- (16) NL G2 AL, context: what did you drink with meals?
 - (a) *tējas* jā tea.ACC.PL yes 'teas, yes'
 - (b) *tī* čajini beja: DEM.NOM.PL.M tea.DIM.NOM.PL be.PST.3 'there were these (herbal) teas'
 - atcerūs— (c) yy es HES 1SG.NOM remember.PRS.1SG.RFL 'I remember'
 - (d) *cikam* Kitīte dzeiva=beja CIKOM Kitīte.NOM.SG be.PST.3 alive.NOM.SG.F 'as long as Kitīte was alive'
 - (e) jei par rūpejuos, 3.NOM.SG.F 3.DAT.PL.M care.PST.3.RFL about 'she took care of them'

In combination with negative polarity, these connectives may express the relation Posteriority¹⁷ ('until not' = 'before'), as in the following example (one of two in my sample).

(17) EL_G2_JK

(a) NU as jau atcerūs nи tīm— PTC 1SG.NOM PTC remember.PRS.1SG.RFL from DEM.DAT.PL.M 'well I remember [this place] from those [times]'

godu (b) nu sešdest sešdestūs VYda: from sixtieth.GEN.PL.DEF year.GEN.PL middle.GEN.SG 'from the middle of the sixties'

(c) (0.8)

(d) yy kamer nabeja jaunīs veikals UZCALTS: HES KAMER NEG.be.PST.3 new.NOM.SG.M.DEF shop.NOM.SG build.PST.PP.SG.M 'before the new shop was built', literally: 'while the new shop had not been built'

¹⁶ In written Latgalian, the basic variant *cikom* is much more frequent: in MuLa we find 438 tokens of *cikom* and

¹⁷ Cf. Thompson et al. (2007: 247-248) for negative polarity in constructions of anteriority in various languages.

Anteriority can be explicitly expressed by a complex connective which consists of *piec tam* 'after that' and one of the simple connectives ka or kai. The preposition piec 'after' has the phonetic variants $p\bar{e}c$ and piec. However, the combination is not fully lexicalized. I found only one example where the three elements really seem to make up one connective (ex. 18). In other instances, there may be a prosodic border after tam (ex. 19), or the two parts are separated by lexical material (ex. 20).

(18) EL_G2_VG

- (a) nu pēc tam ka suocies Latvejas naatkareiba=
 PTC after that KA begin.PST.3.RFL Latvia.GEN.SG independence.NOM.SG
 'well, after Latvia's independence began' (= 'after Latvia had become independent')
- (b) tod jau mes izzynuoam; then PTC 1PL.NOM get_to_know.PST.1PL 'then we got to know'
- (19) NL_G2_AL, context: what kind of dessert you had in your childhood
 - (a) $\uparrow KOMpoti$ suokuos **piec** TAM= compote.NOM.PL begin.PST.3 after that
 - (b) *ka vuocini tī pazaruodejuos*—

 KA lid.DIM.NOM.PL here appear.PST.3.RFL

- (20) SL_G2_DP, context: why is home-distilled liquor called "smakovka"
 - (a) nu it kai tī tuo ka ka tī from DEM.GEN.SG.M KA as if PTC KA PTC **Š**MAKSTYnuoja kā cyuka as pig.NOM.SG smack.PST.3 piec tam ar lyupom **ka** tādu padziers after that with lip.DAT.PL KA such.ACC.SG PVB.drink.PST.PA.SG.M 'from the fact that, it seems, people smacked their lips afterwards when having drunk such stuff' (one intonation unit)
 - (b) $t\bar{a}$ $t\bar{\imath}$ ciel $\bar{\imath}$ s tys n $\bar{\imath}$ saukums ŠMAKOVka. so PTC rise.PST.PA.SG.M DEM.NOM.SG.M name.NOM.SG šmakovka.NOM.SG 'so that's how the name šmakovka ("smacker") has come up'

Another complex connective is derived by juxtaposition of the connective *kod* 'when' with its correlative adverb *tod* 'then'. Evidence for the lexicalization of this pattern may be the fact that there may be another instance of *tod* as correlative adverb in the main clause. More on correlative construction in Section 3.4.

Temporal and conditional connectives: word order patterns

Adverbial clauses with one of the connectives discussed above (*ka, kai, kod, cikom, kamer, pēc tam ka, tod kod*) may precede or follow the main clause, or be inserted after some element

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^{&#}x27;fruit salads started afterwards, when lids had come up' or:

^{&#}x27;fruit salads started after lids had come up'

¹⁸ These are also orthographic variants and I did not verify whether the transcribers always transcribed the word faithfully as pronounced or were influenced by their idea of how this word had to be written.

of the main clause. They thus show variable position, which is one of the features associated with subordination (cf. Haspelmath 1995; Diessel 2001: 437-438). A position before the main clause is more frequent, but temporal and conditional clauses with ka are also often found following the modified clause. Of the 34 temporal clauses with kai, only 3 follow the main clause, as do 5 of the 29 clauses with kod. This behavior fits into cross-linguistic trends as described by Diessel (Diessel, 2001) and Hetterle (2015). Adverbial clauses in initial position create an expectation for certain information that will be given in the main clause (what happened/will happen then?). The two clauses are usually adjacent and more tightly linked by prosody, though pauses may appear. As can be seen in many of the examples given so far, a temporal or conditional clause in initial position most commonly ends in level intonation, which signals a continuation of the clause complex. In contrast, if a temporal clause follows the main clause, it is often treated as an afterthought that provides additional information which is not necessary to complete the clause complex. A good example is (17) above, where the main clause ends in slightly falling intonation, signaling a possible end point, followed by a pause before the modifying kamer-clause.

The different functions of initial and final adverbial clauses of the same type are especially noticeable in instances where a clause complex contains both. This a pattern I found several times in my sample (see also ex. 35). In the following example the speaker describes what they did when the school board came together in the biggest school where she had worked as a teacher. The episode is framed by two adverbial clauses with ka, containing the same lexical verb (at)braukt 'go/come by transport'.

(21) SL_G1_FS

- (a) vot Egļūs ka BRAUce vadietuoji;

 PTC Egļi.LOC.PL KA go.PST.3 superior.NOM.PL

 'well, (in contrast to the small schools,) in Egļi, when the (school) board members came (together)'
- (b) (0.35)
- (c) *nu* tak jau visi školuotuoji tod jau yy—PTC COPTC PTC all.NOM.PL.M teacher.NOM.PL then PTC HES 'then all teachers'
- (d) *kaut kū goldu sataisom*= something.ACC table.ACC.SG PVB.make.PST.1PL 'we prepared something, laid the table'
- (e) = $\uparrow nu$ i::: pasiežam $t\bar{\iota}$. PTC PTC PVB.sit.PRS.1PL here 'and we used to sit there (together) for a while'
- (f) **ka atbrauc**=

 KA PVB.go.PRS.3

 'when they came'

This example is part of an answer to the question whether it was a custom that teachers came together to celebrate anniversaries or New Year. The answer is negative: the speaker had worked mostly in small village schools where no such celebrations took place. The description in (21) is the only kind of gathering she remembers, and it is distinguished by being a custom of the bigger school; the extract continues with resuming that such gatherings were not practiced in the small schools. The place name in the locative $Egl\bar{u}s$ in line (a) has a

contrastive accent and it is topicalized – taken out and put in front of the adverbial clause. This technique is found quite often in my corpus, not only when marking a contrast, but for emphasizing a topic in general. All arguments and adjuncts of a predicate may be fronted in this way, especially in short clauses. Most common are extracted subjects (as in ex. 15 *mes kuo liecem*, literally 'we when jumped') and adverbials of place, as in the preceding and the following example. This fronting is possible only in adverbial clauses that precede the modified clause.

(22) NL_G1_SD

- (a) $K\bar{U}T\bar{I}$ **ka** biji—
 cowshed.LOC.SG KA be.PST.2SG
 'if you were in the cowshed'
- (b) labuok naej pi bitem; better NEG.go.PRS.2SG to bee.DAT.PL 'better don't go to the bees' (because they will bite)

A third possible position for temporal adverbial clauses is within the main clause, as in the following example, where the adverbial clause with *kamer* is inserted between the arguments and the verb. There is no clear border signal between the adverbial clause and the main clause predicate, but the inserted clause is marked by tempo.

(23) EL_G2_JK

- (a) bet jis man(0.35) it $\bar{u}(0.5)$ but 3.NOM.SG.M 1SG.DAT DEM.ACC.SG
- (b) <allegro < kamer viņ dzeivs beja>> while PTC alive.NOM.SG.M be.PST.3 †atguodynuoja; remind.PST.3

'but as long as he was alive he reminded me of it'

Such a construction is however rare in my data. More often, when an adverbial clause interrupts a main clause, the latter is resumed fully after the adverbial clauses, as shown in the following example. We thus get a preposed adverbial clause. The self-correction is another evidence for the differences between initial and final temporal clauses: speakers do not simply continue the main clause and add the adverbial clause (to produce a grammatically correct clause complex such as *es tagad arī brauču uz Aglynu / ka maņ beja dzimšonys dīna*).

(24) NL_G1_FA

- (a) es tagad—
 1SG.NOM now
 'now I'
- (b) dzimšonas dīna **ka** man beja—birth.GEN.SG day.NOM.SG KA 1SG.DAT be.PST.3 'when it was my birthday'
- (c) es arī brauču uz Aglyunu— 1SG.NOM also go.PST.1SG to Aglona.ACC.SG 'I also went to Aglona'

Causal and concessive connectives

Connectives for causal and concessive relations differ from those used in temporal and conditional clauses in several respects. First, they show a greater variety across speakers. Second, complex connectives are more widely used than in temporal and conditional clauses. The total number of clauses with causal and concessive connectives is much smaller than that of temporal and concessive clauses. This is partly due to the nature of my corpus: it is little interactive and the speakers talk mostly of personal experiences and traditions and thus do not so often feel the need to argue for what they say. In more interactive registers causal clauses, especially those expressing a justification for what the speaker thinks or says, are probably more frequent, as they have found to be in English conversations (Biber et al. 1999: 821-822). The absence of causal connectives does not directly indicate the absence of rhetorical relations of cause and justification. For example, the speech of speaker SD contains quite a lot of reasoning ('one does/does not X because of Y'), but his preferred way of combining clauses is asyndetic (as in example 9 above). Only once he uses an explicit causal connective to introduce a reason. Concessive adverbial clauses have been found to be generally less frequent in spoken registers, in English and some other languages, especially concessive clauses preceding a main clause (Biber et al. 1999: 821; 845; Miller & Weinert 1998: 81)¹⁹. In total, I found 81 causal adverbial clauses and 12 concessive clauses introduced with a connective. Tables 6 and 8 below show the distribution of these connectives across speakers. One speaker, who did not produce any of these clauses, is not included in the tables.

Table 6. Connectives in causal adverbial clauses used by speakers of my sample

	E	EL		N	1L			S	SL		sum
	JK	VG	SD	FA	AL	AL2	VP	DP	FS	AL3	
	G2	G2	G1	G1	G2	G2	G1	G2	G1	G2	
'because'											
deļtuo ka (dieļ		1			11						12
tuo ka/kam)											
partū ka (par tū	1	6		1			5	3		6	22
ka)											
jo (juo, jū)	2		1	23	1	10			2		39
ka^{20}							3		1	2	6
'as, since'											
par cik	4										4
tai kai		2									2

The use of ka as a causal connective is found in my sample only with speakers from Southern Latgalia. These clauses may precede or follow the clause they modify. The number of tokens in my sample is too small to draw generalizations about preferred word order; of the six causal clauses with ka, four follow the modified clause (as in example (25)), one interrupts it (26), and one precedes it (example 38 in Section 3.4).

 20 The connective ka is used both for 'because' and for 'since'.

 $^{^{19}}$ Recall that clauses introduced by *bet* or *a* 'but' are not considered in this study. Neither did I search for asyndetic clause combining with concessive meaning. In Barth's (Barth, 2000) study of concessives in English conversations, *but*-clauses and asyndetic combinations were the most frequent expression means for this relation.

- (25) SL_G1_VP, context: occasions when my father made beer
 - (a) agruok beja RODU daudz; ealier be.PST.3 relative.GEN.PL a_lot 'in earlier times one had a lot of relatives'
 - (b) ((interviewer: *mhm*))
 - (c) *i pībrauc*= and PVB.go.PRS.3 'and they came visiting'
 - (d) **ka** O.ī daudz tiergu beja, (2.0) KA PN.LOC a_lot market.GEN.PL be.PST.3 **'because** a lot of markets were held in O.'
- (26) SL_G1_FS; context: we didn't talk Latgalian to our children
 - (a) $j\bar{a}$ i, (0.4) yes and 'yes and' (b) $j\bar{i}$ yy—

 3.NOM.PL.M HES 'they'
 - (c) vai nu ka POGOLmā daudz bie ↑krīvu bārnu,
 PTC PTC KA courtyard.LOC.SG a_lot be.PST.3 Russian child.GEN.PL
 'maybe because there were many Russian children in the courtyard'
 - (d) (0.4)
 - (e) krīviski īsavuicie jī— Russian PVB.RFL.learn.PST.3 3.NOM.PL.M 'they aquired Russian'
 - (f) (0.7)
 - (g) lobuok kai kai <<laughing> kai latgaliski>>.
 better than than Latgalian
 'better than Latgalian'

A more widespread simple causal connective is jo (variants juo, as in Standard Latvian, and $j\bar{u}$ in NL). In my sample, 33 of 39 tokens were produced by only two speakers from the same village in Northern Latgalia, while only two tokens came from a speaker in Southern Latgalia. Clauses with jo always follow the main clause, as do clauses with juo in Standard Latvian. Cross-linguistically this is the typical position for clauses that present a reason or justification (cf. Hetterle 2015). The word jo has no other functions in my sample²¹ and clearly announces a clause or a sequence of clauses naming reasons for a statement. Such an announcement may give the speaker the necessary time to reflect and formulate these reasons.

(27) NL_G1_FA

_

(a) nu uz Rēzekni ratuok braucu; now to Rēzekne.ACC.SG rarely.COMP go.PRS.3 'now I travel to Rēzekne more rarely'

²¹ In the corpus MuLa, jo is often found in other functions, most importantly as a phonetic variant of ja 'if' and in constructions expressing Proportion (jo - jo 'the (more) – the (more)'). The total number of tokens is 1409 in this corpus – too high for a manual filtering of uses, but the use of jo as a causal connective is certainly frequent. In written Latvian, where orthographic $\langle jo \rangle$ is mainly used as a causal connective, the word is by far more frequent than the most common complex connective for 'because': in lvTenTen14, $\langle jo \rangle$ has a frequency of 2302.58 per million and $\langle t\bar{a}p\bar{e}c, ka \rangle$ has a frequency of 129.91 per million.

(b) *jo*,

because 'because'

- (c) (1.7)
- (d) **jo** ceļš ir duorguoks, because way.NOM.SG be.PRS.3 expensive.COMP.NOM.SG.M 'because the journey is more expensive'
- (e) naizdeveiguoks—
 NEG.convenient.COMP.NOM.SG.M
 'less convenient'
- (f) (0.8)
- (g) i man ir uzduovynuojs Vils (0.4) yy $\uparrow ka\check{c}u$, and 1sg.dat be.prs.3 present.pst.pa.sg.m Vils.nom.sg Hes cat.sg.acc 'and Vils has given me a cat'

Besides these two simple connectives, complex connectives are a common means to form causal adverbial clauses. This holds for spoken as well as written varieties of Latgalian as well as of Standard Latvian. In Latvian, the combinations $t\bar{a}p\bar{e}c$, ka and $t\bar{a}d\bar{e}l$, ka, both literally translating as 'therefore that', are lexicalized in the meaning 'because' and their standard orthography (in two words with a comma) is accepted by all writers²². In Latgalian, there is more variation. In the Latgalian corpus MuLA I found the connectives given in Table 7. The orthographic variants show that writers are unsure about the lexicalization of the expression. On the other hand, the numbers suggest that $part\bar{u}$ ka (in all its orthographic variants) is a highly conventionalized expression means for the meaning 'because' in contemporary written Latgalian.

Table 7. Complex connectives for 'because' (literally 'for that that') in written Latgalian (MuLa)²³

connective	all tokens	orthographic variants
partū ka	647	partū ka (279), partū, ka (36), par tū ka (106), par tū, ka (226)
deļtuo ka	58	deļtuo ka (10), deļ tuo, ka (30), deļ tuo ka (7), dieļ tuo, ka (8), dieļ tuo ka (2), dēļ tuo ka (1)
deļtam ka	36	deļtam ka (6), deļtam, ka (5), deļ tam, ka (11), deļ tam ka (8), dēļ tam, ka (3), dieļ tam, ka (1), dieļ tam ka (1), dieļtam, ka (1)
aiztuo ka		aiz tuo ka (1), aiz tuo, ka (17), aiz tō, ka (1)

In my sample, variants of *partū ka* are produced by 6 speakers and variants of *deltuo ka* by 2 speakers (see Table 6 above). Clauses with these connectives always follow the statement they modify. This is the common constellation in written Latgalian as well; very rarely a clause with one of these connectives precedes the main clause in the corpus MuLa. Furthermore, in written Latgalian these adverbial clauses are often separated from the clause they modify and presented as a separate sentence. In spoken Latgalian, causal adverbial

 22 Even in informal texts on the Internet, orthographic variants of $t\bar{a}p\bar{e}c$, ka are rare. In the corpus lvTenTen14, only one token without the comma was found, while the standard form with a comma has 85,419 hits.

²³ Not included are tokens of latgalianized version of Latvian connectives (*tōpēc ka*, *tōdeļ ka*, *tuodēļ ka*, 13 tokens in sum).

clauses are often prosodically set apart from the previous text. For example, they are presented as an afterthought or as a digression from the main flow of thought, or they initiate a new thought. In the following example, the adverbial clause in (d) is an afterthought, but it also initiates a digression from the main topic (what we had for dessert and sweets), leading to reflections about cellars in traditional houses.

(28) NL_G2_AL

- (a) \bar{a} :: ka jau UObuls kuods $z\bar{\imath}mai$ bija= PTC KA PTC apple.NOM.SG some.NOM.SG.M winter.DAT.SG be.PST.3 'if (we were lucky and) there was some apple for winter time'
- (b) *nu* tys bija reti, PTC DEM.NOM.SG.M be.PST.3 rarely 'well this happened rarely'
- (c) *†ja* yy yes HES 'yes'
- (d) *dieļ tuo kam* nabija pagroba;
 DEĻTUO KA NEG.be.PST.3 cellar.GEN.SG
 'because we had no cellar'

Furthermore, complex causal connectives may (and often do) connect larger parts of text rather than clauses. To illustrate this, I will discuss two slightly longer examples. In the first one, the connective in line (c) links the question of line (b) (why is the place called Tridna) to the legend announced in line (a) and unfolded in lines (c)-(h).

(29) EL_G2_JK

- (a) *i nūstuosts ir taids*= and legend.NOM.SG be.PRS.3 such.NOM.SG.M 'and there is this legend'
- (b) par kū vītai nūsaukums Tridņa—
 for what.ACC place.DAT.SG name.NOM.SG Tridņa.NOM.SG
 'why the place is called Tridņa'
- (c) par tū ka (0.6) nu myusu (0.5) SAIMINĪKI, PARTŪ KA PTC 1PL.GEN famer.NOM.PL 'because, well, our farmers'
- (d) $puordavu\check{s}i$ (0.6) sovu $ra\check{z}u$ $t\bar{\imath}=$ sell.PST.PL.PL.M RPOSS.ACC.SG harvest.ACC.SG here 'having sold their harvest here'
- (e) voi tī ↑syvānus apriņķa centrā Ludzā—
 or here piglet.ACC.PL district.GEN.SG center.LOC.SG Ludza.LOC.SG
 'or piglets in the district center Ludza'
- (f) brauca uz SĀTU i; go.PST.3 to home.ACC.SG and 'were driving home and'
- (g) vot $t\bar{t}$ $t\bar{u}$ $veiksmeig\bar{u}$ sovu gišeftu (0.25) PTC here DEM.ACC.SG successful.ACC.SG.DEF RPOSS.ACC.SG business.ACC.SG ATZEIMEJA treis $d\bar{t}nys$; celebrate.PST.3 three day.ACC.PL 'here they celebrated their successful transaction for three days'

(h) *nu tuo i Tri-dṇa*; from DEM.GEN.SG.M PTC Tri-dṇa 'and that's where Tri-dṇa comes from' (Russian *tri dnja* 'three days')

In the next example, it is not possible to identify clauses or other linguistic units which the connective $part\bar{u}$ ka would connect. Nevertheless it is not difficult to understand its function in the context. The speaker had told before how in their village they invented a funny ritual (swiping of greasy hands) as part of enjoying a traditional Latgalian dish (klockys, a kind of dumpling). Then she discovered that a woman from another village, who is running a tourist site, had adopted this ritual and now presents it as if it were her invention. The speaker expresses her indignation. The segment starting with the connective $part\bar{u}$ ka in line (o) may be interpreted as expressing the reason or evidence for the speaker's assumption that the other woman stole their idea, her explanation for this outrageous behavior. Lines (o)-(r) are the coda of a paragraph that started a few clauses before the presented lines. Line (r) closes the paragraph with a final intonation.

(30) SL_G2_AL3

- (a) *īsliedzam* † televizoru switch_on.PRS.3 televison.ACC.SG 'we switched the ty on'
- (b) jei pasnīdz kļockys, 3.NOM.SG.F offer.PRS.3 kļocka.ACC.PL 'she is passing around kļockys'
- (c) (0.7)
- (d) <<slowly> i ruoda (0.3) tože r \bar{u} ku slauceišonu> and show.PRS.3 also hand.GEN.PL wipe.ACN.ACC.SG 'and demonstrates also the hand wiping'
- (e) (0.6)
- (f) saprūtit=

understand.PRS.2PL 'you see'

- (g) mes piļneigi bejom šokā.

 1PL.NOM completely be.PST.3 shock.LOC.SG
 'we were totally shocked'
- (h) (1.6)
- (i) kļockys cap vysa Latgale, kļocka.ACC.PL fry.PRS.3 all.NOM.SG.F Latgalia.NOM.SG 'kļockys are cooked everywhere in Latgalia'
- (j) *lai jei cap* PTC 3.NOM.SG.F fry.PRS.3 'she is free to do it'
- (k) (0.7)
- (1) bet navajag atkuortuot (0.5) $\uparrow nu \downarrow$ (1.0) but NEG.need.PRS.3 repeat.INF PTC 'but one must not repeat, well'
- (m)<<sli>lightly laughing> rituālus saprūtit>, ritual.ACC.PL understand.PRS.2PL

'the rituals, you see'

(n) (0.5)

- (o) <<fast> $par t\bar{u} ka$ jei $to\check{z}e$ beja $\uparrow c\bar{\imath}m\bar{a}=$ PARTŪ KA 3.NOM.SG.F also be.PST.3 village.LOC.SG 'because she had also been a guest in our village'
- (p) nūsaviera>—

PVB.RFL.see.PST.3

'she had seen (the hand swiping)'

- (q) *i vīnkuorši nu nabeja sovys †idejis* and simply PTC NEG.be.PST.3 RPOSS.GEN.SG.F idea.GEN.SG 'and she simply had no idea of her own'
- (r) *i jei* ↑*aizguoja*. and 3.NOM.SG.F PVB.go.PST.3 'and she went along'

Thus, the complex causal connectives have text-structuring functions which I did not observe with the simple connectives. Another causal connective with such functions is *tai kai* 'since', which in my sample is used only by one speaker. In one of the tokens a clause with this connective follows the statement 'I did not at once know what profession to choose' and introduces a paragraph which gives the reasons why the speaker had become a teacher. The structure is very similar to that in example (29) above.

The last causal connective on my list, *par cik*, is likewise used only by one speaker. Its scope is local: it combines clauses. In one token the adverbial clause precedes the main clause and presents a known fact ('**since** our pharmacy was in the neighborhood') as the cause of another fact ('my parents were friendly with them'). In the remaining three tokens the adverbial clause follows the main clause.

Concessive connectives are not frequent in my sample and, as the table below shows, are mainly produced by only one speaker. They are mostly complex, consisting of a simple connective/particle (*lai* or *kaut*) and a particle (*gon*, *i*, *jou*). The particles *i* and *gon* are additive focus particles, which are frequently found as a source for concessive connectives in many languages (König 2006: 822). One speaker uses also simple *lai* in a concessive clause. Three connectives have exact parallels in Standard Latvian (Latvian *lai gan*, *lai arī*, *kaut gan* 'although'), and it is possible that their use by these speakers is influenced by a Standard Latvian model. It seems that all connectives in the table may express both concessive relations ('although') and concessive conditional relations ('even if'). These two functions are often blurred (König, E, 2006). The semantic profile of individual connectives requires more research on a larger sample.

TC 11 0	a			11.1
Table X	Connectives in	concessive and	concessive of	conditional clauses

	EL		NL				SL			
	JK	VG	SD	FA	AL	AL2	VP	DP	FS	AL3
	G2	G2	G1	G1	G2	G2	G1	G2	G1	G2
'although', 'even if'										
kaut gon		3		1						
lai gon	1	1						1		
lai i		1		1						
lai jou		1								
lai				2						

In one instance, *kaut gon* has a text-structuring function such as we have seen above with the causal connectives *partū ka* and *tai kai*. The speaker starts a paragraph about language use among Latgalians by stating that they had always used Latgalian among themselves. This statement is then rectified in a stretch of speech consisting of 21 lines in my transcription, starting with *kaut gon* (stressed, followed by a pause) and closing with the statement 'we spoke Latvian (in public)'. In this context, *kaut gon* is best translated as 'however'. In the other instances, the connective has a more local scope, that is, it combines clauses.

All adverbial clauses with these connectives precede the clause or sequence to which they relate. What is interesting: in 9 of the 12 examples in my sample the following clause contains the connective *bet* 'but', one time the concessive clause is followed by a clause containing *taipat* 'anyhow', and in only two instances (one with *lai gon* and one with *lai i*) there is no corresponding word in the following text. Example (31) shows both *bet* 'but' and taipat 'anyhow' in the main clause correlating with *kaut gon* 'although' in the modifying clause.

- (31) EL_G2_VG; context: the speaker speaks very positively about people she had encountered and refers to them as 'these Latgalian people'
 - (a) *nu* **kaut gon** *dzeivoj jau tagad REI:gā*,

 PTC KAUT GON live.PRS.3 PTC now Riga.LOC.SG
 'well although/even if they are now living in Riga'
 - (b) **bet** saknes **taipat** LATgalī but root.NOM.PL anyhow Latgalia.LOC.SG **'but** their roots are in Latgalia **anyhow**'
 - (c) *jā*:.

 yes 'yes'

The typical construction for concessive and concessive conditional relations is thus correlative: $kaut\ go\ (etc.)\ ...\ -bet\ ...$ Correlative constructions are also used for other relations – and I will turn to these construction in the following section –, but the proportion is not as high and the correlative words are not coordinators.

3.4 Correlative constructions and lexical markers in the main clause

Besides connectives in the adverbial clause, another common way to indicate the semantic relation between two clauses (or other parts of a text) in many languages is the use of adverbs or prepositional phrases such as English *then, later, thus, at that time, for this reason, in spite of this*, etc. Some languages also use particles for linking clauses, which are semantically less specific, for example German *doch, ja*, and many others.

In my corpus, adverbs with specific semantic content are found mostly with temporal meaning: $t\bar{u}laik$ or $t\bar{u}reiz$ 'then, at that time' < 'that time (ACC)', tiuleit 'at once', tod 'then'. The last one (tod or tad 'then') also appears in conditional constructions. Causal relations can be marked by the phrases par $t\bar{u}$ and del duo (diel tuo) 'for that' that are sometimes used as adverbials (more frequently they appear as part of the complex connectives discussed in the previous section). An adverb indicating concession is taipat 'anyhow' (see example 31 above). It is easy to see that all these expressions contain the pronominal (demonstrative) root t-, which is also found in the particles ta, to, tak, tok (see below for translations in context).

I am here mostly interested in adverbs and particles that correlate to one of the most frequent, polysemous simple connectives (*ka* and *kai*).

Example (32) shows the adverb $t\bar{u}laik$ 'then' as the only marker of the temporal relation, while in example (33) the same adverb correlates with the simple connective ka (here in the meaning WHEN2).

- (32) NL_G2_AL2, about working at the farm as children
 - (a) ym sovu dorbu izdaream,
 HES RPOSS.ACC.SG work.ACC.SG PVB.do.PST.1PL
 'we finished our work'
 - (b) *tūlaik* otkol tyka yy skraidēšona then again happen.PST.3 HES run_around.ACN.NOM.SG **'then** we ran around again' (literally: 'running around happened')
- (33) EL_G1_VG, context: granny had peppermint drops which the child liked very much, but granny did not give them to her normally; granny said:
 - (a) *nu* **ka** *kuoss tev* ↑*īs*—

 PTC KA cough.NOM.SG 2SG.DAT go.FUT.3

 'well, **when** you will have a cough'
 - (b) *tūlaik* tu *†vari* $t\bar{u}s$ ka- tūs then 2sg.nom can.PRS.2SG PTC DEM.ACC.PL.M DEM.ACC.PL.M kampetes tuos numani paprasēt. DEM.ACC.PL.F candy.ACC.PL from 1SG.ACC PVB.ask.INF 'then you may ask me for these candies'

In constructions with temporal as well as conditional and causal relations, the particles ta or to and, less often, tok or tak are used²⁴. These particles seem to be semantically empty in these constructions (in other constructions, without a modifying clause, tok/tak can have adversative meaning). They most often appear together with a correlating connective, but may also be used as the sole marker of a relation. In the following example, the speaker produces a pair of two conditional constructions. In the first one, the clauses are linked by the particle ta in the main clause, while the second time he uses the adverbial subordinator ka in the conditional clause.

- (34) NL_G2_AL2, context: the interviewer asked how far the way to the speaker's first school was. The answer (one or two kilometers) is elaborated in the following way.
 - (a) guojam mes pa TAISnū, go.PST.1PL 1PL.NOM PREP straight.ACC.SG 'we went straight'
 - (b) ta bej pusŪTRA kilametra—
 TO be.PST.3 one_and_a_half kilometer.GEN.SG

 'then it was one and a half kilometers'
 - (c) (0.60)

(d) a **ka** guojam pa apkuort, but KA go.PST.1PL PREP around 'but **if** we went around'

²⁴ It is not yet clear to me whether ta and to as well as tak and tok are purely phonetic variants of the same particle or whether there is a difference in use. In this paper I treat them as variants. Furthermore, it is possible that in some occurrences one or both of the first pair (ta/to) are reduced variants of tad/tod.

(e) *kuodi diveji drusciņ vairuok.* some.NOM.PL.M two.NOM.PL.M a_bit more 'about two, a bit more'

Clause (a) in example (34) shows a marked word order (inversion of subject and verb). However, this is the only example I ever found where inversion is used in clause combining and I doubt that it is a conventional indicator of a conditional clause. Note that Latgalian, other than what we find in English or German, does not use inversion in questions.

As noted above, the particles most often appear as correlates of a connective in the adverbial clause. The two clauses are often adjacent. The adverbial clause comes first and ends most often either with level or slightly rising intonation²⁵, while the main clause often ends with a falling intonation, signaling the end of the whole construction. The following examples shows this pattern; for another structurally similar clause complex see ex. (12) above. There is a short pause after the ka-clause and an afterthought after the correlating main clause. In example (35), the main clause has two markers: the particle ta is a semantically empty connective, while the adverb $t\bar{u}laik$ 'then' spells out the semantic relation (WHEN2).

- (35) NL_G2_AL2; context: where we played ice hockey as children
 - (a) a **ka** Uobeļovas azars nūsola kuo spīdžeļs—but KA Uobeļova.GEN lake PVB.freeze.PST.3 as mirror 'but **when** Uobelova's lake froze (as flat) as a mirror'
 - (b) (0.4)
 - (c) ta tūlaik spieļoam iz azara;

 TA then play.PST.1PL on lake.GEN.SG

 'then we played on the lake'
 - (d) *ka nabea viļnens*;

 KA NEG.be.PST.3 wawe.ADJ.NOM.SG.M 'when/if there were no wayes'

The above is a good example of a clause complex marked by prosodic and lexical means. It starts with the discourse particle a 'but', which typically appears at the beginning of clause complexes. The initial clause in line (a) opens a conditional construction and ends with level intonation, which is common for an initial modifying clause. The hearer thus knows that the turn will continue, despite the following short pause. The clause in line (c) completes the construction. The initial particle ta marks it as the second part of the construction, and the slightly falling intonation contour signals a possible end of the clause complex. The clause in line (d) is an afterthought; it paraphrases the first conditional clause in (a). Paraphrases or literal repetitions of initial clauses or their parts are often found at the end of a clause complex, thus "rounding up" the thought.

The following table lists common combinations of simple connectives in the adverbial clause with correlating particles and adverbs. Other combinations occurring only once in my sample are $kam\bar{e}r - tikm\bar{e}r$ 'as long as' and jesli - tod 'if – then'.

²⁵ The slightly rising "comma" intonation seems to be used more often for modifying clauses in constructions with a correlative element such as *ta* in the modified clause. More data are necessary to prove whether this intonation contour is a regular part of the pattern.

Table 9. Correlative construction

first component: simple connective with the root k - (adverbial clause)	second component: adverb or particle with the root <i>t</i> - (main clause)
ka 'when', 'if', 'as'	to (ta) PARTICLE
	tak, tok PARTICLE
	tod (tad) 'then'
	tūreiz, tūlaik 'at that time'
kai (kei, kuo, kā) 'when', 'as', 'as soon as'	tai (tuo, tā) 'such'
	tiuleit 'at once'
kod 'when'	tod 'then'

Correlative articles differ from adverbs in this list not only by being semantically empty, but also by having a fixed position at the beginning of the clause, while adverbs may appear later. The adverb *tod* 'then' often behaves as a particle and may be characterized as somehow half-way between adverb and particle.

The combination kai - tai often indicates a relation of immediate anteriority. The meaning of immediateness may be enforced by the adverb *tiuleit* 'at once' in the main clause.

(36) EL_G2_VL

- (a) *kai* suoksi latgaliski runot, KAI start.FUT.2SG Latgalian speak.INF 'as you start speaking Latgalian'
- (b) tai jau tyuleit tev pīvierš uzmaneibu.

 TAI PTC at.once 2SG.DAT turn.PRS.3 attention.ACC.SG literally: 'so they turn at once their attention to you' 'as soon as you start speaking Latgalian / you draw attention upon yourself'

Though there are also instances where the sequence of actions is not immediate, the meaning of immediate anteriority is conventionalized to a high degree. The construction may further imply (by pragmatic inference, i.e. as a conversational implicature) a causal relation. The following example shows that speakers are aware of this implication. The speaker relates the story of her first name: it was given to her in honor of her mother's sister, who had been deported to Siberia. Shortly after the girl was christened, the aunt returned from Siberia. The choice of the name may thus be seen as a cause for the return, but the speaker's laughter, which sets in after the word tai, questions the implication. The speaker probably does not believe in such a magical causal relation, or at least does not fully support it and does not require the listener to believe in it.

(37) EL_G1_VG

- (a) nu VOT;
 PTC PTC 'well'
- (b) (0.7)
- (c) *i* tod muna muote=
 and then my.NOM.SG.F mother.NOM.SG
 'and then my mother'
- (d) =kai mani ↑nūsauce as 1SG.ACC PVB.call.PST.3 'as (soon as) she had given me the name'

```
(e) tai << laughing> izaruodīs
so PVB.RFL.appear.PST?.3.RFL
piec puors mienešīm īzaroduos>
after couple month.DAT.PL PVB.RFL.appear.PST.3.RFL
```

'a few months later (it) appeared'

(f) yyy atbrauce (0.7 (breath intake)) itei tante;
HES PVB.travel.PST.3 DEM.NOM.SG.F aunt.NOM.SG
'this aunt came back'

(g) *a taipat vysi atbrauce* and just_as_well all.NOM.PL.M PVB.travel.PST.3 *sveiki vasaly nu Sibīrejis*= safe.NOM.PL.M whole.NOM.PL.M from Siberia.GEN.SG

'and just as well all (other mother's relatives) came back from Siberia safe and sound'

(h) =acagrīzēs iz Latveji.

PVB.RFL.turn.PST.3.RFL to Latvia.ACC.SG '(they) returned to Latvia'

A causal meaning of the construction with kai - tai arises through implication and is not part of the lexical meaning of the correlative connective²⁶. As a conversational implicature, the causal interpretation of kai - tai can be cancelled, which distinguishes it from markers such as jo and $part\bar{u}$ ka 'because', where the causal meaning is lexicalized. However, the implication is very common and may become conventionalized.

With the correlation ka - ta the situation is different. While kai - tai has a core meaning (Immediate anteriority) on which inferences may be based, it is more difficult to find such a core meaning for the combination or the individual elements of ka - ta. As we have seen above, the connective ka may introduce temporal, conditional and causal adverbial clauses, as well as others, such as result or purpose, which are not considered in this paper. What ka and ka - ta seem to express is simply the cooccurrence of two situations. Without other cues, the default interpretation of a cooccurrence is temporal, encompassing several finer grained possibilities: two events or situations occur at the same time, or their time spans overlap, or the events follow each other. The correlative particle ta (to) strengthens the link between the two clauses, but it does not make the semantic relation more specific. An interpretation of the relation as causal instead of merely temporal is possible, if it fits with general knowledge about causes and consequences. Consider the following example, where lines (e) and (g) are correlated by ka - to and a causal interpretation is straightforward.

(38) SL_G1_VP; context: the speaker's son asked the speaker to tell the interviewer about the decoration he once was supposed to receive

(a) es nu 1SG.NOM PTC 'well I'

(b) symtu desmit procentu goda plāns
100 10 percent.GEN.PL year.GEN.SG plan.NOM.SG
beja man izpiļdeits.
be.PST.3 1SG.DAT PVB.fill.PST.PP.NOM.SG.M
'I had the annual plan fulfilled by 110 percent'

 26 Ambrazas et al. (2006: 741) argue similarly for the Lithuanian combination $\mathit{kai-tai}.$

- (c) ta man tur gribieja medali īdūt

 TA 1SG.DAT there want.PST.3 medal.ACC.SG PVB.give.INF

 ci ordeni—

 or decoration.ACC.SG

 'so they wanted to give me a medal or a decoration'
- (d) (0.75)
- (e) a ka es partejī nasarakstejūs, but KA 1SG.NOM party.LOC.SG NEG.RFL.write.PST.3.RFL 'but as I didn't join the party'
- (f) ((intonation unit of two unintelligible syllables))
- (g) to man medali tū naīdeve.

 TO 1SG.DAT medal.ACC.SG DEM.ACC.SG NEG.PVB.give.PST.3

 'they didn't give me the medal'

As this is the only example in my corpus where a pair of clauses linked with ka - to expresses a causal relation, I cannot say which factors favor the causal use (by the speaker) and interpretation (by the hearer) of this construction. In the example at hand the fact that the predicates of both clauses are negated may play a role, as it is impossible to establish a purely temporal relation between single events that do not happen.

Example (38) contains also an incident of the particle *ta* as the only lexical marker of a relation (line b). The clause in this line is in a causal relation to the clause in (a): the fulfilling of the plan is the reason for the planned decoration. Both clauses are presented as main clauses and they are not integrated by prosody. Line (b) ends with a falling intonation, thus not signaling a continuation. While the pair (a-b) can be regarded as a kind of clause combining, (a) does not qualify as an adverbial clause.

4. Conclusions

The goal of this paper was to explore how clauses are combined in spontaneous spoken Latgalian and how temporal, conditional, causal, and concessive relations between clauses are marked. My investigation was based on ten interviews with middle-aged and elder speakers from different parts of Latgalia with a total recording time of five hours. This small corpus proved to be large enough to give a differentiated picture of the most frequent constructions and also provide some examples of less frequent constructions. The following techniques were analyzed in Section 3:

- T1. asyndetic clause combining with converbs (examples 2, 3, 4);
- T2. asyndetic clause combining with past participles (examples 1, 5, 6);
- T3. asyndetic clause combining with finite verbs (examples 8, 9);
- T4. adverbial clauses with subordinators, which may be morphologically simple or complex (among others, examples 10, 11, 15, 27);
- T5. adverbs and particles as connectives in the modified clause (examples 32, 34, 39);
- T6. correlative constructions, where both modifying and modified clause are marked with a connective (among others, examples 12, 13, 33, 39).

Most often the relation between the two clauses was temporal. More precisely, it corresponded to one of the following relations from Kortmann's (1997) list: Simultaneity Overlap ('when'), Contingency ('whenever'), Anteriority ('after'), Immediate Anteriority ('as

soon as'). This is partly due to my corpus: main topics of the interviews were reminiscences of the speaker's life and the description of past and present traditions. It may however also reflect a general trend: temporal relations between situations are probably more basic then others. They can be expressed by all of the mentioned techniques. Simultaneity Overlap and Contingency are marked by converbs, simple subordinators, adverbs, particles and correlative constructions. Immediate Anteriority has the same possibilities except for converbs. Anteriority is mostly marked by verbforms: the use of the past active participle in the modifying clause and simple past tense in the modified clause. It can also be marked by the adverbial expression $p\bar{e}c$ tam 'after that'. This expression may be combined with the simple subordinator ka to form a complex subordinator $p\bar{e}c$ tam ka 'after'. However, in my corpus this combination is not fully lexicalized (see examples 18-20 in section 3.3).

More specific temporal relations are (in the terminology of Kortmann 1997) Simultaneity Co-Extensiveness ('as long as') and Terminus ad quem ('until'). They are both expressed by the same connective, in my corpus either *cikom* or *kamer*. Together with negation, this connective also signals Posteriority ('before' = 'until/as long as not'). Simultaneity Duration ('while') can also be marked with *cikom* or *kamer*, but this relation is also contained in the range of temporal meanings expressed by *ka* 'when'.

Conditional relations often contain a simple subordinator 'if' (mostly ka, more rarely ja or jesli). They may have a correlating particle (tod/tad or ta 'then'), but this seems to be less frequent then with temporal clauses. Conditional relations may also be explicit without a lexical marker. The main cue in all constructions seems to be tense or mood: future and imperative are associated with real conditions, while irrealis signals imaginative conditionals. Conditional meaning arises in the combination of two clauses with appropriate tense/mood marking. As the main subordinator ka marks 'if' as well as 'when', an adverbial clause with this marker is often ambiguous between temporal and conditional meaning, and only when paired with another clause the meaning becomes apparent through the constellation of tense forms in both clauses.

Temporal and conditional clauses may precede or follow the clause they modify. In contrast, clauses with a dedicated causal connective (that is, other than the polysemous ka) always follow the main clause. Related to this is the lack of correlative constructions with the simple connective jo 'because, for'; in correlative constructions of the type ka - ta etc. the subordinate clause always precedes the main clause. On the other hand, the phrases $par t\bar{u}$ and delto 'for that' (= 'therefore'), which are potential correlates to the subordinator ka in causal meaning, have already formed stable combinations with this subordinator ($part\bar{u}$ ka and delto ka), which are used as complex connectives with the meaning 'because'. These combinations are much more lexicalized than the formally similar temporal expression $p\bar{e}c$ tam ka 'after'.

Causal clauses with the simple connective *jo* 'because, for' have what I called "local scope": they relate to a preceding clause. Complex causal connectives often have a wider scope and text-structuring functions: they may connect not only clauses, but also clause complexes or paragraphs (shown in example 29); they may open new topics (discussed with example 28) or offer an explanation of a described situation with the speaker's evaluation (example 30). This observation (wider scope for longer connectives, narrower scope for short connectives) is reminiscent of Lehmann's remark that "the explicitness of the linking device is adjusted to the size of the entities linked" (Lehmann 1988: 211), though the author had something else in mind. Semantically *jo* and *partū ka* are equally explicit.

Concession ('although') and Concessive Condition ('even if') are marked less often in an adverbial clause. The most common means to express a contrast is by the coordinative conjunction *bet* 'but'. This conjunction was also found in 9 of 12 constructions where the modifying clause contained a concessive connective. Only four out of eleven speakers produced such connectives (of which two produced it only once), and the variety of concessive connectives is greater than with other semantic relations. A concessive subordinator may also have textual scope and be roughly equivalent to the English adverb *however*.

My findings fully confirm Diessel's remark that "adverbial clauses constitute a very heterogenous class" (Diessel, Holger, 2013). As the above summary shows, temporal, conditional, causal and concessive constructions all have their specific grammatical characteristics. Furthermore, while I started with Hetterle's (2015) semantically based definition, not all the structures discussed in Section 3 meet her criterion and "explicitly express a particular conceptual-semantic concept" (Hetterle 2015: 2.3.2). The range of interclausal semantic relations in constructions with the subordinator ka is so large that this word seems to be semantically vague rather than polysemous. As the same word is also used as a complementizer, it may well be called a universal subordinator (it is however not used in relative clauses). The difference between complement clauses and adverbial clauses, then, is not marked by different kinds of subordinators (semantically specific for adverbial clauses vs. semantically empty for complement clauses). Complement clauses are nevertheless easy to distinguish by the presence of a complement taking predicate. I also noted prosodic differences between constructions with ka as complementizer and as adverbial subordinator, which certainly deserve more detailed research.

The interpretation of clauses with *ka* relies on various lexical, grammatical, and prosodic cues. In this these constructions are similar to the mere juxtaposition of two independent clauses, whose relation may also be temporal, conditional, causal, etc. The connective *ka* indicates that clauses are linked, but leaves open the question of their semantic relation. This means that either the definition of adverbial clauses cannot rely on semantic explicitness, or we need another category of subordinate clauses besides adverbial and complement clauses. However, in my corpus these clauses show the same behavior as adverbial clauses with a semantically more specific subordinator: they can appear in various positions in relation to the main clause, and when preposed, arguments can be extracted and topicalized and the main clause may be marked with a correlating particle or adverb.

Prosodic marking in different types of clause combining in Latgalian needs further, detailed research. I observed that preposed adverbial clauses with finite verbs most often end in level intonation. In contrast, a slightly rising contour (comma intonation) seems to be common in coordination, with or without the coordinating particle *i* (for example, in 14). Comma intonation is also used in constructions where only the second clause has a lexical connective (adverb or particle, for example, ex. 32). Correlative constructions combine a preposed adverbial clause with a lexically marked main clause, and here both level and comma intonation are found in my sample. This may be an argument for the thesis that these constructions are in between subordination and coordination, but I am aware that my findings are very preliminary and much more research is needed.

This research is one of the very first studies on the grammar of spontaneous speech in a Baltic language. It has convinced myself, and hopefully will convince the reader, that this grammar

is indeed intricate and worth investigation not only from the point of view of interaction in conversations (which is also a still unexplored field in Baltic linguistics), but also by linguists who are primarily interested in syntactic structures of languages.

Transcription symbols (based on conventions of GAT 2, Selting et al. 2009)

Line.	Final pitch falling to low	↑Word noticeable step up in pitch
Line!	Final pitch falling from high to low	↓Word noticeable step down in pitch
Line;	Final pitch falling slightly	yy filler, hesitation sound, vocalic
Line—	Final level pitch	m filler, hesitation sound, nasal
Line,	Final pitch rising slightly	SYLLAble emphasis
Line?	Final pitch rising to high	((comment)), ((non-verbal sounds))
Line=	latching	< <manner> text></manner>
(0.5)	measured pause	

Abbreviations in the glosses

ACC – accusative, ACN – action noun, ADJ – adjective (derivational suffix), CAUS – causative, COMP – comparative, COPTC – correlative particle, CVB – converb, DAT – dative, DEM – demonstrative, DIM – diminutive, FUT – future, GEN – genitive, HES – hesitation, INF – infinitive, IRR – irrealis (subjunctive, conditional), LOC – locative, M – masculine, NEG – negation, NOM – nominative, PA – active participle, PL – plural, PP – passive participle, PREP – preposition, PRS – present tense, PST – past, PTC – particle, PVB – preverb, RFL – reflexive, RPOSS – reflexive possessive pronoun, SG – singular

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