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## Adverbial Clauses

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### Abstract

Adverbial clauses are known from traditional grammar as one of three major classes of subordinate clauses. They are semantically diverse and structurally complex. In addition to modifying main clauses, adverbial clauses can also contribute to discourse cohesion. In light of recent cross-linguistic research, this article discusses adverbial clauses with regard to their structure and distribution, meanings, functions in discourse, and structural properties influencing their interpretation.

### Key words

adverbial clause; adverbial subordinator; cohesion; discourse; main clause; ordering; pragmatic function; semantic relation; speech act; typology

Adverbial clauses are known from traditional grammar as one of three major classes of subordinate clauses (the other two being relative and complement clauses). Their major function is that of an adverbial, i.e. they provide information on the (temporal, locative, causal, conditional, etc.) circumstances under which the events depicted in the main clauses take place. Correspondingly, the adverbial clauses in (1) are called temporal, locative, causal, and conditional clauses, respectively.

- (1) They will meet ...
- (a) before the sun rises.
  - (b) where they first made love to each other.
  - (c) because they need to find a solution.
  - (d) if we let them.

Given the large spectrum of possible circumstances, adverbial clauses represent the most semantically diverse class of subordinate clauses as well as the most challenging class for

interpretation. Also given their subject-predicate structure, adverbial clauses are formally the most complex type of adverbials compared with adverbs (e.g., *soon, here, quickly*) and adverb phrases (e.g., *on Sunday, in the garden, very quickly*). Combining with a sentence frame like ‘They will meet ...’ in (1), adverbial clauses yield a complex sentence, whereas adverbs and adverbial phrases still yield a simple(x) sentence. Beyond the complex sentence of which they form a part, adverbial clauses have a crucial function in the creation of a coherent discourse and are thus a prominent feature of texts. It seems that adverbial clauses can be found in all languages of the world even though they are not marked in the same way (Thompson and Longacre, 1985). In light of recent cross-linguistic research, this article discusses adverbial clauses with regard to their structure and distribution (Sect. 1), meanings (Sect. 2), functions in discourse (Sect. 3), and structural properties influencing their interpretation (Sect. 4).

## 1. The Structure and Distribution of Adverbial Clauses

### 1.1 The Structure of Adverbial Clauses

Adverbial clauses are subordinate clauses in the sense that their occurrence usually depends on the main clause. However, not all languages mark the distinction between dependent and independent clauses in the same way. Here are the devices that are commonly found among languages: (i) adverbial subordinators, either in the form of separate words such as *before* and *where* in English (1) or verbal suffixes as in Kiowa (a language in central United States) (2); (ii) special verb forms such as infinitives and participles as in English and Latin (3); (iii) special word order as in German where independent clauses usually uses verb-second word order whereas subordinate clauses usually use verb-final word order (4) (Dryer, 2011; Thompson et al., 2007).

(2) à-dè·k’ó·-àl      hón    àn      à-dè·hè·m-ô  
 1SG-lie-although NEG HAB 1SG-sleep-NEG  
 ‘Although I lie down, I can’t fall asleep.’ (Dryer, 2011 from Watkins, 1984: 242)

(3) Inflating her lungs, Fiona screamed.

(4) Wir wohn-ten auf dem Lande, wie ich dir schon gesagt habe  
 we live-PAST on ART(DAT) land as I you already told have(SG)  
 ‘We lived in the country, as I have already told you.’ (Thompson et al., 2007: 239)

Adverbial clauses may also be expressed in verbless form, as the English example in (5). Such clauses typically do not specify in which way (temporally, causally, conditionally, etc.) they modify the state of affairs described in the main clause, and thus are much more challenging for interpretation than most prototypical adverbial clauses.

(5) Alone in his room, she switched on the light.

Subordinators in the form of separate words (such as *that* and *if* in English) are the most commonly way to mark adverbial clauses (Dryer, 2011). Yet the presence of a subordinator does not guarantee that the relevant subordinate clause can be classified as an adverbial clause, or a relative or complement clause. As illustrated in (6), the word *that* is used as an adverbial subordinator in (6a), but a complementizer in (6b) and a relativizer in (6c):

- (6) (a) He talked so fast that most people couldn't follow.  
(b) He said that most people couldn't follow.  
(c) The talk that most people couldn't follow was given by a colleague of mine.

The sentences in (6) show that even in individual languages there may exist no formal differences between the three major types of subordinate clause. Rather, we need to refer to their function to determine the type: an adverbial clause is a modifier of the main clause and thus optional; a relative clause is a modifier of a noun (phrase) and thus optional; a complement clause is the core argument of a predicate and thus not omissible (Diessel, 2001).

Even though, a clear-cut classification may still be impossible or depend on one's point of view. The subordinate clauses in example (7) are sometimes called *adverbial relative clauses* since they "can be paraphrased with a relative clause with a generic and relatively semantically empty head noun" (Thompson et al., 2007: 245); in other words, *when*, *where*, and *as* in (7) can be analyzed as relative adverbs rather than adverbial subordinators, and replaced by *at the time*, *at the place*, and *in the way* respectively. As a matter of fact, it is not difficult to find languages where in particular adverbial clauses of Time, Place, and Manner resemble and share properties with relative clauses (Kortmann, 1997; Diessel, 2001; Thompson et al., 2007).

- (7) (a) She'll leave when John comes.  
(b) I forgot the bag where we met last time.  
(c) He wrote as his teacher taught him.

## 1.2 The Distribution of Adverbial Coordinators

Adverbial subordinators, by which adverbial clauses are morphologically marked, have two major forms: separate words and verbal suffixes. According to the investigation of 660 languages by Dryer (2011), adverbial subordinators in the form of separate words have three possible positions in a clause, at the beginning as in English, at the end as in Kombai (a Trans-New Guinea language in Indonesia), or inside the clause (e.g., between the subject and the verb) as in Nkore-Kiga (a Bantu language in Uganda); adverbial subordinators in the form of verbal suffixes are mostly found in verb-final languages, so the suffixes are also at the end of the clause (in such cases, the adverbial clause usually precedes the main clause, so that the suffix subordinator is not sentence-final (see Sect. 1.3).

The number of languages whose adverbial clauses are marked by separate words is much larger than those by verbal suffixes; among the former, the number of languages with clause-initial adverbial subordinators is about four times larger than those with clause-final and clause-internal subordinators (Dryer, 2011). There are also languages with more than one type of subordinators and none of them is the dominant; for instance, the adverbial subordinators in Epena Pedee, a Choco language in Colombia, are found both in words (in clause-final position) and verbal suffixes (Dryer, 2011). However, no language is found yet where its adverbial clauses are marked by verbal prefix.

## 1.3 The Ordering of Adverbial Clauses and Main Clauses

Adverbial clauses either precede or follow the main clauses, and are referred respectively as preposed (or initial) and postposed (or final) adverbial clauses. Studies found that preposed adverbial clauses tend to occur in strong OV languages, so that the sentence ends with the main clause; VO languages and a small number of OV languages are found with both pre- and postposed adverbial clauses (Diessel, 2001, 2013). The ordering of the adverbial and main clauses also correlates with the position of the adverbial subordinators described in Sect. 1.2: languages with both pre- and postposed adverbial clauses tend to have clause-initial subordinators, whereas languages with preposed adverbial clauses only tend to have clause-final subordinators (Diessel, 2001; Thompson et al., 2007). For the former type, studies show that the ordering of the adverbial clauses varies according to their semantic relations with the main clauses: conditional clauses tend to be preposed, temporal clauses exhibit a mixed tendency of both pre- and postposing, whereas causal and purposive clauses are often found to follow the main clause (Diessel, 2001, 2008, 2013; Diessel and Hetterle, 2011; Schmidtke-Bode, 2009). Pre- and postposed adverbial clauses also tend to have different pragmatic functions in discourse (see details in Sect. 3).

The relations of pre- and postposed adverbial clauses to the main clauses are not the same either. For example in interrogative questions, the information carried in a postposed adverbial clause is usually included in the question, but that in a preposed one is usually not (Diessel, 2013). As illustrated in (8), the postposed adverbial clause *while she was still in her office* in (a) can be understood as the focus of the question, that is, whether this is the time when “you” talked to “her,” but the preposed clause in (b) is not necessarily an “integral semantic component” of the main clause (Diessel, 2013: 348).

- (8) a. Did you talk to her while she was still in her office?  
 b. While she was still in her office, did you talk to her? (Diessel, 2013: 348)

In terms of intonation, postposed adverbial clauses are found relatively more separated from the main clause, i.e. an intonation break may be found in between the two clauses (also see Sect. 4 for exceptions); on the contrary, preposed adverbial clauses are usually intonationally bound to the main clause (cf. Ford, 1993).

## 2. Semantic Types of Adverbial Clause

Traditionally, adverbial clauses are classified according to the semantic relations of the events depicted in different parts of a complex sentence or different chunks of discourse. The exact number and labeling of these semantic relations vary. All languages are reported to use the adverbial clauses (or a subset of the relations) listed in (9) (cf. Kortman, 1997; Givón, 1990; Thompson et al., 2007); other relations found in all European languages include Instrument/Means ‘by,’ Degree/Extent ‘insofar as,’ Exception/Restriction ‘except/only that,’ (Negative) Concomitance ‘with(out)’ (Kortmann, 1997).

- (9) Time (Simultaneity Overlap/Duration/Co-Extensiveness ‘when/while/as long as,’ Anteriority ‘after,’ Immediate Anteriority ‘as soon as,’ Terminus ‘since,’ Posteriority ‘before,’ Terminus ‘until,’ Contingency ‘whenever’);  
 Place ‘where’;

Manner ‘as, how’;  
 Cause/Reason ‘because’;  
 Purpose (Purpose ‘in order that,’ Negative Purpose ‘lest’);  
 Result ‘so that’;  
 Condition (Condition ‘if,’ Negative Condition ‘unless,’ Concessive Condition ‘even if’);  
 Concession ‘although’;  
 Contrast ‘whereas’;  
 Addition ‘in addition to’;  
 Substitution ‘instead of, rather than’;  
 Similarity ‘as, like’

One would assume that not all of these semantic relations are equally central to human cognition. Indeed there is evidence suggesting roughly a dozen cognitively most central relations, including Simultaneity (Overlap ‘when,’ Duration ‘while’), Place (‘where’), Similarity (‘as’), Cause, Condition, and Concession (Kortmann, 1997). For example, the latter three relations are found in all the European languages that mainly use finite adverbial clauses and these three also have the largest number of adverbial subordinators in the European languages. Moreover, the adverbial subordinators marking the core relations tend to be more reduced morphologically, much more frequently used, and older than those marking the peripheral relations (Kortmann, 1997).

Simultaneity and Cause also figure prominently in a large-scale semantic analysis of nonfinite adverbial clauses. In addition, nonfinite adverbial clauses are frequently interpreted in the sense of Addition/Concomitance (‘and at the same time’), as in (10), and Exemplification/Specification (‘e.g., i.e., in that, more exactly’), as in (11).

(10) (a) There he sat, wearing a white golfing cap.

(b) Sam threw himself to the ground, dragging Frodo with him.

(11) (a) Shares in Midland were worst hit, falling at one time 42p.

(b) He paid the closest attention to everything Lenny said, nodding, congratulating, making all the right expressions for him.

Therefore, not all semantic relations are equally important in different structural types of adverbial clauses. Likewise, their relative importance as coherence relations depends on the type of discourse. For instance, Cause, Condition, and Concession play a much more important role in academic writing than they do in narrative fiction, where temporal relations as well as, for nonfinite adverbial clauses, Addition/Concomitance and Exemplification/Specification account for a much higher number of adverbial clauses (see Kortmann (1991) for statistics and a discussion of relevant literature).

### **3. Functions of Adverbial Clauses in Discourse**

Typically adverbial clauses provide background information for what is depicted in the main clause. But they serve additional functions beyond sentence level, contributing cohesion by linking sentences, paragraphs, or even the whole discourse. In interactive communication, adverbial clauses can also modify the speech act of the speaker, rather than the main clause.

### 3.1 The Functions of Adverbial Clauses Beyond Sentence

Adverbial clauses help create coherent discourse (Chafe, 1984; Thompson, 1985; Givón, 1990; Ford, 1993; Couper-Kuhlen and Kortmann, 2000; Thompson et al., 2007; Diessel, 2013). Depending on whether they precede or follow their main clause, adverbial clauses produce more global (or textual) coherence or more local coherence, respectively. Preposed adverbial clauses serve a kind of guidepost or scene-setting function for the reader or listener by (i) linking back to what has gone in the (not necessarily immediately) preceding sentence, paragraph, or discourse, and (ii) preparing the background for what is going to follow in the complex sentence, and often even a whole chunk of discourse. By contrast, postposed adverbial clauses typically have a much more local function, i.e., their scope is restricted to their immediately preceding main clause. They neither reach back into earlier parts of the discourse, nor fore-shadow or prepare for what is going to follow. For example in written English, the preposed purpose clauses usually contain issues from preceding discourse, whereas the postposed ones often describe purposes of the main clauses (Thompson, 1985). Accordingly, the subject of a postposed adverbial clause typically is identical with the main clause subject, whereas the subject of a preposed adverbial clause is often identical with that of (one of) the preceding sentence(s).

### 3.2 Speech Act Adverbial Clauses

In addition to the adverbial clauses that link main clauses, sentences, or paragraphs as introduced above, some adverbial clauses function at the level of interactive communication by modifying the speech act of the speaker, and are called “speech act” adverbial clauses (cf. Rutherford, 1970; Kac, 1972; Sweetser, 1990; Thompson et al., 2007; Diessel, 2013). Two examples are given in (12). Instead of setting a condition for the event in the main clause, the *if* clause in (12a) expresses the speaker’s attitude that he or she may not be in a position for making the statement in the main clause; similarly, the *because* clause in (12b) does not state the reason for Harry to be late, but the reason why the speaker states that Harry will be late, i.e. the speaker talked to Harry’s wife, through which he or she knows that Harry will be late (Diessel, 2013; Thompson et al., 2007).

(12) a. And if I may say so Mr Speaker . . . they possibly derived some benefit from the presence of the Chancellor . . . [International Corpus of English] (Diessel, 2013: 345)

b. Harry will be late, because I just talked to his wife. (Thompson et al., 2007: 267)

## 4. The Interpretation of Adverbial Clauses

Problems of interpreting adverbial clauses not only arise for the inherently vague nonfinite adverbial clauses, but also for some finite adverbial clauses. World knowledge or contextually grounded knowledge is important for the interpretation, but formal (i.e., morphological, syntactic, and prosodic) features may also crucially influence the process of interpretation. For example, polysemy is observed for almost one third of the adverbial subordinators in the European languages, especially for those with a high text frequency (Kortmann, 1997). This section introduces some of the most important relevant features that may influence the interpretation, always provided that the given language allows for a choice (e.g., has no constraints such as the obligatory use of the subjunctive mood in

subordinate clauses, or subordinate clauses generally preceding their main clause) (for further discussion see Kortmann (1991) and König (1995)):

- i. choice of tense and/or mood in the adverbial clause and, accordingly, in the main clause. For example, many languages use different tense (and mood) for the three semantic types of conditional: present tense (indicative mood) in factual/real conditional clauses (13a), past tense (or subjunctive mood in some languages) in hypothetical conditional clauses (13b), and past perfect (or a conditional perfect) in counterfactual clauses (13c).

- (13) (a) If she comes home, I will be very happy.  
(b) If she came home, I would be very happy.  
(c) If she had come home, I would have been very happy.

Tense constraints also hold for the two different meanings (temporal and causal) of English *since*. *Since* can have a temporal reading in two situations; being used with past tense is one of them (see the other in (16)). Mood is also adopted in many (e.g., Romance) languages to help differentiate Result ('so that') and Purpose ('in order to that') that share the same adverbial subordinators: indicative mood leads to a Result reading, subjunctive mood to a Purpose reading.

- ii. non-subordinate word order. As introduced in Sect. 1, German usually uses verb-second word order for independent clauses, and verb-final word order for dependent clauses. However, the verb-second word order is also typical in spoken German for postposed *weil*-causals and *obwohl*-concessives clauses. An example is given in (14).

(14) Ich hab das mal in meinem ersten Buch aufgeschrieben. Weil dann glauben's die Leute ja. ('I've written that down in my first book. Because people believe it then.')

- iii. Intonation. One relevant intonational feature is the presence or absence of an intonation break: only when the complex sentence in (15) is read as a single intonation group does the adverbial clause receive a concessive conditional reading ('even if').

(15) /I wouldn't marry you if you were the last man on earth./ (Kortmann, 1997: 92 from Haiman, 1986)

- iv. The choice of verb forms. The dependent vs. independent verb forms was shown to be relevant in (i) already (indicative vs. subjunctive mood). (16) illustrates the impact of the choice between finite and nonfinite form in the adverbial clause on the interpretation of an adverbial subordinator, here *since*: when introducing a free adjunct, *since* can only receive a temporal reading; a causal one is impossible (cf. *since* in (i)).

(16) Since working with the new company, Frank hasn't called on us even once.

- v. Constituent order, more exactly the relative order of adverbial and main clauses (cf. Kortmann, 1991; König, 1995; Diessel, 2001, 2005, 2008). In English, for example, the great majority of present-participial free adjuncts receive a temporally sequential interpretation relative to the main clause (Kortmann, 1991). That is, the order of events is presented iconically by the relative order of adverbial and main clauses, as illustrated by the minimal pair in (17).

- (17) (a) She uncurled her legs, reaching for her shoes.  
(b) Reaching for her shoes, she uncurled her legs.

### Cross references

Conversation Analysis; Sociological; Grammar: Functional Approaches; Grammatical Relations; Linguistic Typology; Semantics; Iconicity; Relative Clause

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