

Should conditionals be emergent ...
Asyndetic Subordination in German and English
as a Challenge to Grammaticalisation Research*

1 Interrogatives and Conditionals

Ever since Haiman (1978) and Traugott (1985), it has been well-known that conditional protases are formally identical to (polar) interrogatives in some languages. The first to reflect systematically on this fact was Haiman, who pointed out that conditional protases in Hua may be marked by the interrogative suffix *-ve*, making them identical to independent polar interrogatives (1978: 565f, 570):

- (1) interrogative: *Esive?* 'Will he come?'
 conditional: E -si -ve baigu -e
 come 3sg.FUT INT will-stay 1sg
 'If he will come, I will stay.'

Similarly, in (colloquial) Turkish, the interrogative particle *ma* can appear in the protasis of conditionals (Hentschel 1998: 192). The Russian conditional subordinating conjunction *esli* (cf also Polish *jeśli* etc) is composed of the copula *est'* and the interrogative marker *li* (Hentschel 1998: 191, Haiman 1978: 570), hence Russian conditional protases can be paraphrased etymologically as 'Is it (the case that) ...?' (Hentschel *ibid*). The use of interrogative particles and/or suffixes as conditional markers can also be found in languages such as Serbo-Croat (Browne/Alt 2004, Hamm 1976), Bulgarian (Feuillet 1995: 56, 61), Macedonian (Hacking 1998: 125), Sorbian (De Bray 1951: 738), Hungarian (Riese 1984: 50), Tamil (Elisa Roma p.c.), Chantyal (Noonan 2003: 8) and Kashmiri (Grierson 1911: 63). In other languages the similarity between conditionals and polar interrogatives is due to the word order, as e.g. in Portuguese (Gärtner 1998: 630), Rhaeto-Romance (Danielsen 1968: 45) and also French (Hentschel 1998: 191):

- (2) interrogative: *Le jurerait-il?* "Would he swear it?"
 conditional: *Le jurerait-il, je ne le croirais pas.*
 "If he swore it, I wouldn't believe him."

Very similar conditionals occur to a greater or lesser extent throughout the Germanic languages, including Swedish (Holmes/Hinchliffe 1994: 507) and, as in the following examples, Dutch (ANS 1997: 1255) and German (Helbig 1983: 161):

- (3) interrogative: *Voel je je ziek?* "Are you feeling ill?"
 conditional: *Voel je je ziek, dan moet je thuis blijven.*
 "If you are feeling ill, you should stay home."
 (4) interrogative: *Scheint die Sonne?* "Does the sun shine?"
 conditional: *Scheint die Sonne, (so/dann) gehen wir baden.*

* I am greatly indebted to Torsten Leuschner for his useful comments on earlier drafts of this paper. I have also profited from the advice and suggestions of two anonymous reviewers. Needless to say, I alone am responsible for any shortcomings.

“If the sun shines, (then) we’ll go for a swim.”

And, of course, they are also known in English (Quirk et al 1985: 1094):

- (5) interrogative: *Should you change your mind?*
conditional: *Should you change your mind*, no one would blame you.

Following Hentschel/Weydt (2003: 427), such conditionals will be called ‘asyndetic’ because the protasis lacks a subordinating conjunction that signals its dependence on the apodosis. Others have called them ‘noncanonical’ because the subject and the (finite) verb are inverted (König/van der Auwera 1988, referring to English, German and Dutch), but this usage, though more specific at first sight, is misleading for some of the languages in question and will not be adopted here.

From the point of view of the form-function link, the question is: what motivates the use of interrogative structures in conditionals? Synchronically, based on the principle that potential source constructions for a given target category must be motivated by the ability to fulfill some relevant part of the target function (which then enables them to be interpreted as representatives of the target category), interrogatives are a natural choice for use in conditionals because interrogatives (a) question the epistemological status of the proposition they express, i.e. they “ask about alternative possible worlds”, and (b) provide topics or givens for subsequent text (Traugott 1985: 294f). That this is a very powerful motivation is shown by the fact that all the above-mentioned languages have other, specialized conditional markers: for instance, Hua and Turkish have *mamo* and *sa*, respectively (Haiman 1978: 565, 570), Portuguese and French have the subordinating conjunction *si*, Swedish, Dutch, German and English have *om*, *als*, *wenn* and *if*, etc. Thus, these languages do not strictly need to employ interrogative markers (Hentschel 1998: 192). From the diachronic point of view, the classic scenario for how polar interrogatives come to be used in conditionals historically is due to Jespersen. Discussing asyndetic conditionals in his *English Grammar on Historical Principles* (1940: 374, cf Haiman 1978: 571), he claimed that asyndetic conditionals could be explained on the basis of mini-dialogues like the following:

- (4) A: Scheint die Sonne? “Does the sun shine?/Is the sun shining?”
B: Ja. “Yes.”
A: So/Dann gehen wir baden. “Then we’ll go for a swim.”

On this hypothesis, which will be called ‘Jespersen’s Model’ for convenience, asyndetic conditionals are derived from sequences of a polar interrogative and a subsequent declarative whose assertion depends on an affirmative answer to the question expressed by the interrogative. The interlocutor’s turn is skipped and the interrogative and the declarative are unified first into a single turn and then into a single complex sentence construction, with the interrogative as protasis and the declarative as apodosis.

Besides Jespersen, others have also alluded to the interrogative basis of asyndetic conditionals: Curme (1931: 327) for English, Behaghel (1928: 637), Paul (1920:150) Havers (1931: 21) and Erdmann (1886: 187,189) for German and Terwey (1903: 27) and den Hertog (1903: 100) for Dutch. As such, the model is not fully isolated and looks back on a long tradition. In addition, Jespersen’s Model goes well with the synchronic motivation stated above (cf for instance the topic function of the interrogative, as originally pointed out by Haiman). Yet it is also clear that this explanation is at a disadvantage in theoretical debates for the simple fact that it has never been formalized in any framework of historical linguistics, nor investigated empirically for any particular language(s). This became evident with the publication of Harris/Campbell’s *Historical Syntax in Cross-Linguistic Perspective* (1995: 282-313). Harris/Campbell point out that Jespersen’s Model is an exponent of what they dub the ‘Parataxis Hypothesis’ (1995: 282). According to this hypothesis, which traces back to

Friedrich von Schlegel (1772-1829), hypotactic constructions often (or even always) develop out of paratactic sequences. Harris/Campbell claim, however, that this hypothesis and, by extension, the idea that the presence of interrogative marking in subordinate clauses could have anything to do with earlier discourse uses of the structure in question is a textbook example of the ‘Marker/Structure Fallacy’. This is the (false) presumption that “the sources of markers logically imply the sources of structures” (ibid.: 284). In other words, the premise of Jespersen’s Model is the idea that “the structure in which a particular innovative grammatical element [in this case subject-verb inversion] is found developed out of the structure in which that grammatical element originated [viz polar interrogatives]” (ibid.). It is further argued that the hypothesis is all the more dubious because it is said to assume “mechanisms that have not been clarified or explored” (ibid 308). In addition to these theoretical objections against Jespersen’s Model, Harris/Campbell argue that there is no direct (historical) empirical evidence in support of the discourse origins of asyndetic conditionals (ibid 284).

As an alternative, Harris/Campbell suggest that the interrogative form of asyndetic protases results from a single mechanism, namely *analogical extension* (ibid 293f). They point out that yes/no questions and subordinate clauses are logically similar in that they are non-assertive, i.e. they do not commit the speaker to the truth of the proposition they express (ibid 298). The devices used to express yes/no questions are a.o. intonation patterns, interrogative particles, tag-questions and also subject-verb inversion (ibid 303f). It is argued then, that because of the shared feature of non-assertiveness, these markers (among them inversion) can be extended from yes/no questions to certain subordinate clauses such as conditionals, making “the appearance that subordination represents dialogue [...] a *secondary effect*” (ibid 308 *my italics*). The alleged advantage of this alternative account is that it does not “rely on the vague structures proposed for parataxis” (ibid 308).

Although Harris/Campbell are right in pointing out that, in its current form, Jespersen’s Model fails to explain exactly *how* polar interrogatives come to function as conditional protases, their alternative is likewise problematic in this respect. According to their account, subject-verb inversion is extended from yes/no questions to an *already existent* conditional construction. They do not, however, provide any recorded examples of this pre-extension conditional structure nor do they say what it may have looked like. But even if the subject-verb inversion of asyndetic protases is due to analogical extension, Harris/Campbell’s model does not explain how this pre-extension hypotactic conditional construction developed in the first place; by simply assuming its existence, the problem is shifted to the unrecorded past. Furthermore, as Haspelmath (1998: 136) points out, there is no direct evidence for the analogical extension either, and as such this model is empirically as defective as Harris/Campbell claim Jespersen’s Model to be. It is conceivable that Harris/Campbell are so vehement in rejecting Jespersen’s Model because of their crypto- autonomistic view on linguistic structure. To be sure, they explicitly argue in favour of functional explanations for language change by stating that “syntactic rules cannot be assumed to operate independently of meaning, use, [and] pragmatics” (ibid 44). Nonetheless, it seems that they do not succeed in operationalizing this functionalist view: as soon as syntactic developments come into play that transcend the simplex sentence this premise no longer plays a role. So it is argued that “in explaining [the development of] complex structures it is not necessary to go beyond the boundary of the *sentence*” (ibid 287 *my italics*). This implies a conception of language that considers the sentence the highest level of linguistic analysis, because “there is no need to go beyond the syntax to the structure of discourse to explain syntactic change” (ibid 308). If these are indeed the premises of Harris/Campbell’s model, it is self-evident that it cannot adequately grasp the explanatory potential of (any exponent of) the Parataxis Hypothesis.

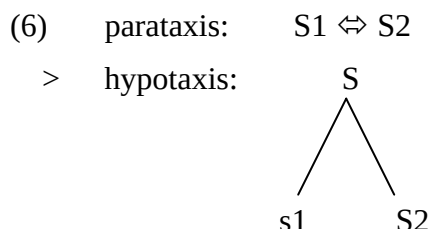
The goal of this paper is, however, not to defend the Parataxis Hypothesis as a whole. As Harris/Campbell (ibid 308f) point out themselves, the original version of the hypothesis

went hand in hand with (now obsolete) associations between parataxis, spoken language use and linguistic and cultural primitiveness. If only because of this, the hypothesis is no longer advocated with the one-sidedness that Harris/Campbell are trying to criticize. Another problem is that Harris/Campbell hardly take note of the more recent literature on hypotaxis in Indo-European. As a result, they overlook the strongly motivated compromise position of Haudry (1973), according to whom the development of hypotactic constructions can follow four different pathways, the syntactization of paratactic sequences being just one of them.

The aim of the present paper is rather to refute Harris/Campbell's criticism especially with regard to asyndetic conditionals. To this end, Jespersen's Model will be updated from the point of view of a modern theory of linguistic change that can accommodate the development of syntactic constructions from discourse. In particular, the paper will explore ways in which this can be done from a *grammaticalisation* point of view. In addition, the paper wants to demonstrate that there are most certainly empirical data that make Jespersen's Model at least plausible. To this end, two West-Germanic languages – German and English – will be compared. As pointed out above, both are similar in having asyndetic conditionals in addition to the prototypical, syndetic conditionals. There are, however, also characteristic differences that reveal certain properties which are interesting from the point of view of grammaticalisation. In the following section, it will be discussed how the transition from discourse sequence to syntactic construction can be conceptualized in terms of grammaticalisation.

2 The Grammaticalisation Perspective

The basic idea of the Parataxis Hypothesis is that sequences of autonomous sentences which are paratactically juxtaposed can – under certain circumstances – be the historical source of hypotactic constructions. The following diagram taken from Hopper/Traugott (1993: 169) illustrates this idea:

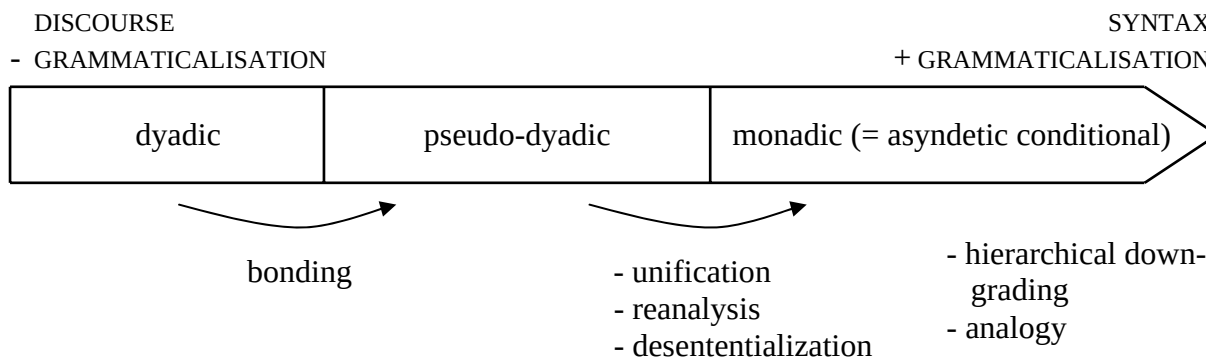


In the underlying discourse sequence, sentences S1 and S2 are syntactically still completely autonomous (hence the capitals). They do, however, exhibit a semantic-pragmatic relationship between them, such that one of the sentences expresses, for instance, a condition, a cause or a temporal classification in relation to the other sentence. If the sentence types represented by S1 and S2 are combined routinely, the semantic-pragmatic subordination can be grammaticalised: S1 becomes a subclause (s1) in that it is syntactically subordinate to the main clause S2 (cf Fabricius-Hansen 2000: 331-332). This is accompanied by the formation of typical markers of subordination like conjunctions, special word order patterns, etc. Together these form a prototype, i.e. a bundle of features, each of which is instantiated to a greater or lesser extent in each individual construction type. It is this prototype which is usually called 'hypotaxis' in the Indo-European tradition. The paper will not, however, focus on the prototype as such (cf Leuschner/Van den Nest in press), but only with regard to asyndetic conditionals. And since asyndetic conditionals mainly deviate from the prototype in that they lack a subordinating conjunction, the development of conjunctions will not be of interest in what follows (cf De Groodt/Leuschner 2004 concerning this). Rather, the question

that will be addressed is how grammaticalisation theory can explain the development of such conditionals from paratactic discourse sequences.

From a diachronic perspective, grammaticalisation was originally only conceived of as morphologization, i.e. as the unidirectional process whereby lexical elements lose autonomy and acquire grammatical functions (Meillet 1959[1912]). Since Givón (1979: 209, cf Hopper/Traugott 2003: 168), however, the transition from pragmatically motivated discourse patterns to syntactic constructions (the so-called syntactization) is also recognized as a grammaticalisation phenomenon. The notion that syntactic constructions continually arise from recurrent discourse patterns and are subsequently integrated in the already existing grammar as new subsystems (Krug 2000) is referred to as the **emergence** hypothesis (Hopper 1998, Traugott 2003: 630). It implies that there is no a priori grammar, but rather that grammar is in “a constant systematization” (Lehmann 1985: 318). An important reason for classifying the diachronic development from discourse to syntax as grammaticalisation is that the same *mechanisms* of language change are involved as in other grammaticalisation phenomena. In addition, the development of complex sentences can be described by means of *processes* that are quite reminiscent of the grammaticalisation parameter of ‘bondedness’. This parameter refers to “the intimacy with which [a linguistic sign] is connected with another sign to which it bears a syntagmatic relation” (Lehmann 1995: 147). An increase in bondedness between two or more signs results in the gradual merger into a single sign (Hopper/Traugott 2003: 176-184 with reference to Lehmann 1988). In Diagram 1, these processes and mechanism are illustrated. It is a proposal for how the various stages in the diachronic emergence of asyndetic conditionals may be mapped onto a cline ranging from discourse to syntax:

Diagram 1: diachronic emergence of asyndetic conditionals



The source structure in Jespersen’s Model can be situated at the left end of the cline; it is repeated here as (7):

- (7) A: Scheint die Sonne? = S1
 B: Ja.
 A: So/Dann gehen wir baden. = S2

On account that such discourse sequences are the collaborative result of two physically present speakers they can be called ‘dyadic’ (cf Couper-Kuhlen/Thompson 1999, 2000). In such sequences the process of *bonding* takes place: a semantic-pragmatic relationship is established between S1 and S2 to the extent that the interrogative allows another interpretation in addition to that of a question. Although both sentences are grammatically still autonomous, they are adjacent: the interrogative may be interpreted as expressing the condition required for the fulfilment of the proposition in the subsequent declarative clause. As a result of bonding, the affirmative reply to the yes/no question is presupposed rather than

expressed explicitly. Since the speaker acts as if an addressee is present, such sequences may be called ‘pseudo-dyadic’ (Couper-Kuhlen/Thompson *ibid*):

- (8) s_1 [Scheint die Sonne?] s_2 [So/Dann gehen wir baden.]

The next step is *unification*, the process of combining the originally autonomous sentences into a single syntagm through the mechanism of reanalysis. *Reanalysis* takes place if a pragmatically determined discourse pattern is interpreted grammatically: for instance, if in Jespersen’s Model the autonomous interrogative and declarative clauses are reinterpreted as the protasis and apodosis of an asyndetic conditional:

- (9) s_1 [Scheint die Sonne?] s_2 [So/Dann gehen wir baden.]
> $S_{[s_1$ [Scheint die Sonne] s_2 [so/dann gehen wir baden].]

In fact, unification through reanalysis is nothing more than the transition from semantic-pragmatic subordination to hypotaxis (i.e. formally marked subordination). Harris/Campbell (1995: 284ff) criticize the proponents of the Parataxis Hypothesis for being too vague about the relationship between the autonomous sentences in the paratactic stage. It seems, however, that they do not allow for relationships between sentences to be anything but syntactic. As such, they ignore that the relationship between the protasis and apodosis of asyndetic conditionals is narrowly defined from the outset, albeit not syntactically but semantic-pragmatically, namely as an antecedent-consequent relationship. The next process involved in the grammaticalisation of complex sentences is the *desententialization* of the protasis. In the case of asyndetic conditionals, this concerns the loss of characteristics that are typical of autonomous sentences. In particular, there is a loss of illocutionary force (cf Lehmann 1988: 193): the interrogative loses its status as an independent locution (i.e. as a question) and the corresponding intonation pattern. The asyndetic conditional that results from unification through reanalysis and desententialization is ‘monadic’: the speaker no longer acts as if an addressee is present.

The grammaticalisation process does not stop, however, once the monadic stage has been reached. For instance, desententialization of the protasis will also manifest itself syntactically by increasing integration in the apodosis, a process called *hierarchical downgrading* (Lehmann 1988). In German, the particles *so* or *dann*, which introduce the apodosis, can be omitted. Consequently, the subclause comes to function as a normal constituent in the forefield of the main clause verb, much like in other adverbial sentence constructions (Fabricius-Hansen 1992: 466ff):

- (10) Scheint die Sonne, *so /dann* gehen wir baden.

- (10)’ Scheint die Sonne, *gehen* wir baden.

Seeing that in this way such asyndetic conditionals become more similar to prototypical hypotaxis, *analogy* takes place: speakers start to use asyndetic conditionals in the same way as their syndetic counterparts. In doing so, the reanalysis is actualized (cf Harris/Campbell 1995: 77-89): the asyndetic conditional is regarded as a syntactic construction and is no longer treated as a discourse sequence. This also becomes evident in constructions as in (11), where the protasis is postposed:

- (11) Der Artikel würde zu umfangreich, *wollten wir* alle Details behandeln. (Helbig 1983:161)

From the point of view of grammaticalisation, the phenomena exemplified in examples (10)’ and (11) can be interpreted as instances of Hopper’s *divergence* (1991: 24f). This is the process whereby forms (or here: syntagms) with a common etymology diverge functionally. In these examples, there is a functional divergence from the discourse basis to the extent that

the full integration (cf 10') and the posposition (cf 11) of the protasis disallow an interpretation in terms of a interrogative-declarative sequence. Another example of divergence is the use of asyndetic conditionals with a non-realis rather than realis reading in terms of possible-world categories:

- (12) *Had I known* that there was never to be another opportunity, I *would have* filmed the occasion. (Collins 1990: 351)

Asyndetic conditionals like (12) can be explained as analogically motivated actualization because they use the same tense pattern as their syndetic counterpart:

- (12)' If I *had known* that there was never to be another opportunity, I *would have* filmed the occasion.

Given that an interpretation of (12) in terms of a discourse sequence is no longer possible, divergence has taken place:

- (12)'' *[Had I known that there was never to be another opportunity? I would have filmed the occasion].

The interplay of reanalysis and analogy illustrated by the above examples is typical of grammaticalisation processes (Hopper/Traugott 2003: 39-70) and emphasizes that the diachronic formation of hypotactic constructions from paratactic discourse sequences is by no means as mysterious as Harris/Campbell (1995) would have, but should simply be interpreted as a normal case of grammaticalisation.

A final important aspect of the grammaticalisation approach to asyndetic conditionals concerns the relationship between diachrony and synchrony. As pointed out above, emergence refers to the idea that grammatical subsystems are continually coming into being. The implication is that emergence is not only a diachronic process, but also has a synchronic component. A construction can be seen as synchronically emergent if it displays a spectrum of formal variation ranging from discourse to syntax at any given point in time (Leuschner 2006: 53f). In the case of asyndetic conditionals, emergence implies that the dyadic, pseudo-dyadic and monadic sequences in Diagram 1 are not only linked stages in a diachronic development, but, provided that Jespersen's Model is correct, are also synchronically coexisting variants. In addition, the various stages of diachronic development a monadic sequence goes through (e.g. with regard to hierarchical downgrading and possible-world categories) may also be expected to be reflected in the synchronic variation patterns of these monadic sequences. Thus, in addition to the diachronic emergence, the cline in Diagram 1 may also model the synchronic emergence. As regards the question how the synchronic variation patterns may be mapped onto this cline, grammaticalisation theory provides a solution: like emergence it not only a diachronic process. From the synchronic point of view grammaticalisation can be considered a methodological principle that allows for subcategories of a certain grammatical category to be ordered – by means of parameters and principles – in such a way that one subcategory appears as more or less grammaticalised than the next.

3. Asyndetic Conditionals as Constructions

Before addressing the question whether, in the case of asyndetic conditionals, a cline ranging from discourse to syntax exists – be it synchronic or diachronic in nature –, it has to be established that in Present-Day German (PDG) and Present-Day English (PDE) asyndetic conditionals are *syntactic constructions* at all. In others words, it has to be demonstrated that they are not mere combinations of autonomous clauses, but “conventionalized pairings of form and function” (Goldberg 2006: 3). To this end, the following section will go more deeply into two

features of asyndetic conditionals: their variation patterns in terms of possible-world categories and the integration of the protasis in the apodosis. Attention is directed to these features because, once analysed from the point of view of particular grammaticalisation parameters and principles (cf Lehmann 1985, Hopper 1991), they allow for hypotheses to be developed about (a) the synchronic emergence and (b) the diachronic grammaticalisation path of asyndetic conditionals.

In section 2, it was pointed out that in adverbial sentence constructions the subclause is normally syntactically integrated in the main clause:

- (13) Weil er krank ist, *kann* Fritz nicht mitkommen. (König/van der Auwera 1988: 102)

“Because he is sick, Fred cannot come along.”

As the causal construction in (13) shows, maximal **clause integration** is formally marked by inversion of the subject and finite verb of the apodosis. As such, the subclause fills the so-called forefield of the finite verb of the apodosis, i.e. the (only) constituent slot left of the verb. However, clause integration only applies to V2-languages like PDG, where the finite verb fills the second structural slot in prototypical declarative clauses. Therefore, clause integration is irrelevant for PDE, which throughout its historical development has lost its V2-character (Stockwell/Minkova 1991). In PDG, conditional – like causal – sentence constructions may exhibit full *integration* of the subclause:

- (14) Wenn man Knollenblätterpilze isst, *vergiftet man* sich. (Zifonun et al 1997: 2282)

“If you eat death cap mushrooms, you will be poisoned.”

- (15) Liegt die Geschwindigkeit darüber, *ist der Abbruch* des Starts nicht mehr gefahrlos möglich. (Archiv der geschriebenen Sprache, MMM/101.27761: Mannheimer Morgen, 01.01.1991, Weltwissen; Wenn die Strömung abreißt, wird es kritisch)

“If the speed is higher than that, an abort is no longer without danger.”

In conditionals with *resumption* there is a lesser degree of clause integration. It is this very option that links asyndetic conditionals with their presumed discourse basis as defined in Jespersen’s Model. As in integrated conditionals, the apodosis exhibits inversion of the subject and finite verb, but the forefield is occupied by a particle (*so* or *dann*) rather than by the protasis (which here occupies the fore-forefield):

- (16) Wenn ich zum Beispiel mit Fräulein Renate befreundet bin, *so/dann ist das* meine Privatangelegenheit. (adapted from Fabricius-Hansen 1980: 161)

“If I am for instance friends with Miss Renate, then that is a private matter.”

- (17) Kommt der Deal zustande, *dann müssen die Essener* rund 590 Mio. Dollar hinblättern. (Archiv der geschriebenen Sprache, MMM104.04289: Mannheimer Morgen, 10.04.1991, Wirtschaft; RWE packt im Osten energisch zu)

“If the deal is struck, then the Esseners have to pay out about 590 million dollars.”

The particles *so* and *dann* have a resumptive function because they refer back to the preceding apodosis; as such they summarize the proposition expressed by the apodosis. As a result, the protasis is semantically represented in the apodosis in spite of its being syntactically outside of it. Finally, conditionals exhibit *disintegration* if the protasis is neither semantically nor syntactically integrated in the apodosis. There is no resumptive particle and the protasis does not influence the word order of the apodosis (i.e. it lacks subject-verb inversion):

- (18) Wenn ich es offen sagen darf, *ich halte* das für einen Schwindel.

“If I may speak openly, I consider that a swindle.” (adapted from König/van der Auwera 1988: 111)

- (19) Wollte er einen Freund von der anderen Seite sehen, *er mußte* ihn im Ausland treffen. (Archiv der geschriebenen Sprache, S94/H29.03497: “Wir waren einfach unzertrennlich”, S. 115)

“If he wanted to see a friend of the other side, he had to meet him abroad.”

Thus, clause integration can be conceived as a continuum with three options ranging from integration to disintegration via resumption. Put in terms of grammaticalisation, they represent a cline ranging from maximal (integration) via intermediate (resumption) to minimal (disintegration) *bondedness*. As examples (14-19) show, all options occur in both syndetic and asyndetic conditionals. However, according to König/van der Auwera (1988: 117), there are differences between them in terms of frequency. Those options which only occur in rare and specially motivated cases are called ‘marked’ options (König/van der Auwera’s *ibid*). An option that represents the default case is ‘unmarked’. If there are several unmarked options, the more frequent one is labelled as favoured. The distribution of these different options in syndetic and asyndetic conditionals as proposed by König/van der Auwera is summarized in Table 1:

Table 1: clause-integration in PDG (König/van der Auwera 1988)

	syndetic	asyndetic
disintegration	marked	unmarked, non-favoured
resumption	unmarked, non-favoured	unmarked, favoured
integration	unmarked, favoured	unmarked, non-favoured

From this table it may be concluded syndetic conditionals are grammaticalised stronger than asyndetic conditionals, since the former prefer integration, the strongest degree of bondedness. In asyndetic conditionals, on the other hand, integration only occurs marginally as it is categorized as an unmarked, non-favoured option; the same is true of disintegration. In König/van der Auwera’s analysis, asyndetic conditionals most typically take resumption, which represents the intermediate degree of bondedness and is the unmarked, favoured option.

However, an analysis of clause integration in asyndetic conditionals based on a large corpus of PDG data casts doubt on König/van der Auwera’s proposal. A search performed on the tagged part of the *Archiv der geschriebenen Sprache* (AGS) has yielded 4800 asyndetic conditionals with a preposed protasis.^{1,2} The bulk of these – 3415 tokens or 71% – are conditionals with maximal integration. The frequency of resumption is significantly lower, but with a total of 1338 tokens (or 28 %) this option is still well represented. Finally, disintegration is extremely marginal with a frequency of some 47 tokens (or 1%). Drawing on these numbers, it may be concluded that Table 1 does not accurately reflect the distribution of clause-integration options in asyndetic conditionals. For one thing, given the extreme difference in frequency between integration and disintegration there is, in my opinion, no reason for attributing the same status to both options by categorizing them as unmarked, non-

¹Many thanks are due to Frank Bodmer of the *Institut für deutsche Sprache* for providing information on how to efficiently extract data from the corpus by means of the COSMASII-search tool: COSMAS II (*Corpus Search, Management and Analysis System*), <http://www.ids-mannheim.de/cosmas2/>, ©1991-2007 Institut für Deutsche Sprache, Mannheim.

²Conditionals with a postposed protasis will not be taken into account because clause integration only applies to conditionals with a preposed protasis.

favoured options. Since integration represents a large majority of all tokens, I would argue that this is the unmarked, favoured option. On account of its significant frequency, resumption remains an unmarked option. However, since it occurs less often than integration it may be called non-favoured. Finally, disintegration is the marked option due to its negligible frequency. These results are summarized in Table 2 (cited as ‘AGS’); for convenience sake, König/van der Auwera’s classification (cited as ‘K/A’) is repeated:

Table 2: clause-integration in PDG: K/A vs AGS

	syndetic (K/A)	asyndetic (K/A)	asyndetic (AGS)
disintegration	marked	unmarked, non-favoured	marked
resumption	unmarked, non-favoured	unmarked, favoured	unmarked, non-favoured
integration	unmarked, favoured	unmarked, non-favoured	unmarked, favoured

Table 2 yields an interesting insight: contrary to what König/van der Auwera claim, syndetic and asyndetic conditionals have an equal status with regard to the distribution of clause integration options and, consequently, bondedness. In other words, as a result of analogy, asyndetic conditionals are used like prototypical, syndetic conditionals. The resumptive option, however, still connects them with their discourse basis.

In addition to clause integration, there is another (bundle of) feature(s) which allow(s) to establish the constructional character of asyndetic conditionals, viz the use of the possible-world categories **realis**, **potentialis**, **irrealis** (‘RPI’). RPI are categories that relate to the attitude of the speaker/writer vis-à-vis the question of (non-)fulfilment of the proposition expressed by the conditional construction. In both PDG and PDE, the formal marker of these categories consists in the use of specific combinations of tense and/or mood forms in the protasis and apodosis, also referred to as *canonical tense patterns*.³ To demonstrate that asyndetic conditionals are constructions with regard to the possible-world categories the following has to be established: (1) like their syndetic counterparts, asyndetic conditionals should allow a non-realistic reading and (2) asyndetic conditionals should display the same tense patterns as their syndetic counterparts. If both conditions are fulfilled, it can be concluded that asyndetic conditionals are used like their syndetic conditionals as a result of analogy and are in fact constructions. Before going into the empirical evidence, it will be briefly explained what qualifies as a realis, potentialis and irrealis conditional. In addition, the canonical tense pattern will be discussed for each possible-world category.

Conditionals are of the *realis*-type if the question of (non-)fulfilment of the proposition is left unresolved (cf Quirk et al 1985: 1091, Huddleston/Pullum 2002: 739, Eisenberg 1999: 116):

(20) Wenn er *gewählt wird*, *bleibt* er (Duden 1998: 801)

“If he is chosen, he will stay.”

In PDG, realis conditionals take as their canonical tense pattern a present indicative in both clauses as in (20) (Duden 1998: 801). English has the simple present tense in the protasis and *will* (or another present modal auxiliary) + present infinitive in the apodosis (Collins 1990: 350):

(21) If she *comes*, I *will tell* her everything. (Declerck/Reed 2001: 231)

³ Although deviations are possible (cf. Declerck / Reed 2001: 231ff for an extensive discussion), the correlation between the canonical tense patterns and the possible-world categories is convincingly consistent (Dancygier 2003: 317)

In addition, realis conditionals also allow an alternative pattern:

(22) Wenn er *gewählt werden sollte*, wird er *bleiben/bleibt* er.

“If he should be chosen, he will stay.”

(23) If she *should* come, I will tell her everything.

Instead of the present indicative (PDG) or simple present (PDE) the protasis has *sollte* or *should* + present infinitive (Duden 1998: 802, Quirk et al 1985: 1015). In PDG, the protasis with *sollte*, may be combined with the future (or present) indicative in the apodosis (Duden *ibid*). Conditionals like (22) and (23) are not realis proper as *sollte/should* marks them as slightly more tentative (Leech 2004: 119; Helbig/Buscha 1993: 135); hence such conditionals will be referred to as realis (+tentative), whereas conditionals like those in (20-21) will be called realis proper.

Conditionals of the *potentialis*-type express that the fulfilment of the proposition is possible though unlikely (Quirk et al 1985: 1091, Eisenberg 1999: 115, Duden 1998: 801). In PDE, such conditionals have as their canonical tense pattern the simple past tense in the protasis and *would* (or another past modal auxiliary) + present infinitive in the apodosis:

(24) If she *came*, I *would be* happy (adapted from Declerck/Reed 2001: 59)

In PDG, the preterite subjunctive is used in both clauses:

(25) Wenn er *gewählt würde*, *bliebe* er (Duden *ibid*)

“If he was chosen, he would stay.”

In both languages, *potentialis* conditionals also allow *sollte* or *should* + present infinitive in protasis (cf Duden 2005: 525, Vandenberg 1995: 241).

Finally, *irrealis*-conditionals or ‘counterfactuals’ express that the proposition of the construction was either not fulfilled in the past (past irrealis) or cannot be fulfilled (present irrealis) (Eisenberg 1999: 115 cf Fillmore 1986: 179). In PDG, the canonical tense pattern consists of the pluperfect subjunctive in both clauses for past irrealis and the preterite subjunctive for present irrealis:

(26) Wenn er das *gewusst hätte*, *hätte* er anders *gehandelt*.

“If he had known that, he would have acted differently.”

(27) Wenn er Präsident *wäre*, *gäbe* es nur Totalitarismus.

“If he were president, there would be nothing but totalitarianism.”

In PDE, the protasis has the pluperfect tense and the apodosis takes *would* + perfect infinitive for past irrealis; for present irrealis, the protasis takes the simple past tense or past subjunctive and the apodosis *would* + present infinitive:

(28) If she *had come*, I *would have been* happy.

(29) If I *were* God, I *would make* the world a better place.

To determine whether asyndetic conditionals allow a non-realis reading⁴ and display the canonical tense patterns, this paper will present an empirical analysis of a large number of corpus examples. Before going into the results, it should be noted that the correlations described above apply in principle only to so-called *content* conditionals, i.e. conditionals

⁴ In the remainder of the paper, ‘non-realis’ will be used as shorthand for all possible-world categories other than realis proper.

where the “realization of the event or state of affairs described in the protasis is a sufficient condition for the realization of the event or state of affairs described in the apodosis” (Sweetser 1990: 114). The correlations do not apply to epistemic and speech-act conditionals (König 1993:121f); therefore such conditionals (exemplified in 30 and 31) will be disregarded:⁵

(30) If I may say so, that’s a crazy idea. (Sweetser 1990: 118)

(31) If she’s divorced, then she’s been married. (ibid 116)

For PDG, the analysis is based on a random sample of 1400 tokens taken from the *Archiv der geschriebenen Sprache* (cf supra). After filtering out all epistemic and speech-act conditionals, 1334 tokens remained. For PDE, the sample counts 1416 content conditionals, all of which were extracted from a total of 1589 tokens taken from the *British National Corpus*.^{6, 7} The distribution of realis (proper), realis (+tentative), potentialis and irrealis in asyndetic conditionals is presented in Diagram 2:

Diagram 2: RPI in PDE and PDG

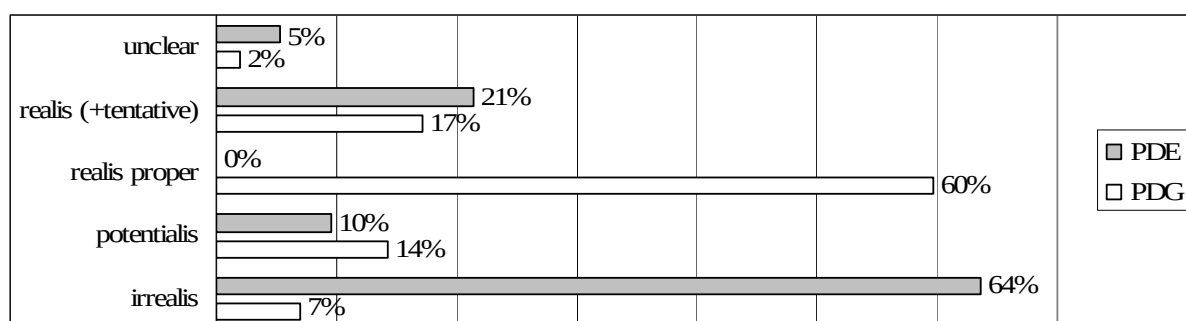


Diagram 2 clearly shows that like their syndetic counterparts asyndetic conditionals allow a non-realis reading in both languages. PDG and PDE are also similar with respect to the frequency of realis (+tentative) – 17% in PDG and 21% in PDE – and potentialis – 14% in PDG and 10% in PDE. With regard to irrealis, there are significant differences: whereas PDG only marginally allows irrealis (7%), it is dominant in PDE (64%). The most striking difference concerns the frequency of *realis proper*: this category is clearly the preferred one in PDG (60%); in PDE it is, however, altogether absent. Hence, asyndetic realis conditionals are always tentative in PDE.

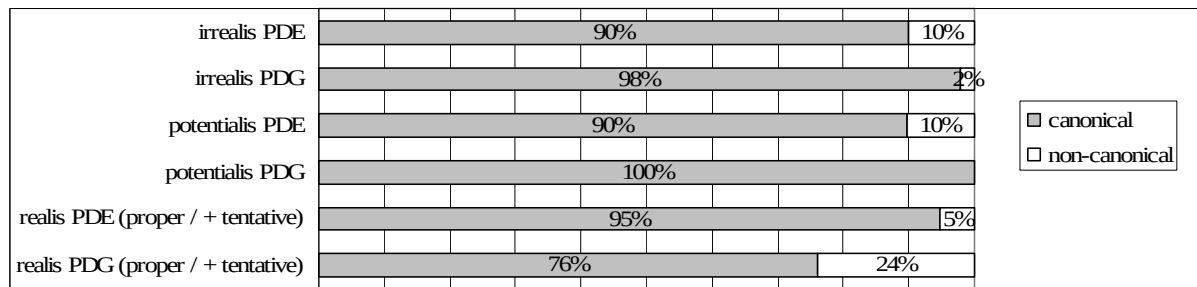
As for the tense patterns, the results of the corpus analysis are summarized in Diagram 3.

⁵ Another category of conditionals that will be excluded from the empirical analysis are conditionals with a postposed protasis (cf ex 11 above), albeit for purely technical reasons. As the *British National Corpus* and the *Archiv der geschriebenen Sprache* are not syntactically parsed, it is nearly impossible to find such constructions by means of a search query.

⁶ To extract the data the following search tool was used: SARA (*SGML Aware Retrieval Application* version 0.930), developed by Tony Dodd for the British National Corpus project, © Chancellor, Masters and Scholars of Oxford University, 1995-1997

⁷ It should be noted that 1594 is the total amount of asyndetic conditionals (with a preposed protasis) that could be found in the BNC.

Diagram 3: Tense patterns in RPI



It appears that for all possible-world categories, asyndetic conditionals predominantly take a canonical tense pattern; the share of non-canonical patterns is smaller. In many cases, the non-canonical tense pattern is due to *back-shifting*. For instance, the PDG realis-conditional in (32) has a preterite indicative instead of the usual present indicative:

- (32) Nach Lage der Dinge hätten sie - zumindest den politischen - Anspruch auf 800 Millionen Mark gehabt. Die Summe bestritt ernsthaft weder Teufel noch sein Kassenwart Mayer-Vorfelder. Doch beide hatten vorher das Haushaltskorsett des Landes ganz eng geschnürt und auch noch mit einer Ausgabensperre dramatisch geschickt die Notbremse gezogen. *Wollten* die Gemeinden nicht bis zum St.-Nimmerleins- Tag auf den Geldsegen *warten*, *mußten* sie von ihrer Ausgangsforderung herunter. (AGS, MMM/410.07494: Mannheimer Morgen, 29.10.1994, Politik; Spatz in der Hand)

“In that situation they would – at least politically – have been entitled to 800 million marks. Neither Teufel nor his treasurer, Mayer-Vorfelder, seriously contested this sum. Nevertheless, both had implemented serious savings with regard to the province’s budget. And by placing a block on expenditure they have taken emergency measures. If the local authorities *did not want to wait* forever for their money, they *would have to give up* their initial demands.”

Such a change of tense forms occurs if there is a shift from a temporal domain with present time reference to a temporal domain with past time reference (Declerck/Reed 2001: 476, cf Huddleston 1984: 72). This is often found in narrative texts written in the past tense as in (32) (Declerck/Reed *ibid*). Non-canonical tense patterns also occur in potentialis conditionals. In (33), for instance, the apodosis takes the simple present tense instead of the usual periphrastic *would* + present infinitive:

- (33) *Should* the TGAT proposals *be abandoned* for an almost exclusive reliance on nationally prescribed tests for pupils at 7, 11, 14 and 16, *there is no doubt* that the assessment procedures *would have* a much stronger impact on the taught curriculum, and pressures for teachers to ‘teach to the test’ would be greatly increased. (BNC, text=CN5 n=763)

The apodosis consists, however, of a matrix clause introducing a complement clause with the canonical *would* + present infinitive (cf Poutsma 1926: 193). Finally, in irrealis-conditionals, non-canonical patterns can often be explained as a mixture of present and past irrealis:

- (34) *Wären* die Heimpunkte nicht *abgegeben worden*, *könnte* der SV Südwest an der Tabellenspitze *stehen* [...] (AGS, MMM/411.09181: Mannheimer Morgen, 11.11.1994, Lokales; SV baut auf Auswärtsstärke)

“If the goals scored by the home team would not have been given up, SV Southwest could be top of the league.”

As pointed out above, PDE has no asyndetic conditionals in the realis proper domain. PDG, on the other hand, has a clear preference for this category. From the grammaticalisation perspective, these differences may be interpreted in terms of *specialization* (Hopper 1991: 22). According to this principle, increasing grammaticalisation involves a decrease of variability of forms with different semantic nuances within a functional domain (such as conditionality) (Hopper *ibid*). Thus, the figures in Diagram 2 reveal that, in PDE, asyndetic conditionals are specialized for *non-realis*; in PDG, such a specialization is absent. This is directly related to differences regarding the **finite verb** of the protasis. According to most grammars of English, the protasis can only take three forms, viz *had*, *should* and *were* (Collins 1990: 351, Huddleston/Pullum 2002: 753f, 917f, Poutsma, 1929: 706f, Quirk et al 1985: 748, Raith 1959: 234). All of these occur in the PDE corpus sample, but simple past *had* is the most frequent (827 or 52% of all tokens); it functions almost exclusively (99%) as a perfect auxiliary (cf Declerck/Reed 2001: 27):⁸

- (35) *Had* Kingsley been ill, the performance would have been cancelled. (BNC text=A35 n=40)

The use of *had* as a lexical verb is clearly obsolescent (7 tokens or 1%):

- (36) *Had* it this power there might be a dramatic fall in the incidence of needless hysterectomies [...]. (BNC text=B7J n=1647)

With a total of 582 tokens (37%), the past modal auxiliary *should* is the second most frequent form:

- (37) *Should* that unthinkable thing happen, and you forget your lines, don't despair. (BNC text=A06 n=355)

In conditionals, the function of PDE *should* is exclusively epistemic, a deontic reading as in polar interrogatives is impossible:

- (38) Should_{deontic} I open the window?
 (39) *Should_{deontic} I open the window, I could catch a cold.

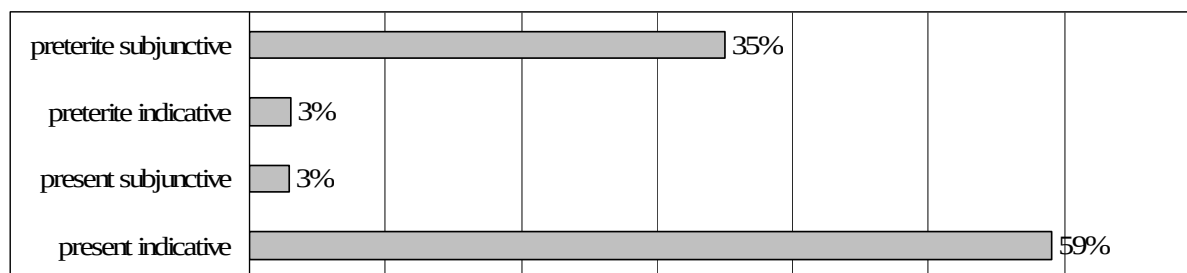
Finally, the protasis can also be introduced by the copula *were* (180 tokens or 11%). It expresses epistemic uncertainty – like *should* – and does so through its past subjunctive form, which does not appear in polar interrogatives:

- (40) *Were it an elephant?
 (41) *Were* it an elephant, our feet would be in its midriff, our heads just under its rib-cage. (BNC text=A3A n=149)

The restriction to these three preterite forms is an indication for a strong degree of grammaticalisation, because it implies a very low *paradigmatic variability* (cf Lehmann 1985: 306). This correlates with the specialization for non-realis. From these observations it follows that, in PDE, asyndetic conditionals are no longer connected with their discourse origins. In PDG, the finite verb behaves quite differently. First of all, there are no restrictions in terms of mood and tense. However, as Diagram 4 shows, the finite verb has a clear preference for the present indicative (59%); the preterite subjunctive (35%) occurs often as well:

⁸ Asyndetic conditionals are also said to take the forms *could*, *dare*, *might* and *did* (Huddleston / Pullum 2002: 753f & 917f, Leech 2004: 123, Poutsma 1929: 706f). However, none of these occur in the BNC sample.

Diagram 4: Tense and mood in asyndetic conditionals (PDG)



Secondly, the finite verb may be of any syntactic-semantic category. In the majority of cases (48%), PDG has a lexical verb. In this respect, it differs to a large extent from PDE where lexical verbs are extremely marginal. Moreover, if in PDE the finite verb is lexical, it is always restricted to the lexeme *have*. In the PDG corpus sample, *haben* is just one of the many lexemes (242 in total) that make up the group of lexical verbs.

The second most frequent verb category are modal auxiliaries (23%). Whereas PDE allows only one (form of one) modal auxiliary (viz *should*), asyndetic conditionals are subject to no such restrictions in PDG. Although most modals are attested (*können*, *mögen*, *müssen*, *wollen*), there is a clear preference for *sollen*. It constitutes about 84% of all modals and appears almost exclusively in the past subjunctive form *sollte(n)*. Like PDE *should*, *sollte(n)* is exclusively epistemic in conditionals:

- (43) Sollte ihm die Pioniertat gelingen, könnte sich das Planetarium um Aufträge in aller Welt bemühen. (AGS, the MMM/410.07334)

“Should he be successful in that pioneering work, the planetarium could strive for projects around the whole world.”

In addition to modal auxiliaries, other auxiliaries, such as those used to form the perfect (*haben*) and future tenses (*werden*), the periphrastic subjunctive mood (*würden*) and the passive voice (*werden/sein*) also occur; their combined share is 21%. Finally, copulae (mainly *sein*) represent 8% of all tokens. Thus, these figures demonstrate that in PDG the finite verb displays a wide range of variation. From the grammaticalisation point of view, this implies a relatively high paradigmatic variability without any restrictions in terms of possible-world categories. However, there is an indication that in PDG asyndetic conditionals may be undergoing a development, the result of which may be a situation similar to that in PDE. It appears that the verb forms with highest token frequency are the preterite subjunctives *sollte(n)* (259 tokens), *würde(n)* (52 tokens), *wäre(n)* (47 tokens) and *hätte(n)* (46 tokens). All of these – apart from *würde(n)* – are cognate with PDE *should*, *were* and *had*. If the high token frequency of these forms should develop into a restriction, then German may one day be characterized by a specialization for non-realis, like English is today. This is, of course, a hypothesis and the abundance of realis conditionals shows that there is no specialization as yet.

From the observations above it may be concluded that asyndetic conditionals are constructions in PDE and PDG. As for the possible-world categories, both conditions on which the constructional nature of asyndetic conditionals hinges are fulfilled: (1) they appear in non-realis contexts and (2) they display the same canonical tense patterns as syndetic conditionals. In PDG the constructional character further follows from the similarity of asyndetic and syndetic conditionals in terms of clause integration. However, it has become clear that, in PDE, asyndetic conditionals have a much higher synchronic grammaticalization degree than in PDG: they are specialized for non-realis and their finite verb exhibits a very low paradigmatic variability. This is not the case in PDG: it also has realis variants as a result

of the relatively high paradigmatic variability of the finite verb. As regards clause integration, PDG exhibits a relatively strong grammaticalisation degree on account of the unmarked, favoured status of full integration. However, clause integration options with a lower grammaticalisation degree are still relatively frequent (resumption) or possible (disintegration). Projecting these observations on a synchronic cline ranging from discourse to syntax yields the following result:

Diagram 5: synchronic emergence of asyndetic conditionals

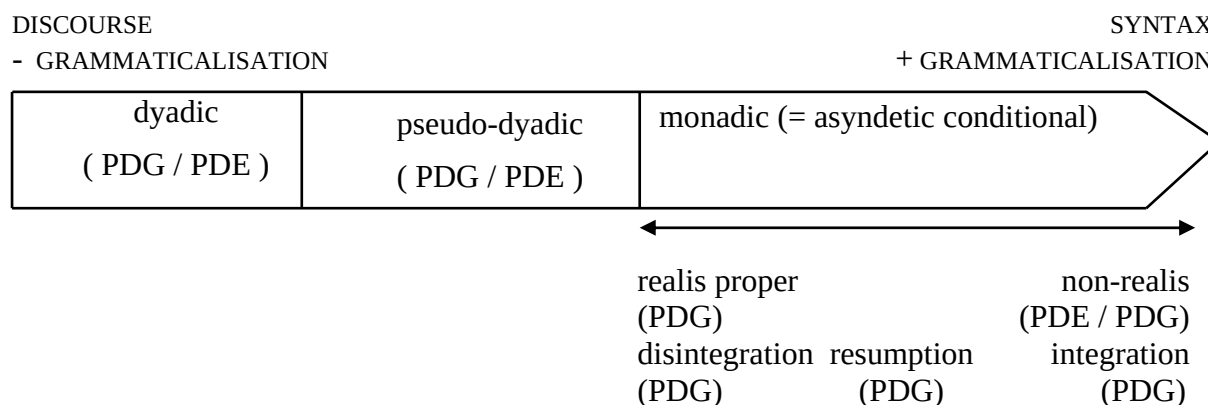


Diagram 5 shows that, in PDE, asyndetic conditionals are situated exclusively to the syntax end of the cline because they have only highly grammaticalised variants (viz non-realisation conditionals). In PDG, asyndetic conditionals with integrative word order and, again, those with a non-realisation reading occupy the same position on the cline. What is important, is that PDG has some variants – resumptive, disintegrative and realis (proper) conditionals – that are situated somewhat nearer to the discourse end of the cline on account of their relatively low degree of grammaticalisation. Such conditionals may be seen as forming a bridge between the highly grammaticalised conditionals, on the one hand, and the hypothesized (pseudo-)dyadic sequences which, in Jespersen’s Model, represent the discourse-basis of asyndetic conditionals. If these (pseudo-)dyadic sequences do in fact exist, asyndetic conditionals may be said to be synchronically emergent. Therefore, the following section aims to substantiate the alleged existence of the discourse basis with empirical data. Although pseudo-dyadic sequences also occur in PDE (cf example 44), asyndetic conditionals cannot be synchronically emergent in PDE, because of the lack of moderately grammaticalised conditionals. Consequently, the focus of the next section will be exclusively on PDG.

- (44) Do you sometimes feel you should take more exercise?But just don't seem to have the time or even the energy?Then the answer is to combine a fitness routine with something you're doing already — and that's why we've come up with our great series of supermarket trolley exercises! (BNC, text=A1F n=34)

In section 2, a cline was proposed to account for the diachronic development of asyndetic conditionals in terms of grammaticalisation. In keeping with traditional grammaticalisation theory, the hypothesis was put forward that – at least in PDG – the various stages of this development may have a synchronic reflex. The aim of this section is to substantiate this hypothesis with empirical evidence.

The first structure that may be hypothesized are the dyadic sequences proposed by Jespersen (cf section 1). A search query performed on the *Datenbank Gesprochenes Deutsch* of the 'Institut für deutsche Sprache' reveals that such sequences can in fact be observed in actual spoken language use. The following is an excerpt from a telephone conversation between a counsellor (A) and a woman (B). Prior to the interaction, she asks him for advice as to whether it is appropriate to join a male acquaintance in viewing a flat:

- | | | | |
|------|--------|---|---|
| (45) | turn 1 | A: [...] können sie sich auf ihn
verlassen auf sein benehmen | “Can you trust his behaviour?” |
| | turn 2 | B: oh ja das kann ich | “Oh yes I can.” |
| | turn 3 | A: na ja dann können sie auch die
wohnung besichtigen | “Well then you can also go view the
flat.” |

(Datenbank Gesprochenes Deutsch, Interaktion DS004 cf <http://dsav-wiss.ids-mannheim.de/DSAv/KORPORA/DS/DS0/DS004/DS004TRA.HTM>)

The counsellor's first turn is a yes/no question in the form of a polar interrogative. As a request for information it has full illocutionary force: the woman feels forced to provide an explicit (in this case affirmative) answer (turn 2). Turn 3 is a declarative clause with resumptive word order. To be sure, the dyadic sequence as proposed by Jespersen is an idealization: the affirmative answer is more extensive than in Jespersen's Model; it is a full-fledged clause with a finite verb (*oh ja das kann ich*). The same applies to the declarative clause where a complex modal particle (*na ja*) precedes the resumptive *dann*. Moreover, the affirmative answer need not be followed by a declarative clause. As example (46) shows, it may also be an imperative clause:

- (46) turn 1 A: Haben Sie auch Gänse gehabt? “Did you also have geese?”
turn 2 B: Nun ja, auch! “Well yes, that too !”
turn 3 A: Erzählen Sie mal was von der “Tell me something about breeding
Gänsezucht!”
geese!”

(Datenbank Gesprochenes Deutsch, Interaktion OS833 cf <http://dsav-wiss.ids-mannheim.de/DSAv/KORPORA/OS/OS8/OS833/OS833TRA.HTM>)

In both sequences, the polar interrogative's primary function is to express a yes/no question. In addition, it also allows an interpretation as a conditional antecedent. This new interpretation rests on the topic function of interrogatives (cf Traugott 1985: 294f, Haiman 1978: 570f). On account of B's affirmative answer, both speakers agree on the validity of the interrogative's proposition. Consequently, this proposition serves as a topic for further discussion (e.g. the declarative or imperative clause). The declarative and imperative clauses may therefore be interpreted as consequents. In terms of grammaticalisation, these sequences are clear examples of *bonding*, the process whereby a semantic-pragmatic relationship is established between two autonomous clauses.

As pointed out in section 4, it may be expected that in addition to dyadic sequences, also pseudo-dyadic sequences may occur in actual language use. The following newspaper example shows they do:

- (47) Wollen auch Sie Ihr Fest zu einem unvergesslichen Erlebnis werden lassen? Dann “sitzen” Sie im “Ernberg” richtig. (AGS, I00/JAN.01740 Tiroler Tageszeitung, 13.01.2000, Ressort: Allgemein; Idealer Platz für Feste aller Art)

„Do you too want make your party an inforgetable event? Then ‘Ernberg’ is the place to be.”

Such sequences are common in *written texts*: a search query performed on the *Archiv der geschriebenen Sprache* has yielded about 406 tokens, a majority of which are used in advertisements. They are interesting because they provide an insight as to why interrogative-based conditionals are used in the first place, even though the speaker already has syndetic conditionals at his disposal. The key concept is *speech-situation evocation* (Schwenter/Waltereit 2005). By phrasing the antecedent as a polar interrogative, the writer involves the reader in *constructing* the hypothetical world. The latter feels addressed, because he is intuitively aware that a yes/no question – as the first turn of an adjacency pair – requires an answer, which preferably expresses agreement (cf Sacks 1973, Léon 2004). However, because an actual exchange is impossible in written texts, this answer is presupposed. As a result, the reader is committed all the more strongly to the action or conclusion expressed in the consequent. This explains why the latter is often an imperative as in the following example:

- (48) Lieben Sie die Mode der 20er Jahre? Dann *tragen Sie* diese doch auf unserer Fete. (AGS, M98/811.88888 Mannheimer Morgen, 20.11.1998, Ressort: Lokal Mannheim, *my italics*)

“Do you like fashion from the twenties? Then wear it at our party.”

This interactive potential is lacking from syndetic conditionals, which through their conditional conjunction *posit* rather than interactively construct the hypothetical world.

Compared to Harris/Campbell’s analogical extension, speech-situation evocation seems preferable as an explanation for the interrogative form of asyndetic conditionals. First of all, speech-situation evocation provides an explanation that is concentrated on one specific marker (viz subject-verb inversion) and one specific adverbial construction (viz conditionals). Analogical extension, on the other hand, is neither marker-specific nor construction-specific: it can apply to all polar interrogative markers and to all hypotactic constructions. In addition, analogical extension – which Harris/Campbell claim is enabled by non-assertiveness – offers no explanation as to *why* asyndetic conditionals are used besides their syndetic counterparts. Speech-situation evocation does: it offers the speaker a clear discourse-pragmatic advantage.

From a grammaticalisation perspective, speech-situation creates a **bridging context** (Heine 2002:84). Such contexts are crucial in the development of new, grammatical meanings. Typically, bridging contexts allow a new meaning, the target meaning, to be foregrounded; this meaning offers a more plausible interpretation of given structure than the source meaning (ibid). In the case of pseudo-dyadic sequences, the interpretation of the polar interrogative as a yes/no question is backgrounded. This results from a loss of illocutionary force: since the interrogative is used in written texts, it loses its potential to request information. Consequently, the interpretation of the interrogative as a conditional antecedent is foregrounded. Since speech-situation evocation offers the discourse-pragmatic advantage described above, it may become entrenched. As a result, conditional antecedents may be phrased as interrogatives even in cases where speech-situation evocation is no longer possible:

- (49) Bei einer wirklich großen Inszenierung der ‘Carmina Burana’ wäre er gerne dabei. Und wenn das ein Traum bleibt? Auch gut. *Sollte er einmal genug Zeit haben, sich einen Wunsch zu erfüllen? Dann möchte er für zwei Jahre nach Peking, um dort traditionelle chinesische Theaterluft zu schnuppern [...].* (AGS, K96/DEZ.31461 Kleine Zeitung, 01.12.1996, Ressort: Kultur; Lichtblicke sind sein Metier, *my italics*).

“He would like to take part in a really big production of ‘Carmina Burana’. And if that remains a dream? That would be fine as well. *Should he have enough time one day to make a wish come true? Then he would like to go to Beijing for two years to take in the traditional chinese theatrical atmosphere.*”

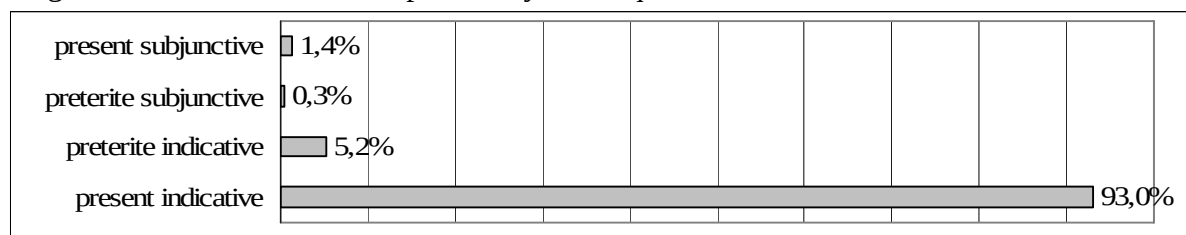
In this example, the interrogative clause is introduced by *sollte*, the preterite subjunctive of *sollen*. As appears from the context, *sollte* only allows an epistemic (and not a deontic) interpretation. On this account, the sequence gets a tentative, non-realis reading. This implies that a speech-situation where the interrogative functions as the first turn of an adjacency pair of the type ‘yes/no question > answer’ can no longer be evoked. The same applies to sequences in the irrealis domain like the following:

- (50) Wäre die Schweiz ein einziger Wahlkreis? Dann würden zwangsläufig die bevölkerungsreichen Deutschschweizer Kantone die Bundesräte stellen. (AGS, E98/JUL.16647 Züricher Tagesanzeiger, 03.07.1998, S. 6, Ressort: Schweiz; Er zeuselt im Schweizer Haus)

“Were Switzerland a single constituency? Then inevitably the densely populated German speaking cantons would supply the ministers.”

Seeing that such sequences cannot evoke a speech-situation, they may be monadic rather than pseudo-dyadic. Consequently, pseudo-dyadic sequences only allow a realis proper reading. Thus, in spite of the antecedent-consequent relationship being established in pseudo-dyadic sequences, we are not dealing with conditional *constructions* as these may also occur in the non-realis domain. As such, the divergence from the underlying dyadic sequences is clearly much lower in pseudo-dyadic sequences than in asyndetic conditionals. Furthermore, the restriction to realis proper is mirrored by the form of the finite form of the interrogative clause: as Diagram 6 shows it is almost exclusively a present indicative.

Diagram 6: Tense and mood in pseudo-dyadic sequences



Nonetheless, the preterite subjunctive – which is typical of the non-realis domain – is also attested, particularly in cases where the finite verb is a form of *mögen*:

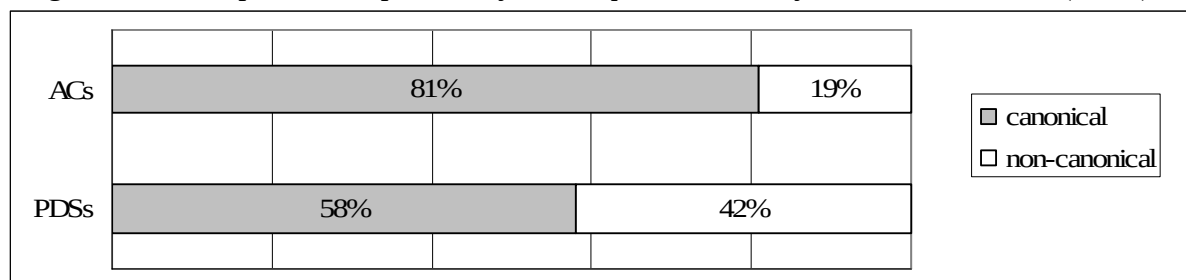
- (51) *Möchten* Sie mehr über Imedeem wissen? Dann fordern Sie bitte Ihre kostenlose Broschüre unter Tel. 01/587 48 73, Fax.01/587 88 43 oder schriftlich bei: Imedeem-Broschürendienst, 1060 Wien, Postfach 707 an. (AGS, N97/OKT.40174 Salzburger Nachrichten, 04.10.1997, Ressort: GESUNDHEIT IM BILD; IMEDEM, die Pille gegen Falten)

“Would you also like to know more about Imedeem? Then please order your free brochure by phone 01/587 48 73, by fax 01/587 88 43 or by letter from Imedeem Brochure Department, 1060 Vienna, P.O. BOX 707.”

However, the preterite subjunctive does not serve here to express epistemic modality but rather a weakened form of desire (Duden 1998: 103). Therefore, it functions as a present indicative (ibid).

As tense patterns are concerned, the predominance of the present indicative may lead to suspect that pseudo-dyadic sequences prefer a canonical pattern. However, Diagram 7 reveals that the share of *canonical tense* patterns is much lower than in asyndetic conditionals:

Diagram 7: Tense patterns in pseudo-dyadic sequences and asyndetic conditionals (realis)



At first sight, this may seem contradictory but often the present indicative of the interrogative clause is part of a periphrastic future or present perfect tense:

- (52) *Sind* Sie neugierig auf die Schalmeien-Musik *geworden*? Dann lohnt sich ein Besuch am 3. Mai, ab 10.30 Uhr am Krummensea-Mannli-Fest. (AGS, A98/APR.25882 St. Galler Tagblatt, 24.04.1998; Schalmeien laden ein zum Fest)

“Have you become curious about shawm music? Then it is worthwhile to pay a visit to the Krummensea-Mannli Festival on the 3rd of May, from 10.30.”

Conversely, a future or present perfect tense may also occur in the declarative clause:

- (53) Wollt ihr, dass ich das tue? Dann *werde* ich für euch *kämpfen*; ich verspreche euch: Ich lasse euch nie im Stich. (AGS, A00/NOV.76348 St. Galler Tagblatt, 07.11.2000; Entscheidung in Bethlehem?)

“Do you want me to do that? Then I will fight for you; I promise you: I won’t let you down.”

The large amount of non-canonical patterns is also due to the occurrence of the preterite indicative in the declarative or interrogative clauses:

- (54) [Jeder, der sich einem schwierigen und langem Studium an einer Technischen Universität oder Fachhochschule unterzieht, muss sich ja als Trottel vorkommen, wenn man bei einem Unternehmen wie der SAFE ohne technische Vorbildung ‘technischer’ Vorstandsdirektor werden kann.] Oder hat Herr Gasteiger seine technische Ausbildung als Finanzreferent der Salzburger Landesregierung absolviert? Dann *war* er sechzehn Jahre lang mit 180.000 S im Monat und Dienstwagen mit Chauffeur zweifellos der bestbezahlte Werkstudent der Welt - allerdings zu Lasten der Salzburger Steuerzahler. (AGS, N00/JAN.00466 Salzburger Nachrichten, 05.01.2000, Ressort: LOKALES; Neben Kritik ist auch Lob fällig Es ist mir ein echtes Anliegen)

“Everyone who takes up a difficult and long course of study in a Technical University or Polytechnic must feel like an idiot, if you can become executive ‘technical’ manager in a company like SAFE without any technical training. Or has Mr Gasteiger

completed his technical training as Financial Advisor of the Salzburg government? Then, with a salary of 180.000 Schillings and chauffeur driven car, he was without doubt, for sixteen years, the best-paid working student of the world – admittedly, at the expense of the Salzburg taxpayer.”

Pseudo-dyadic sequences further deviate from asyndetic conditionals in terms of which finite verb forms have the highest token frequency. In asyndetic conditionals, these forms are the preterite subjunctives *sollte(n)*, *wäre(n)*, *würde(n)* and *hätte(n)*. In pseudo-dyadic sequences, on the other hand, the present indicative forms *haben* (44 tokens), *ist* (33 tokens), *sind* (32 tokens) and *wollen* (27 tokens) have the highest token frequency. A final difference concerns clause integration. As pointed out in section 3, asyndetic conditionals allow three options: disintegration, resumption and full integration. In the case of pseudo-dyadic sequences, the corpus analysis has revealed that besides resumption, only disintegration occurs. The only token is the following:

- (55) Tuckert die Umwälzpumpe? Laufgeräusche deuten auf Verschleiß der Lager hin. (AGS, N93/APR.15939 Salzburger Nachrichten, 30.04.1993; Nach der Wintersaison: Zehn Punkte für Überprüfung und Revision:)

„Does the circulating pump chug? Noises during running point to abrasion of the bearings.”

Maximal integration, the unmarked, favoured option in asyndetic conditionals, does not occur at all in pseudo-dyadic sequences. Put in grammaticalisation terms: pseudo-dyadic sequences exhibit a lower degree of bondedness than asyndetic conditionals and therefore the degree of divergence from the underlying dyadic sequences is clearly lower.

The analysis above shows that, if the variation patterns of pseudo-dyadic sequences and asyndetic conditionals are put together, a grammaticalisation cline with three focal points appears: (a) pseudo-dyadic sequences (low grammaticalisation: realis proper, resumption/disintegration) > (b) asyndetic conditionals (intermediate grammaticalisation: realis proper, resumption/disintegration) > (c) asyndetic conditionals (high grammaticalisation: non-realis, integration). The existence of this continuum suggest that in PDG asyndetic are in fact synchronically emergent. What remains to be investigated, is whether in German asyndetic conditionals are also diachronically emergent and whether their historical development can be described as a grammaticalisation process. This will be the focus of the following section.

5 Historical Data

In section 2, a scenario for the development of asyndetic conditionals was sketched. Drawing on a suggestion by Jespersen (1940) it was hypothesized that, diachronically, asyndetic conditionals are grammaticalisations of discourse sequences containing an interrogative and declarative (or imperative) clause. A first step in exploring the validity of this hypothesis has been to determine whether asyndetic conditionals are at all syntactic constructions. Based on synchronic corpus data, it has become clear that, in PDG and PDE, asyndetic conditionals behave like their syndetic counterparts in different respects; as such, they are constructions. Furthermore, the data analyses have revealed that, in PDE, asyndetic conditionals exhibit such a high degree of grammaticalisation that they are not synchronically emergent. This is not the case in PDG: asyndetic conditionals are less grammaticalised and corpus data demonstrate that the synchronic emergence cline proposed in section 3 may be observed in real language use. Therefore, it is conceivable that this cline also has a diachronic reflex. As for English, the lack of synchronic emergence need not imply that asyndetic conditionals are not diachron-

ically emergent. This may simply mean, that in English the process of grammaticalisation takes place much faster than in German. As a final step in verifying the plausibility of Jespersen's Model, this section will focus on the oldest stages of the languages in question, viz Old High German (OHG) and Old English (OE). Since we have no access to the spoken language of these stages, it is impossible to verify the existence of dyadic sequences. Similarly, pseudo-dyadic sequences are not accessible, because texts were not punctuated. Even if question marks occur, they are not original but the work of editors. Therefore, the focus will be on determining the grammaticalisation degree of asyndetic conditionals. To this end, the variation patterns of clause integration, the possible-world categories and the finite verb will be analysed for OE and OHG. This will provide clues about the validity of Jespersen's Model: if it is correct, it may be expected that the historical development of asyndetic conditionals is characterized by an increase of grammaticalisation in terms of bondedness, specialization and paradigmatic variability.

The above hypothesis will be tested by means of corpus data. For OE, the data are extracted from the York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE), a corpus containing about 75% of all extant Old English prose (Ann York p.c.). The syntactic annotations of the YCOE are such that *all* asyndetic conditionals may be easily found.⁹ On the whole, 99 constructions are annotated as asyndetic conditionals. Upon closer inspection, however, a large majority have a (conditional-)concessive reading. As a result, the YCOE contains only 34 tokens that are purely conditional. For OHG, the data have been extracted from two major works: Otfried's *Harmony of Gospels* and Notker Labeo's translation of the *Consolation of Philosophy*.¹⁰ On the basis of philological studies, it was possible to extract all asyndetic conditionals (159 in total).¹¹ For their analysis, a random sample of about 100 tokens has been taken used. Before discussing the results of the analyses, it should be noted that, in OE, the ratio of asyndetic to syndetic conditionals seems to be extremely low: of all conditional constructions in the YCOE, 99% are syndetic (introduced by *gif* or *gyf*), making the share of asyndetic conditionals marginal at best. Although it is impossible to give precise figures for OHG due to the lack of annotated corpora, the share of asyndetic conditionals must be much higher in OHG: the works of Otfried and Notker represent a smaller percentage of the extant OHG material than the YCOE does for OE and yet there are five times more OHG than OE tokens. Having said this, the focus will now be on the analysis of the historical data.

As for **clause integration**, it has been demonstrated in section 3 that, in PDG, there is a continuum ranging from disintegration to integration via resumption. Of these, integration is the unmarked, favoured option; resumption is also unmarked but non-favoured and disintegration is marked. From the grammaticalisation perspective it is important that, according to König/van der Auwera (1988: 107), these options should be regarded as linked

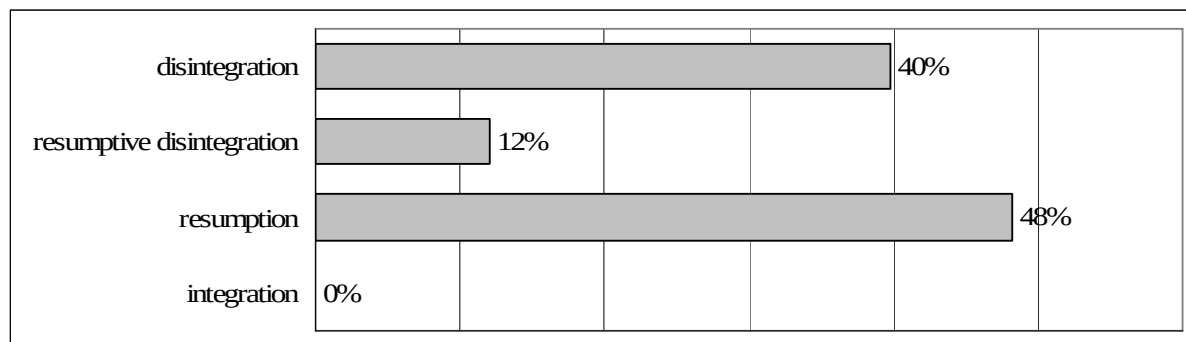
⁹ To extract the data the following search tool was used: CorpusSearch2 (developed by Beth Randall, cf <http://corpussearch.sourceforge.net/>). Thanks are due to Ann Taylor for advice on how to efficiently extract data from the YCOE with CorpusSearch2.

¹⁰ As for Notker Labeo, I have opted not to include any of his other works (e.g. his translation of the Boethian adaption of Aristotle's *Categorieae* and *De Interpretatione* or his translation of the *Book of Psalms*) because it is unlikely that any conditionals contained in them would yield a significantly different variation pattern. Other important texts such as the OHG *Tatian* and *Isidor* contain either no or just one asyndetic conditional(s) (cf Dittmer / Dittmer 1998: 132, Rannow 1888: 69). Finally, an analysis of the *Corpus of Minor Old High German Monuments* (cf <http://titus.uni-frankfurt.de/texte/etcs/germ/ahd/klahddkm/klahd.htm>) has also yielded only a very small amount of tokens.

¹¹ The following works served as a basis for collecting the OHG data: Furrer (1971) for Notker's *Consolation of Philosophy* and Wunder (1965) for Otfried's *Harmony of Gospels*. Both works contain an exhaustive list with references to all asyndetic conditionals in the texts in question. The citation of examples taken from Notker refers to the edition by Tax (1986, 1988, 1990). For examples taken from Otfried, reference is made to the edition by Erdmann (1973).

stages in a diachronic development. As such, disintegration is supposed to be the oldest option and developed into integration via the intermediate stage of resumption. This is not necessarily inconsistent with Jespersen's Model, because, as pointed out in section 4, (pseudo-)dyadic sequences without resumption are also possible. However, more recent studies on clause integration in adverbial constructions cast doubt on König/van der Auwera's hypothesis (cf Axel 2002 for OHG, Vandenberghe 2003 for Middle Dutch). They clearly show that in these older stages resumption was the unmarked, favoured option. Therefore, there is no reason to assume that disintegration was historically the original option. As Diagram 8 shows, asyndetic conditionals seem to confirm this for OHG:

Diagram 8: clause integration (OHG)



It appears that in the oldest stage of German, resumption and disintegration occur side by side; as expected, integration does not occur at all. It is interesting that resumption (48%) is even somewhat more frequent than disintegration (40%). Example (56) has disintegration, example (57) has a form of resumption which still occurs in PDG, namely with the resumptive particle *so*:

- (56) Strîtet man úmbe réht . únde úmbe únréht . sô man in dînge tûot . tíu sláhta strîtes . héizet latine fône iudicio iudicialis. (Notker, Consolation of Philosophy 55.25)

“If people argue about justice and injustice, as is normal in a legal procedure, then this kind of argument is called ‘iudicio iudicialis’ in Latin.”

- (57) quát er ouh bi nóti thaz man sia stéinoti *so* wídorit er in wáru sines sélbes leru. (Otfried, Harmony of Gospels III 17;31)

“However, if he had said that they should stone her, then his actions would have been in contradiction with his own teachings.” (Kelle [1870]1966: 222, translated from the German)

Another problem with König/van der Auwera's proposal is that it assumes only three options of clause integration. However, an additional option often occurs in OHG, viz resumptive disintegration:

- (58) Irsúachist thu thiu wúntar inti ellu wóroltaltar, erzélist thu ouh thia gúati, waz íagilicher dáti: Tharana maht thu irthénken, mit brúnnen thih gidrénken, gifréwen ouh thie thíne mit géistlichemo wíne. (Otfried, Harmony of Gospels II 9;21)

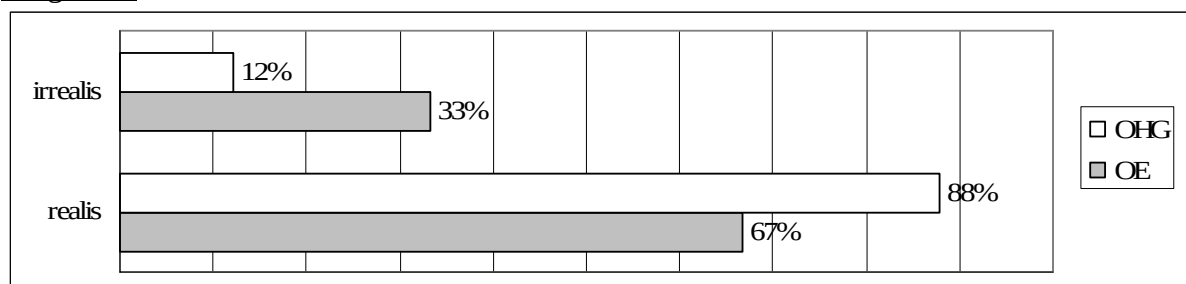
If you search through the wonders and aeons, if you consider the virtues that everyone has practiced, therein you may discover what invigorates you and your neighbours with water and refreshes you with sacred wine. (Kelle [1870]1966: 113f, translated from the German)

In such conditionals the protasis is followed by an adverb such as *tharana* (‘at that’). It combines a deictic element (*thar-* ‘there’) with an adverbial element (*-an* ‘at’). Like the

resumptive particles *so* and *dann* it has a propositional-deictic function. However, due to the additional adverbial component, it is semantically heavier. From these observations it may be concluded that, although König/van der Auwera's hypothesis is not entirely supported by the empirical data, a grammaticalisation process has nonetheless taken place in the diachronic development of clause integration. The total lack of integration, in OHG, and the preference for it, in PDG, indicates that diachronically there is an increase in bondedness. An increase in grammaticalisation has also taken place in terms of paradigmatic variability: whereas OHG allows a much wider range of adverbs and particles at the head of the apodosis, PDG only allows *so* and *dann*. This implies a decrease in paradigmatic variability.

The second aspect that needs to be examined are the **possible-world categories** realis, potentialis and irrealis (RPI). The data-analysis in section 3 has brought to light that, in PDE, asyndetic conditionals have a such strong degree of grammaticalisation that they are specialized for non-realis and have a very low paradigmatic variability. As for the historical perspective, it may be hypothesized that if this restriction to non-realis is in fact the result of a diachronic grammaticalisation process, realis variants should still be possible in OE. With regard to German, it has become obvious that PDG is not specialized for non-realis and that there is a clear preference for realis. Nonetheless, the data analysis has revealed that the verb forms with the highest token frequency are *sollte(n)*, *würde(n)*, *wäre(n)* and *hätte(n)*, all of which are typical of non-realis. If this tendency is interpreted as an ongoing process of decreasing paradigmatic variability (which one day could lead to specialization for non-realis), it may be hypothesized that in OHG the share of non-realis is even lower than in PDG. These hypotheses seem to be borne out by the results of the data analysis:

Diagram 9: RPI in OHG and OE



As for OE, it appears that realis is not only possible, but also represents the majority of all tokens (67%):

- (59) And soð is, þæt ic secge, awacie se cristendom, sona scylfð se cynedom. (Wulfstan's Institutes of Polity, YCOE: coinspolX, WPol_2.1.1_[Jost]:39.51)

And what I say is true: if Christianity weakens, then the monarchy will soon stagger (Jost 1959: 55ff, translated from the German)

Furthermore, OE allows irrealis as in (60); it represents 33% of all tokens:

- (60) Hæfde ic ælteowe þenas, nære ic þus eaðelice oferswiðed. (Ælfric's Lives of Saints, YCOE: coelive,+ALS[Forty_Soldiers]:226.2623)

“Had I faithful servants, I should not be thus overcome.” (Skeat 1881: 251ff)

OHG, like OE, has asyndetic conditionals in the realis (61) and irrealis (62) domains, potentialis is attested in neither language:

- (61) Máнно túmbesto . pegínnet sî in stéte stân . sô neíst si uuîluuéndigi. (Notker, Consolation of Philosophy 47.14)

“Stupidest of all men, if she [i.e. Dame Fortuna] stops, then this is no coincidence.”

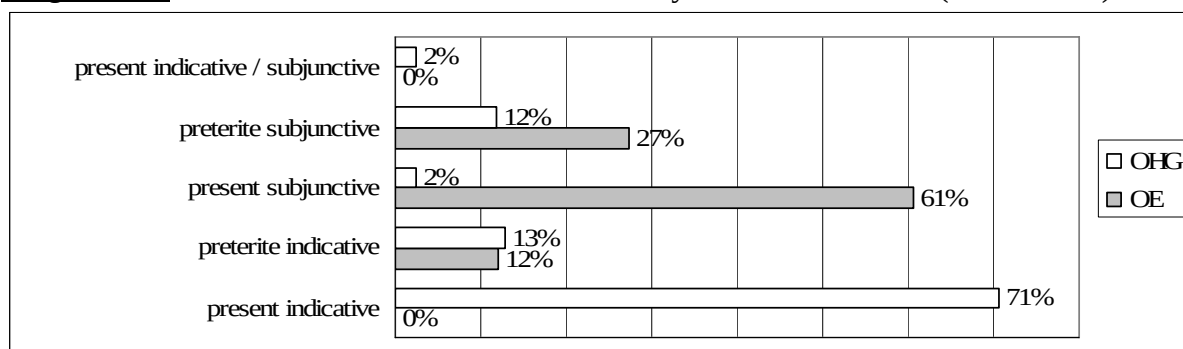
- (62) Ni wari thó thiú giburt, tho wurti wórolti firwúrt (Otfried, Harmony of Gospels I 11;59)

“Were there not this birth [of Christ], then this world would be lost.” (Kelle [1870]1966):34f, translated from the German)

In terms of frequency, it is clear that in OHG the share of realis (88%) is significantly higher than in PDG (62%). As a result, non-realís tokens (13%) are considerably less frequent than in PDG (34%).

The broader variety of possible-world categories in OE as compared to PDE is reflected by the tense and mood patterns of the **finite verb** of the protasis:

Diagram 10: Tense and mood of the finite verb in asyndetic conditionals (OE & OHG)



As Diagram 10 shows, the finite verb predominantly takes a present subjunctive (61%) in OE; this correlates with the high frequency of realis tokens (cf Mitchell 1985: 850):

- (63) Gewite þæt ungesewenlice ut: þonne fylð adune þæt gesewenlice. for ðan ðe hit ne stod na ær þurh hit sylf. (Ælfric's Catholic Homilies I, YCOE: cocathom1, +ACHom_I,_10:262.123.1914)

“If that which is visible depart [sic], then will the visible fall down; because it before stood not of itself.” (Thorpe 1971: 159f)

In OHG, the present subjunctive, though attested, is much less frequent (2%). Instead, the high amount of realis is reflected by the preference for the present indicative (71%) (cf Schrodtt 2004: 157). The latter does not appear in the OE sample. The preterite indicative, however, occurs not only in OHG (13%), but also in OE (12%). It occurs in backshifted realis conditionals as in the following examples:

- (64) Migdonia hire andwyrde, Eala þu, min swuster, *wistest* þu þæt ic wat, þas word þu ne cwæde. (Ælfric's Lives of Saints, YCOE: coelive,+ALS_[Thomas]:312.7732)

“Migdonia answered here: Oh! thou my sister, knewest thou what I know, thou wouldest not have said these words [...]” (Skeat 1881: 417f)

- (65) *Fuar* ther díufal thana sár; tho warun éngila thár (Otfried, Harmony of Gospels II 4;99)

“If the devil departed, then the angels were there.” (Kelle [1870]1966: 96f, translated from the German)

The preterite subjunctive is again found in both OE and OHG. Yet, in OE (27%) its frequency is more than twice as high as in OHG (12%); this correlates with the higher amount of irrealis tokens in OE:

- (66) Næron swa manega martyras *nære* seo mycele ehtnyss ðe se deofol astyrode ongean Drihtnes halgan þurh his arleasan þenas þe ðone hæðenscipe lufedon. (Ælfric's Lives of Saints, YCOE: coaelive ,+ALS[Forty_Soldiers]:328.2688)

“There would not have been so many martyrs had there not been this great persecution which the devil stirred up, against the Lord's saints, through his wicked servants who loved heathenism.” (Skeat 1881: 257f)

- (67) *Wárist* thu hiar, druhtin Kríst, ni thúltin wír nu thesa quíst (Otfrid, Harmony of Gospels III 24;51)

“Were you here, our Lord Christ, we would not suffer this torture.” (Kelle [1870]1966: 258f, translated from the German)

The OE examples further reveal that, as compared to PDE, the finite verb allows a wider range of variation in terms of the syntactic-semantic category of the verb. Whereas in PDE the use of *lexical verbs* is extremely rare and restricted to the lexeme *have*, OE shows a clear preference for them; they represent 61% of all tokens. As example (60) shows, the lexical verb may be a form of the lexeme *habban* – the OE reflex of *have* –, but other lexemes (often with a higher semantic weight) are equally possible: e.g. *awacian* ‘to grow weak’, *gewitan* ‘to depart’ and *witan* ‘to know’ as in examples (59, 63, 64). The following lexemes are also attested: *aræran* ‘to establish’, *eargian* ‘to grow timid’, *forberstan* ‘to burst apart’, *fulberstan* ‘to burst fully’, *fulgan* ‘to follow’ and *geseon* ‘to see’. Similar observations may be made for OHG, where in addition to *habên* ‘to have’, other lexical verbs occur: e.g. *findan* ‘to find’, *geleiten* ‘to lead’, *intlazan* ‘to temper’, *munden* ‘to join’, *strîten* ‘to fight’, *wasgan* ‘to wash’ and *zeigôn* ‘to show’, to name but a few. In OHG – where the share of lexical verbs is 53% – the amount of lexemes is much higher than in OE (52 vs 9). However, in all probability this is due to lower frequency of asyndetic conditionals in OE as compared to OHG (cf supra).

The category of *copulae* occurs in both OE (33%) and OHG (25%). In OE, they comprise forms of the lexemes *beon* ‘to be’ (e.g. 66) and *(ge)weorþan* ‘to become’ (e.g. 68); the latter has no reflex in PDE:

- (68) And huru hit byð to mænigfeald, *gewyrðe* hit þriddan siðe. (Wulfstan's Institutes of Polity; YCOE: coinspolX,WPoL_2.1.1_[Jost]:195.278)

And in particular it is too much, if it happens for the third time. (Jost 1959: 131ff, translated from the German)

The same applies to OHG, where forms of either *sîn* ‘to be’ or *werdan* ‘to become’ are used. In OHG, *werdan* may also function as an *auxiliary of the passive* (4%):

- (69) Uuirt er ferlâzen . ér rîhtet síh áber ûf ze_hímele . (Notker, Consolation of Philosophy, 118.16)

“If he is set free, then he will rise to heaven.”

Perfect auxiliaries, such as those to form the pluperfect are, however, not attested in the OHG and OE samples. This is to be expected, given that OHG and OE – unlike PDG and PDE – make no grammatical distinction between past and present irrealis (cf Mitchell 1985: 805, Schrodtt 2004: 157).

Furthermore, modal auxiliaries occur in both languages. In OE, this category, which represents 6% of all tokens, is restricted to *magan* ‘to be able’ as in (70):

- (70) [...] and sceoldon cunnian, *meahton* hy þone here ahwær utan betreppan. (Anglo-Saxon Chronicle C, YCOE: cochroC,ChronC_[Rositzke]:992.3.1234)

[...] that they should try if they could anywhere without entrap the enemy. (translation taken from the Avalon Project, cf <http://www.yale.edu/lawweb/avalon/angsax/ang10.htm>)

OHG, on the other hand, also allows – in addition to *mugen* – forms of *sculan* ‘will/must’ and *wellen* ‘to want’. With a combined share of 18% of all tokens, their frequency is significantly higher than in OE. It should be noted that in the corpus sample, the modal auxiliaries always have a deontic reading. Epistemic modality as expressed by PDE *should* and PDG *sollte* in conditional protases had not yet developed in OE and OHG (cf Traugott 1992: 196, Fritz 1997:109).

If the observations above are interpreted from the grammaticalisation perspective, it is clear that, in PDE, the finite verb displays a significantly lower paradigmatic variability than in OE. As regards the use of tense and mood forms, the most striking change concerns the present subjunctive: in PDE, this form, which was dominant in OE, is no longer used in asyndetic conditionals. The decrease in variability also concerns the syntactic-semantic category of the verb. As pointed out, lexical verbs not only represented the largest category in OE, they also comprised a relatively wide range of lexemes. The extremely low frequency of lexical verbs in PDE as well as their restriction to (one form of) the lexeme *have* are evidence of a decrease in paradigmatic variability. The near absence of lexical verbs in asyndetic conditionals need not surprise, seeing that in PDE, initial subject-verb inversion is (to a large extent) restricted to modal auxiliaries and *be*, *have* and *do*. Furthermore, the loss of the present subjunctive in asyndetic conditionals is not unusual given the overall marginal position it has in the verbal system of PDE. Apart from in a few formulaic expressions, the present subjunctive occurs only in the form *be* (cf Denison 1998: 162). However, this does not suffice to explain why the present subjunctive is no longer used in asyndetic conditionals. After all, the past subjunctive – the overall use of which is even more restricted – is still common in asyndetic conditionals. Thus, the absence of the present subjunctive in PDE is not only due to system-internal factors, but may also be explained in terms of a diachronic specialization towards non-realis and the disappearance of verb forms that are associated with realis. As for German, the data above have revealed that in OHG the share of realis is higher than in PDG. Furthermore, it appears that the high token frequency of non-realis forms such as *würde(n)*, *wäre(n)* and *hätte(n)*, which characterizes PDG, is absent in OHG.¹² The present indicative forms *(n)ist* and *wille* have the highest token frequency in OHG. These observations may indicate that the grammaticalisation degree of asyndetic conditionals has also increased in German, be it in a much less dramatic way than in English.

6 Conclusion

The central issue of this paper has been Jespersen’s suggestion that asyndetic conditionals arise from polar interrogatives. The aim was to update Jespersen’s Model, because in recent years it has been claimed it lacks a theoretical and empirical basis. To this end, the hypothesis was put forward that the development of asyndetic conditionals can be described in terms of emergence and grammaticalisation. Since emergence means there is a continual systematization, the various stages in Jespersen’s Model are not only linked stages in a diachronic development; they are also synchronically co-occurring variants. For PDG, the data-analyses

¹² The PDG preference for *sollte(n)* also has no reflex in OHG. However, given the overall absence of modals with an epistemic reading in OHG, this is conditioned system-internally (cf supra).

have produced two main insights. First of all, in German there is a spectrum of formal variation ranging from dyadic sequences to asyndetic conditionals. In other words, asyndetic conditionals are synchronically emergent. Secondly, it has become evident why interrogative-based conditionals are used in the first place: they provide the language user a discourse-pragmatic advantage by means of speech-situation evocation. In PDE, on the other hand, the grammaticalisation degree of asyndetic conditionals is so high that they are not synchronically emergent.

As for the historical perspective, there is an indication that asyndetic conditionals may also be *diachronically* emergent: in various respects (clause integration, the finite verb, possible-world categories), their historical development displays an increase in grammaticalisation. The question that remains is, however, whether this implies that Jespersen's Model can account for the diachronic emergence. First of all, since it was demonstrated for PDG that there is a cline ranging from dyadic sequences to strongly grammaticalised asyndetic conditionals via pseudo-dyadic sequences and moderately grammaticalised conditionals, it is plausible that this also applies to OHG. For OE such an extrapolation is, however, more difficult, because asyndetic conditionals are not emergent in PDE. In addition, even if such discourse sequences exist, they are not accessible to us due to the nature of the extant OE (and OHG) material; consequently, their existence cannot be verified. A further reason why Jespersen's Model is problematic from a historical perspective is the high frequency of the present subjunctive in OE asyndetic conditionals. According to Mitchell (1985: 679), polar interrogatives with subject-verb inversion could only take the indicative in OE:

(71) Is hit swa hi secgað? (Ælfric's Catholic Homilies I, cited in Mitchell 1985: 679)

“Is it as they say?”

The preference for the present subjunctive and the absolute lack of the present indicative in asyndetic conditionals might be explained as a case of divergence from the discourse basis. However, given the relatively low grammaticalisation degree of asyndetic conditionals in OE, this does not seem plausible. A final problematic aspect of Jespersen's Model is related to the development of word order patterns. By claiming that polar interrogatives are the historical source of asyndetic conditionals, Jespersen assumes that, already in the earliest stages of German and English, subject-verb inversion was fixed as the standard marker for polar interrogatives. However, as Burridge (1993: 221f) points out, in the earliest stages of the West-Germanic languages, “the placement of elements was controlled by information structure and other contextual considerations”. In other words, word order used to have a pragmatic function in OHG and OE. Only later on did word order develop into a marker of specific syntactic categories (such as polar interrogatives).

From this it follows that Jespersen's Model may be accused of being a-historical as a explanation for the diachronic emergence of asyndetic conditionals. There is, however, an alternative, which I call *Hopper's Model*. He suggests that asyndetic conditionals should not be traced back to an interrogative-declarative sequence, but rather to a combination of two declarative clauses, the first of which is a V1-declarative clause (Hopper 1975: 51). Unlike Jespersen's Model, this suggestion is not a-historical, because declarative clauses are not restricted to the indicative. This suggestion is also attractive, if the discourse functions of conditionals are taken into account. According to Ford/Thompson (1986), conditionals may fulfil the following functions: (1) the exploring of options, (2) introduction of a contrast, (3) exemplification and (4) repetition of an earlier claim. Studies on the discourse functions of V1-declaratives, reveal that there is a considerable overlap with conditionals (Masayuki 2004: 12, cf also Mitchell 1985: 978). This may be indirect evidence in support of Hopper's suggestion.

If it is true that Jespersen's Model does not account for the diachronic emergence, the question arises how a discourse sequence of two *declarative* clauses may receive a conditional interpretation. In other words: what does the bridging context look like? According to a suggestion by Lenerz (1984: 153), V1-order in declarative clauses allows to mark the whole proposition of the clause as rhematic. If a proposition is rhematic, it may be concluded that the clause in question contains no thematic element whatsoever (ibid). As such, the statement cannot be interpreted as a statement about a specific theme (ibid). Consequently, the statement is under discussion as a whole (ibid). Lenerz (ibid) argues that if this declarative clause is followed by another one, the former may be interpreted as hypothetical and therefore serve as theme for the latter.

Lenerz's proposal for a bridging context is, of course, a conjecture and further analyses of the structure and function of V1-declaratives in OE and OHG are needed to verify Hopper's Model. Nevertheless, supposing that the latter can account for the diachronic emergence of asyndetic conditionals, it may seem cumbersome that another model – Jespersen's Model – has already turned out to adequately model the synchronic emergence. However, if we take into account the transition from a pragmatic to a grammatical (i.e. syntactic) word order in the history of West-Germanic, this need not be surprising. In OE and OHG subject-verb inversion was quite common in declarative clauses. However, this word order gradually disappeared in declarative clauses and was fixed as a marker of polar interrogatives. This means that subject-verb inversion in asyndetic conditionals may have been *remotivated* in the discourse sequences as the marker of polar interrogatives. But why then has English ceased to be emergent? There is, for instance no obvious reason why asyndetic conditionals of the type *Does the sun shine, then we'll go for a swim* do not exist in PDE, as they are perfectly normal in PDG. An important difference between English and German that may explain why in PDE asyndetic conditionals are not emergent concerns the ratio of asyndetic to syndetic conditionals. This ratio was already very low in OE (viz 1% vs 99%) and a query performed on the British National Corpus shows about the same ratio for PDE (2% vs 98%). If asyndetic conditionals have always been so marginal it is conceivable that already early on – e.g. in (early) Middle English – non-realis became their niche. If this took place before the transition from pragmatic to grammatical word order, it may well be that a remotivation of the subject-verb inversion as an interrogative marker would not make sense to the language user. This hypothesis, however, requires further research on word order patterns and the form and function of asyndetic conditionals in Middle and Early Modern English.

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