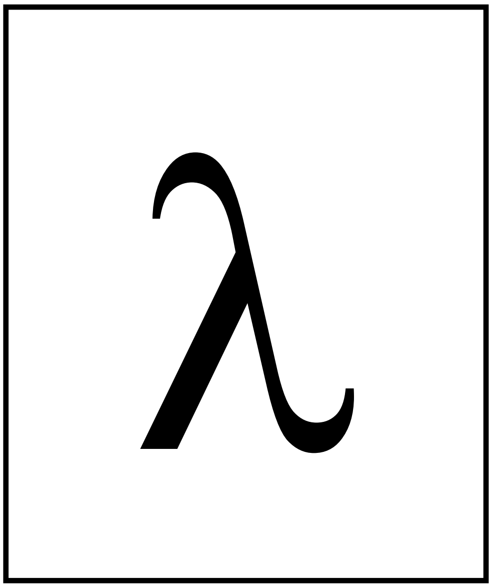
Sprachtheorie und germanistische Linguistik

Eine internationale Zeitschrift

28.2 (2018)



Nodus Publikationen
Münster

Sprachtheorie
und
germanistische
Linguistik

Herausgeber:	ANDRÁS KERTÉSZ
Redaktion:	PÉTER CSATÁR, ZSUZSANNA IVÁNYI, CSILLA RÁKOSI, MARIANNA F. BALOGH (technische Redakteurin)
Wissenschaftlicher Beirat:	GUNTHER DIETZ (München), REINHARD FIEHLER (Mannheim), NORBERT FRIES (Berlin), ERNEST W.B. HESS-LÜTTICH (Bern), PIROSKA KOCSÁNY (Debrecen), JÜRGEN PAFEL (Stuttgart), MARGA REIS (Tübingen), MONIKA SCHWARZ-FRIESEL (Jena), ANITA STEUBE (Leipzig), RICHARD WIESE (Marburg)
Anschrift:	PROF. DR. ANDRÁS KERTÉSZ, Universität Debrecen, Institut für Germanistik, H–4002 Debrecen, Pf. 400, Tel./Fax: 0036-52-512942, e-mail: kertesz.andras@arts.unideb.hu.
Zielsetzung:	*Sprachtheorie und germanistische Linguistik* setzt sich zum Ziel, Forschungen zur germanistischen Linguistik zu fördern, die auf sprachtheoretisch reflektierte Weise betrieben werden und mit Grundlagenproblemen der theoretischen Linguistik verbunden sind.
Gutachten:	Alle eingereichten Beiträge werden doppelt blind begutachtet.
Referatenorgane:	*Sprachtheorie und germanistische Linguistik* wird in den folgenden Referatenorganen oder Datenbanken angeführt oder referiert: *Bibliographie Linguistischer Literatur* (Frankfurt: Klostermann), *Germanistik* (Tübingen: Niemeyer), *Linguistics Abstracts* (Oxford: Blackwell), *Linguistics and Language Behavior Abstracts* (San Diego: Sociological Abstracts), *MLA Directory of Periodicals* (New York: MLA), *MLA Bibliography* (New York: MLA), *Zeitschrift für Germanistische Linguistik* (Berlin & New York: de Gruyter).
Erscheinungsweise:	Zweimal jährlich.
Web:	http://sugl.eu/
Verlag:	NODUS PUBLIKATIONEN – WISSENSCHAFTLICHER VERLAG, Lingener Str. 7, D-48155 Münster, Fax: [+49]-[0]251-661692, Tel: +49-[0]251-65514, e-mail: dutz.nodus@t-online.de, http://www.nodus-publikationen.de
Copyright:	© 2018 Nodus Publikationen. Die in dieser Zeitschrift veröffentlichten Artikel sind urheberrechtlich geschützt. Nachdruck oder Vervielfältigung, auch auszugsweise, verboten.

ISSN (Online) 2365-8584

Aufsätze / Articles

Sprachtheorie und germanistische Linguistik (sugl.eu), 28.2 (2018), 155-183
© 2018 by Nodus Publikationen (Münster), ISSN (Online) 2365-8584

Katalin Nagy C., Enikő Németh T. & Zsuzsanna Németh

Merging various data analysis techniques in pragmatics

Abstract

We aim to explore the merging of various data sources in two different disciplines of the study of language use, namely, synchronic and historical pragmatics. On the basis of two case studies taken from the actual research practice of these traditionally corpus-based fields, we demonstrate that corpus as a data source is of an integrated nature and research methodologies in pragmatic research have fuzzy boundaries. We attempt to show that even in a mainly corpus-based research practice various pieces of information gained from different sources are merged, consequently, corpus as a data source is not exclusive. We argue that it is complemented with the researchers' linguistic intuition, the results of earlier investigations, the theoretical framework we work in, inferences, etc. as further data sources.

Keywords: implicit arguments, context types in grammaticalisation, fuzzy boundaries of data sources, corpus data, linguistic intuition

1 Introduction

In the last decades metatheoretical studies have emphasised that the integration of data from various sources is useful and even necessary in linguistic research practice (cf. Lehmann 2004; Kepser & Reis 2005; Penke & Rosenbach 2004/2007; Kertész & Rákosi 2008, 2012, 2014). The different approaches to the study of language use assume that they collect and use data from well-distinguished sources compatible with their underlying theoretical considerations, such as linguistic intuition, written and spoken corpora, real and thought experiments, etc. However, the actual research practice often reveals that there are fuzzy boundaries between these methods. In the present paper, we aim to examine this fuzziness in the research methodologies of two different disciplines of the study of language use, namely, synchronic and historical pragmatics. Although classic philosophical pragmatic studies dominantly applied data from intuition, introspection, and thought experiments, in the last few decades both synchronic and historical pragmatic research became corpus-based (corpus informed) or corpus-driven to a large extent in the sense that they mainly rely on the empirically observable occurrences of various linguistic and pragmatic units in spoken or written discourses.[1] However, data source in the corpus-based or corpus-driven research is more complex than it has been assumed previously.

To fulfil our aim, we will present two brief case studies in which methodological and metatheoretical considerations help to identify the different pieces of data merged during the research. Furthermore, we attempt to show that even in a mainly corpus-based research practice various pieces of information gained from different sources are merged, consequently, corpus as a data source is not exclusive. We argue that it is complemented with the researchers' linguistic intuition, the results of earlier investigation, the theoretical framework we work in, inferences, etc. as further data sources.

The organisation of the paper is as follows. After the introductory Section 1, in Section 2 we will briefly summarise the methodological and metatheoretical background underlying our hypothesis according to which it is not possible to draw clear boundaries between various data sources. In Sections 3 and 4, we will present two case studies to support our hypothesis. In Section 3, we will analyse implicit plural pronominal objects in Hungarian language use, and then, in Section 4, we will investigate the role of context types in semantic change of grammaticalisation. After presenting these case studies, in Section 5, we will summarise our results and conclusions.

---

[1] Although in this paper we relied on data from various corpora, we did not aim to conduct a frequency-based statistical analysis. Consequently, our investigations were rather corpus-based than corpus-driven. For more details on the difference between corpus-based (corpus-informed) and corpus-driven investigation, see Tognini-Bonelli (2001).

2 Methodological and metatheoretical approaches to data and data sources in the study of language use

2.1 Traditional concepts of data and data sources

Jucker (2009: 1615-1619) discusses the “armchair”, “field” and “laboratory” approaches as three different ways of doing pragmatic research.[2] The three types of data which these approaches provide are usually regarded as the three basic data types in the research of language use. Let us consider these three types of data in detail.

The first type of data includes data gained with the “armchair” method. Their source can be the researcher’s intuition and introspection, but opinions and assessments from other speakers of a language or language variety can be elicited via the interview method (Jucker 2009: 1615).

The second type of data contains data gained with the “field method”. According to Jucker (2009: 1615-1618), the field method is based on observing naturally occurring data, that is, utterances produced for communicative purposes outside the research project for which they are collected.[3]

And finally, the third type of data involves data gained with the “laboratory” method. The laboratory method (Jucker 2009: 1618-1619) includes different techniques to elicit certain utterances expected to be used in imaginary situations. This method enables researchers to control many different variables.

Although these types of data and data sources are widely accepted and applied in pragmatics, different approaches prefer one or another data source. At the same time, historical research obviously lacks some of these data types. Although researchers’ intuition as a data source plays a role in historical research in order to judge the well-formedness of linguistic units of earlier language stages, researchers have to rely on what has been termed “substitute competence” (see Forgács 1993-1994), while native language speakers’ linguistic intui-

---

[2] These notions were introduced by Clark & Bangerter (2004: 25).

[3] Jucker (2009: 1615-1618) enumerates several types of field method. Researchers can take notes of occurrences encountered in daily life (“notebook method”), collect occurrences from fictional material or from written documents (“philological method”), use transcriptions of actual conversations (“conversation analytical method”), and, finally, employ computerised search techniques on electronic corpora (“corpus method”).

tions can be accessed only indirectly.[4] The philological and corpus methods can only be used when investigating language stages from which we have written documents. Other language stages can only be studied by relying on reconstructed data. Methods which require native language informants' contribution (i.e. the "notebook", the "conversation analytical", and the "laboratory" methods, see fn. 3) cannot be applied in historical linguistics. However, it is worth noting that data sources not available in the investigation of earlier language stages can still play a role in an indirect way, since argumentation in historical research can use information concerning the current language state.

Since both case studies presented here are corpus-based in the sense that they rely on the observable occurrences of various units in spoken or written discourses, some remarks on the notion of corpus data seem to be in order. Researchers in the wide domain of the study of language use usually share Lehmann's (2004: 201) opinion that data relying on corpora are the most reliable type of data. According to Lehmann, since corpus data are independent of the researcher, the research itself can be considered more objective. Francis (1992: 17) defines linguistic corpus as "a collection of texts assumed to be representative of a given language, dialect, or other subset of a language, to be used for linguistic analysis". The amount of texts contains a group of occurrences which represent the linguistic or pragmatic unit under study in the corpus. These occurrences are traditionally conceived of as data used in that particular research. However, if we use the term *data* in this sense, we cannot account for the practice that the researchers do not rely on the occurrences themselves, but the *statements* about them (cf. Kertész & Rákosi 2012: 170-171), that is, the relationship between occurrences and theoretical statements of a certain research is not explicit. In order to reveal this relationship, it is reasonable to apply a new concept of data.

---

[4] For instance, through analysing grammars of the period at issue concerning normative language use, differences between original manuscripts and possible later duplicates or translations, remarks on the margins of historical documents, translations, etc.

2.2 A new concept of data proposed by Kertész & Rákosi (2012)

Kertész & Rákosi (2012) propose a new model of linguistic research, the central idea of which is that scientific theorising is a process of plausible argumentation based on only partially confirmed, i.e. plausible information and provides plausible results. Kertész & Rákosi (2012: 170-171) argue that the occurrences themselves cannot enter the argumentation process directly, only in form of statements. Kertész & Rákosi (2012: 169) define a datum as follows: "A datum is a statement with a positive plausibility value originating from a direct source".[5] According to this novel approach, data (plausible statements) combine information content and plausibility value, which is assigned to the information content on the basis of some direct source. These statements cannot be regarded as true or false, but as acceptable only to a certain extent (see Kertész & Rákosi 2012: 63). The plausibility of data is connected to the strength of acceptability of their source.

One of the advantages of Kertész & Rákosi's (2012) approach is that it can handle the traditional data types in a unified way. Data gained with the "armchair method", "field method" and "laboratory method" all can be regarded as plausible statements about occurrences originated from various sources.

Another advantage is that the model also enables a statement to be plausible on the basis of a source and implausible on the basis of another one at the same time (Kertész & Rákosi 2012: 169-184, 2014: 37-46),[6] therefore it is suitable to reveal inconsistencies emerging during the research.

Since both fields we work in are mainly corpus-based, we have to clarify the concept of corpus data we work with. We share Kertész & Rákosi's (2012: 173) view on corpus data, according to which corpus data are plausible statements about the presence of a linguistic unit in a corpus or some of its characteristics.

The question arises how data are used in the process of linguistic theorising and what the relationship is between data and hypotheses.

---

[5] According to Kertész & Rákosi's model, indirect sources are those from which one can get plausible statements by means of inferences, all other sources (e.g. intuition, corpus, and experiments) are considered direct.

[6] When a source supports a statement's negation, we can say that the statement is implausible on the basis of this source.

To answer this question, Kertész & Rákosi (2012: 178-184, 2014: 41-46) use the concept of evidence. Evidence is a relative notion in the model, and not an objective, given subcategory of data. Data function as evidence in the case when they "contribute to the judgement and comparison of the plausibility of rival hypotheses" (Kertész & Rákosi 2012: 178). If data from different sources function as evidence for a hypothesis, then higher plausibility value can be assigned to the hypothesis. On the basis of the above metatheoretical considerations, we can assume that the conscious integration of data from various data sources increases the plausibility and reduces the uncertainty resulted from relying on a single data source (Kertész & Rákosi 2012: 239).

In the next two sections, we will examine the merging of different data sources in synchronic and historical pragmatics. We will show that although these areas are mainly corpus-based, in the actual research practice they integrate data from different sources. However, the connections between these sources are not easy to reveal, since they can have fuzzy boundaries. Firstly, we present a case study in synchronic pragmatics.

3 Implicit plural pronominal objects in Hungarian language use

3.1 *Aim*

In this section we aim to examine a particular pragmatic phenomenon, namely, the occurrence of the implicit plural pronominal object arguments in Hungarian language use. To investigate this phenomenon and eliminate the inconsistency in the literature regarding their presence in Hungarian is only possible if we merge various data sources and assume fuzzy boundaries between them.

In the past two decades special attention has been devoted to the investigation of implicit verbal arguments in different languages in a complex approach which considers both grammatical and pragmatic (contextual) information interacting with each other (Cote 1996; García Velasco & Portero Muñoz 2002; Goldberg 2005; Németh T. 2010, 2017). Implicit arguments can be defined as arguments in lexical-semantic representations of verbs which are lexically unrealised, and whose implicit presence in utterances is attested by lexical-semantic, grammatical, and/or pragmatic (contextual) evidence (Németh T. 2014, 2017).

In Hungarian language use the occurrence of verbs with implicit arguments can be licensed by lexical-semantic, grammatical, and pragmatic factors in the following three manners: (A) if some element of the lexical-semantic representation of a verb licenses the lexically unrealised occurrence of the argument, according to the principle of relevance (cf. *A mama főz [ételt]*[7] 'The grandmother is cooking [dish]'), (B) if the rest of the utterance, i.e. immediate context with its contextual factors including encyclopaedic pieces of information and grammatical requirements provides a relevant, typical interpretation (cf. *Rita adott a koldusnak [pénzt]* 'Rita gave [money] to the begger'), and, (C) if extending the immediate utterance context of the argument results in a relevant interpretation (cf. *Kihűltek a sütemények*$_i$*. Megettük pro*$_{subj}$*=[mi] pro*$_{obj}$*=[azokat*$_i$*].* 'The cookies got cool. We ate [them.ACC].').

Hungarian is a pro-drop language which licenses not only subject pro-drop but object pro-drop as well. Dropped objects are kinds of implicit direct object arguments which can be licensed and identified in the second (B) or the third (C) manner (Németh T. forthcoming).

Hungarian grammatical tradition as well as the current generative grammatical approaches agree that Hungarian transitive verbs can only be used with singular zero pronominal objects (Kugler 2000; É. Kiss 2002, 2012; see e.g. (2)). Their argumentation is mostly based on the sentence-level data coming from their own intuition. However, there are other Hungarian native speakers whose intuition does accept plural zero pronominal objects (see e.g. (1c)). Consequently, there is an inconsistency in the research regarding the acceptability of the plural zero pronominal objects. But if data from new data sources are taken into consideration and merged in the research, this inconsistency can be eliminated.

3.2 Implicit pronominal objects in Hungarian language use

The pronominal direct object can be left implicit in Hungarian language use, if it is expressed by the verbal inflection on the transitive verbs and/or can straightforwardly be identified in the context (see

---

[7] Implicit arguments are provided in square brackets.

e.g. (3)). In Hungarian language use both zero object anaphors and extralinguistically licensed object pro-drop can occur (see e.g. (7) and (12), respectively).

In Hungarian there are two types of conjugations, traditionally called indefinite and definite conjugations. Transitive verbs can be conjugated for both indefinite and definite forms, but intransitive verbs only for indefinite forms. If transitive verbs are used with an indefinite direct object, they need to be conjugated for the indefinite forms. If they are used with a definite direct object, they must be conjugated for the definite forms. The 1st and 2nd person dropped objects are indicated by the inflectional morphemes on the transitive verbs conjugated for the indefinite form; they do not occur with definite conjugations (É. Kiss 2012: 194). Let us consider (1a–c).[8]

(1) a. *Szeretsz/* *szerettek* *[engem/minket]?*
love.INDEF.2SG love.INDEF.2PL me.ACC/us.ACC
'Do you.SG.NOM/PL.NOM love [me/us]?'

b. *A* *nagypapa* *szeret* *[engem/minket/*
the grandfather.NOM loves.INDEF me.ACC/us.ACC/
téged/titeket].
you.SING.ACC/you.PL.ACC
'The grandfather loves [me/us/you.SG.ACC/you.PL.ACC].'

c. *Szeretlek* *[téged/titeket].*
love.1SG.2OBJ you.SG.ACC/you.PL.ACC
'I love [you.SG.ACC/you.PL.ACC].'

In (1a) the verb *szeret* 'love' is conjugated for the indefinite form, it agrees with the singular or plural 2nd person subject and the inflectional morpheme can refer to both the singular and plural 1st person dropped object indicating the actual speaker(s). In (1b) the verb *szeret* 'love' is also conjugated for the indefinite form but it has a singular or plural 3rd person subject and its inflectional morphemes can indicate both a singular and plural 1st or 2nd person dropped object, identifiable with the actual speaker(s) and hearer(s). If the subject is 1st person singular, the verbal suffix *-lak/-lek* can indicate both a singular

---

[8] Abbreviations used in the glosses are provided at the end of the paper in the List of abbreviations.

and plural 2nd person dropped object which refer(s) to the actual hearer(s), cf. (1c).

3.3 Hungarian grammatical tradition on implicit pronominal objects

É. Kiss (2012: 193-195) assumes that Hungarian allows only singular null pronominal objects. If a transitive verb is conjugated for the indefinite form and occurs without an explicitly expressed 1st or 2nd person object, then a zero singular 1st or 2nd person object is supposed. So, according to É. Kiss's (2012: 193) claim, utterances in (1a–b) are only grammatical if they contain a singular null 1st or 2nd person object. However, in (1a) if the null 1st person pronominal object refers to the speaker and some other people, it definitely has a plural reading. Similarly, in (1b) if the null 1st and 2nd person objects refer to the speaker and some other people and to the hearer and some other people, respectively, they have a plural reading. The singular 1st and 2nd readings are only a default interpretation due to the lack of specific context. É. Kiss (2012: 195) especially highlights that the plural 2nd person object pronoun cannot be dropped with verbs conjugated for the *-lak/-lek* form. Therefore, plural reading in (1c) and in the second utterance in (2) are ungrammatical according to her intuition.

(2)	*Ne*	*bújjatok*	*el!*	*Látlak*	*titeket/*
	not	hide.IMP.INDEF.2PL	PVB	see.1SG.2OBJ	you.PL.ACC

**pro.*
[you.PL.ACC]
'Don't hide! I can see you.PL'

Previous approaches to the objectless use of Hungarian transitive verbs share É. Kiss's (2012) opinion, i.e. they assume that plural 2nd person objects always have to be explicitly expressed with verbs conjugated for the *-lak/-lek* form (H. Molnár 1962: 157; Pete 1998: 140; Kugler 2000: 110). Thus, on the basis of their intuition as a reliable source, a statement that Hungarian transitive verbs cannot occur with zero plural pronominal objects seems to have a high plausibility value.

3.4 New data sources in the research on implicit plural pronominal objects

3.4.1 Data from intuition and thought experiments

In contrast to the Hungarian grammatical tradition, according to our intuition as well as that of other Hungarian native speakers (see Németh T. forthcoming), (1c) and the second utterance in (2) are also grammatical and acceptable when *szeretlek* 'I love you' and *látlak* 'I can see you' occur with an implicit plural 2nd person personal object pronoun [titeket 'you.PL.ACC']. However, it must be noted that there are Hungarian native speakers whose intuition considers plural reading in (1c) and in the second utterance in (2) questionable, i.e. these native speakers evaluate these occurrences as neither absolutely acceptable nor totally unacceptable. However, if we perform a thought experiment and situate these utterances in a particular context, the native speakers in question change their acceptability evaluations from questionable to acceptable, cf. (3) and (4), respectively.

(3) (Children are playing hide-and-seek. The children whose turn it is to hide are hesitating where to hide, and so they are running out of time. The boy who finishes the counting says:)
Ne bújjatok el! Látlak [titeket].
not hide.IMP.INDEF.2PL PVB see.1SG.2OBJ you.PL.ACC
'Don't hide! I can see [you.PL.ACC].'

(4) (Grandchildren are behaving terribly; they are shouting and quarrelling with each other. The grandfather punishes them. The grandchildren become frightened and grow sad. After a while the grandfather says:)
Gyertek ide gyorsan! Szeretlek ám
come.IMP.INDEF.2PL here quickly love.1SG.2OBJ really
[titeket], nincs semmi probléma.
you.PL.ACC not.is.INDEF nothing problem.NOM
'Come here quickly. I do love [you.PL.ACC], there is no problem.'

In (3) and (4) the contexts support the interpretation with zero plural 2nd person pronouns [titeket 'you.PL.ACC']. The implicit plural 2nd person subject indicated by the verbal inflection can serve as an antecedent for the zero objects of *látlak* 'I can see you' and *szeretlek* 'I love you' in the discourse context. However, it is worth emphasising that if we imagine the contexts described above without the first utterances, *Látlak* [titeket] 'I can see you.PL.ACC' and *Szeretlek ám* [titeket] 'I really love you PL.ACC' still remain grammatical and acceptable with a zero plural 2nd object reading. Thus, the physical contextual information is strong enough to license the occurrence of the zero plural 2nd person object with the *-lak/-lek* inflection.

Let us modify the situation and utterances with 3rd person subjects. Cf. (5) and (6).

(5) (Children are playing hide-and-seek. The children whose turn it is to hide are hesitating where to hide, and so they are running out of time. The boy who finishes the counting begins looking and can see other children not hiding. A girl realises that the boy who has begun looking can see them:)

Ne	*bújjatok*	*el!*	*Lát*	*[titeket].*
not	hide.IMP.INDEF.2PL	PVB	sees.INDEF	you.PL.ACC

'Don't hide! He can see [you.PL.ACC].'

(6) (Children are behaving terribly; they are shouting at their mother. The grandfather punishes them. The children become frightened and grow sad. After a while the mother says:)

Szaladjatok	*oda*	*gyorsan*	*nagypapához!*	
run.IMP.INDEF.2PL	there	quickly	grandfather.ALL	
Szeret	*ám*	*[titeket],*	*nincs*	*semmi*
loves.INDEF	really	[you.PL.ACC]	not.is.INDEF	nothing
probléma.				
problem.NOM				

'Run there to the grandfather quickly. He does love [you.PL.ACC], there is no problem.'

The occurrence of implicit plural 2nd person object pronouns in (5) and (6) also attest that in Hungarian language use it is not only the singular 2nd person object pronoun which can be dropped. Furthermore, similar analysis can be provided in the other forms of indefinite conjugation (cf. Németh T. forthcoming).

The analyses of the utterances in (1)–(6), based on our own and other native speakers' intuition, as well as thought experiments, suggest with a high plausibility value that plural 2nd person pronominal objects can also be dropped in Hungarian language use if the particular contextual factors and/or anaphoric relations in subsequent utterances license it.

3.4.2 Corpus data

In order to eliminate the inconsistency concerning the occurrence of zero plural pronominal objects, let us introduce a new data source into the research, namely, the Hungarian National Corpus (corpus.nytud.hu/mnsz) and check whether there are occurrences of verbs conjugated for the *-lak/-lek* form with zero plural 2nd person objects. Cf. (7)–(8).

(7) *Eltévedt madaraim$_i$, látlak [titeket$_i$],*
PVB.lost my birds.NOM see.1SG.2OBJ you.PL.ACC
látlak [titeket$_i$].
see.1SG.2OBJ you.PL.ACC
'My lost birds, I can see [you.PL.ACC], I can see [you.PL.ACC].'

(8) *Ági, Margit, Kati, hol vagytok [Ø$_{subj\ i}$]?*
Ági.NOM Margit.NOM Kati.NOM where are.INDEF.2SG
Szeretlek [titeket$_i$]!
love.1SG.2OBJ you.PL.ACC
'Ági, Margit, Kati, where are [you.PL.NOM]? I love [you.PL.ACC].'

The occurrence of *látlak* 'I can see you' in (7) and *szeretlek* 'I love you' in (8) with zero plural 2nd person objects can also be analysed as anaphoric null plural 2nd person pronominal objects which are coreferential with their coindexed antecedents in the discourse context. However, the zero plural 2nd person objects in (7)–(8) can also be analysed as zero exophoric objects since they also refer extralinguistically to the partners of communicators.

Finally, let us examine the use and interpretation of the verbs with implicit 3rd person pronominal objects in Hungarian language use. É. Kiss (2012: 193) claims that if in a Hungarian sentence there is no overt object and the verb is conjugated for the definite form, a singular 3rd person pronominal object is assumed. Cf. É. Kiss's (2012: 194) example in (9).

(9) *Ismerem pro$_{subj}$ =[én] pro$_{obj}$ =[őt/azt].*
know.DEF.1SG I her.ACC/him.ACC/it.ACC
'I know [her.ACC/him.ACC/it.ACC]'.

According to É. Kiss (2012: 194), the plural pronominal object cannot be dropped, since the plural feature cannot be reconstructed from the verbal suffix. However, she admits that there are plural zero 3rd person pronominal objects in Hungarian in the second conjuncts of coordinated sentences and in responses to *yes–no* questions. They are licensed when their antecedent is an object in the previous clause, but they are not anaphoric object *pro*; instead, their use involves VP-deletion. Cf. É. Kiss's (2012: 194) example in (10).

(10) *Az ismerőseimet keresem, de nem*
the my.acquaintances.ACC seek.DEF.1SG but not
találom [$_{VP}$ 0]
find.DEF.1SG
'I am looking for my acquaintances but I cannot find [them.ACC].'

However, we can find occurrences of zero plural 3rd person pronominal objects when their antecedent in the context is not an object, and so VP-deletion cannot take place. Cf. (11).[9]

(11) *Kihűltek a sütemények$_i$. Megettük*
PVB.got.cool.INDEF.3SG the cookies.NOM PVB.ate.DEF.1PL
pro$_{subj}$=[mi] pro$_{obj}$=[azokat$_i$].
we them.ACC
'The cookies got cool. We ate [them.ACC].'

Although the verbal suffixes in (11) do not mark the plural feature either, as É. Kiss (2012: 194) claims, the verb *megettük* 'we PVB.ate', conjugated for the definite form occur with plural zero 3rd person pronominal objects. The particular context overrides the evaluation predicted by grammar, i.e. this anaphoric occurrence is acceptable, since it is licensed by particular contextual information. It is worth mentioning that exophoric plural zero 3rd person pronominal objects can also be licensed by contextual factors, as in (12).

(12) (The teacher writes a lot of four-digit numbers on the blackboard. Then she says:)
Adjátok pro$_{subj}$=[ti] össze pro$_{obj}$=[azokat]!
add.IMP.DEF.2PL you PVB them.ACC
'Add [them.ACC] up.'

---

[9] Occurrences in (11) and (12) below have been collected via observation.

In (12) the verbal form *adjátok össze* 'add.PVB' conjugated for the definite form occurs with a plural zero 3rd person pronominal object which does not have any object antecedent in the previous utterances. In other words, it cannot be analysed as a case of VP-deletion either; instead, it has exophoric identification in the physical context. The deictic interpretation of the plural zero 3rd person pronominal object in (12) occurs similarly to the interpretation of the zero 1st and 2nd person pronominal objects discussed earlier, although the verb it occurs with is conjugated for the definite form, while the verbs with which zero 1st and 2nd person pronominal objects occur are conjugated for the indefinite forms.

Summarising the results, it can be concluded that in Hungarian language use transitive verbs can occur with zero plural pronominal objects both anaphorically and exophorically in all persons. The plausibility value of this concluding statement is much higher than the plausibility values of the inconsistent initial statements about the nonacceptability/acceptability of the occurrences of zero plural pronominal objects (see Sections 3.3 and 3.4.1). Data originated in the new data sources such as other native speakers' intuition, thought experiments and the Hungarian National Corpus have strengthened the plausibility value of the second initial statement according to which zero plural pronominal objects can occur in Hungarian language use. The case study has shown that the inconsistency in the literature regarding this problem can be eliminated only by introducing new data sources into the research and by merging various data types. The study has also highlighted how contextual factors in the thought experiments and corpus can influence the native speakers' intuition concerning the acceptability of implicit plural pronominal objects in Hungarian language use,[10] i.e. the merging of various data sources reveals fuzzy boundaries of data sources in the research practice.

In the next section, let us turn to our case study in historical pragmatics.

---

[10] This finding shows that these differences in the evaluation are not originated from dialectal diversity.

4 Context types in semantic change in grammaticalisation

4.1 Aim

In this Section, our aim is to show how corpus data are used in a particular area of historical pragmatics, namely, research on semantic change in grammaticalisation. As mentioned above in Section 2.1, in historical research we work with a restricted set of data sources, and the central role of corpus data is unquestionable. Fischer (2004: 730) holds that historical documents are the only firm source of knowledge for historical linguists. However, even in such a necessarily corpus-based research as historical research usually is, the source of data is more complex than it seems to be at first sight. In the actual research practice, corpus as data source is complemented with further sources and depending on the particular data sources we rely on, the analysis of corpus data can lead to different conclusions.

4.2 Context(s) in semantic change and contextual analysis in historical pragmatics

It is a widely accepted hypothesis in historical pragmatics that the meaning of linguistic constructions changes in – and as a result of – ordinary language use in context. Semantic change in grammaticalisation occurs in specific contexts and can be conceived of as a change of contexts in which a certain linguistic construction can be used. As a consequence, the description of changes in the semantic structure is closely linked to the description of contexts in which the grammaticalising linguistic item is used. To reconstruct changes in semantic structure and the spread of the innovation, we should examine the distribution of different context types among successive language stages: the occurrence or non-occurrence of a certain linguistic construction in a certain context type in historical documents can inform us about the process of semantic change. The nature of context types in which particular stages of semantic change processes can be detected and the importance of contextual analysis have been the topic of various papers on grammaticalisation (Diewald 2002; Heine 2002; Nagy C. 2014, forthcoming).

In order to investigate semantic change, we should be able to assign meanings to historical occurrences and to determine what kind of context we have in each case. That is to say, in each case the analysis of semantic change presupposes the researcher's knowledge of the meaning of the particular linguistic unit in the historical context. In order to reveal what context type each and every occurrence belongs to, we need to check (i) whether the original, as well as the new interpretation is possible or not, (ii) whether it is the only possible reading, or only one of the accessible interpretations, and (iii) whether the new meaning is context dependent (i.e. emerges as an inference), or already independent of the context. We should minimise the subjectivity in identifying meanings and base our analysis on linguistic clues whenever possible. We need to bear in mind that ambiguity is always a necessary stage of a change in meaning. At the same time, we can base our analysis on contexts which favour or disallow one meaning as opposed to another, because historical occurrences in a type of context that excludes the original meaning can provide evidence for a previous semantic change.

*4.3 Semantic change in the grammaticalisation of the Catalan "*anar *'go' + infinitive": Two rival hypotheses*

The brief and simplified case study presented in this section concerns semantic change in the grammaticalisation of the Catalan "*anar* 'go' + infinitive[11]" construction. The combination of the verb meaning 'go' with an infinitive in its origin was a purposive construction, which referred to a motion with the aim of carrying out a certain act: 'go in order to do sg'. During the grammaticalisation of this periphrasis, the verb meaning 'go' lost its full lexical meaning of motion and became an auxiliary: the Catalan GO-construction, "*anar* 'go' + Inf", evolved into a preterit tense[12], and it is used to express a perfective past meaning in modern Catalan (cf. (13))[13].

(13) *Pere II* ***va*** ***morir*** *l'any 1285.*
AUX.PRS.3SG die.INF
'Pere II **died** in 1285.'

---

[11] Infinitive: hereafter abbreviated as Inf.

[12] The term *preterit tense* is used to express the combination of the perfective aspect and the past tense. In Catalan it is a synonym for perfective past.

[13] In Section 4 we gloss only the relevant parts of the texts.

In the following, we present two main hypotheses on the formation of the Catalan GO-preterit and show how different the analysis of the same corpus data can be depending on which hypothesis we accept. The auxiliary forms of the perfective past "*anar* + Inf" in modern Catalan formally are in the present tense. Therefore, it is not surprising that some authors base their analyses on medieval present tense occurrences and derive the current Catalan "*anar* + Inf" construction from them. These authors regard relevant present tense occurrences of the verb *anar* as instances of a historical present usage, so I will refer to their approach as the *historical present hypothesis* (cf. Colon 1959/1978, 1976/1978; Pérez Saldanya 1996; Pérez Saldanya & Hualde 2003).

Another group of authors rejects the supposition that Catalan narrative texts containing early occurrences of the periphrasis can be characterised by the use of historical present. The most prominent representative of this approach is Juge (2002, 2006, 2008), who claims that forms in the current paradigm of the Catalan perfective past "*anar* + Inf" in the present tense resulted from analogy with other constructions which have the auxiliary in the present tense. He assumes that this process only took place after the past meaning of the whole construction had already consolidated. Consequently, the morphologically present forms are not examples of the historical present, but fully grammaticalised forms. Juge bases his hypothesis on a thorough morphological analysis of occurrences and on the observation that semantic change has already occurred in some examples with the verb *anar* in the preterit. I will therefore use the term *preterit hypothesis* to refer to this account, opposing it to the historical present hypothesis.

4.4 Context types in the grammaticalisation of the Catalan GO-construction

In a previous study, Nagy C. (2015) argued in favour of the preterit hypothesis through providing a pragmatic analysis of the process, relying on a detailed contextual analysis of occurrences found in a historical corpus of Catalan texts from the 13th to the 16th centuries. Various types of context have been differentiated, which, as they can be linked to successive stages of grammaticalisation, have helped to reveal the process of semantic change. When interpreting occurrences, Nagy C. followed the methodological principle according to which, if nothing in the context contradicts it, we should assume the original lexical meaning of *anar* 'go'. Occurrences interpretable literally can also be classified into different subtypes. Historical data have suggested an ongoing increase of occurrences over time where the lexical meaning can be excluded. Let us see all these relevant context types.

(i) In some contexts the motion covers long distances and leads to a different scene. The continuation of the story facilitates an inference to the effect that the event indicated as the aim of the motion was actually performed. Although this piece of information is not explicitly expressed, it had to be inferred in order to have a coherent discourse. Observe the following example.

(14) *E no bastà açò, que enans* ***anaren*** ***combatre*** *Nicòtena,*
go.PST.3PL combat.INF
e preseren-la;
'And that was not enough; rather they **went to attack** Nicótena and took it;' (Munt I 102,34-35)[14]

In (14) the motion meaning is obvious, but the actual performance of the act described as the aim of this motion is not explicitly expressed. However, in order to have a coherent story, we assume the following events when interpreting the discourse in (14): they went to Nicótena with the aim of attacking it, they attacked it and finally, they took the city. The frequent use of the construction in this type of context might have established a strong associative link between the use of the periphrasis and the inferential content of perfectivity.

(ii) In another group of occurrences allowing for the motion reading, the movement is minimal and presumably performed within a very limited space, and sometimes the question arises as to whether it is

---

[14] The sources of the examples are abbreviated at the end of each example, with page and/or line numbers (full details of sources can be found at the end of the paper in Historical sources). The English version of Muntaner's Chronicle by Goodenough (2000) has been used to translate some of the historical text fragments. However, given that it is a literary translation, sometimes it was necessary to modify it for the linguistic purposes of the present discussion. For example, Goodenough (2000) translates the occurrence *anaren combatre* in (14) by the paratactic sequence "they went and attacked". This translation has not been adopted because it does not reflect the idea that we are dealing with an infinitival construction. As for city names, the spelling of the original text is used in the translations. Bibliographic data for the translation are given in Historical sources.

reasonable to assume any movement at all. In these contexts the aim of the narrator could be to achieve dynamism by the use of the motion verb and not to describe spatial movement at all. This interpretation appears in previous literature too, not only for Catalan, but for French as well, where the periphrasis is characterised as a certain kind of stylistic tool (cf. Colon 1976/1978: 144). The frequent use of "*anar* + Inf" in this type of context can also promote the semantic change of the construction. Consider the example in (15).

(15) *E lo senyor rei saltà dins, avant, qui era jove e trempat,*
e ***va-li*** *tal* ***donar*** *per mig del cap, de l'espaa, que*
go.PRS.3SG give.INF
el capmall que portava no li valc un diner, que entrò
en les dents lo fenè; e puis ***va****-li* ***trer***
go.PRS.3SG pull-out.INF
l'espaa del cap, e ***va*** *'n* ***ferir*** *altre, que*
go.PRS.3SG attack.INF
el braç ab tot lo muscle n'avallà en terra.
'And the Lord King, who was young and spirited, advanced and **gave (=[15] goes to give) him such a blow** with his sword on the middle of his head, that the cap of mail he was wearing was of no use to him, for he was split open to the teeth. Then the King **pulled (= ?goes to pull)** the sword **out** of this man's head, and **attacked (= goes to attack)** another, whose arm, with the whole shoulder, fell to the ground.' (Munt II 50,3-8)

The fragment in (15) illustrates the typical early context of use of the periphrasis: a battle scene with fast successive movements within a relatively limited space. The first clause of the quotation describes a motion event that leads to the location of the battle: the king 'advanced' (*saltà dins*), 'forward' (*avant*), to the battleground, and after that we may assume short-range dynamic movements within a limited area of the battleground. The first occurrence of "*anar* + Inf" *va-li tal donar* '(he) goes to give him such a blow' allows the motion-then-action reading, but only if we interpret this verbal form as historical present. In contrast, this reading must be excluded in the case of the following occurrence of "*anar* + Inf" (*va-li trer* 'pulled out'), or at least it would be strange: after giving a big blow with his sword to a man,

---

[15] The symbol = is used to indicate literal meaning, while the symbol ? indicates strange/nonsensical readings.

the king pulled the sword out of his head. These two movements must have taken place one after the other in quick succession, which does not imply any movement in space. Then the king turns to attack another man: in this case it is possible that he took some steps in the battlefield (if we interpret the verbal form as a historical present), although it was not absolutely necessary, because participants in a battle scene are supposed to be close to each other. This scene, if imagined as a dynamic battle scene, does not suppose long movements, although small movements cannot be excluded in two of the three occurrences. However, even in these cases the motion reading is only possible if we accept the historical present hypothesis. If we accept the preterit hypothesis, we should interpret these occurrences as fully grammaticalised forms.

(iii) Finally, at the conventionalisation stage, the new meaning no longer needs to be supported by the context. Once the target meaning has been conventionalised, the construction can appear in new contexts, as in (16).

(16) *Mas con foren prop d'Agda, noves los* ***van*** ***venir***
AUX.PRS.3PL come.INF
con havia pres, lo dia passat, a aquells de Besers
'But when they came near Agda, news **arrived** (= **?go to come**) that they of Besers had been taken on the previous day.' (Munt II 10,36-37)

An advanced stage of grammaticalisation can be identified in (16), because the originally purposive construction "'go' + Inf" co-occurs with a subject that is incompatible with the source meaning of 'go'. The motion-with-intention meaning excludes inanimate subjects, thus occurrences as the one in (16) suggest that semantic change has already taken place. The combination of *anar* with the infinitive *venir* 'come' as in (16) is itself a contradiction due to the deictic meanings of 'go' and 'come', since the literal interpretation would yield the strange and nonsensical reading ?'the news come/are coming to go'. We do not need the broader context anymore to find out that this is not the literal meaning, i.e. this example is representative of the conventionalisation stage. The combination *van venir* can be analysed as a fully grammaticalised form conveying a preterit meaning independently of whether we accept the historical present or preterit hypothesis.

4.5 Different analyses of corpus data

Analysis of the distribution of these context types over time has led to the finding that the number of contexts where the 'motion' meaning is possible decreases over the period examined, while the number of contexts where it can be excluded increases (cf. Nagy C. 2015). Tables 1 and 2 show the assumed context types according to the tense of the finite verb in four texts of the historical corpus investigated.[16]

	Jau	Desc	Munt	Per	**total**
motion is possible	15 (~78.94%)	60 (~86.95%)	62 (~87.32%)	0	137
short-range movement	0	4 (~5.79%)	4 (~5.63%)	0	8
motion is not possible	4 (~21.05%)	5 (~7.24%)	5 (~7.04%)	1	15
total	**19**	**69**	**71**	**1**	**160**

Table 1: Distribution of context types in preterit tense occurrences of "anar + *Inf*"[17]

	Jau	Desc	Munt	Per	**total**
motion is possible	2	15 (~55.55%)	65 (41.4%)	1 (~7.69%)	83
short-range movement	0	3 (~11.11%)	26 (16.56%)	0	29
motion is not possible	0	9 (~33.33%)	66 (42.03%)	12 (~92.3%)	87
total	**2**	**27**	**157**	**13**	**199**

Table 2: Distribution of context types in present tense occurrences of "anar + *Inf*"

---

[16] As mentioned before, the present investigation did not require a frequency-based statistical analysis, it was rather corpus-based than corpus-driven (cf. Tognini-Bonelli 2001).

[17] The writing of the first text (Jau) can be dated between 1229 and 1276. However, the surviving manuscripts can be dated to a later period, the oldest one being from 1343. The date of composition of Desclot's chronicle (Desc) is not certain, but we can suppose that it must have been written between 1283 and 1289. Muntaner's chronicle (Munt) was written from 1325 to 1332. The last text (Per) is datable to the second half of the 14th and the early 15th centuries. For references to the texts see Historical sources.

In Table 1 it is worth observing that also in the case of the preterit examples there are contexts where the motion reading is impossible, although we can observe a reduction in their proportion. The reason for this finding might be that present tense occurrences became able to convey such readings. Table 2 reflects that present tense occurrences gradually became associated with the context type that excludes the source meaning of *anar* to a greater extent.

Now, let us compare how these pieces of data can be analysed according to the two hypotheses presented above. Historical present hypothesis accounts for the semantic change taking into consideration only the present tense occurrences. If we accept it, we will have two important consequences. Firstly, each and every piece of data included in Table 1 has to be ignored, because they are considered to have no relevance from the point of view of semantic change. Secondly, we have to examine the context of each and every occurrence in present tense in order to check whether they can convey motion meaning or not, that is, which context types they belong to. The path of semantic change will be delineated by the interpretation and classification of occurrences in present tense (cf. Table 2).

Preterit hypothesis accounts for the semantic change taking into consideration also the past tense occurrences. If we opt for it, we have to consider the contexts of preterit occurrences and classify them into different types. In contrast, occurrences in present tense must be interpreted as fully grammaticalised forms, in other words, they all will be included in the 'motion is not possible' row of Table 1. The result is shown in Table 3.

	Jau	Desc	Munt	Per	**total**
motion is possible	15 (~71,4%)	60 (62,5%)	62 (~27,2%)	0	137
short-range movement	0	4 (~4,16%)	4 (~1,75%)	0	8
motion is not possible	6 (~28,6%)	32 (~33,33%)	162 (~71,05%)	14 (100%)	214
total	**21**	**96**	**228**	**14**	**359**

*Table 3: Distribution of context types in occurrences of "*anar + *Inf" according to the preterit hypothesis*

When interpreting the occurrences this way, the tendencies mentioned above are more impressive. Let us take Muntaner's *Chronicle* as an example. If we reject the historical present hypothesis, 162 of the occurrences in this text will be interpreted as grammaticalised forms, and if we accept it, only 71 of them. Relevant occurrences found in other texts of the corpus also would be analysed differently depending on the two hypotheses. As a consequence, two different paths of semantic change can be outlined. According to the preterit hypothesis, occurrences in the earliest text examined already suggest that the semantic change has started. However, every occurrence in this text considered to be relevant according to the historical present hypothesis conveys the source meaning. As a consequence, these two different ways of interpreting the same occurrences affect the dating of semantic change as well.

In this Section, we have argued that an inconsistency can emerge even if relying on the same occurrences found in the same historical texts. In this case study we have shown that different interpretations can follow from different theoretical stances. However, the consideration of further factors would lead to an even more complex picture. Other relevant factors, among others, could be the following: (i) how sensitive the contextual analysis is, i.e. how many relevant context types are hypothesised, (ii) the researchers' intuition, i.e. how they interpret each and every occurrence and how they classify them into context types, and, (iii) what kind of texts they use when searching for relevant occurrences, etc. The analysis of historical pragmatic research practice in using and interpreting corpus data has revealed the integrated nature of historical data. In order to make historical occurrences usable in linguistic research, we have to add other data from further sources, which shows how fuzzy the boundaries of data sources are in the actual research practice.

5 Conclusion

In this paper, on the basis of two case studies taken from the actual research practice we have shown that in the synchronic and historical pragmatic research various pieces of information gained from different sources are merged.

In our first, synchronic pragmatics case study, we have attested that the inconsistency in the literature regarding the nonacceptability/acceptability of the occurrences of zero plural pronominal objects in Hungarian language use can be eliminated only by introducing new data sources into the research and merging various data types. Data originated in new data sources such as other native speakers' intuition, thought experiments and the Hungarian National Corpus have strengthened the plausibility value of the statement that zero plural pronominal objects can occur in Hungarian language use. The study has also highlighted how contextual factors in the thought experiments and corpus can influence the native speakers' intuition concerning the acceptability of implicit plural pronominal objects in Hungarian language use.

In our second, historical pragmatics case study, we have presented how differently corpus occurrences are analysed according to two rival hypotheses on the semantic change in grammaticalisation of the Catalan "*anar* 'go' + Inf". We have argued that an inconsistency can emerge even if relying on the same occurrences found in the same historical texts. Since in the actual research practice corpus as data source has to be complemented with further sources, the analysis of corpus occurrences can lead to different conclusions depending on the particular data sources we add. These different ways of interpreting the same occurrences outline different paths of semantic change and also affect the dating of semantic change.

From the metatheoretical point of view, both case studies have led to the same conclusion that corpus as a data source is of an integrated nature and the various research methodologies have fuzzy boundaries. We have argued that in the mainly corpus-based synchronic and historical pragmatic research corpus as a data source is not exclusive, but it is complemented with the researchers' linguistic intuition, the results of earlier investigation, the theoretical framework we work in, inferences, etc. as further data sources. A similar metatheoretical analysis would also be possible and desirable on research based on other data collecting methods.

List of abbreviations

1 = first person
2 = second person
3 = third person
ACC = accusative
ALL = allative
AUX = auxiliary
DEF = definite conjugation
IMP = imperative
INDEF = indefinite conjugation

INF = infinitive
NOM = nominative
OBJ = object
PL = plural
PST = past
PRS = present
PVB = preverb
SG = singular
SUBJ = subject

Historical sources

Jau: *Llibre dels fets del rei en Jaume* ['The Book of Deeds of James I of Aragon']. Vols 1–2. Barcelona: Barcino. (1991).

Desc: B. Desclot. *Crònica* ['Chronicle']. Vols. 1–5. Barcelona: Edicions 62. (1990).

Munt: R. Muntaner. *Crònica* ['Chronicle']. Vols. 1–2. Barcelona: Edicions 62. (1979/1990-1991). English version: Ramon Muntaner, *Chronicle.* Translated by Lady Goodenough. Cambridge, Ontario: In Parentheses Publications. (2000). Available at: http://www.yorku.ca/inpar/muntaner_goodenough.pdf.

Per: R. de Perellós: Viatge del vescomte Ramon de Perellós i de Roda fet al Purgatori nomenat de Sant Patrici ['The Journey of Viscount Ramon de Perellós i de Roda to Saint Patrick's Purgatory']. In *Novel·les amoroses i morals*. Barcelona: Edicions 62. (1982).

References

Clark, H.H. & Bangerter, A. (2004): Changing ideas about reference. In: Noveck, I.A. & Sperber, D. (eds.): *Experimental Pragmatics*. Houndmills: Palgrave Macmillan, 25-49.

Colon, G. (1959/1978): El perfet perifràstic català "va + infinitiu". In: Colon, G. (ed.): *La llengua catalana en els seus textos, 2. vol.* Barcelona: Curial, 119-130.

Colon, G. (1976/1978): Sobre el perfet perifràstic 'vado + infinitiu', en català, en provençal i en francès. In: Colon, G. (ed.): *La llengua catalana en els seus textos, 2. vol.* Barcelona: Curial, 131-174.

Cote, Sh.A. (1996): *Grammatical and Discourse Properties of Null Arguments in English.* PhD dissertation. Philadelphia: University of Pennsylvania.

Diewald, G. (2002): A model for relevant types of contexts in grammaticalization. In: Wischer, I. & Diewald, G. (eds.): *New reflections on grammaticalization.* Amsterdam: John Benjamins, 103-120.

É. Kiss, K. (2002): *The Syntax of Hungarian.* Cambridge: Cambridge University Press.

É. Kiss, K. (2012): Null pronominal objects in Hungarian: a case of exaptation. *Acta Linguistica Hafniensia* 44, 192-206.

Fischer, O. (2004): What counts as evidence in historical linguistics? *Studies in Language* 28, 710-740.

Forgács, T. (1993-1994): Zárt korpuszok és pótkompetencia [Closed corpora and substitute competence]. *Néprajz és Nyelvtudomány* 35, 17-23.

Francis, W.N. (1992): Language corpora B. C. In: Svartvik, J. (ed.): *Directions in Corpus Linguistics*. Berlin: Mouton de Gruyter, 17-32.

García Velasco, D. & Portero Muñoz, C. (2002): *Understood Objects in Functional Grammar* (Working papers in functional grammar 76). Amsterdam: University of Amsterdam.

Goldberg, A. (2005): Argument realization. The role of constructions, lexical semantics and discourse factors. In: Östman, J.-O. & Fried, M. (eds.): *Construction Grammars: Cognitive Grounding and Theoretical Extensions*. Amsterdam: John Benjamins, 17-43.

H. Molnár, I. (1962): A tárgy [Direct object]. In: Tompa, J. (szerk.): *A mai magyar nyelv rendszere. Leíró nyelvtan 2. Mondattan* [The Structure of Modern Hungarian Language. A Descriptive Grammar. Vol 2. Syntax]. Budapest: Akadémiai Kiadó, 147-161.

Heine, B. (2002): On the role of context in grammaticalization. In: Wischer, I. & Diewald, G. (eds.): *New reflections on grammaticalization.* Amsterdam: John Benjamins, 83-102.

Jucker, A.H. (2009): Speech act research between armchair, field and laboratory. The case of compliments. *Journal of Pragmatics* 41, 1611-1635.

Juge, M.L. (2002): *Tense and aspect in periphrastic pasts: evidence from Iberian Romance*. PhD Thesis. University of California-Berkeley.

Juge, M.L. (2006): Morphological factors in the grammaticalisation of the Catalan “go” past. *Diachronica* 23, 313-339.

Juge, M.L. (2008): Narrative and the Catalan GO-past. *Folia Linguistica historica* 29, 27-56.

Kepser, S. & Reis, M. (eds.) (2005): *Linguistic evidence. Empirical, theoretical and computational perspectives* (Studies in Generative Grammar 85). Berlin/New York: Mouton de Gruyter.

Kertész, A. & Rákosi, Cs. (2008): Introduction: The problem of data and evidence in theoretical linguistics. In: Kertész, A. & Rákosi, Cs. (eds.): *New Approaches to Linguistic Evidence. Pilot Studies / Neue Ansätze zu Linguistischer Evidenz. Pilotstudien*. Frankfurt am Main: Lang, 9-19.

Kertész, A. & Rákosi, Cs. (2012): *Data and Evidence in Linguistics: A Plausible Argumentation Model.* Cambridge: Cambridge University Press.

Kertész, A. & Rákosi, Cs. (2014): *The Evidential Basis of Linguistic Argumentation.* Amsterdam, Philadelphia: John Benjamins.

Kugler, N. (2000): Az igeragozás [The conjugation]. In: Keszler, B. (szerk.): *Magyar grammatika* [Hungarian Grammar]. Budapest: Nemzeti Tankönyvkiadó, 104-126.

Lehmann, Ch. (2004): Data in linguistics. *The Linguistic Review* 21, 175-210.

Nagy C., K. (2014): Kontextus(ok) a grammatikalizációs jelentésváltozás irodalmában [Context(s) in the literature on semantic change in grammaticalisation]. *Jelentés és Nyelvhasználat* 1, 11-27.

Nagy C., K. (2015): *Adatok és érvelés a történeti pragmatikában – A katalán* anar + *főnévi igenév szerkezet grammatikalizációja* (Pragmatika 2) [Data and argumentation in historical pragmatics. Grammaticalisation of the Catalan *anar* + infinitive construction]. Budapest: Loisir.

Nagy C., K. (forthcoming): *Data and argumentation in historical pragmatics. Grammaticalisation of a Catalan motion verb construction*. Sheffield: Equinox.

Németh T., E. (2010): How lexical-semantic factors influence the verbs' occurrence with implicit direct object arguments in Hungarian. In: Németh T., E. & Bibok, K. (eds.): *The Role of Data at the Semantics–Pragmatics Interface*. Berlin: Mouton de Gruyter, 305-348.

Németh T., E. (2014): Hungarian verbs of natural phenomena with explicit and implicit subject arguments: their use and occurrence in the light of data. In: Kertész, A. & Rákosi, Cs. (eds.): *The Evidential Basis of Linguistic Argumentation*. Amsterdam: John Benjamins, 103-132.

Németh T., E. (2017): Theoretical and methodological issues in the research into implicit arguments in Hungarian. In: Assimakopoulos, S. (ed.): *Pragmatics at Its Interfaces*. Berlin: Mouton de Gruyter, 149-174.

Németh T., E. (forthcoming): *Implicit Subject and Direct Object Arguments in Hungarian Language Use: Grammar and Pragmatics Interacting*. Sheffield: Equinox.

Penke, M. & Rosenbach, A. (eds.) (2004/2007): *What Counts as Evidence in Linguistics. The Case of Innateness* (Benjamins Current Topics 7). Amsterdam, Philadelphia: Benjamins.

Pérez Saldanya, M. (1996): Gramaticalització i reanàlisi: el cas del perfet perifràstic en català [Grammaticalisation and reanalysis: the case of the Catalan periphrastic past tense]. In: Schönberger, A. & Stegmann, T. D. (eds.): *Actes del desè col·loqui internacional de llengua i literatura catalanes, 3. vol.* Barcelona: Publicacions de l'Abadia de Montserrat, 71-107.

Pérez Saldanya, M. & Hualde, J.I. (2003): On the origin and evolution of the Catalan periphrastic preterit. In: Pusch, C.D. & Wesch, A. (eds.): *Verbalperiphrasen in den (ibero-)romanischen Sprachen*. Hamburg: Helmut Buske, 47-60.

Pete, I. (1998): A magyar igeragozás típusai [Types of Hungarian conjugation]. In: Büky, L. & Maleczki, M. (eds.): *A mai magyar nyelv leírásának újabb módszerei 3.* [Current Methods in the Description of the Present-Day Hungarian 3]. Szeged: JATE, 133-148.

Tognini-Bonelli, E. (2001): *Corpus Linguistics at Work* (Studies in Corpus Linguistics 6). Amsterdam, Philadelphia: John Benjamins.

Dr. Katalin Nagy C.
MTA-DE-SZTE Research Group for Theoretical Linguistics
Egyetem u. 2.
H-6722 Szeged
nagykati@hist.u-szeged.hu

Prof. Dr. Enikő Németh T.
University of Szeged, Department of General Linguistics
MTA-DE-SZTE Research Group for Theoretical Linguistics
Egyetem u. 2.
H-6722 Szeged
nemethen@hung.u-szeged.hu

Dr. Zsuzsanna Németh
MTA-DE-SZTE Research Group for Theoretical Linguistics
Egyetem u. 2.
H-6722 Szeged
nemethzs7@gmail.com

Sprachtheorie und germanistische Linguistik (sugl.eu), 28.2 (2018), 185-235

Sonja Müller

A discourse structural view on the (combined) use of the modal particles *doch* and *auch*

Abstract

This article is concerned with (combinations of) modal particles (MPs) in German. Although MPs can in principle combine, such combinations are restricted by a) conditions that regulate which MPs can combine at all and b) by ordering rules. Focussing on the combination of *doch* and *auch*, I will argue that the fixed order of the two particles is an iconic reflex in grammar. Building on work by Diewald & Fischer (1998) as well as Karagjosova (2004), an analysis will be developed which captures the contribution of the single particles as well as of their combination within the discourse model developed in Farkas & Bruce (2010). The account eventually traces the difference in markedness between the two orders of *doch* and *auch* back to a different weighing of the discourse structural information conveyed by them. In particular, the claim is that *doch* contributes to deciding the topic of the conversation and, therefore, aims at finally increasing the *common ground* (cg). *Auch*, on the other hand, evaluates the same proposition (p) as being the reason for another proposition (q) (an inference relation p > q ['If p, then normally q.'] is in the cg). Although *auch doch* is not altogether avoided by speakers (as corpus data show), it is very clearly dispreferred. Therefore, I will consider *doch auch* to be the unmarked order and *auch doch* the (highly) marked sequence. Deciding an issue will be considered a superior discourse goal in comparison to a qualitative judgement about a causal link between propositions. The order *doch auch* thus mirrors the flow of discourse which fulfills its main aim (increasing the cg) in a more straightforward way.
Keywords: modal particle, organisation of discourse, iconicity, utterance meaning

1 The phenomenon: constraints on the order of modal particles

The subject of this article is the combination of modal particles (MPs) in German.

MPs are associated with the mainland Germanic languages.[1] They are a phenomenon of the spoken (colloquial) language or occur where this is intended to be mirrored in the written medium. Among the typical properties attributed to these words are the following: They do not inflect, they are usually unaccentuated, they are restricted to the middle field, they do not contribute to the truth conditions of the sentence, they have little lexical content, but they rather show communicative, speaker-related, discourse structural meaning. As MPs also have identical forms in other categories, for example among adjectives and adverbs, criteria as the ones mentioned here are essential in guaranteeing that one is really speaking about MPs (for an overview of their characteristics including questions regarding their internal and external syntax as well as the precise functions that they have been assumed to fulfill cf. Diewald 2007, Thurmair 2013, 628ff., Müller 2014a, chapter 2; for an overview of MPs in the tradition of formal semantics cf. Zimmermann 2009, Grosz to appear).

(1) and (2) show examples for *auch* and *doch* which are the particles this paper will be concerned with.[2]

(1) A: Albert ist sehr fröhlich.
Albert is very happy
'Albert is very happy.'

---

[1] Of course, this does not mean that other (Germanic) languages do not have linguistic entities which can fulfill similar functions. However, MPs as a category (displaying certain properties [see below]) have mainly been described for Dutch, Frisian, Danish, Swedish, Luxemburgish and German. Additionally, Slavic languages, Greek and Japanese are mentioned. However, for English as well as the Romance languages, it has been assumed that they do not show MPs (to the same extent as German). Waltereit (1999, 2006) e.g. discusses right dislocation in Italian (1999, 527) or intonation in English (2006, 130) arguing that phenomena of this kind can code the meaning MPs display. As my approach is pragmatic in nature, I argue that if a language codes the meaning I attribute to *doch* and *auch* by using different entities, their combination should underly the same conditions.

[2] It is very hard (if possible at all) to find appropriate translations. The translations provided throughout the article can therefore only be claimed to come close to the MP-utterances.

B: Er fährt **auch** morgen in den Urlaub.
He goes MP *tomorrow in the holidays*
'***That's because*** he will go on holiday tomorrow.'

(2) A: Albert fährt morgen ans Meer.
Albert goes tomorrow to-the sea
'Albert will go to the sea tomorrow.'
B: Es sind **doch** gerade keine Ferien. Bist du dir
It are MP *now no holidays are you yourself*
sicher?[3]
sure
'***But*** there are no holidays right now. Are you sure?'

Another characteristic of MPs is their ability to combine, that means, along certain restrictions (which will be explained below), MPs can occur in sequences. (3) is an example extracted from DECOW2014 (cf. Schäfer & Bildhauer 2012).

(3) B: „Sie wissen dass sie mir meinen Job nicht gerade leicht
You know that you me my job not exactly easy
machen?"
make
'You know that you are not really making this job easy for me?'
A: „Na sie müssen sich ihr Geld **doch auch** verdienen
Well you must self your money MP MP *earn*
Lucius!"
Lucius
'Well, ***but***, ***that's because*** you must be worth your money, Lucius.'
(http://www.tabletopwelt.de/index.php?/topic/92424-40k-rpg-20/)
(DECOW2014AX01)

Although MPs can in principle combine, it is well-known (at least since Thurmair's 1989 seminal work) that such sequencing is subject to restrictions. Approaches range from mere classifications (cf. Helbig & Kötz 1981), the formulation of descriptive generalisations (cf.

---

[3] Apart from the unstressed *doch*, there is a stressed *doch* as well. On its semantics and use cf. e.g. Meibauer 1994, 104-131, Egg & Zimmermann 2012, Rojas-Esponda 2013). Throughout the article, I will only be concerned with the unstressed version.

Thurmair 1989, 1991), semantic/pragmatic criteria (e.g. assertive force [Doherty 1985, 1987], illocutionary weight [cf. Abraham 1995]), syntactic conditions (scope relations) (Ormelius-Sandblom 1997, Rinas 2007), input conditions (Doherty 1985, Rinas 2007) and information structural criteria (de Vriendt et al. 1991) to phonological (Lindner 1991) and historical (Abraham 1995) argumentations.[4] As far as is known, two types of (ordered) restrictions apply.

1.1 Restriction 1: syntactic and semantic/pragmatic intersections

The first one is concerned with the fact that not all MPs can combine with each other. It is assumed that syntactic and semantic/pragmatic (in)compatibilities play a role here. Thurmair (1989, 205; 1991, 20) renders this condition in such a way that two MPs can only be combined if the set of sentence moods in which both particles can occur independently is not empty.

Against this background, the combined use of *doch* and *auch* is possible in (3) for example because these two particles can occur in declarative clauses in isolation as we can see in (1) and (2). However, they cannot occur together in a polar interrogative because *doch* is excluded from this domain (cf. (4)).

(4) a. Ist das Kleid **auch** durchsichtig? Thurmair (1991, 27)
Is the dress MP *transparent*
'Are you sure the dress is really transparent?'
(A positive answer is expected.)
b. *Ist das Kleid **doch** durchsichtig?
c. *Ist das Kleid **doch auch** durchsichtig?

Thurmair (1989, 281; 1991, 25ff.) also shows that this condition on intersection can apply on the level of the interpretation as well, in the sense that the MP-utterances involved have incompatible use conditions (see also already Dahl 1985, 218; 222f.). This assumption can also be confirmed when looking at combinations of *doch* and *auch*: (5) and (6) demonstrate that both particles can occur in wh-interrogatives. A *why*-question is at hand in (5), a *who*-question in (6).

---

[4] For an overview of these approaches see Müller (2018, chapter 2.1).

(5) A: Ich bin heute sehr müde.
I am today very tired
'I'm very tired today.'
B: Warum gehst du **auch** immer so spät ins Bett?
Helbig (1990, 89)
Why go you MP *always so late to-the bed*
'You are supposed not to go to bed that late. It is clear that you are tired if you go to bed that late.'

(6) Wer war **doch** der berühmte Feuerfresser im Zirkus Krone?[5]
Dahl (1985, 88)
Who was MP *the famous fire-eater in-the Circus Krone*
'I can't remember: Who was the famous fire-eater in Circus Krone ***again***?'

Although both particles can in principle occur in wh-questions, they cannot combine in this domain. A combination is neither possible in a *why*-question nor in a *who*-question.

(7) a. *Warum hat er **doch auch** sein Studium abgebrochen?
Why has he MP MP *his studies quit*
b. *Wer hat **doch auch** dieses neue "Glamping"
Who has MP MP *this* new "glamping"
ausprobieren wollen?
try wanted

This has nothing to do with the particular wh-pronouns which differ in (5) and (6), as one might object at first glance. Typical *auch*-questions ask for reasons, but they can also contain other wh-pronouns (cf. (8)).

(8) Der Jochen muß 4.000 Mark Kaution bezahlen! Aber wer
The Jochen must 4000 D-marks deposit pay! But who
unterschreibt **auch** einen Mietvertrag,
signs MP *a tenancy agreement*
ohne ihn vorher genau durchzulesen?
without it before exact read through
Thurmair (1989, 159)

---

[5] For some speakers this use of *doch* is only acceptable if it occurs in combination with *gleich*.

‘Jochen has to pay 4000 D-marks as a deposit! But who signs a tenancy agreement without reading it in every detail beforehand?’

And *doch*-questions can also ask for reasons (cf. (9)).

(9) Warum waren die Karten gegen Braunschweig **doch** vier
Why were the tickets against Braunschweig MP *four*
Euro teurer als sonst? Ach ja, es ist ein
Euros more expensive than usual Oh, yes, it is a
Topspiel!
top match
‘Why did the tickets against Braunschweig go four Euros up in price ***again***? Oh, I remember, it is a top match!’

(10) to (13) provide contexts in which the two particles occur in the sentences in which they are combined in (7) in isolation.

(10) Warum hat er **doch** (gleich) sein Studium abgebrochen?
Why has he MP *just his studies quit*
Ach so! Ich erinnere mich.
Oh so I remember me
Seine Freundin war der Grund.
His girl-friend was the reason
‘Why was it ***again*** that he quit his studies? Oh yes! I remember. His girl-friend was the reason.’

(11) Warum hat er **auch** sein Studium abgebrochen? Ist doch
Why has he MP *his studies quit Is* MP
klar, dass er so schnell keinen
obvious that he so quickly no
Ausbildungsplatz findet.
apprenticeship training position finds
‘How ***could*** he quit his studies? It is obvious that he won’t find an apprenticeship trainig position that quickly.’

(12) Wer hat **doch** dieses neue “Glamping” ausprobieren
Who has MP *this new “glamping” try*
wollen? Irgendwer hatte sich gemeldet, meine ich.
wanted Someone had self volunteer think I

‘Who was it ***again*** who wanted to try this new “glamping”? Someone wanted to volunteer, I think.’

(13) Wer hat **auch** dieses neue “Glamping” ausprobieren
Who has MP *this new “glamping” try*
wollen? Dass das Unsinn ist, war doch schon vorher
want That this nonsense is was MP MP *in advance*
klar!
obvious
‘Who ***can*** have wanted to try this new “glamping”? It was obvious in advance that it is nonsense!’

As the MP-utterances have different conditions of use (which is the main point of my argumentation here), it is difficult to find environments in which they can both occur on their own (see below).

(7) shows that when looking at the occurring sentence mood, the sequencing should be possible in wh-questions. However, the two particles cannot combine in this sentential environment.

For different examples, Dahl (1985, 218; 222f.) and Thurmair (1989, 281; 1991, 25ff.) showed that such circumstances can be due to the fact that the interpretations of the particles (or rather of the utterances which result when they are inserted) clash. In the following, it is shown that it cannot be the sentence mood alone which decides on the (un)acceptability of the examples in (7). Arguments will be provided for the claim that incompatible conditions of use for *doch*- and *auch*-wh-questions are at hand here.

For *auch*-wh-questions, it has been assumed in the literature that the speaker expects a negative answer or no answer at all (cf. (14)). The question is considered not to be information-seeking, but rhetorical. In this sense, the utterance does not really serve the function of a question from the perspective of classical speech act theory (cf. Searle 1969, 102f.). One is rather dealing with a commentary or an explanation of the previous utterance (cf. Franck 1980, 218f.; Dahl 1985, 51ff.; Thurmair 1989, 158f.; Helbig 1990, 89; Karagjosova 2004, 231; Kwon 2005, 77; 202).[6]

---

[6] An answer such as “I forgot my jacket at work.” is not completely inadequate. However, the question does not primarily aim at an answer of that sort.

(14) A: Ich friere so.
I freeze so
'I'm freezing so much.'
B: Warum ziehst du dich **auch** so leicht an bei so
Why dress you yourself MP *so lightly on at such*
nem nasskalten Wetter?
a damp weather
'Why do you dress that lightly in such a damp weather?'
Franck (1980, 218)
[= You should not dress so lightly and it is clear that you are freezing if you dress like that.]

With *doch*-wh-questions, however, the speaker asks for information which s/he actually knows, but which s/he has forgotten or cannot remember in the current situation. S/he wants to get the answer from the addressee, while there is no presupposition that the hearer can answer the question (even if this is not ruled out). The question is not about information generally known, for instance (Dahl 1985, 88; Thurmair 1989, 117; Helbig 1990, 114; Kwon 2005, 204). The question rather targets individual knowledge of the speaker which s/he tries to recover.

A wh-question with *doch auch*, therefore, has to be a rhetorical question (expecting a negative answer) and a question the speaker poses in order to remember its answer at the same time. That means, the speaker knows the answer, assumes that s/he and the hearer know the answer (*auch*) and the speaker does not really know the answer and, therefore, asks for it (*doch*). The speaker will express then that s/he knows the answer (*auch*) and does not know the answer (*doch*). And the hearer must be able to answer the question (*auch*) and s/he does not have to be able to do so (*doch*).[7]

---

[7] Helbig (1990: 90) refers to a sporadic use of *auch* in non-rhetorical wh-questions such as in (i).

(i) Wie hieß der kleine Gasthof in Masserberg **auch** wieder?
How called the small hotel in Masserberg MP *again*
What was the small hotel in Masserberg called ***again***?'

The answer used to be known to the speaker, but it slipped his/her mind. As this is one of the contexts in which *doch* can occur in wh-questions, the combination of the two particles is possible under this particular meaning again. Thus, inserting *doch* in (i) results in an acceptable structure. Indirectly, the possible combination of the two particles in this environment provides evidence for *doch* being used in questions which address an issue the speaker tries to remember.

Coming back to the examples in (10) to (13), it now becomes obvious why it is difficult to find contexts in which *doch-* and *auch-*wh-questions can equally be used: It is more plausible to ask for an entity when remembering some piece of information rather than having forgotton a reason. On the other hand, causal relations occur when reasons or motivations are involved and are not built up between entities. Furthermore, *doch*-wh-questions seem to favour past tense marking on the verb which *auch*-wh-questions, on the contrary, do not prefer. Nevertheless, (7a) and (7b) are unacceptable in all of the contexts described in (10) to (13).

1.2 Restriction 2: orderings

If two MPs can in principle combine (in accordance with the first condition), a second type of constraint is brought in which is concerned with the relative ordering of the particles.

When comparing the order *doch auch* to *auch doch* (cf. (15)), the first version is clearly preferred.

(15) „Na sie müssen sich ihr Geld **doch auch/??auch doch**
Well you must self your money MP$_1$ MP$_2$/ MP$_2$ MP$_1$
verdienen Lucius!“
earn Lucius
‘Well, ***but***, ***that’s because*** you must be worth your money, Lucius.’

It is a robust generalisation that the orders of MPs cannot be readily reversed: A number of proposals have been made in order to account for this observation (see above).

My own programme – which I already applied to other MP-combinations (cf. Müller 2014b, 2016) – is to anchor the restrictions on the level of the interpretation. In particular, I argue that the form (= the order) mirrors the function (= the MPs’ contribution to discourse). Consequently, I argue for an iconic relation in the sense that the order is motivated by what MPs contribute to discourse. Furthermore, I also assume that it is not the case that the one order is grammatical and the other one is ungrammatical and needs to be filtered out by the analysis, but that the one order is unmarked and the other one is marked.

Therefore, the particular question I want to address in this article is: Why is *doch auch* unmarked and *auch doch* (highly) marked?

The explanations will be restricted to verb second declarative clauses (or more precisely verb second-assertions) in this account, that means cases as in (15). However, one has to deal with other contexts as well. As I showed above, particles can combine in those sentence moods in which they can also occur in isolation, unless there are interpretative incompatibilities within those sentence moods. I will come back to this issue in section 6. I consider this aspect concerning the wider distribution important because the explanation for the ordering preference must not rely too much on sentence mood or illocutionary type. On the contrary, it has to be general enough to cover more than assertions (at least if one assumes that MPs have the same contribution in different sentence moods [which is my basic assumption until I find out about the contrary]).[8]

In the following, I will first introduce the main features of the discourse model within which I capture the MP utterances' contribution to discourse (section 2). I will then model the contribution by *doch* and *auch* when they occur in isolation (section 3). Section 4.1 will determine the interpretation of utterances in which the two particles occur in sequence before I will present my own idea concerning the ordering preference in section 4.2. That is, I will propose an answer to the question why *doch auch* is the unmarked order and I will explicate in how far I consider *discourse structural iconicity* (which is my term for the concept) to play a role here. In section 5, I will raise the question whether the reversed, dispreferred order should really be excluded altogether as all pieces of work I know assume (cf. Dahl 1988, 230, Thurmair 1989: 278, Zifonun et al. 1997, 1542, Rinas 2007: 149). Based on data displaying the order *auch doch*, I will claim that – rare as it may be – an account should leave the niche for its existence. Section 6 will summarise the results and point at further questions and some more general issues concerning the combination of MPs in order to broaden the perspective of this discussion about a very particular linguistic structure.

---

[8] Examples are given in section 6. It is not possible to give a precise account of other sentence types within the confines of this paper as this requires modelling the contextual effects of directives, exclamatives, *doch-*/*auch*-directives as well as *doch-*/*auch*-exclamatives. Concerning directives the interested reading be referred to Müller (2018, chapter 5.5). A short sketch how the analysis developed in this paper can be transferred to directives will be given in section 6.

2 The discourse model (Farkas & Bruce 2010)

The discourse model within which I will describe the MPs' contribution (under slight changes) was proposed by Farkas & Bruce (2010).[9]

2.1 The components

A central component in all discourse models is the *common ground*, which is modelled as a set of propositions (cf. (16)).

(16) cg = $\{p_1, p_2, p_3\}$ (for example)

According to Farkas & Bruce, the contents of the cg are the consciously shared public discourse commitments. That means, it contains the propositions to which the interlocutors committed themselves in public, which they agree upon and which they mutually know that they agree upon.

The interlocutors also have individual systems of discourse commitments, called the *discourse commitment set*. This set contains for each participant the propositions to which s/he publicly committed herself/himself in the course of the conversation (cf. (17)).[10]

(17) a. $DC_A = \{p_1, p_2, p_3, p_5, p_6\}$ (for example)
b. $DC_B = \{p_1, p_2, p_3, p_7, p_8\}$ (for example)

The third component relevant for my modelling is *the table*, which saves the open topics of the conversation. It saves what is under debate in the conversation in its current state. As long as elements are placed on the table, there are topics which need to be sorted out.

---

[9] I adopt a slightly changed version here. The major change is that I put the actual propositions on the table and not a form-meaning-pair as the authors do. The reason is that this allows me to make the MPs' contribution more explicit.

[10] In Farkas & Bruce' (2010: 85) own formulation the individual systems only contain those propositions to which the interlocutors committed themselves, but which they do not agree upon yet. In order to make the contribution of MPs more explicit, I leave the propositions in DC_A and DC_B even if they have already become cg.

2.2 *Example: canonical assertions and canonical reaction to assertions*

When an assertion is uttered, the components are involved in the following way: Before the assertion is made, the context state K_1 in (18) is at hand.

(18) K_1: initial context state

DC_A	Table	DC_B
cg s_1		

The discourse commitment sets of A and B as well as the table are empty and the cg has a particular state.[11]

The next move in disourse is that A utters an assertion, such as (19).

(19) A: Sam is at home.

The result is context state K_2 in (20).

(20) K_2: A asserted relative to K_1: *Sam is at home.*

DC_A	Table	DC_B
p (Sam is at home.)	$p \vee \neg p$ (Is Sam at home?)	
cg $s_2 = s_1$		

By A asserting p, p is added to A's discourse commitment set. The cg does not change, the new state is identical to the previous one. That is because the contents of this assertion can only become cg by B accepting it (cf. (21)).[12]

(21) Uh huh/sure/right/you bet/yup/(nod)/staying silent.

---

[11] Assuming that DC_A, DC_B and the table are empty is an idealisation for the purpose of my presentation. Of course, other utterances can precede the assertion. The cg can be assumed to be empty or it matches the state which it displays in the conversation at that moment.

[12] Note that more recent accounts introduced finer distinctions concerning reactions to assertions than Farkas & Bruce (2010). Krifka (2015, 334) distinguishes between *acknowledging, confirming* and *contradicting* information. This differentiation increases the number of subsequent context states. However, as far as I can see, these changes do not have consequences for the account I propose.

Before B does not show a reaction of the sort in (21), p remains a contribution by A to which s/he publicly committed herself/himself.

That means assertions can open up an issue by placing an element on the table. If p is put on the table, the question opens up whether p. Therefore, $p \vee \neg p$ opens up on the table.

If B accepts p, then B also has a discourse commitment to p, i.e. both have one (cf. (22a)).

(22) K_3: B confirmed A's contribution

a. part 1

DC_A	Table	DC_B
p (Sam is at home.)	$p \vee \neg p$ (Is Sam at home?)	p (Sam is at home.)
cg $s_3 = s_2$		

As a consequence, p becomes part of the cg as a consciously shared public commitment as in part 2 in (22b). The issue is removed from the table and the components of A and B are emptied.

b. part 2

DC_A	Table	DC_B
cg $s_4 = \{s_3 \cup \{p\}\}$ (Sam is at home.)		

2.3 Canonical moves in discourse

Farkas & Bruce (2010: 87) assume that the two aspects in (23) drive conversations in general. This assumption will become essential for my idea why *doch* precedes *auch* in the unmarked case in section 4.2.

(23) a. increasing the cg
b. reaching a stable state

The first driving force is that participants follow the need to increase the cg. As they strive for that, they place elements on the table. The second driving aspect is that participants strive for reaching a stable state, that means a state in which nothing is under debate. Speaking with the components, nothing is placed on the table in this case. Because of the two intentions interlocutors remove elements from the table in that way that the cg increases.

I think that a requirement especially for the second intention is that one refers to the issues on the table. That means, one actually addresses the open topics when communicating.

3 Modelling the meaning of modal particles

My modelling of the MPs' contribution within this discourse model relies on a conception of MPs as taken by Diewald in a number of works (cf. Diewald & Fischer 1998; Diewald 1999, 2006, 2007). It says:

> [...] the MP-utterance [appears] as a second, i.e. reactive conversational turn in a supposed dialogical sequence. This does not have to correspond to the actual situation. On the contrary: [...] the speaker [can] simulate a non-initial move [...] (Diewald 2007, 130, my translation).

I model this impression that the MP-utterance is always reactive by assuming that it presupposes a particular context state.[13] That means, depending on the respective MP, the components I introduced in the last section need to be filled differently for the MP-utterance to be appropriate (in bold face in the following boxes which represent the context states).

3.1 The isolated use of doch *in assertions*

In (24), in which a *doch*-assertion occurs, one perceives a certain conflict between the two statements.

(24) B: Sandra hat einige Linguisten aus der Abteilung zum
Sandra has some linguists of the department for-the
Sekt eingeladen.
sparkling wine invited
'Sandra invited some linguists of the department for sparkling wine.'

---

[13] As the meaning of MPs cannot be captured by formulating truth conditions, all formal approaches formulate their contribution in terms of conventional implicatures (e.g. Ormelius-Sandblom 1997), presuppositions (e.g. Rinas 2007) or use conditions (e.g. Gutzmann 2015). In this sense, all formal approaches in one way or another assume that MPs impose restrictions on the previous context state.

A: Sie hat **doch** alle Linguisten eingeladen.
She has MP *all linguists invited*
'***But*** she invited all linguists, didn't she?'

This meaning aspect of *doch* has often been treated as a *contradiction* or some *adversative moment* between the proposition contained in the *doch*-utterance and another inferred proposition (cf. for example Thurmair 1989, 110ff.; Meibauer 1994, 108ff.; König 1997, 67ff.). I capture it that way that a *doch*-utterance requires that the proposition expressed is already under debate in the current context. Put differently, $p \vee \neg p$ is already placed on the table. With the *doch*-utterance, the speaker commits herself/himself either to p or $\neg p$ (depending on the polarity of the assertion).

(25) Context preceding a *doch*-assertion

DC_A	Table	DC_B
	$p \vee \neg p$	
cg s_1		

For (24) that means that after B's statement, it is under debate whether Sandra invited all linguists. And by uttering the *doch*-assertion, A commits herself/himself to p. This example also shows that the MP scopes over the propopositon expressed with the utterance.[14]

Consequently, I assume (25) to be the minimal requirement for a *doch*-utterance to be appropriate. From case to case, it might vary how this openness comes about, and therefore further components might be involved as well (see below). However, I consider (25) to be the invariant contribution of *doch* or rather the requirement *doch* imposes on the context. All other fillings which might occur are not due to *doch* (see below).[15] In this particular case, the openness the

---

[14] This is the case most of the time. However, there is also data which suggests that MPs can also scope over speech acts.

(i) Witness: And we are driving and driving, at a pace of 80 to 100.
Richter: Warum fahren Sie denn so schnell?
Judge *Why drive you* MP *so quickly*
And why did you drive so quickly?' (Hoffmann 1994; 61)

(i) can be analysed in that way that *denn* indicates that posing the question is motivated by the context. In this sense, the MP relates to the whole utterance.

[15] Note that this is a recurrent problem for acccounts on MPs as meaning effects caused by context, intonation, the propositional contents or sentence type/sen-

particle calls for arises due to a conversational implicature which looks like in (26).[16]

(26) Sandra invited some linguists of the department for sparkling wine. (= q) +> She did not invite all linguists of the department (=$\neg$ p).

Non-p is plausibly derived from q because *all* and *some* form a scale (*all* implies *some*) (cf. Horn 1984). Due to the maxim of quantity, it can be assumed that the use of *some* is all the speaker can say, and, therefore, the stronger form *all* is not suitable. Concretely, one could imagine the relations as in (27).

(27) Context preceding the *doch*-assertion: B: Sandra invited some linguists of the department for sparkling wine. (= q)[17]

DC$_A$	Table	DC$_B$
	$q \vee \neg q$ (Did Sandra invite some linguists of the department for sparkling wine?) $\mathbf{p} \vee \neg \mathbf{p}$ (Did she invite all linguists of the department?)	q (Sandra invited some linguists of the department for sparkling wine.) $\neg p$ (She did not invite all linguists of the department.)
cg s_1 = {q +> $\neg$ p} (Sandra invited some linguists of the department for sparkling wine. +> She did not invite all linguists of the department.)		

---

tence mood/illocution have to be carefully distinguished (cf. for example Karagjosova 2004, 36ff.; Müller 2014a, 35ff.).

[16] This is not meant to mean that the particle is responsible for the openness. In this example, the topic is under debate due to a conversational implicature. The particle reacts to a context state of this kind which it requires for its adequate use.

[17] Bold letters stand for the context state which is necessary for an adequate use of the particle (apart from other contextual changes which might occur in the respective discourse situation).

In this case, it seems conceivable that the implicature in (26) is part of the cg. As a consequence, speaker B then also commits herself/himself to $\neg p$ when committing himself to q. Therefore, in addition to $q \vee \neg q$ $p \vee \neg p$ opens up as well.

Next, the *doch*-assertion is uttered and A commits herself/himself to p (cf. (28)).

(28) Context following the *doch*-assertion: A: Sie hat **doch** alle Linguisten eingeladen. (= p)
‘***But*** she invited all linguists.’

DC_A	Table	DC_B
	$q \vee \neg q$ (Did Sandra invite some linguists of the department for sparkling wine?)	q (Sandra invited some linguists of the department for sparkling wine.)
p (She invited all linguists.)	$p \vee \neg p$ (Did she invite all linguists of the department?)	$\neg p$ (She did not invite all linguists of the department.)
cg $s_2 = s_1$		

This example shows that with a typical *doch*-assertion a speaker reacts to another proposition ($\neg p$) which can be inferred from another utterance and which for some reason stands in a controversial relation to the proposition expressed with the *doch*-utterance. In this case, $\neg p$ comes about by being implicated by a preceding assertion expressing q. The discourse might proceed in the following ways: As the topic $p \vee \neg p$ is under debate now because A is committed to p while B is committed to $\neg p$, it can be the case that B insists on $\neg p$ being true, thereby confirming the implicature. If A accepts $\neg p$ then, q and $\neg p$ could become cg. B could also deny his commitment to $\neg p$ and agree that in fact the stronger version of expressing p is true. In this case, q and p would become cg. Under all scenarios either A or B have to cancel their commitment to $p/\neg p$.

As mentioned above, the openness can arise in various ways. It can also be due to an implication (cf. (29)), a presupposition (cf. (30)) or a speech act condition (cf. (31)). In all three contexts, the *doch*-assertion is adequate. If my analysis of *doch* requiring the openness of p is correct, one should be able to describe how this openness comes about. When asserting p in (29) e.g., q is implied. Therefore, p ∨ ¬ p as well as q ∨ ¬ q are placed on the table. The *doch*-utterance reacts to the topic q ∨ ¬ q.

(29) B: Moni spielt Harfe. (p)
Moni plays harp
'Moni plays the harp.'
A: Moni spielt **doch** kein Musikinstrument. (¬ q)
Moni plays MP *no musical instrument*
'***But*** Moni does not play a musical instrument.'
[Moni plays the harp. →
p
Moni plays a musical instrument.]
q

(30) B: Die Kinder von nebenan sind immer so laut. (p)
The children from next door are always that loud
'The children next door are always that loud.'
A: Nebenan wohnen **doch** gar keine Kinder. (¬ q)
Next door live MP *at all no children*
'***But*** there are no children living next door.'
[The children next door are always that loud. >>
p
There are children next door.]
q

(31) B: Geh bitte! (!p)
Leave please
'Please leave!'
A: Das hatte ich **doch** gerade vor. (q)
That had I MP *now up*
'***But*** that's what I was just about to do.'
[Second preparatory condition for requests: It is not obvious to both S and H that H will do A in the normal course of events on her/his own accord.] Searle (1969, 66)

Moreover, being under discussion can also be simulated in order to insinuate an ongoing conversation (which applies to discourse initial uses as in (32)).

(32) [first contribution in a conversation]
Sie sind **doch** Norbert Meier. Herzlichen Glückwunsch
You are MP *Norbert Meier. Heartily congratulations*
zum Aufstieg!
to-the promotion
'You are Norbert Meier, ***aren't you***? Congratulations on the promotion!'

In (32), no utterance has been made yet from which one might infer that the topic is really already under debate. On discourse initial uses of *doch* see e.g. König (1997, 68), Grosz (2014, 7), Müller (2014b, 187f.).

The idea to model the MP's contribution to discourse within the model by Farkas & Bruce (2010) can also be found in Müller (2014b), (2016) as well as in Döring (2016) and Döring & Repp (to appear). As Döring (2016) and Döring & Repp (to appear) also model the contribution *doch* makes (however, they are not concerned with *auch*), I would like to point out in how far my approach differs from these pieces of work. Their account of *doch* comprises two aspects: a) *doch* indicates that the assertion is incompatible with something on the table, b) the speaker assumes that p is contained in the cg and that the addressee is currently not aware of this fact and introduced that incompatible proposition (see a)) (Döring 2016, 51). I think that these two approaches both succeed in capturing the core cases in which *doch* is used equally well. However, there are other uses to consider for which one cannot assume that the proposition is part of the cg and that the addressee introduced the incompatible proposition. These concern V1- and *Wo*-VE-clauses (cf. Müller 2017) as well as directive and discourse initial uses (cf. (32)). E.g., it does not seem plausible to assume for a proposal as in (33) that the addressee already knows that s/he should come at 9 o'clock. And the interpretation that the addressee considered doing the opposite also does not seem to be apt.

(33) Perfect. And the day after tomorrow, we can only meet in the afternoon.
– Yes. Good afternoon, Mrs Müller. Saturday, the 15th, is good for me.

Ja okay dann kommen Sie **doch** gleich um neun Uhr
Yes okay then come you MP *right at night o'clock*
zu mir.
to me
'Allright. Then ***why don't you*** come to me right at 9 o'clock?'
(Tübinger Baumbank des Deutschen/spontaneous speech)
(my translation)

A similar point can be made in relation to V1-clauses as in (34).

(34) Since the early Middle Ages, the wine has lent importance to the place.
War es **doch** König Dagobert I., der der Metzer Domkirche
Was it MP *king Dagobert I who the Metzer Domkirche*
ein Weingut in Neef schenkte.
a winery in Neef gave
'Because it was King Dagobert I who gave a winery in Neef to the cathedral of Metz.'
(RHZ09/OKT.24515 Rhein-Zeitung, 10/28/2009)
(my translation)

The *doch*-clause is certainly not incompatible with the first clause and there is no addressee who considered the opposite. Assuming p to be known is not compatible with assumptions on V1-clauses which have been made independently (cf. Önnerfors 1997).

Discourse initial uses as in (32) are also problematic for an approach which builds on incompatibility as the addressee undoubtedly did not express that he is not Norbert Meier.

Assuming that the issue is under debate, however, allows to capture these uses without the proposition having to be cg-information: In the context of organising a meeting different options can open up (Shall we meet at 8, 9, 10, 11 o'clock etc.?). In discourse initial uses, suggesting the topic to be already open evokes a polite context. The use of *doch* in V1-/*Wo*-VE-clauses has been discussed at length in Müller (2017).

Note that *being under debate* does not automatically mean *being contradictory*. The concepts are not equal. The latter rather involves the former. However, a contradiction is no condition for being an open topic. An aspect can be under debate without arising from a contradiction as the more peripheral uses of *doch* above show.

3.2 The isolated use of auch *in assertions*

There are a couple of descriptive findings on *auch* in the literature which I want to account for in my formal modelling: For instance, the particle utterance marks a causal relation between its own contents and a previous utterance (cf. Dahl 1985, 47; Thurmair 1989, 160; Zifonun et al. 1997, 1226; Karagjosova 2004, 343; Möllering 2004, 222ff.). This point can be illustrated by (35): From the point of view of the speaker, that Peter had not prepared himself explains why he failed the exam. This is a plausible and not a necessary connection though, because one can pass an exam without being prepared, of course, and preparing is also no guarantee for passing.

(35) B: Peter hat die Prüfung nicht bestanden. (q)
Peter has the exam not passed
'Peter did not pass the exam.'
A: Er hatte sich **auch** nicht vorbereitet. (p)
He had self MP *not prepared*
'***That's because*** he had not prepared himself.'

The preceding utterance gets (implicitly) confirmed by an *auch*-assertion (cf. Franck 1980, 212; Thurmair 1989, 160; Helbig 1990, 88; Möllering 2004, 222ff.; Karagjosova 2004, 343). Undoubtedly, it makes sense that the speaker assumes the proposition for which her/his utterance provides a reason. In (35), A implicitly confirms that Peter did not pass.

The causal relation cannot solely be a contribution by the context. This can be illustrated by examples such as (36).

(36) A: Der Wein ist ja ausgezeichnet!
The wine is MP *delicious*
'The wine is so delicious!'
B: *Ja, das war **auch** der billigste Wein im Handel.
Yes that was MP *the cheapest wine in-the shop*
'Your are right. ***That's because*** it was the cheapest wine in the shop.' Franck (1980, 211)

The use of *auch* is inadequate if a causal relation cannot be established: Having been cheap is not a suitable explanation for wine being delicious. The same effect does not come about without the MP *auch*. If B does not use *auch*, her/his utterance is an adequate reaction.

Furthermore, the causal connection is regarded as being generally valid by the interlocutors (cf. Burkhardt 1982, 103; Dahl 1985, 47). The connection between failing an exam and not preparing oneself, for example, can be assumed to be generally accepted. It has also been assumed that the preceding utterance loses its amazing and questionable nature (cf. Franck 1980, 211f.; Helbig 1990, 88; Kwon 2005, 74) or its informativity (Karagjosova 2004, 223f.).

If turn-taking is involved as in (35) (dialogical use), A can derive the contents of B's utterance which B considers worth conveying. It is generally known that when he has not prepared himself, he will probably not pass. If A assumes that Peter has not prepared himself, A can derive that he will probably fail. Therefore, it is no amazing or new information to A that he did not pass. S/he expresses that s/he does not consider the other speaker's contribution relevant. If the *auch*-assertion is uttered by the same speaker as the first utterance (monological use), the speaker does not consider the preceding proposition expressed with her/his own assertion to be of high relevance as s/he can derive it from the second one.

Whereas the relation between the *auch*-proposition and the preceding proposition is considered to be generally valid or known, the contents of the *auch*-assertion is viewed as new information (cf. Franck 1980, 215; Thurmair 1989, 156; König 1997, 71; Karagjosova 2004, 343; Kwon 2005, 73), that means it is not really known or simulated as being known.[18]

Aiming at accounting for these descriptive findings, (37) shows what I regard as the minimal requirement for an appropriate *auch*-context: An inference relation 'If p, then normally q.' is part of the cg.[19] Furthermore, q is either part of A's or B's commitments (depending on whether we are dealing with a monologue or dialogue).

(37) Context preceding the *auch*-utterance

DC_A	Table	DC_B
(q)		(q)
cg s_1 = {p > q}		

---

[18] Note that the possible combination of *doch* and *auch* thus also provides evidence for not attributing the meaning component 'being known' to the MP *doch*.

[19] Note that assuming that the inference relation is part of the cg is much more straightforward here than in the case of *doch* (see the discussion above).

In the concrete example in (35), the relation is 'If Peter does not prepare himself for an exam, Peter will probably not pass.' and q is *Peter did not pass the exam* (cf. (38)). Additionally, because B asserts q, the topic q or non-q opens up on the table. This is the common effect of the assertion.

(38) Context preceding the *auch*-assertion: B: Peter hat die Prüfung nicht bestanden. (= q)
'Peter did not pass the exam.'

DC$_A$	Table	DC$_B$
	$q \vee \neg q$ (Did Peter pass the exam?)	**q** (Peter did not pass the exam.)
cg s_1 = {p > q} (If Peter does not prepare for an exam, Peter will probably not pass.)		

Against this context state, the *auch*-assertion is made. (39a) illustrates that A commits herself/himself to p and, therefore, the topic opens up *whether p*. A implicitly confirms q because both assume 'If p, then normally q.' and A assumes p (cf. Asher & Morreau 1991, 387; Karagjosova 2004, 202ff.; 224).

(39) Context following the *auch*-assertion: A: Er hatte sich **auch** nicht vorbereitet. (= p) '***That's because*** he had not prepared himself.'
a. part 1

DC$_A$	Table	DC$_B$
q (Peter did not pass the exam.)	$q \vee \neg q$ (Did Peter pass the exam?)	q (Peter did not pass the exam.)
p (Peter had not prepared himself.)	$p \vee \neg p$ (Had Peter prepared himself?)	
cg s_1 = s_2		

(39b) depicts that q becomes cg. This course comes about because B already committed himself to q, so that the topic q or non-q gets decided. The topic concerning p, however, is still open because B could reject the explanation by A.

b. part 2

DC_A	Table	DC_B
p (Peter had not prepared himself.)	$p \vee \neg p$ (Had Peter prepared himself?)	
cg $s_3 = \{s_2 \cup \{q\}\}$		

One question which one can ask when discussing MPs is whether they make the same contribution in every sentence type. As my analysis is built on a minimalist perspective, I assume that one does not have to distinguish between different versions of the same particle. In the following, I will illustrate this aspect for the occurrence of *auch* in polar and wh-interrogatives as well as in imperatives.

In the declarative in (40), the relation between p and q comes about by the plausible inference that being well-behaved leads to Santa Clause being nice.

(40) A: Santa Clause was nice to us. (q)
B: Ihr wart **auch** artig dieses Jahr. (p)
You were MP *well-behaved this year*
'***That's because*** you were well-behaved this year.'
[p > q, When you are well-behaved, Santa Clause will be nice to you.]

The same relation is involved in the polar interrogative in (41).

(41) Nikolaus: Wart ihr **auch** artig?
Santa Clause *Were you* MP *well-behaved*
'Did you behave well?'
[p > q, When you are well-behaved, Santa Clause will be nice to you.]

In contrast to a polar interrogative without the MP, (41) has a bias towards p which can be traced back to the fact that it is obvious in this scenario that the children want Santa Clause to be nice.

The interpretation of (42) also involves the inference relation p > q.

(42) A: Santa Clause was not nice to us.
B: Warum wart ihr **auch** nicht artig dieses Jahr?
Why were you MP *not well-behaved this year*
'***This does not surprise me.*** Why were you not well-behaved this year?'
[p > q, When you are well-behaved, Santa Clause will be nice to you.]

As the utterance by A introduces non-q, non-p follows. That means, if Santa Clause was not nice, the children plausibly were not well-behaved during the year. Non-q is presupposed by the *why*-question.

In principle, also imperatives can be described by the same meaning contribution. The only difference is that the relation gets reversed (cf. (43)). However, this difference is due to a directive being associated with plans and intentions rather than assumptions. The proposition p has yet to be brought about.

(43) A: We want Santa Clause to be nice to us. (q)
B: Dann seid **auch** artig! (!p)
Then be MP *well-behaved*
'***It is obvious what you have to do***: Behave well then!'
[q > !p, If you want Santa Clause to be nice, you need to be well-behaved.]

Thus, this look at the occurrence of *auch* in other sentence moods shows that it is not necessary to assume another contribution for the MP than in declarative clauses.

(44) and (45) show again what I consider the context states to look like in the context preceding the particle-utterances.

In the case of *doch*, the proposition which the *doch*-assertion contains is already under debate.

(44) Context preceding the *doch*-utterance

DC$_A$	Table	DC$_B$
	$p \vee \neg p$	
cg s_1		

An *auch*-assertion needs an inference relation in the cg and q has to be part of the commitments of A or B.

(45) Context preceding the *auch*-utterance

DC_A	Table	DC_B
(q)		(q)
cg s_1 = {p > q}		

Under the view I represent, the relevant part in modelling the discourse effect of MPs is always the context preceding the MP-utterance. When uttering the MP-assertion, the assertion works entirely regularly: It introduces a commitment to p. Depending on how the components are filled, p (and q) take different paths within the current discourse then.

4 The combination of *doch* and *auch*

The next question is how an utterance in which both *doch* and *auch* occur gets interpreted. In the literature on the phenomenon, the interpretation of MP-combinations is a controversial issue: The central question is whether and if so, how the scopes (which each MP takes over the proposition) interact. Assuming that the single particles take scope over the proposition p (= that the team won) as in (46), the four possible scope relations in (48) and (49) arise for the sequences in (47).

(46) a. Die Mannschaft hat **doch** gewonnen. doch(p)
the team has MP *won*
b. Die Mannschaft hat **auch** gewonnen. auch(p)

(47) Die Mannschaft hat **doch auch/auch doch** gewonnen.

The particles can either scope over each other (cf. (48)) with *auch(p)* falling in the scope of *doch* (cf. (48a)) or *auch* taking *doch(p)* in its scope (cf. (48b)).

(48) Different scope
a. doch(auch(p))
b. auch(doch(p))

The alternative is that their meaning adds up, that means the overall meaning consists of the sum of what *doch* and *auch* contribute in isolation.

(49) Same scope
  a. doch(p) & auch(p)
  b. auch(p) & doch(p)

With the formulation in (49), I intend to express that both MPs relate to the same proposition. Nevertheless, they do not make their contribution simultaneously, but they come into effect one after another.[20]

A common explanation for the fixed order is that it mirrors the asymmetric scope relation between the two particles (cf. for example Ormelius-Sandblom 1997; Rinas 2007). However, I believe that an utterance in which *doch* and *auch* occur gets the correct interpretation in case the two particles take the same scope. That means, both particles scope over the same proposition as in (49).

Apart from Rinas (2007: 149), I do not know of any author who discusses this particular MP-combination of *doch* and *auch* in terms of scope. However, several pieces of work discuss the combination of *ja* and *doch* and all four possibilities have been suggested (cf. (50)).

(50) a. ja(doch(p)) Ormelius-Sandblom (1997), Rinas (2007)
  b. doch(ja(p)) Lindner (1991)
  c. 1. ja(p), 2. doch(p) Thurmair (1989), Müller (2014b)
  d. 1. doch(p), 2. ja(p) Doherty (1985)

4.1 Against a scope relation between the two modal particles

I want to verify this assumption by analysing the authentic example in (51) (cf. (3)).[21]

(51) B: „Sie wissen dass sie mir meinen Job nicht gerade
  You know that you me my job not exactly

---

[20] Alternatively, one could represent this interpretation as [doch & auch](p). However, in my opinion, this suggests that the two MPs form one entity – which I do not assume. I do not consider the MP-combination a complex lexeme or something similar.

[21] I consider it more convincing to analyse a couple of examples and not just one occurrence of a *doch auch*-assertion. However, due to lack of space, I cannot accomplish this aim in this article. See Müller (2018, 352ff.) for an analysis of further corpus examples.

leicht machen?“
easy make
‘You know that you are not really making this job easy for me?’
A: „Na sie müssen sich ihr Geld **doch auch**
Well you must self your money MP MP
verdienen Lucius!“
earn Lucius
‘Well, ***but***, ***that’s because*** you must be worth your money, Lucius.’

If my account of the isolated use of *doch* and *auch* is correct, the causal link between the proposition contained in the MP-utterance and another proposition/utterance has to be detected, at least B needs to commit himself to what is to be explained and the proposition which serves as the explanation needs to be under debate.[22]

I assume that the relevant relation in (51) is: ‘If B has to be worth his money, A does not make B’s job easy for A.’ This is in the cg in (51).[23] Furthermore, the question by B presupposes (factive *wissen* [*know*]) that A does not make B’s job easy. Thus, ¬q is in the cg as well (and, therefore, it is also among A’s and B’s commitments). These fillings of the components cover what *auch* requires. Additionally, the question sounds reproachful to me or B is (negatively) amazed by the fact that A does not make B’s job easy. On these grounds, I believe, that from the fact that B poses this question, one can derive that B commits himself to the proposition that he does not have to be worth his money. If he assumed that he needed to be worth his money, he would not be amazed by his hard time. This is how the topic *Does B*

---

[22] One might analyse As contribution by assuming that s/he is joking and only pretends that having to be worth the money is the reason for making Bs job difficult although both interlocuters know that this is not the reason. However, I do not think that this impression provides a counter argument to my analysis. This is a naturally occurring example and as the contextual requirements for the MPs’ use are fulfilled, I think that the interpretation I describe arises. However, of course, MPs do not give any information on whether the speaker’s contribution can be taken seriously. When s/he uses the particles, the respective interpretation arises, regardless of whether the expressed causality really exists or has been meant as a joke by the speaker.

[23] Note that it is never possible to find out whether a component is really filled in a certain way or whether a MP only pretends it is.

have to be worth his money? opens up in this dialogue – the requirement *doch* imposes on the context.

(52) Context preceding the *doch auch*-utterance

DC$_A$	Table	DC$_B$
	$p \vee \neg p$ (Does B have to be worth his money?)	$\neg p$ (B does not have to be worth his money.)
cg $s_1 = \{p > \neg q, \neg q\}$ (If B has to be worth his money, A does not make B's job easy for B., A does not make B's job easy for B.)		

When making the *doch auch*-assertion (cf. the effects in (53)), A introduces p which serves as the explanation for $\neg q$ (A does not make B's job easy for B.). From the point of view of A, this assumption follows because 'If p, then normally $\neg q$.' is in the cg. Moreover, A reacts to the open topic $p \vee \neg p$ (*Does B have to be worth his money?).*

(53) Context following the *doch auch*-utterance

DC$_A$	Table	DC$_B$
p (B has to be worth his money.)	$p \vee \neg p$ (Does B have to be worth his money?)	$\neg p$ (B does not have to be worth his money.)
cg $s_2 = s_1$		

After the utterance of the *doch auch*-assertion B knows that A assumes p and that this is A's explanation for $\neg q$. Depending on how the context continues, B can revise his own assumption about $\neg p$ or he can just keep it.

Thus, I believe, it is possible to motivate why the requirements which *doch* and *auch* need in isolation are both fulfilled in this dialogue in which a *doch auch*-assertion gets used.[24]

---

[24] The rising declarative might also be relevant in this example. Rising declaratives have a different impact on the context than polar interrogatives (cf. e.g. Bartels 1999, Truckenbrodt 2009, Gunlogson 2001). However, this difference does not interact with my analysis which relies on the availability of the presupposition non-q and the openness of p vs. non-p. The rising declarative comes with the same presupposition as the polar interrogative and although the rise indicates that the

(54) and (55) illustrate what results when modelling scope between MPs. In (54), the context requirement for *auch(p)* serves as the input for *doch(p)*; in (55), the configuration for *doch(p)* is the input for *auch(p)*.

(54) Context preceding the *doch auch*-utterance; reading: doch(auch(p))

DC_A	Table	DC_B
	$(q \in DC_{A/B}$ & $cg = \{p > q\}) \vee$ $\neg(q \in DC_{A/B}$ & $cg = \{p > q\})$	
cg s_1		

(55) Context preceding the *doch auch*-utterance; reading: auch(doch(p))

DC_A	Table	DC_B
(q)		(q)
cg $s_1 = \{((p \vee \neg p) \in T) > q\}$		

It becomes immediately clear that the assumptions in the components become much more complex. In short, I believe that neither description captures the relevant context state in the situation which precedes the MP-utterance immediately.

Following (54) for example, the dialogue would be about whether A or B assume that A does not make B's job easy for B ($\neg$q) and whether the causal link exists between making the job hard ($\neg$q) and B having to be worth his money (p). This interpretation does not seem to be apt: It is not up for discussion whether A and B commit themselves to $\neg$q. These two discourse commitments are clearly at hand (*You know that* $\neg$*q?*). Neither is it a topic of the conversation whether p justifies $\neg$q. A simply bears on this relation. Nor is it an issue whether the two aspects hold at once.

In (55), the reading comes about that it is a common assumption that if the topic about p is under debate, q normally follows. Applying this constellation to (51), the reading arises that A and B agree that if it is under discussion whether B has to be worth his money, it usually follows that A does not make B's job easy for B. Even though I do not consider this constellation completely besides the point as far as this

---

addressee is committed to p (according to Gunlogson 2001, 36), the issue is still not settled in the current context. I, therefore, assume that the topic is open.

particular example is concerned, I do not believe that this context state motivates the use of the MP-utterance. $p \vee \neg p$ would not really have to be under debate then. And there should not be contexts in which the interlocutors hold contrary views concerning q while $p \vee \neg p$ is lying on the table. According to (55), both participants have to commit to the proposition which the MP-utterance motivates.

I think, both readings are not suitable to capture the context state which motivates (or allows) the use of the *doch auch*-assertion. However, it is possible to reconstruct the additive meaning of the two particles in this dialogue as I showed above.

My argumentation in favour of the non-scope reading is consequently based on the interpretation of the MP-combination. A more general argument for my analysis is suggested in Jacobs (2018, 136ff.): Relying on the classification of MPs as expressives (cf. Gutzmann 2015, 2017), he argues that MPs can never scope over each other because one expressive expression cannot fall within the scope of another expressive item. This assumption goes back to Potts (2005). The example in (56) can only be interpreted along the lines of (57a). The relative clause can only refer to the descriptive part of the main clause. It cannot refer to the main clause as modified by the adjective (cf. (57b)).

(56) I have to mow the **fucking** lawn, which is reasonable if you ask me.

(57) a. that I have to mow the lawn is reasonable if you ask me
b. that I disapprove of having to mow the lawn is resonable if you ask me (Potts 2005, 61)

4.2 Explaining the unmarked order doch auch

Although the assumption that the preference for one particle order can be explained by scope relations (cf. Ormelius-Sandblom 1997, Rinas 2007) sounds plausible, I believe it is not of much use if the resulting interpretation is not apt in dialogues in which such utterances are appropriate.

4.2.1 Iconicity

Assuming that my additive interpretation is adequate, in the following, I will make the proposal that the preferred and dispreferred ordering of *doch* and *auch* can be derived by referring to some form of *iconicity*. Croft (1995, 129) defines iconicity in language as follows:

> [...] the principle that the structure of language should, as closely as possible, reflect the structure of experience, that is, the structure of what is being expressed by language.

A fundamental distinction in the literature on iconicity which goes back to Peirce (1960, 2.277) is that between *imagic* and *diagrammatic iconicity*. The first one concerns a single linguistic sign (a prototypical example is onomatopoeia) for which holds that a resemblance exists between its form and its contents (cf. (58)).

(58) signifier meow
↕ ↕ (direct resemblance of sound and form)
signified 'sound caused by a cat'
Nänny & Fischer (1999, xxii)

In the case of *diagrammatic iconicity*, the relevant level is not the isolated sign, but a motivation of the relations between signs is at hand. There is not a direct (vertical) connection between signifier and signified. The link exists between the horizontal relation on the level of the signifier and the horizontal level of the signified. These constellations can be realised structurally (morphologically, syntactically) or semantically (metaphors for example). In (59), the sequencing of the three forms in the famous Caesar-quotation corresponds to the order of the events in the real world.

(59) signifier veni → vidi → vici
↕̸ ↕ ↕
signified 'event' → 'event' → 'event'
Nänny & Fischer (1999, xxii)
(in the real world)

Within the scope of my argumentation, *structural diagrammatic iconicity* is of interest, and more precisely the constellation Haiman

(1980, 516) calls *iconic motivation*. He defines this type of iconicity in the following way: “a grammatical structure, like an onomatopoeic word, reflects its meaning directly.” Typically, ordering restrictions are comprised under this type of iconicity. For instance, there is the tendency to order sentences in discourse according to the temporal sequencings of the events they describe (cf. (60)).

(60) a. He opened the door, came in, sat and ate.
b. *He sat, came in, ate and opened the door.
Givón (1991, 92)

In the following, I will explicate in how far the ordering of the MPs *doch* and *auch* can be said to mirror discourse structural processes from my point of view. I will argue that the unmarked sequence represents the most direct mapping of word order and the order in which things should (ideally) happen in discourse.

4.2.2 Addressing the current issue and giving reasons for another issue

According to my modelling, *doch* refers to the openness of the proposition, i.e. it reacts to the topic which is currently under debate, *auch* explains another issue.

My idea for deriving the preference towards *doch auch* is that this structure mirrors the discourse goal more directly than *auch doch* in the following sense: It is more directly relevant for the course of a conversation and the goal of communication to address the current topic (which *doch* does) than to state a reason for another issue (which *auch* does). That means, it is more urgent to learn in a discourse that the asserted proposition is part of a topic under debate than to learn that the speaker assumes that this proposition serves as a reason for another proposition.

This assumption has to be seen in the light of Stalnaker’s (1978, 322) original idea that communication serves the purpose of increasing the cg and, thereby, reducing the context set (the set of worlds in which the cg-propositions are true):

> To engage in a conversation is, essentially, to distinguish among alternative possible ways that things may be. The purpose of expressing propositions is to make such distinctions.

The same idea is expressed by Farkas & Bruce (2010: 87). In section 2, I referred to their assumption that conversation is generally driven by the two aspects in (61).

(61) Aspects that drive conversation
  a. increasing the cg
  b. reaching a stable state

Firstly, interlocutors place elements on the table because they intend to increase the cg. Secondly, they strive for reaching a state in which nothing is under debate. Nothing is lying on the table. In order to reach this aim, they remove elements from the table in that way that the cg increases.

Being under debate is a precondition for becoming part of the cg and if this is the main discourse goal, any other aim is less important. This should then also apply to the expression of a causal relation.[25]

Although both orders lead to the same literal interpretation (*doch* and *auch* scope over p) (cf. section 4.1), *doch auch* (cf. (62a)) (unlike *auch doch* [cf. (62b)]) complies with the communicative aim in the most direct, isomorphic way.

(62) a. order *doch auch*: 1. addressing the current topic p (*doch*), 2. stating a reason for another issue q (*auch*)
  b. order *auch doch*: 1. stating a reason for another issue q (*auch*), 2. addressing the current topic p (*doch*)

5 The reversed order *auch doch*

As already mentioned in section 1, I believe that one should not say that there is only one grammatical order and that the reversed order needs to be filtered out by the analysis. I rather pursue the view to look at this phenomenon as a markedness phenomenon. And from my assumptions on the form-function-relation it follows why one order is more normal. If possible, I also go as far as to say that the reversed order does exist, that it is just restricted to very particular contexts

---

[25] On urgency determining word order cf. Givón (1985, 199). It would be desirable to find independent evidence (e.g. within other constructions) for this particular order of urgency: addressing the topic > expressing a causal relation.

and I try to determine these contexts (cf. Müller (2014b, 2016, 2018) for an account of other MP-combinations).

As far as *doch auch* and *auch doch* are concerned, it is doubtlessly the case and it is not up to discussion that the *auch doch*-hits one finds are clearly underrepresented in the data.[26] I want to stress at this point that my argumentation regarding the reversed order does not run along the lines of wanting to prove that the marked sequences are used to the same extent as the unmarked ones. Without doubt, we are dealing with a clear difference in markedness. Nevertheless, I do not consider the marked cases ungrammatical and non-existent. In fact I hold the view that they are not altogether excluded and occur with a certain systematicity. In particular because of the latter observation, I want to deny their status as performance errors. In DECOW2014, I found 40 examples in which both forms of the combination are really used as MPs in my opinion. Although this is definitely only a small number of examples, it is still large enough to analyse it for patterns.

For several reasons it is difficult to provide numbers for *doch auch*- and *auch doch*-examples within one and the same corpus. Within DGD2, I found 60 *doch auch*-hits and two *auch doch*-hits. In DeReKo, four *auch doch*- and 59 *doch auch*-examples could be made out when looking at a random sample of 500 hits. It is only possible to look at samples of this kind because one needs to read every example within its context and has to decide whether *doch* and *auch* are really used as MPs. Interpolating the data from DeReKo allows me to determine a 95%-confidence interval for the occurrence of *doch auch*: Between 6654 and 11258 relevant hits are expected to occur. A parallel interpolation for *auch doch* is not possible as the statistical conditions for calculating such interpolations are not met (cf. Perkuhn & Keibel & Kupietz 2012: chapter 6.5). The estimated number would be seven hits. In a sub-corpus of DECOW (DECOW14AX01), I found eight relevant *auch doch*-combinations. However, it is impossible to check all *doch auch*-examples. Additional efforts are involved as it is only possible to extract single sentences from the corpus. However, it is essential to look at MP-utterances within contexts. One thus has to search for the contexts before one can look at the examples. For that reason, I can only provide a very rough estimation which is 6552 hits.

---

[26] I consulted DECOW (Corpora from the web) (cf. Schäfer & Bildhauer 2012), DeReKo (Deutsches Referenzkorpus) (cf. Kupietz et al. 2010) and DGD2 (Datenbank für gesprochenes Deutsch) (cf. Schmidt & Dickgießer & Gasch 2013).

The 40 hits occur in the whole DECOW-corpus and it is obviously impossible to provide numbers for *doch auch*-examples for the reason explained above.

The magnifying glass is big. But this does not have to keep one from looking at the examples which are available. It is clear that it is the central task of the analysis to explain the considerable preference for *doch auch*. However, nevertheless, it should be allowed to look for reasons why reversing the order occurs in particular contexts and the analysis should be able to account for this observation.

I think that two patterns can be made out. The first one is causal subordinate clauses, the second one the combination with *ja* (*ja auch doch*). The latter is also mentioned in the only reference to the order *auch doch* I could find (see Hentschel 1986, 254). (63) to (66) show two examples for each context.

(63) @Titus: If I remember correctly, you wished for an additional function [see the commentary 42 further above].
Ich bin aber noch nicht dazu gekommen eine solche
I am however still not to-it got a such
Funktion einzubauen, ***da*** **es aufgrund der**
function integrate as it due-to the
Wahlmöglichkeit die man dazu haben sollte
options which one for-it have should
auch doch kein kleiner Aufwand ist.
MP MP *no small effort is*
'However, I still haven't got down to integrate such a function, ***because***, ***as you know***, it is not a small effor ***though***, due to the options which one should have for it.'
(http://www.crazytoast.de/plugin-wordpress-blogroll-widget-with-rss-feeds.html)
(DECOW2014)

(64) Ich finde ohne Sattel reiten prima, ***weil*** **man**
I find without saddle riding super because one
auch doch viel genauer merkt, was unter
MP MP *much more precise perceives what under*
einem los ist.
one up is

'I consider riding without a saddle super ***because*** one perceives much more precisely what is going on underneath oneself ***though***.'

(http://www.wege-zum-pferd.de/
forum/archive/index.php?t-5461.html)
(DECOW2014)

(65) I'm sorry for you that there are problems again! You got really stitched with yours! Mine is rather harmless in comparison, although I'm annoyed enough. Have you considered that they convert it for you?
Es gibt *ja* auch doch einige im Board, bei denen
It gives MP MP MP *some on-the board for who*
alles funktioniert.
everything functions
'[I'm suggesting that] ***because***, ***as you know***, there are some on the board for whom everything works ***though***.'

(http://www.der206cc.de/forum/archive/
index.php/t-2177.html)
(DECOW2014)

(66) The woman answered: "No, that's not possible, young man."
Manuel
21.06.2009, 21:11
Ja ... naja **das is *ja* auch doch ziemlich dreist**. xD
Yes well that is MP MP MP *quite bold*
'Well [that's an expected reaction] ***because***, ***as you know***, this is quite bold ***though***.'

(http://forum.torwart.de/de/archive/
index.php/t-62037-p-4.html)
(DECOW2014)

Among the 40 hits for *auch doch* for which I assume that both elements are used as MPs, there are 14 causal clauses which are marked by a causal conjunction or the verb-first-order, 11 sequences with *ja* and two combinations of these two contexts.[27] If one searches specifically for *auch doch* in these two contexts on the web, one finds more

---

[27] I could not make out patterns in the remaining 13 occurrences. However, the difference between the cases with a pattern and the ones without turns out to be statistically significant: $\chi^2(1, n = 40) = 4.9$, $p < 0.05$, $V = 0.35$.

examples of the type in (63) to (66), which I do not consider peculiarly abnormal.

Further examples are given in (67) to (70).

(67) My blog used to be mainly a blog for nature photography. Nowadays it is mostly a blog for people fotography. Concerning my motives I made a 180 degrees turn. :D
Das liegt zunächst einmal daran, dass ich kaum noch
This lies first of all once at-it that I hardly still
Natur fotografiere,
nature take pictures
weil **ich *ja* auch doch keine 36 Stunden Tage habe**
as I MP MP MP *no 36 hours days have*
‘In the first place the reason for that is that I hardly take
pictures of nature because ***[that's an expected reason]***, ***as you know***, I do not work 36 hours a day ***though***.’
(unfortunately :D) and, therefore, there is no time for that besides the shootings
(Google-search 25/06/2015)
(http://www.lichtreflexe-2014_10_01_archive.html)

(68) According to rumours, the German economy wants to make Asia's last original dictator get a move.
Weil **auch doch dort unten alles besser werden**
as MP MP *there below everything better become*
soll.
shall
‘Because ***[and that's expected]*** everything shall become better down there ***though***.’
(Google-search 25/06/2015)
(http://www.tagesspiegel.de/sport/willmanns-kolumne-dresdner-fans-wollen-den-fdgb-pokal-wieder-einfuehren/7601988-2.html)

(69) He does not make “Die Frau in den Dünen” sound without a special touch.
Das könnte einigen Hörern vielleicht etwas zu
That might some listeners maybe a bit too
verkünstelt sein, aber es geht aufgrund des Inhaltes,
artificial be but it goes due to the contents

der ja auch doch eher auf einer
which MP MP MP *rather on a*
psychologischen Ebene seinen Schwerpunkt hat.
psycholocical level his focus has
'Some listeners might find this a bit too artificial, but it works because of the contents which, ***as you know***, has its focus on the psychological level ***though***.'
(Google-search 25/06/2015)
(http://www.hoerspieltipps.net/archiv/diefrauindenduenen.html)

(70) I rather think that the 11 point font is for multiplayer apps… This is logical. The display is bigger than an iPhone. Maybe there are no apps which use it correctly now, but who knows what the future will bring. ;)
— Coolix
Ich will neben meinen Finger aufm iPhone *ja* auch
I want next to my fingers on-the iPhone MP MP
doch was erkennen…
MP *something recognise*
das ne Simple erklareung…
that an easy explanation
'***As you might imagine***, I would like to recognise something on my iPhone apart from my fingers ***though***.'
— Gtc-michel89
(Google-search 25/06/2015)
(http://www.iphone-ticker.de/multitouch-punkte-ipad-unterstutzt-11-iphone-nur-funf-10833/)

I am aware of the fact that it is probably unavoidable to face criticism regarding the reversed orders. In order to provide further evidence for my assumption that it does exist, I would like to direct the reader's attention to the examples in (71) and (72).

(71) When the reception was over, he had a job which he hadn't expected to get. With his incredible persuasiveness, Trippe brought Lindbergh to become a "technical consultant" for Pan AM.
Mit derselben Überredungskunst machte Trippe
With the-same persuasiveness made Trippe

seine Betty schließlich auch doch noch zur
his Betty finally MP MP *yet to-the*
Ehefrau.
wife
'With the same persuasiveness, Trippe finally made his Betty a wife.' (Z04/405.04570 Die Zeit (Online), 27/05/2004)

(72) Question: Is it not possible to delete all contributions which are not related to the article?
Nein. (**Das gäbe schlimmstenfalls dann auch doch**
No This gave worst case then MP MP
nur weitere Bewertungsscherereien nach dem
only further annoyance concerning judgements after the
Motto: „Was ist artikelbezogen"
motto "What is article-related"
'No. As this would just lead to further annoyance concerning judgements in the worst case, according to the motto: What is related to the article?'
(WDD11/L43.00760: Diskussion: Lectorium Rosicrucianum/Archiv/2010/1. Teilarchiv)

In (71), it is obvious that *auch* and *doch* cannot be used as MPs. *Auch* is a conjunctive adverb (meaning 'additionally') and *doch* is an adverb (meaning 'nevertheless'). In (72), *auch* can be understood as a MP, however, *doch* is a stressed adverb (meaning 'nevertheless'). In my opinion, the possibility to interpret *doch* and *auch* both as MPs increases from (71)/(72) to (63)–(70).

Although a number of empirical questions definitely still need to be addressed (for instance: Do speakers really judge *auch doch* better in these domains than in others? Are causal clauses and combinations with *ja* also preferred environments for *doch auch* or can they be considered a genuine *auch doch*-context?), for the moment (as long as the opposite has not been proven), I want to assume that these two contexts play a role, in case speakers use the order *auch doch*. And I would like to think about reasons why the reversal of the order seems to be possible more easily in exactly these contexts.

I would like to suggest that MPs in combinations are not weighted identically, in the sense that the sentential context can have an impact on the weight of a particle. The contribution of the particles can be foregrounded or backgrounded depending on the context. If *ja* is added to the sequence *auch doch*, I argue that addressing the topic becomes less relevant as the expressed proposition is made part of the cg anyway immediately by *ja*.[28] The consequence is that *doch* can also apply later, and for that reason occurs at the right margin of the combination of three MPs. The constellation which is responsible for *doch* occurring in front position according to my analysis of the unmarked *doch auch*, thus gets cancelled in this context by adding *ja*, and therefore makes the late application of *doch* possible.

Similarly, one can argue for the causal context, too, that the aspect of addressing the topic gets backgrounded here. I generally assume that if particles occur, their discoursive contribution comes into effect in the respective sentential context and their use is really intended by the speaker. However, it does not seem surprising if the reversal can arise particularly in the causal context. The aim of a causal clause is precisely to provide a reason. If a particle occurs which underpins the causal reading and another one which marks the addressing of the current topic, it seems quite plausible to assume that it is exactly this context which allows backgrounding of addressing the topic under debate. As a consequence, the particle which codes addressing the actual discourse topic (which is principally highly relevant for assertive utterances) can step back in this exact context and can be brought to application later.[29] As every causal clause is an assertive context after all[30], the order *doch auch* is possible, of course, and also more commonly used.

---

[28] My modelling of *ja* builds on Doherty (1987, 191), Thurmair (1989, 104) or Rinas (2007, 425) who assume that the proposition is already known on the part of the hearer. As the confirmation of p by the hearer is a precondition for p becoming part of the cg, I assume that p is either already contained in this component or becomes part of this component by making the *ja*-utterance. Like other cg-contents, the contribution by *ja* can also be accommodated, namely in situations in which the contents is in fact not known. An example for this use is given in (i). The addressee probably would not admit that s/he knows that s/he is a fool.

(i) Du bist **ja** ein Depp!
You are MP *a fool*

[29] Note that this assumed shift of urgency is in accordance with Givón's (1985) assumptions on urgency. He (1985, 199) also assumed for the order of topic and comment that the urgency to process the comment first or introduce the topic early interacts with the topic's form.

[30] It is under debate in the current literature whether/which subordinate clauses can be considered to be (relatively) independent in terms of their illocution. In the literature on German, these questions have predominantly been discussed for verb-second orders in *weil*-clauses (cf. e.g. Küper 1991, Holler 2008, Antomo &

6 Summary and further questions and issues

This article claims that the unmarked order of the MPs *doch* and *auch* is an iconic reflex of what discourse strives for, namely, increasing the cg and reaching a stable state. As addressing the current topic is essentially involved in this endeavour and, decisively more than stating reasons for other propositions, the order *doch auch* mirrors this discourse goal more directly. Put differently, one could say that advancing the discourse is superior to conveying a qualitative assessment.

My explanation offers a link to Thurmair's (1989, 288) hypothesis 2. The author suggests a catalogue of five hypotheses which describe acceptable orderings of MPs. Hypothesis 2 says that MPs which relate to present utterances precede MPs which take a qualitative evaluation of the previous contribution. Thurmair models the meaning of MPs by attributing features to them. *Doch* displays the features BEKANNT$_{H}$ (known to the hearer) and KORREKTUR (correction), capturing that the proposition which *doch* relates to, according to Thurmair, is known to the hearer and the utterance asks the hearer to change his assumption. *Auch* is characterised by the features KONNEX (connection) and ERWARTET$_{V/S}$ (the preceding utterance is expected by the speaker). BEKANNT$_{H}$ and KORREKTUR relate to the current utterance, KONNEX and ERWARTET$_{V/S}$ to the previous one which is qualitatively evaluated by being judged to be expected. Of course, Thurmair works with a different modelling of the MPs' meaning contributions. The constellation described in hypothesis 2 is reflected in my analysis: From the point of view of the development of discourse, *doch* makes the more urgent contribution to address the open topic whereas *auch* accounts for the comparatively subordinate information that this proposition provides the reason for another issue. In contrast to Thurmair's hypothesis, I do not only describe the constellations which arise under this order of the MPs, but I offer a

---

Steinbach 2010) and in complement- and relative clauses (cf. Reis 1997, Gärtner 2001, 2002). Recently, Jacobs (2018) and Rapp (2018) suggested that the occurrence of MPs does not depend on illocutionary force in the subordinate clause, but that the embedded contexts also express certain attitudes which need to be compatible with the attitudes coded by MPs. However, regardless of whether one wants to assume that main and subordinate clauses code attitudes or display a certain illocutionary force, the result for declarative clauses and *weil*-clauses would be that the speaker expresses his belief of p. As my analysis only relies on speaker commitments, this discussion does not have an impact on my argumentation.

proposal for an explanation. After all, her account leaves the question open why the MP-sequences mirror the constellations described in the hypotheses. Why do particles which relate to the current utterance precede those that offer a qualitative judgement of the previous utterance? My account provides an answer to this question for the case at hand by referring to the most direct mapping of the desired discourse goals.

In this article, only assertions are discussed. In accordance with Thurmair's (1989) condition introduced in section 1.1, *doch* and *auch* can also combine in directives and exclamatives (cf. (73) to (75)).

(73) Mach **doch/auch/doch auch** die Heizung an!
Make MP MP MP MP *the heating on*
'Switch on the heating!'[31]

(74) Dass der mir **doch/auch/doch auch** so dicht auffährt!
That that me MP MP MP MP *so close drives*
'Gosh! He is driving so close behind me!'

(75) a. Was haben die **doch/auch/doch auch** gut gespielt!
What have they MP MP MP MP *well played*
'How well they played!'
b. Was die **doch/auch/doch auch** gut gespielt haben!
What they MP MP MP MP *well played have*
'How well they played!'

It would be desirable if the ideas I presented for assertions carried over to these sentential contexts. I believe one has to analyse such occurrences in detail before making such claims. In particular, the impact such illocutionary types have on the discourse context need to be described and the MPs' contribution has to be captured. However, in my opinion, my constraint is general enough to be applicable to such contexts. It is not constricted to assertions. Addressing the current topic should usually be more relevant than evaluating another proposition qualitatively across speech acts.

Of course, one should also aim at an account which can explain all combinations of MPs.[32] My contribution might seem rather modest in

---

[31] I do without providing paraphrases for MPs in these utterances here as it is not possible to discuss the MP-utterances' contribution in contexts within the confines of this paper.

this respect. Thurmair (1989, 280) assumes that there are 171 possible combinations of two MPs, 50 of them being actually used. I think there is no way around analysing each combination in detail before making statements about the whole system. However, there is also evidence that a criterion such as the one I make responsible for the preferred sequence *doch auch* might be adequate to cover the general distribution of *doch*. This MP usually precedes any other particle (except for *ja* [see below] and in combination with *denn* in assertions – which is peculiar in this use for independent reasons). Addressing the current topic is always a highly ranked discourse aim if one understands the goal of communication to be the desire to increase the cg and to solve the topics in discourse. Normally, only *ja* yet precedes *doch*. In Müller (2014b), I propose that this is due to the fact that *ja* makes the proposition part of the cg more directly than *doch* (as a *doch*-assertion does not establish cg according to my modelling), and therefore gets presented early in the sequence in order to be able to make its contribution immediately. The order *doch ja* can also be shown to be restricted to certain linguistic contexts in which the contribution by *ja* is backgrounded (such as epistemic modalisations, evaluations). Thus, my analysis makes the right prediction that there should be an interest for speakers to introduce *doch* instantly when it combines with other MPs.

References

Abraham, W. (1995): Wieso stehen nicht alle Modalpartikel in allen Satzformen? Die Nullhypothese. *Deutsche Sprache* 23/2, 124-146.

Antomo, M. & Steinbach, M. (2010): Desintegration und Interpretation. Weil-V2-Sätze an der Schnittstelle zwischen Syntax, Semantik und Pragmatik. *Zeitschrift für Sprachwissenschaft* 29, 1-37.

Asher, N. & Morreau, M. (1991): Commonsense entailment: A modal theory of nonmonotonic reasoning. *Logics in AI. Lecture Notes in Computer Science* 478, 1-30.

---

[32] Apart from MPs, other entities can combine as well, such as adverbs (cf. e.g. Cinque 1999) and adjectives (cf. e.g. Trost 2006) and discourse markers (cf. Fraser 2013), and show ordering restrictions when they occur in sequences. It would be desirable to find criteria which determine orderings across categories.

Bartels, C. (1999): *The Intonation of English Statements and Questions: A Compositional Approach*. New York & London: Garland.

Burkhardt, A. (1982): Abtönungspartikeln als Mittel des Vollzugs präsuppositionaler Akte. Zu Dittmanns und Rombouts' Untersuchungen über die Abtönungsfunktion von *auch*, *denn* und *doch*. *Zeitschrift für germanistische Linguistik* 1, 85-112.

Cinque, G. (1999): *Adverbs and Functional Heads. A Cross-linguistic Perspective*. New York: Oxford University Press.

Coniglio, M. (2011): *Die Syntax der deutschen Modalpartikeln: Ihre Distribution und Lizenzierung in Haupt- und Nebensätzen*. Berlin: Akademie-Verlag.

Croft, W. (1995): Modern syntactic typology. In: Shibatani, M. & Bynon, T. (eds.): *Approaches to Language Typology*. Oxford: Clarendon, 85-144.

Dahl (1985): *Die Abtönungspartikeln im Deutschen. Ausdrucksmittel für Sprechereinstellungen mit einem kontrastiven Teil deutsch-serbokroatisch*. Heidelberg: Groos.

De Vriendt, S., Vandeweghe, W. & van de Craen, P. (1991): Combinatorial aspects of modal particles in Dutch. *Multilingua* 10.1/2, 43-59.

Diewald, G. (1999): Die dialogische Bedeutungskomponente von Modalpartikeln. In: Naumann, B. (ed.): *Dialogue Analysis and the Mass Media. Proceedings of the International Conference, Erlangen, April 2-3, 1998*. Tübingen: Niemeyer, 187-199.

Diewald, G. (2006): Discourse particles and modal particles as grammatical elements. In: Fischer, K. (ed.): *Approaches to Discourse Particles*. Amsterdam: Elsevier, 403-426.

Diewald, G. (2007): Abtönungspartikel. In: Hoffmann, L. (ed.): *Handbuch der deutschen Wortarten*. Berlin: de Gruyter, 117-141.

Diewald, G. & Fischer, K. (1998): Zur diskursiven und modalen Funktion der Partikeln *aber*, *auch*, *doch* und *ja* in Instruktionsdialogen. *Linguistica* 38, 75-99.

Döring, S. (2016): *Modal Particles, Discourse Structure and Common Ground Management. Theoretical and Empirical Aspects*. Dissertation. Humboldt-Universität zu Berlin. Available via: https://www.linguistik.hu-berlin.de/de/institut/professuren/sprachwissenschaft/mitarbeiter/doering. Last access: 19/11/2018.

Döring, S. & Repp, S. (to appear): The modal particles *ja* and *doch* and their interaction with discourse structure: Corpus and experimental evidence. In: Wietersheim, S. von (ed.): *Information Structure and Semantic Processing*. Berlin: de Gruyter.

Doherty, M. (1985): *Epistemische Bedeutung*. Berlin: Akademie Verlag.

Egg, M. & Zimmermann, M. (2012): Stressed out! Accented discourse particles – the case of DOCH. In: Aguilar, A., Chernilovskaya, A. & Nouwen, R. (eds.): *Proceedings of Sinn und Bedeutung* 16, Vol. 1, *MIT Working Papers in Linguistics*, 225-238.

Farkas, D. & Bruce, K. (2010): On reacting to assertions and polar questions. *Journal of Semantics* 27, 81-118.

Franck, D. (1980): *Grammatik und Konversation*. Königstein, Ts.: Scriptor.

Fraser, B. (2013): Combination of contrastive discourse markers in English. *International Review of Pragmatics* 5, 318-340.

Gärtner, H.M. (2001): Are there V2 Relative Clauses in German? *Journal of Comparative Germanic Linguistics* 3/2, 97-141.

Gärtner, H.M. (2002): On the Force of V2 Declaratives. *Theoretical Linguistics* 28/1, 33-42.

Givón, T. (1985): Iconicity, isomorphism and non-arbitrary coding in syntax. In: Haiman, J. (ed.): *Iconicity in Syntax*. Amsterdam: John Benjamins, 187-219.

Givón, T. (1991): Isomorphism in the grammatical code: cognitive and biological considerations. *Studies in Language* 15/1, 85-114.

Grosz, P. (2014): German *doch*: An element that triggers a contrast presupposition. *Proceedings of the Chicago Linguistic Society* 46. University of Chicago, 163-177.

Grosz, P. (to appear): Discourse Particles. In: Matthewson, L. et al. (eds.): *The Companion to Semantics*. Oxford: Wiley.

Gutzmann, D. (2015): *Use-Conditional Meaning. Studies in Multi-dimensional Semantics*. Oxford: Oxford University Press.

Gutzmann, D. (2017): Modal particles ≠ modal particles (= modal particles). Differences between German modal particles and how to deal with them semantically. In: Bayer, J. & Struckmeier, V. (eds.):

Discourse Particles. Formal Approaches to their Syntax and Semantics. Berlin & Boston: de Gruyter, 144-172.

Gunlogson, C. (2001): *True to Form. Rising and Falling Declaratives as Questions in English.* Dissertation. University of California, Santa Cruz. Published as Gunlogson (2003), *True to Form. Rising and Falling Declaratives as Questions in English*. London.

Haiman, J. (1980): The iconicity of grammar: Isomorphism and motivation. *Language* 56, 515-540.

Helbig, G. (1990): *Lexikon deutscher Partikeln*. Leipzig: Verlag Enzyklopädie.

Hentschel, E. (1986): *Funktion und Geschichte deutscher Partikeln. 'Ja', 'doch', 'halt' und 'eben'*. Tübingen: Niemeyer.

Hoffmann, L. (1994): Juristische Kommunikation: eine Verhandlung vor dem Amtsgericht. In: Ehlich, K. & Redder, A. (eds.): *Gesprochene Sprache. Transkripte und Tondokumente*. Tübingen: Niemeyer, 19-91.

Holler, A. (2008): German dependent clauses from a constraint-based perspective. In: Fabricius Hansen, C. & Ramm, W. (eds.): *Subordination vs. Coordination in Sentence and Text*. Amsterdam & Philadelphia: Benjamins, 187-216.

Horn, L. (1984): Toward a new taxonomy for pragmatic inference: Q-based and R-based implicature. In: Schiffrin, D. (ed.): *Meaning, Form, and Use in Context*. Washington: Georgetown University Press, 11-42.

Jacobs, J. (2018): On main clause phenomena in German. *Linguistische Berichte* 254, 131-181.

Karagjosova, E. (2004): *The Meaning and Function of German Modal Particles. Saarbrücken Dissertations in Computational Linguistics and Language Technology*.

König, E. (1997): Zur Bedeutung von Modalpartikeln im Deutschen: Ein Neuansatz im Rahmen der Relevanztheorie. *Zeitschrift für Germanistische Linguistik* 136, 57-75.

Kwon, M.-J. (2005): *Modalpartikeln und Satzmodus. Untersuchungen zur Syntax, Semantik und Pragmatik der deutschen Modalpartikeln*. Dissertation. München. Accessible via: http://edoc.ub.uni-muenchen.de/4877/1/Kwon_Min-Jae.pdf. Last access: 19/11/2018.

Krifka, M. (2015): Bias in Commitment Space Semantics: Declarative questions, negated questions, and question tags. In: D'Antonio, S., Moroney, M. & Little, C.R. (eds.): *Semantics and Linguistic Theory* (SALT) 25, Washington, D.C.: LSA Open Journal Systems, 328-345.

Kupietz, M. et al. (2010): The German Reference Corpus DeReKo: A primordial sample for linguistic research. In: Calzolari, N. et al. (eds.): *Proceedings of the 7th Conference on International Language Resources and Evaluation (LREC 2010)*. Valletta, Malta: European Language Resources Association (ELRA), 1848-1854.

Küper, C. (1991): Geht die Nebensatzstellung im Deutschen verloren? – Zur pragmatischen Funktion der Wortstellung in Haupt- und Nebensätzen. *Deutsche Sprache* 19, 133-158.

Lindner, K. (1991): 'Wir sind ja doch alte Bekannte.' The use of German *ja* and *doch* as modal particles. In: Abraham, W. (ed.): *Discourse particles. Descriptive and Theoretical Investigations on the Logical, Syntactic and Pragmatic Properties of Discourse Particles in German*. Amsterdam: Benjamins, 168-201.

Meibauer, J. (1994): *Modaler Kontrast und konzeptuelle Verschiebung. Studien zur Syntax und Semantik deutscher Modalpartikeln*. Tübingen: Niemeyer.

Möllering, M. (2004): *The Acquisition of German Modal Particles. A Corpus-based Approach*. Bern: Peter Lang.

Müller, S. (2014a): *Modalpartikeln*. Heidelberg: Winter.

Müller, S. (2014b): Zur Anordnung der Modalpartikeln *ja* und *doch*: (In)stabile Kontexte und (non)kanonische Assertionen. *Linguistische Berichte* 238, 165-208.

Müller, S. (2016): Normalität im Diskurs – Implikationsverstärkung in (*halt eben-/eben halt-*)Assertionen. In: *Linguistische Berichte* (special issue *Normalität in der Sprache*, ed. by d'Avis, F. & Lohnstein, H.), 145-180.

Müller, S. (2017): Kausale/konzessive Verberst- und *Wo*-Verbletzt-Sätze. *Deutsche Sprache* 3, 245-276.

Müller, S. (2018): *Distribution und Interpretation von Modalpartikel-Kombinationen*. Berlin: Language Science Press.

Nänny, M. & Fischer, O. (eds.) (1999): *Form Miming Meaning*. Amsterdam & Philadelphia: John Benjamins.

Ormelius-Sandblom, E. (1997): *Die Modalpartikeln 'ja', 'doch' und 'schon'. Zu ihrer Syntax, Semantik und Pragmatik*. Stockholm: Almqvist & Wiksell International.

Önnerfors, O. (1997): *Verb-erst-Deklarativsätze: Grammatik und Pragmatik*. Stockholm: Almqvist & Wiksell International.

Peirce, C.S. (1960): *Collected Papers of Charles Sanders Pierce I-II*. Edited by Charles Hartshorne und Paul Weiss. Cambridge/MA: Belknap Press of Harvard University Press.

Perkuhn, R., Keibel, H. & Kupietz, M. (2012): *Korpuslinguistik*. Paderborn: Fink.

Potts, C. (2005): *The Logic of Conventional Implicatures*. Oxford: Oxford University Press.

Rapp, I. (2018): Wenn man versucht, JA nichts Falsches zu sagen – Modalpartikeln in Haupt- und Nebensätzen. *Linguistische Berichte* 254, 183-228.

Reis, M. (1997): Zum syntaktischen Status unselbständiger Verbzweit-Sätze. In: Dürscheid, C., Ramers, K.H. & Schwarz, M. (eds.): *Sprache im Fokus. Festschrift für Heinz Vater zum 65. Geburtstag*. Tübingen: Niemeyer, 121-144.

Rinas, K. (2007): Abtönungspartikel-Kombinationen und Skopus. *Sprachwissenschaft* 32/4, 407-452.

Rojas-Esponda, T. (2013): A QUD account of German *doch*. In: Etxeberria, U. et al. (eds.): *Proceedings of Sinn und Bedeutung* 18, 359-376.

Schäfer, R. & Bildhauer, F. (2012): Building large corpora from the web using a new efficient tool chain. In: Calzolari, N. et al. (eds.): *Proceedings of the Eighth International Conference on Language Resources and Evaluation*, 486-493. Accessible via: http://rolandschaefer.net/wp-content/uploads/2014/08/ SchaeferBildhauer_LREC2012_ BuildingLargeCorpora.pdf. Last access 19/11/2018.

Schmidt, T., Dickgießer, S. & Gasch, J. (2013): Die Datenbank für Gesprochenes Deutsch – DGD2. Accessible via: http://ids-pub.bsz-bw.de/frontdoor/index/index/docId/1274. Last access: 19/11/2018.

Searle, J.R. (1969): *Speech Acts. An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.

Stalnaker, R. (1978): Assertion. In: Cole, P. (ed.): *Syntax and Semantics 9: Pragmatics*. New York, 315-332.

Struckmeier, Volker (2014): Ja doch wohl C? Modal particles in German as C-related elements. *Studia Linguistica* 68/1, 16-48.

Thurmair, M. (1989): *Modalpartikeln und ihre Kombinationen*. Tübingen: Niemeyer.

Thurmair, M. (1991): Kombinieren Sie doch nur ruhig auch mal Modalpartikeln! Combinatorial regularities for modal particles and their use as an instrument of analysis. *Multilingua* 10.1/2, 19-42.

Thurmair, M. (2013): Satztyp und Modalpartikeln. In: Meibauer, J., Steinbach, M. & Altmann, H. (eds.): *Satztypen des Deutschen*. Berlin & New York: de Gruyter, 627-651.

Trost, I. (2006): *Das deutsche Adjektiv*. Hamburg: Buske.

Truckenbrodt, H. (2009): On rises and falls in interrogatives. In: Yoo, H.Y. & Delais-Roussarie, E. (eds.): *Proceedings from IDP 2009, Paris, Septembre 2009*, 9-17.

Verschueren, J. (2003): *Understanding Pragmatics*. London: Hodder & Stoughton.

Vismans, R. (1994): *Modal Particles in Dutch Directives: A Study in Functional Grammar*. Amsterdam: IFOTT.

Waltereit, R. (1999): Abtönung als universalpragmatisches Phänomen. In: Spillner, H.O. & Warnke, I. (eds.): *Internationale Tendenzen der Syntaktik, Semantik und Pragmatik. Akten des 32. Linguistischen Kolloquiums in Kassel 1997*. Frankfurt: Lang, 523-530.

Waltereit, R. (2006): *Abtönung. Zur Pragmatik und historischen Semantik von Modalpartikeln und ihren funktionalen Äquivalenten in romanischen Sprachen*. Tübingen: Niemeyer.

Zifonun et al. (1997): *Grammatik der deutschen Sprache. Band 1-3*. Berlin: de Gruyter.

Zimmermann, M. (2009): Discourse Particles in the Left Periphery. In: Cook, P et al. (eds.): *Dislocated Elements in Discourse*. Oxford, Routledge, 200-231.

Corpora/Tools

Corpora from the Web ((DE)COW): http://hpsg.fu-berlin.de/cow/
[Schäfer & Bildhauer 2012]

Datenbank für gesprochenes Deutsch (DGD2):
http://dgd.ids-mannheim.de:8080/dgd/ pragdb.dgd_extern.sys_desc
[e.g. Schmidt & Dickgießer & Gasch 2013]

Deutsches Referenzkorpus (DeReKo):
https://cosmas2.ids-mannheim.de/cosmas2-web/
[e.g. Kupietz, M. et al. 2010]

Tübinger Baumbank des Deutschen/Spontansprache
(TüBa-D/S):
http://www.sfs.uni-tuebingen.de/ascl/ressourcen/corpora/tueba-ds.html

PD Dr. Sonja Müller
Bergische Universität Wuppertal
Germanistik – Linguistik
Fakultät für Geistes- und Kulturwissenschaften
Gaußstr. 20
D-42119 Wuppertal
sonja.mueller@uni-wuppertal.de

Sprachtheorie und germanistische Linguistik (sugl.eu), 28.2 (2018), 237-273
ISSN (Online) 2365-8584

Katinka Halász

Misunderstandings in communicative language use

Abstract

The present paper aims to analyze how the different causes underlying misunderstandings can be predicted by relevance theory. Misunderstandings are defined as those types of unsuccessful communicative acts that primarily pertain to the unfulfillment of the informative intention of the speaker. After briefly reviewing the theoretical background for the investigation of ostensive-inferential communication and the previous research on communicative failures the paper provides a theoretically determined and empirically supported typology of misunderstandings in verbal communication.
Keywords: ostensive-inferential communication, misunderstanding, intentions

1 Introduction

In communication one often comes across misunderstandings despite the cooperative behavior of the communicative partners and their best efforts to ensure mutual understanding and effective information exchange.

The present paper has three main aims. First, I will outline the theoretical background for the investigation of misunderstandings, that is, unsuccessful communicative acts that primarily pertain to the unfulfillment of the informative intention of the speaker. The second aim is to present a typology of misunderstandings in communication that is theoretically determined by Sperber & Wilson's (1995 [1986]) relevance theory and the previous research on communicative failures by Ivaskó & Németh T. (2002). The third goal of the paper is to examine particular cases of misunderstandings. Based on detailed analyses of these examples, I demonstrate how the different causes underlying misunderstandings can be predicted by relevance theory.

The paper is thus organized as follows. Section 2 provides a brief overview of the notions of language use and communication so that we can differentiate between them, and also define the place of ostensive-inferential verbal communication within these notions. Section 3 characterizes the conditions under which the different verbal interactional forms of language use are considered to be successful, as well as the distinction between misunderstandings and other types of failures in social language use. Section 4 proposes a theoretically determined and empirically supported typology of misunderstandings in verbal communication. This section relies on the analyses of Hungarian spoken language examples taken from a TV show that features 30 minute conversations between a psychologist and individual patients filmed with hidden cameras. Finally, Section 5 summarizes the results.

2 On the notions of language use and communication

In order to investigate unsuccessful language use, one has to be able to use the term *language use* in a reflective way. As the main focus of pragmatics lies on the study of verbal communication, it is necessary to note that communication – even when performed with verbal coding – does not equal language use (Németh T. 2008: 154-156). First of all, communication itself can be performed with non-verbal codes as well. Smoke signals or color codes using flags are, for instance, early examples of long-distance communication. Not to mention that communication can also be achieved without using any established code system. Let us take an example:

(1) The mother enters the room of her teenage son, ostensively starts sniffing the air and picking up smelly clothes and pieces of leftover food from the floor.

In this case it is quite obvious that the mother is in a way communicating with her son, as her behavior would not make any sense if it was not intended to make her son realize how displeased she is. The mother's ostensive behavior is not an element of a code. It is only in this particular situation that sniffing the air and picking up different items is a means of communicating the meaning “I am displeased with the chaos that reigns in your room, you should do something about it”. Nevertheless, if the son notices the mother’s intention to inform him about something and is also capable of inferring the intended information, then this instance of situation bound behavior without any code use is just as successful as its verbal counterpart could be. What these examples make clear is that communication as a form of human social behavior relies on ostensive behavior. Ostensive behavior is performed in order to make the initiator’s intention to make any kind of information manifest – or more manifest – to the partner, manifest to both parties (Sperber & Wilson 1995 [1986]: 49).[1] In order to achieve this goal, first of all, the initiator has to overtly claim the partner’s attention so that the partner focuses on his/her communicative intention and, as a second step, the partner is able to recover those pieces of information which confirm the presumption of relevance (Sperber & Wilson 1995 [1986]: 155). According to this characterization of communication, there are two distinct kinds of intentions that underlie this type of ostensive behavior: an informative intention and a communicative one, the first being prior to the latter from both a logical and an evolutionary viewpoint (Németh T. 2008: 163). The intended information can be recovered by relying on the combination of decoding and various types of inferences (Sperber & Wilson 1995 [1986]: 9-15). To study further aspects of communication,

---

[1] The term ‘manifest’ makes a claim about the participants’ cognitive environment, in other words, about the set of assumptions which the individual is capable of mentally representing and accepting as true, or probably true. The term manifest does not make a claim about mental states or processes. In consequence, a fact that is manifest to both initiator and partner at a given time is not necessary mutually known by them, since the initiator and the partner do not have to make the same assumptions, they just have to be capable of doing so (Sperber & Wilson 1995 [1986]: 38-46).

The term ‘intention’ is used in a broad sense here to refer to speakers’ intentions both in informative and in communicative language use. The informative intention that is made manifest in informative language use, includes a set of assumptions {I} – if there is a second intention to make this first layer of ostensive behavior overt, then it is called a communicative intention. As we will argue in the following, manipulative intentions that are present in manipulative language use, should not become mutually manifest. If the manipulative intention is recognized by the partner, manipulation is unsuccessful. Consequently, manipulative language use is not an ostensive behavior, but it is performed through forms of ostensive behavior (Németh T. 2015: 59).

let us adopt the precise definition of communication that is formulated within relevance theory as developed by Sperber & Wilson (1995 [1986]):

(2) Ostensive-inferential communication: “the communicator produces a stimulus which makes it mutually manifest to communicator and audience that the communicator intends, by means of this stimulus, to make manifest or more manifest a set of assumptions {I}” (Sperber & Wilson 1995 [1986]: 63).

Now that we have established that there are forms of communication which do not rely on a verbal code or on any code in general, let us take a look at the discrepancy between verbal communication and language use.[2] To give an illustration of non-communicative forms of language use, consider the following examples:

(3) In the hope of memorizing a homework task, student X repeats the information out loud.

(4) While repeating a homework task out loud, student X utters the sentence “I'm so tired of studying all afternoon” loudly enough for his mother to hear it in the kitchen, as well.

(5) While repeating a homework task out loud, student X utters the sentence “I'm so tired of studying all afternoon, I'm thirsty and exhausted” loudly enough for his mother to hear it in the kitchen, as well.

Example (3) is an illustration of cases where language is not used within social situations as, for example, when language is used to think, memorize, play etc. Consequently, we cannot categorize these forms of individual language use as communication. Example (4)

---

[2] The above definition of ostensive-inferential communication will be applied in explaining verbal communication. The stimulus which makes it mutually manifest to the communicator and the audience that the communicator intends by means of this stimulus, to make manifest or more manifest a set of assumptions {I}, is first and foremost a linguistic stimulus consisting of elements of a natural language that can be accompanied by stimuli in other modalities.

It is important to note that this definition of communication is meant to be an empirical generalization about the behavior of the language user and not a prescription that must be followed by the communicator (Sperber & Wilson 1995 [1986]: 162).

shows a scene where the student is not communicating with his mother, yet there is another form of verbal interaction, namely information transmission without a communicative intention, as has been argued by Németh T. 2008. The student merely wants to let the mother know that he is feeling exhausted without making this intention of his mutually manifest. Therefore, informative language use is inherently one-sided (Németh T. 2008: 171). On the one hand, there are no means to address the partner by using linguistic indicators, such as "Mom", thereby requesting his/her attention, and on the other hand, there is no way for the speaker to check the success of the information transmission by using linguistic devices such as tag questions, speech acts of correction, or self-correction along with different discourse markers (Németh T. 2015: 60). Besides its one-sided nature, we should point out the difference between having an informative intention, namely an intention to make a set of assumptions {I} manifest or more manifest to the audience, and the mere intention not to prevent the audience from being informed (Ivaskó 1997). In the former case the initiator, even though he/she has no intention to make the audience believe that he/she wants to inform the audience about {I}, explicitly intends the audience to infer the set of assumptions the initiator wants to transfer. Ideally the hearer would process the information in the way the speaker expected it to be processed and think that the utterance was not addressed to the hearer; for example he/she could only hear it accidentally. In the latter case, however, the speaker has no explicit intention to make manifest or more manifest a set of assumptions {I} to the hearer, yet he/she has no explicit intention to hold back the information from the hearer, either. Consider the modified version of the situation in (4).

(6) While repeating a homework task out loud, student X utters the sentence "I'm so tired of studying all afternoon" loud enough for his mother, who is preparing dinner in the kitchen with his father, to hear it.

In this condition, just as in the original example the student has an informative intention towards his mother and wants his informative intention to be fulfilled without necessarily being recognized. By contrast, the student does not explicitly want to inform the father about the fact that he is exhausted. Then again, he does not manifestly intend to prevent him from being informed either. Both kinds of language use are common in everyday multi-participant conversations.

There the particular speaker addresses the information in each turn to (a) particular participant(s), thereby communicating with (a) particular addressee(s), but at the same time, other participants, who the speaker is aware of and who he/she might or might not want to inform, also listen to the speaker's utterance. The speaker performs a communicative act and, at the same time with one and the same utterance he/she performs further types of language use as well. Namely, the speaker can have the intention of informing other participants about the same set of assumptions {I} he/she is communicating to the addressee(s) without wanting to make this intention mutually manifest (Németh T. 2008: 160-162; Németh T. 2015: 58; Árvay 2003). In this sense, the speaker's verbal act towards these other people can be understood as a manifestation of informative language use. Towards those participants who the speaker is aware of but has no intention to inform about a set of assumptions {I}, he/she simply has the intention not to prevent them from being informed. It follows that there is no genuine informative intention on the speaker's part. Therefore, we cannot speak here of ostensive language use. A third conceivable scenario would be that the speaker is not fully aware of the potential circle of listeners, perhaps because they are not manifest to him/her, hence the speaker does not have any sort of intention towards that part of the audience. Obviously, there is no ostensive language use in this case either.

Now let us turn to example (5), which is quite similar to (4) in the sense that the student has the intention of making manifest, or more manifest, to the mother how he feels, but does not have an intention of making his informative intention mutually manifest. Therefore, in the absence of the communicative intention we cannot classify this instance of verbal behavior as communication. Having said this, examples (4) and (5) do differ in terms of the intentions the speaker has. In the latter, besides his informative intention the student also has a "hidden" manipulative intention. Not only does he have the intention of influencing his mother to bring him some refreshing drink but on top of this intention he also has the intention not to make his influencing intention explicit. Whether a particular case of verbal information transmission can also be considered as manipulative or not does not depend solely on the existence of an influencing intention, but whether the speaker wants this intention to be recognized or not (Németh T. 2015: 61). Let us compare the following indirect request in (7) and the explicit impression of a wish in (8) with example (5):

(7) Could you bring me some refreshment, Mom?

(8) Mom, please bring me some refreshment!

Besides the fact that in (7) and (8) we see communicative acts, another difference is that in these cases the student does not try to hide his influencing intention. Influencing alone does not count as manipulation as long as the influencing intention is overt. Even if the mother brings a refreshing drink to her son after hearing (5), it cannot be seen as successful manipulation, if she recognizes that she is being influenced. Manipulation as a non-ostensive behavior has to work unconsciously on the partner (Németh T. 2015: 61). The success of manipulation does not, therefore, solely depend on the extent to which the speaker was able to influence the other person, but also on whether the manipulative intention remains hidden, or is recognized by the addressee.

Another interesting question to consider is whether information transmission without a communicative intention as illustrated in (4) is inevitably manipulative in nature or not. This question may arise from the fact that by using forms of informative language the speaker has a genuine informative intention, yet in most cases this remains unrecognized by the partner. The intention to make the informative intention manifest, i.e. the communicative intention, is missing. The speaker intends the partner to have the impression that the information he/she has become aware of was not addressed to them. The partner is intended to believe either that they have heard the speaker's utterance only accidentally, or that the speaker only intends not to prevent them from being informed, and even though they are entitled to hear the utterance by virtue of being a member of the audience, they are nevertheless not the addressee. Let us consider the following example:

(9) At a party student X learns that one of his friends is undecided as to whether to accept a one-year scholarship abroad. Student X face to face, but he wants him to know about his thoughts on the topic. Therefore, he starts talking to another person, knowing that his friend can hear the conversation as well, about his good experiences abroad.[3]

---

[3] For the original example, see Árvay (2004).

Only if the speaker has an explicit intention to hide his informative act and make it seem unexpected, will this count as an example of information transmission with a manipulative intention. If so, the hearer must have the impression that he/she only heard the utterance by chance. By contrast, if student X does not care whether his informative intention becomes obvious or not and just wants his friend to hear about the positive aspects of living abroad, so that he will decide to experience it himself, then we cannot analyze it as manipulation. In this condition, the friend should ideally believe that he is not the addressee, yet the only important concern is that he processes the content of the set of assumptions {I} which student X wants him to know.

Another key point to consider is the content of the set of assumptions {I} the speaker intends to make manifest, or more manifest. In other words, we should define what is communicated or transmitted. Consider (10):

(10) Student X and his friend take part in a contest. According to the rules, everyone is assigned a partner by the committee. After seeing who has been assigned to student X, his friend utters: "She is not that smart, but at least she is pretty. Enjoy that!"

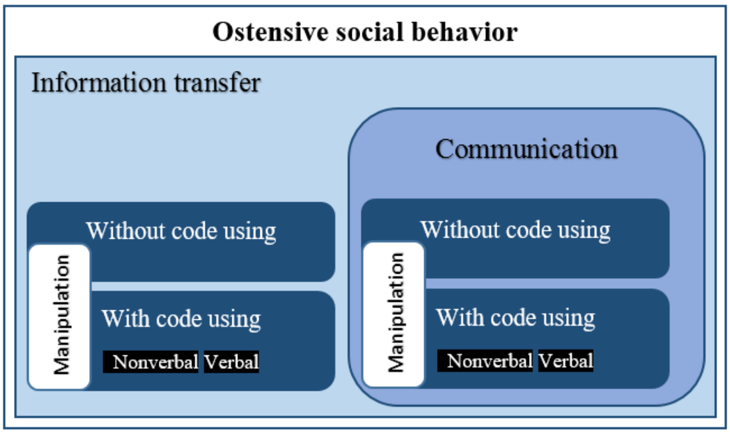
The common core meaning of this sentence shared by every utterance of it would be that the female partner of student X is not smart and that she is pretty. It also presupposes that the speaker knows the girl to some degree, since he believes that he can judge her intelligence accurately. These assumptions are conceptual representations, i.e. thoughts, treated by the individual as representations of the actual world – in contrast, for example, to fiction or desire (Sperber & Wilson 1995 [1986]: 1-2). Nevertheless, what is actually communicated is more than this semantic representation, it includes the communicator's various intentions, his attitude towards the topic and all the intended inferences. Based on his friend's ostensive behavior and what relevance it could have, as well as on the properties of the context student X choses afterwards, there are several possible interpretations of this utterance.[4] Student X could perceive (10) as an intention

---

[4] By context, Sperber and Wilson mean a psychological construct. It is the subset of the hearer's assumptions about the world used in interpreting an utterance that

to influence him so that he flirts with the girl, or he could see it as a manifestation of jealousy/celebration on his friend's part, or he could infer the implicature that his friend thinks that in his everyday life he is not surrounded by pretty girls. With this in mind, we see that if the context envisaged by the speaker does not match the context used by the hearer, failures in language use are bound to happen.

Lastly, the different social forms of language use are summarized in the following figure:



3 On the notion of success

Now that we can clearly differentiate – at least in theory – between the different cases of language use and communication, we should also discuss the conditions under which the different social forms of language use are considered to be successful. Afterwards we will establish the differences between the various types of failures in social language use and misunderstandings.

To put it simply, the success of language use is guaranteed if and only if the speaker's intentions are fulfilled (Németh T. 2015: 55). As we have previously argued, the speaker may have several intentions with one and the same utterance (Németh T. 2015: 71). For now, we will concentrate on the two that are involved in the definition of ostensive-inferential communication, namely, the informative and the

---

does not have to coincide with the actual state of the world (Sperber & Wilson 1995 [1986]: 15).

communicative intentions. Communication is truly successful when both the informative and the communicative intentions are achieved. In other words, if the speaker can produce an utterance that is both the most relevant stimulus capable of fulfilling his/her intentions and a stimulus that for the hearer appears to be worth processing, and if the hearer is then capable of inferring a representation which is to a large extent similar to the representation the speaker wanted him/her to construct, then communication is successful. In other cases, when one or both intentions of the communicator are not fulfilled, for example if the partner is not paying attention, is not identifying himself/herself as the addressee or failing in some way in the inferential procedures, communicative language use is, at least to some degree, unsuccessful. In order for information transmission without communicative intention to be truly successful the hearer must process the linguistic stimulus and recover all explicit and implicit information meant by the speaker, as well as the speaker's attitude, perspective and other intentions. Even if the hearer assumes a communicative intention on the part of the speaker and therefore does not have exactly the same representation the speaker wanted him/her to construct, information transmission is still successful as long as the set of assumptions {I} intended by the speaker are processed by the person in question (Németh T. 2015: 73).[5] Unlike communication in information transmission, because of its one-sided nature, the speaker has no way to make sure that the partner is able to process the intended information entirely, neither does he have a chance to make self-corrections and elaborations (Németh T. 2015: 60). Moreover, since there is no intention to make the informative intention mutually manifest, the speaker, by definition, cannot behave in a way that overtly attracts the hearer's attention, and so the hearer has no special help in recognizing the speaker's informative intention and so cannot make use of the presumption of relevance to guide his/her interpretation process in the same way he/she would in the case of communication. As a result of these characteristics of information transmission it should be a

---

[5] However, if there was a specific intention on the speaker's part regarding the manifestness of the informative intention, namely that it should remain unrecognized by the partner, then assuming that the speaker has a communicative intention would make this instance of information transmission unsuccessful. What this means is that the only exception is information transmission with a manipulative intention where not assuming an informative intention and consequently, holding the belief that the hearer heard the utterance accidentally, is a condition for success (Németh T. 2015: 74).

less reliable and effective form of information exchange than communication (Németh T. 2008: 163).[6]

From this characterization of communication in particular, and other forms of language use in general, it follows that these processes are ultimately asymmetrical. By asymmetrical coordination, Sperber and Wilson mean that it is left to the speaker to make correct assumptions about the codes and contextual information the hearer has at hand (Sperber & Wilson 1995 [1986]: 43). On the one hand, the speaker has to evaluate what assumptions are, or will be, manifest to the hearer at a given time and situation. In cases where the context envisaged by the speaker does not match the context used by the partner, the informative intention of the speaker cannot be fulfilled. If, however, the speaker develops a correct intuition about the partner's cognitive environment, then he/she is more likely to choose both the most relevant stimulus capable of fulfilling his/her intention(s) and a stimulus that for the hearer appears to be worth processing. Accordingly, the presumption of relevance that comes with each utterance will run a smaller risk of being falsified by the partner (Sperber & Wilson 1995 [1986]: 164). On the other hand, the speaker also has to guess what assumptions the hearer will actually make. Considering that even if the cognitive environment is to a great extent mutually shared, and the partner uses the context that was expected by the speaker, there is no guarantee that at the end of the interpretation process the informative intention of the speaker will be fulfilled. The hearer could easily arrive at contextual implications that were not intended by the speaker. As a result of the asymmetrical coordination in all forms of language use, the success of both informative and communicative attempts will depend to a large extent on the speaker. Nevertheless, failures in reception do also occur.

In order to resolve the differences between failures in language use in general and misunderstandings in particular, we first have to summarize the various types of failures that are predicted by relevance theory and that we have considered so far:

---

[6] Nevertheless, successful instances of information transmission can achieve a very desirable effect. Namely, due to the fact that in information transmission the hearer does not attribute intentionality to the speaker, and therefore does not think that he/she is being influenced in some way, informative acts of language use do come across as more reliable sources of information (Németh T. 2015: 74).

Form of language use	Intentions of speaker	Intentions fulfilled	Success
Communication	Communicative Informative	Communicative and informative	Full Success
		Communicative	Partial Success
		Informative	Partial Success
		None	Complete or partial failure
Information transmission	Informative	Informative	Full Success
		None	Complete or partial failure

Generally speaking, misunderstandings are those types of failures in language use that include a partial or complete failure in achieving the informative intention of the speaker. Let us consider the modified version of example (6) and a new example, both of which illustrate this distinction:

(11) Student X utters the sentence “I’m so tired of studying all afternoon, I’m thirsty and exhausted. Somebody please bring me a refreshment!” loudly enough for his parents, who are preparing dinner in the kitchen, to hear it.

(12) The following dialog takes place between a psychologist and his patient:
Psychologist:
– *Jókedélyűnek tűnik. Most ez valóság vagy álcázás?*
– You seem cheerful. You really are, or is it just a façade?
Patient:
– *Nekem mindenki azt mondta, hogy ilyen kis mosolygós vagyok.*
– Everyone tells me that I always have a pleasant smile on my face.
Psychologist:
– *Ez engem nem érdekel.*
– This is not what I wanted to know.

Patient:
- *Magamban nagyon sokat vívódom és örlődöm, nem tudom, kifele biztos, hogy ez van. […] Tehát azért még mosolygok, és mindenki azt mondja, hogy nem látszik rajta, hogy bármi problémám lenne.*
- I am full of self-doubt on the inside, I don't know. It's certain that that's the case on the outside. […] So I do still smile, and everybody tells me that it doesn't look like I have any problems.

Psychologist:
- *Az baj.*
- That's an issue.

In example (11) the student's communicative attempt may fail, since he does not assign the role of the addressee explicitly and so the interpersonal function of this utterance is not clear (Ivaskó & Németh T. 2002: 35-36). Both mother and father could decode its linguistic meaning and so understand that it is a request, but if nobody takes the role of the addressee, and, consequently, nobody carries out the request, then the speaker's communicative intention is not fulfilled. If this should be the case, communication is unsuccessful, yet according to our definition there is no misunderstanding.[7] Example (12) is, however, an illustration of the way the informative intention of the speaker is unfulfilled. Here the patient, aware of her role as the addressee, is paying attention to the speaker and by processing the stimulus she finds the first relevant interpretation that is enough for her to confirm the presumption of relevance. This interpretation is, though, not the same as the one the communicator intended her to arrive at. Thus it appears that with this communicative attempt, it is only the informative intention that is not fulfilled.[8] This misunder-

---

[7] Only if we decide to treat the fact that the utterance was addressed to the parents as part of the informative intention is (11) a misunderstanding.

[8] At this point, the addressee is not aware of the fact that she has not been able to fully process the set of assumptions {I} the communicator intended to convey. Even if the speaker also does not recognize this failure after the hearer's reaction, and thus it is left unresolved, is it still a misunderstanding according to our definition.

Interestingly enough, not even the researcher is able to identify all misunderstandings, as the content of the set of assumptions {I} which is communicated by the speaker is obviously not explicitly stated. However, since the researcher has the whole conversation at hand, he/she can recover all cues that render a failure sufficiently probable and then trace back the misunderstanding.

standing is easily detected by the psychologist, because he is aware that the patient's response is, first, not accurate if she interpreted his utterance correctly, and, secondly, does not give him the information he was looking for in the patient's answer. The misunderstanding is then resolved quickly within 2 turns. First, the speaker points out that there must have been a failure somewhere in the interpreting process. Secondly, the partner takes the second interpretation that for her confirms the presumption of relevance and answers accordingly. Considering that example (12) represents a misunderstanding in communicative language use, the speaker, after detecting that his informative intention has not been fulfilled, can make use of different linguistic means to indicate the disturbance in the communicative process. Yet not all sorts of misunderstandings can be dealt with this way. Consider a modified version of example (9) to illustrate a misunderstanding in informative language use:

(13) At a party student X learns that one of his friends is undecided as to whether to accept a one-year scholarship abroad. Student X does not want to influence his friend's decision, but he wants him to know about his thoughts on the topic. Therefore, he starts talking to another person, knowing that his friend can hear the conversation as well, and says: *I've spent the last year of my BA studies in Bielefeld, which made great sense, because I could fully concentrate on my thesis. I had the best time of my life there!*

The intended set of assumptions {I} that should be manifest to the hearer after processing these utterances contains the following thoughts:

(13 a) Student X has spent the last academic year of his BA studies (consisting of 10 months) in Bielefeld.

(13 b) The one year stay in Bielefeld made great sense for Student X, because he could fully concentrate on his thesis.

(13 c) Student X had the best time of his life in Bielefeld.

(13 d) Accepting the scholarship and living abroad would be a great opportunity for the friend, just as it was for Student X.

(13 e) The friend should therefore accept the scholarship.

The assumptions (13 a) – (13 c) are explicatures, and so processing them and resolving their indeterminacies require different types of inferences on the partner's part than is the case with the intended implicit content in (13 d) – (13 e). In order to yield the fully propositional forms in (13 a) – (13 c) the hearer must, for example, assign reference to the pronouns and assign appropriate interpretations to approximations like "great", "fully" or "the best" and to vague expressions like the time interval of "a year". If this were a communicative act, the hearer would also have to resolve illocutionary indeterminacies – the utterance may be interpreted as an assertive or as a directive, e.g. a piece of advice. Assuming that the partner has successfully arrived at the intended explicatures, the comprehension procedure should not stop there. Based on the activated chunks and on the inferences made, the intended interpretation should incorporate the implicatures in (13 d) – (13 e) as well. Ideally, it is (13 c) that is the most relevant part for the hearer and the one that governs the comprehension procedure, so that the intended implicatures are the most accessible ones and they already satisfy the hearer's expectation of relevance. However, if it is (13 b) that grabs the partner's attention, we find that in this context, the degree of activation of different chunks, and therefore the order of accessibility of the related inferences, are quite different:

(13 d') Spending a year abroad only makes sense in the final year while writing the thesis.

(13 e') The friend is starting the first year of his BA studies.

(13 f') Staying abroad does not make sense while in the first year of university, so in this case the friend should not accept the scholarship.

If the hearer arrives at (13 f') instead of (13 e), then the informative intention of Student X is a partial failure. Hence, it should be classified as a misunderstanding with the additional note that here the speaker has no means to investigate the success of his informative intention, nor does he have the chance to modify the unwanted interpretation (Németh T. 2015: 60).

To summarize: the fulfillment of the speaker's intentions is a good indicator of success in language use. According to the different forms of language use and the particular combination of intentions not met, various forms of unsuccessful language use can be distinguished. In general, if there is a partial or complete failure in achieving the informative intention of the speaker, then we speak of misunderstandings. As we have seen, misunderstandings occur both in communication and in information transmission without a communicative intention. In the next section I aim to present a typology of possible forms of misunderstandings, based on the predictions that follow from a relevance theoretic view on language use.

4 Misunderstandings in communication

The present section has two main aims. The first goal is to propose a typology of misunderstandings in communication that is theoretically determined by Sperber and Wilson's (1995 [1986]) relevance theory and the previous research on communicative failures by Ivaskó and Németh T. (2002). The second goal is to examine particular misunderstandings in communicative language use. The examples that will be analyzed are selected from a corpus consisting of Hungarian spoken language examples taken from a TV show that features 30 minute conversations between a psychologist and individual patients filmed with hidden cameras.[9]

In the relevance theoretic approach of comprehension in ostensive-inferential communication, the hearer infers the speaker's intended meaning from an utterance and from the selected context, that is, a predominantly linguistically-coded piece of evidence that was produced by the speaker for this purpose (Sperber & Wilson 2002: 3). First, the hearer's attention is drawn to the communicator's informative intention by some sort of ostensive stimulus that is most appropriate when it automatically pre-empts attention, e.g. an utterance in someone's mother tongue.[10] Another important feature of such ostensive stimuli is that the only relevant assumptions they make manifest are about the informative intention of the speaker (Sperber & Wilson 1995 [1986]: 151-155). In the second step, the comprehension of the utterance, as it is mainly linguistically-coded, has to involve an element of decoding. The outcome of the decoding process then serves as

---

[9] For reasons of space, PT will refer from now on to the psychotherapist and P to the patients.

[10] "*Ostensive stimuli* [...] must satisfy two conditions: first, they must attract the audience's attention; and second, they must focus it on the communicator's intentions" (Sperber & Wilson 1995 [1986]: 153)

the starting point for an inferential process (Sperber & Wilson 2002: 3). In the third and last part of the comprehension process, the conceptual representations, in other words the thoughts that are actually communicated, have to be inferred by the hearer. In order to bridge the gap between sentence meaning and the speaker's meaning, the indeterminacies of the explicit and of the implicit content will be resolved by a search for the greatest relevance possible (Sperber & Wilson 2002: 17-20). Both the determining of the context for the interpretation and the steps of the inferences that follow are guided by the presumption of relevance, namely the guarantee that according to the speaker's estimation, the information the hearer will gain is relevant enough to be worth the hearer's attention and processing effort.[11] This means, on the one hand, that on the effect side the level of effect achievable should never be less than is needed to make the utterance worth processing, and, on the other hand, that on the effort side the speaker has chosen the most relevant stimulus capable of fulfilling his/her intentions (Sperber & Wilson 1995 [1986]: 155-158).[12] Now, the hearer has to arrive at an interpretation that for him/her confirms the presumption of relevance. Finally, the first interpretation that satisfies the presumption of relevance should be accepted, otherwise the speaker has not chosen the most relevant stimulus capable of fulfilling his/her intentions and so the benefits of achieving contextual effects do not outweigh the cost of the processing effort (Sperber & Wilson 1995 [1986]: 170).

---

[11] "Someone who asks you to behave in a certain way, either physically or cognitively, suggests that he has good reason to think that it might be in your own interests, as well as his, to comply with his request. This suggestion may be ill founded or in a bad faith, but it cannot be wholly cancelled. If a request has been made at all, the requester must have assumed that the requestee would have some motive for complying with it." (Sperber & Wilson 1995 [1986]: 155)

Note that as the relevance of an interpretation is not assessed at the end of the comprehension process, but is a principle that governs the context formation and the interpretation process, the context is not uniquely determined in advance, but is open to choices and revisions throughout comprehension (Sperber & Wilson 1995 [1986]: 141-142).

[12] The utterance has no contextual effect, and therefore no relevance for the hearer if:

- the new information does not connect up with any information in the context, e.g. it yields no contextual implication;
- the assumption is already present and its strength is unaffected, e.g. it yields no dependent, independent or retroactive strengthening;
- the assumption is inconsistent with the context, but is too week to upset it, e.g. it yields no contradictions (Sperber & Wilson 1995 [1986]: 121).

It follows from the previous view on comprehension in relevance theory that the production process involves two essential steps in verbal communication: firstly, the speaker has to attract the attention of the audience and focus it on his/her informative intention; secondly, the speaker has to produce a linguistically-coded piece of evidence which can be accompanied by ostensive stimuli in other modalities. It follows that this has to involve an element of coding and, because of the asymmetrical coordination in language use, a consideration of possible context choices and inferences on the hearer's part. That is, the speaker has to make correct assumptions about the codes and contextual information the hearer has at hand so that he/she can produce the most relevant utterance that is capable of fulfilling his/her informative intentions (Sperber & Wilson 1995 [1986]: 43). If there is any failure, either in the production part or in the interpretation part of the communicative process, then communication is unsuccessful. Then again, not all cases of unsuccessful communication are also misunderstandings.

The table below presents the main components of ostensive-inferential communication, both on the speaker's and on the hearer's part:

	Crucial steps in the production – Ostensive part of communication	**Crucial steps in the comprehension – Inferential part of communication**
Ostension	Attract the audience's attention and focus it on the communicator's (informative) intention	Pay attention to the communicator
Coding – Decoding	Linguistic coding of the stimulus	Linguistic decoding of the stimulus
Inference	Consideration of possible context choices of the audience	Choice of context and inferences for maximal relevance

Accordingly, failures in communicative language use can occur with regard to ostension, coding-decoding or inference, both in production and in comprehension. As discussed in the previous section, misunderstandings in language use are generally defined as partial or complete failures in achieving the informative intention of the speaker. Failures concerning ostension, namely failures in requesting attention on the speaker's part and failures in paying attention on the hearer's part, mean that the informative intention of the speaker has not become mutually manifest. In other words, the communicative intention of the speaker is not fulfilled, and verbal communication is (at least to some extent) unsuccessful. As a result, the chances are high that the informative intention of the speaker will also not be met if there is no communicative interaction established. However, since these cases primarily pertain to the unfulfillment of the communicative intention, they will not be addressed in this article.

With this in mind, let us look at the different causes that should lead to misunderstandings in the procedures of verbal communication as predicted by the relevance theoretic model of ostensive-inferential communication, and thus relying on the results of Ivaskó and Németh T. (2002): misunderstandings in communication, that is, unsuccessful communicative acts primarily pertaining to the unfulfillment of the informative intention of the speaker, may be caused by failures in production and by unsatisfied comprehension. Failures in production can occur as a result of a failure in the coding procedures or an inadequate choice of context. Failures in the decoding procedures, in choosing the right context for the interpretation and in the inferential procedures, may lead to unsuccessful comprehension.

We will now go through some concrete cases of misunderstandings in communication and discuss the reasons behind the unfulfillment of the speaker's informative intention in each case.

4.1 The informative intention is not fulfilled because of the speaker's fault

4.1.1 A failure in coding procedures occurs

Failures in the coding procedures include the violation of rules or principles at one or more linguistic levels such as the phonological, morphological, syntactic and semantic level of language. Consider (14), in which the personal pronoun "they" could both refer to the girls and boys who had young mothers or to the young mothers themselves. This indeterminacy at the syntactic level makes the psychologist's utterance ambiguous. In order to decide what information the speaker intended to convey, the patient disambiguates the utterance by assigning reference to the pronoun in question. The resolution of this linguistic indeterminacy is relevance-guided and not arbitrary. The initial context of the conversation contains the information that the patient, who is a fifteen year-old girl, is pregnant with her first child. Therefore, when interpreting the psychologist's question, the girl has every reason to suppose that it is about young mothers like herself.

Unfortunately, as this is not what the speaker meant; his informative intention was not fulfilled and a misunderstanding followed. To avoid this failure the psychologist would have to make his utterance unambiguous so that it is manifest to the hearer that he is interested in adolescents whose mothers are young. After detecting the misunderstanding, this is exactly what he does.

(14)
PT: – *Találkoztam olyan lányokkal és srácokkal, akiket az anyjuk elég fiatalon szült meg. Mit gondol, kiegyensúlyozott emberek vagy nem?*
– I've met girls and boys whose mothers had them at a quite young age. What do you think, are they well-balanced people or not?
P: – *Szerintem az, hogy kinek a… szóval, most az, hogy a szüleik ilyen fiatalok…*
– I think that… so that, their parents are that young…
PT: – *Nem ők, a gyerekek. Ezek a fiatal felnőttek kiegyensúlyozottak-e vagy sem?*
– Not them, the kids. Are these young adults well-balanced individuals or not?

Let us have a look at another example, (15), in which it is an indeterminacy at the semantic level that results in a misunderstanding. The speaker is using the overgeneralization "guys" even though he is only interested in the reactions of one man, namely the husband of the patient. Similar to the previous example, the speaker quickly notices the misunderstanding and a self-corrective term follows.

(15)
P: – *A házasságom vége felé, akkor a férjemtől is ugye azért megkaptam, hogy miért nem próbálok már ezért tenni valamit.*
– At the end of my marriage, I also got criticized by my husband for not trying to do anything [in order to lose weight].
PT: – *Mit mondanak ilyenkor a pasik? Mondjon egy pár jelzőt. Meg hogy egyáltalán, hogy milyen…*
– What do guys say in a situation like that? Give me some adjectives. And like generally, like what sort of…
P: – *Hát, pasik. Hát, mostanában nagyon pasival sem találkoztam, aki úgy…*
– Well, guys. Nowadays I don't even meet up with guys who would…

PT: – *A férje. Amit a férje mond, ezt nemcsak Ön kapja meg, hanem nagyon-nagyon sok ilyen helyzetbe levő ember. Miket mondanak a pasik? Mármint az Ön férjét, vagy válófélben levő férjét illetően.*
– Your husband. What your husband says is not something that only you get to hear, but very many people who are in this situation. What do guys say? Concerning your husband, or your soon-to-be divorced husband?

Finally, consider the case in (16) where the unfulfillment of the speaker's informative intention results from syntactic as well as semantic underdetermination. The patient cannot recover the information contained in the psychologist's question because it is too fragmentary, and more than one interpretation could confirm the presumption of relevance. There are at least two resolutions that would achieve approximately the same effect with the investment of approximately the same effort. On the one hand, the question could be about whether the target of the attempted manslaughter was the patient's partner at the time, and on the other hand, whether the reason for this criminal act was a bad relationship. As the hearer is unable to resolve the indeterminacy on the basis of relevance, she has to reach out to the speaker for more information.

(16)
P: – *Emberölési kísérlet plusz rablás. Ez volt a vád. […] Tehát nem vagyok ártatlan ember, igenis megfelelő, helyénvaló volt.*
– Attempted manslaughter and robbery. This was the charge. […] So, I'm not an innocent person, it was appropriate.
PT: – *Párkapcsolat?*
– A relationship?
P: – *Kérem?*
– Pardon?
PT: – *Emberölési kísérlet, ez egy párkapcsolat?*
– Attempted manslaughter, is this a relationship?
P: – *Nem, nem, hanem ez a züllött életnek, az éjszakai életnek a szövődménye.*
– No, no, it was a consequence of the loose life, the nightlife.

4.1.2 The choice of context is not appropriate

The unfulfillment of the informative intention can also occur if the speaker chooses an inappropriate context for the production of the utterance. This type of failure is a result of the speaker's incorrect judgment as to what context the hearer would select for the interpretation. In (17) the speaker, in producing his utterance-token, assumes that using the term "qualifications" will be precise enough for the hearer and she will interpret it in the context of higher education, not for example in the wider context of vocational training. So one cause of this misunderstanding is that the psychologist's question concerns qualifications in general and the context of higher education is just one type of qualification the patient may choose. Another reason for this communicative failure is that the cognitive environment involves the information that it is a therapeutic consultation which does not make the context of higher education degrees as prominent as would be the case in a job interview.

(17)
PT: – *És mi a végzettsége?*
– And what qualifications do you have?
P: – *Hát kezdetben ugye ügyintéző titkár, az volt egy ilyen kis tanfolyam…*
– Well, at first administrative secretary, that was a course I took…
PT: – *Iskolai végzettsége.*
– Your highest educational qualification
P: – *Érettségi.*
– High school graduation.

Let us consider another case, (18), in which unsuccessful communication is again caused by the speaker not choosing a context for the production that would successfully narrow down the possible contexts for the interpretation so that the most relevant interpretation for the hearer would be similar enough to what the speaker intended. Here the psychologist's question concerns the feeling of being content with oneself as a man. However, as the hearer himself later on points out, it is not clear what aspect of being a man the psychologist has in mind. In the hearer's first interpretation attempt he arrives at the conclusion that it is his physical capacity that is called into question. As this is not what the speaker intended to ask, his informative intention could not be fulfilled. Yet the fact that male impotence was the most relevant interpretation for the patient, could in itself be valuable information regarding his attitude towards the meaning of 'being a man'.

(18)
P: – *38 éves vagyok, és ilyen hülyeségeket csinálok, amit általában 18-20 éves korában csinál az ember.*
– I'm 38 years old and do stupid stuff like what, what 18-20-year-olds usually do.
PT: – *Most elégedett vagy azzal, mint férfi?*
– Are you now content with that, as a man?
P: – *Te most mire gondolsz? Hogy esetleg impotens vagyok?*
– What do you mean? That maybe I'm impotent?
PT: – *Nem a férfiasságra. Hanem férfinak érzed magad?*
– Not your manhood. But do you feel like a man?
P: – *Ez jó kérdés egyébként, őszintén megmondom Neked. Férfinak érzem-e magam? Milyen szempontból kérdezed, ne haragudj.*
– It's a good question, honestly. Do I feel like a man? Sorry, but what aspect of it are you asking about?

The following two examples are of the same type as well. In (19) it is the question regarding the location of the fiancé that is taken literally by the patient instead of a metaphorical interpretation intended by the psychologist. In (20) it is a general question about possible paths the patient could choose in order to tackle her weight issue that results in a misunderstanding. Again, there are several ways to resolve such linguistic indeterminacies on the basis of contextual help. However, the speaker does not provide any cues, because he makes an incorrect judgment about what context the hearer will select to achieve the greatest relevance possible. The speaker intends the hearer to think of measures she could take to improve her mental health. Yet because when previously thinking about her weight issue the patient had accessed the chunk "diet" much more often than she had done with the chunk "mental health", it now involves less processing effort and gives roughly the same contextual effects to choose this first context for her interpretation.

(19)
PT: – *Hogy van és hol van [az a fiú, aki meghalt]?*
– Where is he and how's he doing [the ex-fiancé who had died 17 years ago]?

P: – *Hát, temetőben van sajnos.*
– Sadly, in the graveyard.
PT: – *Azt gondoltam, de egyébként hol van?*
– I know that, but where is he besides that?
P: – *[…] tehát ezek után nem tudom azt mondani, hogy a mennyekbe van.*
– […] after all that, I cannot say that he is in heaven.
PT: – *Nem, nem. Nem is erre vagyok kíváncsi, hanem, hogy ott van-e még benned vagy nincs?*
– No, no. That's not what I had in mind, rather whether he is still with you or not?
P: – *Bennem van. Örökké bennem lesz.*
– He is. He always will be.
PT: – *Ezt kérdezem.*
– That's what I'm asking.
P: – *Három éves korunktól ismertük egymást […] tehát ezt elég nehéz lenne kitörölni.*
– We knew each other since the age of three […] so it would be hard to leave it behind.

(20)
PT: – *De hát akkor miért nem kezdesz el valamit csinálni?*
– But then why don't you start to do something about it?
P: – *Milyen értelemben valamit csinálni? […] Azt ne mondd, hogy fogyókúrázni! Ezt az egy szót ne!*
– In what sense do you mean? […] Don't tell me to go on a diet! Not that word!
PT: – *Dehogy! […] A belső elégedetlenség táplálja ezt a testet. Boldogtalanságérzés. […] Ha elkezdenél valami olyat csinálni, amit szeretsz, és amiben jól éred magad?*
– Certainly not! […] The inner dissatisfaction is feeding your body. The feeling of unhappiness. […] What if you started to do something that you like, that you are comfortable with?

4.2 The informative intention is not fulfilled because of the hearer's fault

4.2.1 There is a failure in decoding procedures

The violation of rules or principles at one or more linguistic levels such as the phonological, morphological, syntactic and semantic level of language can also occur because of the hearer's fault. In (21) for example the hearer confuses the verb "to regret sth." with "to look forward to sth." due to the phonetic similarity of their Hungarian equivalent: "várja" and "bánja".

(21)
PT: – *Nagyon várja ezt a babát?*
– Do you look forward to having this baby? / Do you regret having this baby?
P: – *Várom?*
– Look forward?
PT: – *Ühüm.*
– Mhmm.
P: – *Nagyon várom.*
– I look forward to it very much.

Let us next consider (22), where the hearer semantically equates the proposition "to do everything for x" with the proposition "to not do enough for not x". Therefore, she misses the intended information of the speaker, namely that she uses none of her energy to change the situation she is in.

(22)
PT: – *Nézze asszonyom, Ön mindent megtesz azért, hogy így nézzen ki, nem?*
– Look madam, you do everything to look like this, don't you?
P: – *Hát valóban, nem eleget. Szóval ez…*
– Well actually, not enough. So this…
PT: – *Nem. Ön mindent megtesz azért, hogy így nézzen ki, ahogy kinéz.*
– No. You do everything possible to look the way you do.

4.2.2 The choice of context is not appropriate

Misunderstandings with respect to an inadequate choice of context can also result from a failure in the hearer's context formation in the interpretation process. In this type of unsuccessful communication, the speaker's informative intention will not be fulfilled, even though the speaker neither violates any rule or principle in the coding, nor does he/she leave open several relevant contexts that would yield interpretations as relevant as the one intended. Nevertheless, the hearer manages to create a relevant representation that has little to do with the one the speaker wants him/her to construct. In (23), for instance, the psychologist is asking about all the activities the patient can engage in with passion and joy. He makes it clear that the question concerns a wide context of interests, possibly ranging from favorite pastime activities to life goals. He intentionally does not use work-related terms, yet the patient narrows down the interpretation to the context of work.

(23)
PT: – *Mit az amiért lángolni tud? Lelkesedni. Tudja mi az, amit tűzzel-vassal tud csinálni? Mi az? […]*
– What is it that you can be passionate about? Enthuse about. Do you know what it is that you can do with heart and soul? What is it? […]
P: – *Igazság szerint szerettem én dolgozni, szerettem, amit csináltam és most is dolgoznék. Tehát bennem van az, hogy öt évet voltam otthon…*
– To be honest, I liked to work, I liked what I did, and I would like to work now as well. After staying at home for five years…
PT: – *A munka az egy dolog.*
– Work is one thing.

The patient's fault in (24) is that she interprets the psychologist's utterance in a concrete context even though the speaker justifiably expected her to process it in a figurative sense. The figurative interpretation was supported by the initial context of the conversation, namely that they were talking about the future consequences of her current lifestyle. With this in mind, the concrete interpretation does not make much sense, since one occasion of eating a full-fat cake in the future does not count as a consequence worth thinking about. Then again, the figurative interpretation with the meaning that she will have to bear the consequences of eating too much unhealthy food for a longer period of time, fits the flow of the conversation perfectly. The fact that her otherwise unhealthy diet does not contain full-fat cakes is therefore irrelevant.

(24)
PT: – *De ha nem teszek semmit se meg, jó kis zsíros levest fog enni.*
– But if you don’t do anything, you will have your nice full-fat cake and you’ll have to eat it.
P: – *Igen, pedig nem is szoktam.*
– Yes, even though I normally don’t.
PT: – *De azt eszi.*
– You do.

Let us consider another example, (25), where the hearer interrupts the speaker, because she thinks that she has already grasped what the speaker is trying to get across. The patient assumes that the question will be about her feelings about the outside world in general while being in prison. However, what the psychologist was about to ask was more specific than that. He wanted to know what the patient thought about the level of difficulty she will face after being released from prison.

(25)
PT: – *Két-három év alatt betöltött egy adott presztízst, az ottani hierarchiában. Akkor miért sírdogál itt két hónap után?*
– After two to three years you’ve gained a certain prestige, in that hierarchy. So then why are you crying here after two months?
P: – *Ezen még nem gondolkodtam el. Tehát én azt hittem, hogy itt egyszerűbb. Én azt gondoltam.*
– I’ve not thought about that yet. I just believed that it will be easier here. That’s what I thought.
PT: – *Amikor két hónapja benn volt a kaptárban, akkor…*
– While you were in the prison two months ago, then…
P: – *Nem vágytam ki.*
– I wasn’t eager to come out.
PT: – *Miért, akkor mire gondolt, hogy egyszerű?*
– Why, what were you thinking then? That it’s easy?
P: – *Nem, nem vágytam ki.*
– No, I wasn’t eager to come out.
PT: – *Az egy dolog, hogy nem vágyott ki.*
– It may be the case that you weren’t eager to come out.

The next case in (26) is of the same type as well. The hearer again believes that he is one step ahead and knows what assumptions the speaker will expect him to have. Accordingly, the hearer reacts with this in his mind and states that the speaker did not understand what his previous objections were about. However, after taking the next turn the psychologist can finish his utterance and they can clarify the situation.

(26)
PT: – *Értem.*
– I understand.
P: – *Nem érted, ezt csak mondod, hogy érted.*
– No, you don't. You just say that you understand.
PT: – *Abból a szempontból, hogy ezek régi dolgok és én a jelen dolgokkal szeretnék foglalkozni…*
– With respect to the fact that these are old things and I would like to work with the present…
P: – *De bocsássál meg, de ezek mind… ne haragudjál…*
– Sorry but, these are all… I'm sorry…
PT: – *Kihat, kétségtelenül kihat a jelenre.*
– No doubt, it does all have an influence on the present.
P: – *Így van pontosan, erről van szó.*
– That's exactly it, this is what I'm talking about.

4.2.3 There is a failure in inferential procedures

4.2.3.1 There is a failure regarding explicatures

If the hearer makes a failure somewhere in the inferential procedures, he/she will not arrive at the intended interpretation and, consequently, the informative intention of the speaker cannot be fulfilled. The first type of failures involve cases either where the hearer already stops the comprehension procedure after the recovery of the truth-conditional meaning, even though the speaker intended to make manifest to him/her some implicit information as well, or where the hearer does not deduce the proper explicature. In (27) the reason for the misunderstanding is that the patient does not construct the intended implicature, namely that a younger boy will most probably have some ulterior motive, if he starts a relationship with an older overweight woman. The presumption of relevance that is communicated by the psychologist's question is not identified until one processes all the intended implicit assumptions. To deduce all intended assumptions the patient should have used the encyclopedic knowledge about these types of relationships, in particular that they are unrealistic. The patient probably rejects this assumption and the new information was too weak to upset it. As a consequence, the intended implicature was not relevant enough. However, after repeating the question the patient successfully infers the intended implicature and the conversation can continue.

(27)
PT: – *[…] Gyakorlatilag van egy […] 33 éves, körülbelül ugyanilyen testsúly csaj, egy 26-27 éves srác. Kedves Piroska, hova raktad a szemed?*
– […] So there is, in effect […] a 33 year-old girl with approximately the same body weight and a 26-27 year-old boy. Dear Piroska, did you decide to turn a blind eye?
P: – *Nem, ezt most igazán nem értem. Mert?*
– No, I really don't get that. Why?
PT: – *Mert egy sokkal fiatalabb, valószínűleg jól nézett ki a srác… […] Mikor választ egy 33 éves csajt, akinek súlyfeleslegei vannak?*
– Because a much younger, probably good-looking guy […] when will he choose a 33 year-old girl who is overweight?
[…]
P: – *Rettegtem a magánytól.*
– I was afraid of loneliness.

In (28) the hearer correctly processes the assumption that someone made an already difficult situation deliberately harder, but resolves the referential indeterminacy inaccurately. The patient constructs a wrong explicature by assuming that the psychologist refers to the patient's relatives, when what is meant is the patient herself. Again, the wrong explicature can be explained if we take into consideration that the construction of the wrong explicature involves less effort, since it is more accessible. On the one hand, the previous parts of the conversation focus on the difficult situation of her daughter and what they could do to resolve it. On the other hand, the mother is, of course, more concerned with her daughter's decisions and future life, than with her own issues.

(28)
PT: – *Egyszerűen emberként nem tudom megérteni, hogy ha nagyon nehéz helyzetben vagyok és minden energiám…*
– I simply cannot understand that if I'm in a difficult situation and all my energy…
P: – *Akkor még nehezebbet miért csinálok magamnak szándékosan?*
– Then why would I deliberately make it even harder for myself?
PT: – *Pontosan.*
– Exactly.
P: – *Igen. Ők ezt nem igazán gondolták át, szerintem.*
– Yes. I think they didn't give it much thought.
PT: – *De nem, Ön miért csinál nehezebbet magának?*
– No, why do you make it harder for yourself?

4.2.3.2 There is a failure regarding implicatures

Apart from the hearer not inferring the proper explicature and not deducing some intended implicatures, there are other types of errors that occur in the inferential procedures as well. The second type of failures involve cases at the stage of the recovery of implicatures. Misunderstandings at this point of the comprehension process include, on the one hand, cases where the hearer infers more assumptions than intended by the speaker, and, on the other hand, cases where the hearer arrives at an alternative implicature that is not what the speaker would have liked to make manifest to him/her.[13] In (29), for example, the hearer does not stop the comprehension procedure at the recovery of the truth-conditional meaning, since that interpretation – even though it is the representation the speaker wanted her to construct – obviously does not meet her expectations of relevance. Instead of taking the question literally as was intended by the psychologist, the patient assumes an implicature in the speaker's meaning. Namely, that this question should make manifest to her that given her current circumstances she shouldn't have kept her baby if she was a responsible person. This assumed implicature seems indeed relevant if we look at the whole conversation. It is clear that the psychologist accentuates the difficulties of having a child at 16 when facing a prison sentence and having a boyfriend with low in-

---

[13] Of course, there might be cases where both types occur in one and the same utterance and overlap each other.

come. Therefore, the assumed implicature that a responsible person would not keep the baby and so she should not, is new information that connects up very relevantly with the information already present in the context. Furthermore, this assumed implicature would also strengthen the already present assumption that he believes that it will be very difficult for her to handle all of this.

(29)
PT: – *Ön egy felelősségteljes ember?*
– Are you a responsible person?
P: – *Most arra gondol, hogy nem kellett volna fölvállalnom ezt a babát?*
– By that you mean that I shouldn't have kept this baby?
PT: – *Én kérdezem, hogy Ön felelősségteljes ember?*
– I'm asking: are you a responsible person?

Consider (30), in which a patient again, in interpreting the psychologist's utterance, infers an assumption that was not intended by the psychologist. In this case, however, it is not clear how the hearer by following the path of least effort arrived at this interpretation, because neither the initial context consisting of the preceding utterances, nor the observable environment, seem to prompt the assumption that he takes the money away from his family. One possible explanation is that he has heard this particular accusation in connection with his problems several times before, which has resulted in a relatively high accessibility of this assumption. The accessibility of this chunk has then created a corresponding level of accessibility for this implication.

(30)
PT: – *A mérlegelő ember egy idő után azért átgondolja azt, amit csinál. Tehát 3 éve fokozódik az agresszivitásod, piázol, gyógyszert szedsz. Ez okés lenne, hogyha hatékonyan élnél vele.*
– A mature person considers what he does after a while. So, for three years now your level of aggression has been increasing, you drink and you take pills. This would be fine, if you were able to live effectively.
P: – *Mire gondolsz a hatékonyan élni?*
– What do you mean by living effectively?
PT: – *Hatékonyan élni: munka, megbecsülés stb. […]*
– To live effectively: work, be appreciated, and so on […].

P: – *Na de bocsáss meg, azért ne úgy vedd elő a dolgot. Tehát én nem a családtól viszem el otthonról a pénzt.*
– Sorry, but don't put it like that. So, I don't take the money away from my family.
PT: – *Tudom, nem is erről… önmagad. A családdal sajnos nem tudok mit kezdeni, ők nem itt ülnek.*
– I know, not that… yourself. Unfortunately, I cannot do anything about the family, they are not the ones sitting here.

The next example in (31) concerns more the illocutionary force of the psychologist's utterance, since the inferred assumption by the hearer, namely that their conversation must soon come to an end, is probably correct. Nevertheless, the patient processed the utterance as a request to leave immediately, which was certainly not what the psychologist intended to convey.

(31)
PT: – *Én egyet kívánok neked.*
– There is one thing I wish for you.
P: – *Most vége a beszélgetésnek? Ki vagyok rúgva? Mivel tartozom doktor úr?*
– Is this the end of the conversation? Have I been kicked out? How much do I owe you, Doctor?

In the last example in this section, (32), the hearer first deduces an implicature that was not intended by the speaker and in his second turn he constructs an alternative implicature, not the one that was intended by the psychologist. With his second utterance the psychologist expected the hearer to deduce the implicit meaning that whether he takes his own life or not is a decision the patient has to make. Yet the patient focuses more on the concrete formulation of the utterance and so arrives at the alternative unintended implicature that he can do it with a gun or by other means, but the main thing is that he has to do it.

(33)
PT: – *[…] Úgy érzem, hogy tudod, én nem hiszek abba… véletlenbe se, hogy leültél velem szembe és nekem a Hemingway jutott eszembe.*
– […] I feel that… you know I don't believe in… it is not a coincidence that you sat down with me here and Hemingway has come to my mind.

P: – *Jaj, hogy öngyilkosnak kellene majd lennem?*
– Oh, so I have to commit suicide then?
PT: – *Nem kell! Ezt majd te eldöntöd vadászpuska, nem vadászpuska. A te ügyed.*
– You don't have to! You will decide whether it will be a shotgun or not . It is up to you.
P: – *Ja a módját majd én döntöm el? Már ki van osztva!*
– So I can decide on the method? It is all set!
PT: – *Te ügyed, ez a te ügyed.*
– It's your business, your business.
P: – *Köszi egyébként.*
– Thanks anyway.

4.3 Miscommunication

In the previous examples we have to a great extent analyzed isolated cases of misunderstandings. However, in real life it is more common to have cases of miscommunication, that is, cases in which several different instances of unfulfilled informative intentions merge with one another. Singled out misunderstandings can be accounted for on the basis of the above typology. Nevertheless, a detailed analysis of how they interact and what impact they have on each other could be of interest for further research.

(34)
PT: – *Mivel nagyon sok mindent nem tudsz, és úgy ítélkezel rólam…*
– Since you don't know very much about me, and yet you judge me…
P: – *Te is úgy ítélkezel rólam és sok mindent nem tudsz…*
– You judge me as well, and you don't know very much…
PT: – *Én miben ítélkeztem? Mondjál egyet.*
– When did I judge you? Give me an example.
P: – *[…] Visszatérek erre, amit az előbb is hozzám vágtál, hogy mindenki a maga szerencséjének a kovácsa. Tehát magyarán te úgy ítélkeztél…*
– […] I will come back to the accusation you just threw at me earlier, that everyone makes their own destiny. In other words, you judge me in a way…
PT: – *Én megkérdeztem: „mit gondolsz arról, hogy mit jelent az, hogy mindenki saját sorsának a kovácsa”?*

– I asked: “What do you think it means that everyone makes their own destiny”?

P: – *Vagy azt mondtad, hogy nekem felelősségem gondoskodnom a családomról. Tehát ezzel is ítélkeztél fölöttem.*

– Or you also said that it is my responsibility to take care of my family. So you have also judged me in that respect.

PT: – *Amikor iszol… nem!*

– When you drink… no!

P: – *Dehogynem.*

– But for sure you did.

PT: – *Akkor te nevezd ítélkezésnek, én azt gondolom, hogyha valakinek van egy családja x gyerekkel és ő mégis a saját makacs feje után megy és iszik és lehet, hogy vannak jelzések, hogy figyelj ide, rá fogsz fázni… mert kapod a jelzéseket. […] Te azt mondod, hogy a mai világban szükségesek a hátszelek. Én meg tudom azt, hogy nekem hátszelem nem volt.*

– Then call it judging, I think that if someone has a family with x children and despite this he continues his stubborn way of acting and goes drinking and it may be that there are signs telling you ‘Look, you will screw things up’… because you get those signs. […] You say that in today’s world tailwinds are necessary. Yet I know that I did not have a tailwind.

P: – *Erre azt mondom, hogy hangember vagy.*

– You are an insincere man, that’s what I say about this.

PT: – *Akkor mondjad, csak tudod az a különbség, hogy a barátaim között, akik tudják, hogy honnan jöttem…*

– Then say that, but the difference is, you know, that my friends who know where I came from…

P: – *Erre nem lehet végig hivatkozni. És az én Édesanyám Bulgáriából jött. És akkor mi van?*

– You cannot refer to that the whole time. My mother came from Bulgaria, so what?

PT: – *Barátaimról beszélek.*

– I was talking about my friends.

[…]

P: – *Te most arra hivatkozol, hogy jöttél Szerbiából és akkor végül is benned is van egy nagy seb, hogy Úristen…*

– Now you’re referring to the fact that you’re from Serbia and therefore there is this big wound and, Oh my God…

PT: – *De nincsen.*

– But there is none.

[…]
PT: – *De nincsen. Igen, de nincsen bennem seb.*
– But there is none. Yes, but there is no wound in me.

5 Summary

In the present paper, I have investigated the ways in which misunderstandings occur in communicative language use. I have defined misunderstandings as those types of unsuccessful communicative acts that primarily pertain to the unfulfillment of the informative intention of the speaker. Based on the relevance theoretic approach of ostensive-inferential communication, as well as on a detailed empirical analysis, I have constructed a typology that is able to make predictions concerning the different causes underlying misunderstandings.

The typology presented in the paper grasps that misunderstandings may be caused by failures in production and/or comprehension processes. Failures in the coding and decoding procedures include the violation of rules or principles at the phonological, morphological, syntactic and/or semantic levels of language. The unfulfillment of the informative intention can also occur if either the speaker or the hearer chooses an inappropriate context for the production or the interpretation of the utterance. In many cases, this is a result of asymmetrical coordination in language use. This means that it is left to the speaker to make correct assumptions about the codes and contextual information the hearer has at hand (Sperber & Wilson 1995 [1986]: 43). The last type of failures involves cases where either the hearer does not infer the adequate explicature/implicature, or the hearer infers more/less assumptions than intended by the speaker.

Tasks for the future may include investigating the strategies that communicative partners rely on when trying to avoid misunderstandings, as well as the strategies they use when trying to solve them, and analyzing how particular instances of unfulfilled informative intentions interact with each other when causing miscommunication.

References

Árvay, Anett (2003): A manipuláció és a meggyőzés pragmatikája a magyar reklámszövegekben [The pragmatics of manipulation and persuasion in Hungarian advertisements]. *Általános Nyelvészeti Tanulmányok* 20, 11-35.

Carston, Robyn (2004): Relevance theory and the saying/implicating distinction. *The handbook of pragmatics*, 633-656.

Grice, H. Paul (1975): Logic and conversation. In: Cole, Peter & Morgan, Jerry (eds.): *Syntax and semantics* 3. *Speech acts.* New York: Academic Press, 41-58.

Haugh, Michael (2013): Implicature, inference and cancellability. *Perspectives on Pragmatics and Philosophy*. Springer: Cham, 133-151.

Horn, Laurence (1984): Toward a new taxonomy for pragmatic inference: Q-based and R-based implicature. *Meaning, form, and use in context: Linguistic applications*, 11-42.

Ivaskó, Lívia & Németh T., Enikő (2002): Types and reasons of communicative failures. *Modern Filológiai Közlemények* 4, 31-43.

Ivaskó, Lívia (2005): Félreértéseink nyomában. In: Ivaskó, Lívia (szerk.): *Érthető kommunikáció*. Szeged: Szegedi Tudományegyetem, 14-26.

Kertész, András & Rákosi, Csilla (2012): *Data and evidence in linguistics: A plausible argumentation model.* Cambridge: Cambridge University Press.

Nemesi, Attila László (1997-1998): Miként viselkedünk a szavakkal? Benyomáskeltés és nyelvhasználat 1-2. *Magyar Nyelvőr* 121: 490-496; 122: 24-35.

Nemesi, Attila László (2000): Benyomáskeltési stratégiák a társalgásban. *Magyar Nyelv* 96, 418-436.

Németh T., Enikő (2004): The principles of communicative language use. *Acta Linguistica Hungarica* 51, 379-418.

Németh T., Enikő (2005): Az osztenzív-következtetéses kommunikációtól a verbális kommunikációig. In: Ivaskó, Lívia (szerk.): *Érthető kommunikáció*. Szeged: Szegedi Tudományegyetem, 77-87.

Németh T., Enikő (2008): Verbal information transmission without communicative intention. *Intercultural Pragmatics* 5, 153-176.

Németh T., Enikő (2013): Intenciók és nézőpontok a nyelvhasználatban. In: Kugler, Nóra, Laczkó, Krisztina & Tátrai Szilárd (szerk.): *A megismerés és az értelmezés konstrukciói: Tanulmányok Tolcsvai Nagy Gábor tiszteletére*. Budapest: Tinta Könyvkiadó, 112-126.

Németh T., Enikő (2014): Intentions and perspectives in the social forms of language use. *Argumentum* 10, 472-485.

Németh T., Enikő (2015): The role of perspectives in various forms of language use. *Semiotica* 203, 53-78.

Searle, John R. (1969): *Speech acts: an essay in the philosophy of language.* Cambridge: Cambridge University Press.

Sperber, Dan & Wilson, Deirdre (1986/1995): *Relevance: communication and cognition.* 1./2. ed. Cambridge, MA & Oxford: Blackwell.

Sperber, Dan & Wilson, Deirdre (2002): Pragmatics, modularity and mind-reading. *Mind & Language* 17.1-2, 3-23.

Tannen, Deborah (1987): *That's not what I meant!: How conversational style makes or breaks relationships.* Ballantine Books.

Wilson, Deirdre & Sperber, Dan (1993): Linguistic form and relevance. *Lingua* 90.1, 1-25.

Katinka Halász
MTA-DE-SZTE Research Group for Theoretical Linguistics
University of Debrecen
Pf. 400
H-4002 Debrecen
halaszkatinka@yahoo.com

Rezensionen / Reviews

Sprachtheorie und germanistische Linguistik (sugl.eu), 28.2 (2018), 277-283
© 2018 by Nodus Publikationen (Münster), ISSN (Online) 2365-8584

Andreas H. Jucker, Klaus P. Schneider & Wolfram Bublitz (eds.): *Methods in Pragmatics.* (Handbooks of Pragmatics Vol. 10). Berlin & Boston: De Gruyter Mouton, 2018, 674 pp.

The first chapter of the handbook begins with the following sentences:

> There is no research in pragmatics without data. Data – in one form or another – form the essence of what pragmatic research is about. Research – at a very basic level – consists in the search for generalizable patterns in the data. […] A certain method of data collection will typically provide a very specific type of data and lend itself to a specific way of analysing it, or – viewed from the opposite direction – a certain research question will require a specific set of data that needs to be collected and analysed with a specific method. (Jucker, A.H.: Data in pragmatic research, p. 3)

At first sight, these sentences might seem to be trivial and commonplace. However, they are not, because they differ significantly from the methodological perspective that dominated linguistic theorizing during several decades. Namely, in the second half of the twentieth century in mainstream linguistics it was the refinement of diverse theoretical approaches that were in the foreground of interest, whereas questions pertaining to the nature of data were neglected rather than focused on. But over the past about two decades, the perspective has changed. The overemphasis on technical details of linguistic theories has been questioned and the importance of data has been realized. Accordingly, an intense discussion has taken place on the nature of linguistic data and linguistic evidence.[1] The debate has yielded a series of new insights that undermine the methodological prejudices inherent in linguistic research in the past century. These new insights include, among others, that instead of the dogmatic commitment to merely one type of data, a great variety of different data types may be legitimate. It is even the case that different data types have to be combined in order to increase the reliability of the results and to capture the complexity of linguistic behaviour. Thereby, no data type is perfect, but all data types have their particular shortcomings. Linguistic data do not secure a neutral basis for linguistic theorizing because they are problem- and theory-dependent.

---

[1] For the analysis of this debate from the point of view of the philosophy of science see Kertész & Rákosi (2012, 2014).

It has also been realized that the function of data cannot be reduced to the testing of hypotheses. Rather, the relationship between the data and the theory at issue is cyclic rather than linear insofar as data are used in several cycles of the raising, checking, modifying, refining, and extending of hypotheses and hypothesis systems. It has also been realized that data can function not only as tools of problem solving but may also lead to the emergence of new problems because the application of different data types often generates contradictions.

It is this state of the art that deprives the above quotation of its seemingly trivial character. The most significant feature of the handbook is that it perfectly fits into this context. The book highlights the nature of data as the basis of pragmatic research, thus avoiding both the hypostasis of theories and the monolithic way of thinking. It overcomes the attitude of many linguists who tend to defend their own theoretical framework and reject those of others along with claiming the legitimacy of only one data type. The book acknowledges the diversity of data and data collection methods. The source of all data types that may be considered is the whole richness and the whole heterogeneity of language use, instead of restricting it to the common core of such variability. Accordingly, the perspective of the handbook is committed to the pluralism of problems, of research methods and of frameworks.

The volume is divided into five parts each of which consists of several chapters.

The three chapters of the first part introduce the reader to the above-mentioned background assumptions, the basic data types, the central methods and the methodology of transcription. Andreas H. Jucker (‘Data in pragmatic research’, pp. 3-36) clarifies the units of analysis. Utterances are identified as the basic units, but both smaller ones (deictic elements, stance markers, discourse markers, hedges and pragmatic noise) as well as larger units (‘discourse’ and ‘text’ in whatever sense) are mentioned. After discussing the media of transition (spoken vs. written language, online data, sign language data, data of nonverbal behaviour), four dimensions of observational data are discussed. In his chapter ‘Methods and ethics of data collection’ (pp. 37-93), Klaus P. Schneider overviews the data collection methodology applied in pragmatics. The author systematically discusses the rich variety of methods and concludes in accordance with the leading ideas of the volume: “[…] there is no best method as such, even though some researchers may claim that the method they have chosen is generally superior to other methods. […] A best method does not exist because each and every method has its specific strength and weaknesses […]" (p. 80). The ethical principles the author highlights focus on the investigators' responsibility for the participants in several respects: the participants' consent, their well-being, their privacy and autonomy as well as legal aspects are the factors that must not be ignored. In the third chapter of Part I, Roger J. Kreuz and Monica A. Riordan discuss transcription techniques ('The art of transcription: Systems and methodological issues', pp. 95-120). They emphasize that "there is no universal transcription system that will be suitable for all researchers and all research questions" (p. 95). The survey draws a sophisticated picture of the inventory of transcription techniques by exemplifying which of them may serve which purpose.

Part II entitled 'Introspectional pragmatics' starts with Wolfram Bublitz' introductory chapter (pp. 123-131). It defines the method of introspection (which is conceived of to be basically deductive) and delimits it from the methods of experimentation, observation (which is inductive), and corpus exploration. In addition, the chapter sketches the main theses of and the relationship between the remaining three chapters of this part. In accordance with the introspectional method thus introduced, Marina Sbisà overviews philosophical pragmatics (pp. 'Philosophical pragmatics', pp. 133-153). She provides concise overviews of Austin's and Grice's contribution to pragmatics, and goes into the main tenets of speech act theory as developed by Searle and by Bach and Harnish. She devotes a subchapter to Stalnaker's impact on the development of pragmatics and to Recanati's contextualism. Yan Huang reveals the reasons why introspection seems to have become a well working research method in Gricean and neo-Gricean pragmatics ('Research methodology in classical and neo-Gricean pragmatics, pp. 155-183). The author discusses both the merits and the shortcomings of this methodology also showing its interaction with experimentation and attested data. In the next chapter, Billy Clark divides the development of relevance theory into three phases from the point of view of the predominant data type ('Cognitive pragmatics: Relevance-theoretic methodology', pp. 185-215). In the first phase intuitions constituted the main data source. The nineties of the past century saw the rise of experimentational pragmatics thus triggering the second phase. Although in the third phase relevance theoretic research also considers further data types, introspective and experimental data remain in the centre of research. After having discussed the main issues of introspectional pragmatics, Parts III-V turn to empirical methods used in pragmatic inquiry.

In the introductory chapter to Part III ('Experimentational pragmatics', pp. 219-228), Klaus P. Schneider distinguishes between 'experimental' and 'experimentational pragmatics'. While the former is restricted to the method applied by relevance theory ('XPrag'), the latter is a broader notion comprising experimental methods rooted in a variety of other traditions. Schneider, just like Bublitz in the previous part, also overviews the subsequent chapters. One of the methods fitting into the scope of the broad notion of experimentational pragmatics is that of discourse completion tasks, which is suited to the generation of data stemming primarily from contextually varied cross linguistic speech acts. In her chapter ('Discourse completion tasks', 229-255), Eva Ogierman overviews different features of this data elicitation method and compares it to other data elicitation methods as well as to naturally occurring data. Alma Veenstra and Napoleon Katsos ('Assessing the comprehension of pragmatic language: Sentence judgment tasks', 257-279) use examples from the literature on scalar implicatures in order to demonstrate how sentence judgment tasks work in which sentence judgements are based on binary scales such as for example correctness vs. incorrectness. The authors draw a sophisticated picture of the use of this method in that besides pointing out its merits they also call attention to its limits and discuss alternatives to this paradigm. Raymond W. Gibbs ('Psycholinguistic production tasks', 281-303) overviews the possibilities of experimental psycholinguistics in investigating pragmatic language production. Among others, the chapter shows that pragmatic language production is not an isolated process but comprises the cooperation of both speakers and listeners. In the last chapter of Part III, J. César Félix-Brasdefer discusses the method of role-play as it is used in cross-cultural and interlanguage pragmatics ('Role play, 305-331). The author concludes, among others, that role-play data are to be evaluated as reliable, because they shed light on the learner's pragmalinguistic and sociopragmatic knowledge in face-to-face or telephone interactions.

Andreas H. Jucker's introduction to Part IV outlines basic tenets of observational pragmatics (335-342). It distinguishes, as a first approximation, between qualitative (small sets of data, e.g. transcriptions of audio- or video-recorded data) and quantitative (large sets of digital data) analyses, restricting the present part to the former. After clarifying the notion of 'naturally occurring' data by delimiting it from ‘researcher prompted data’, the author summarizes the leading ideas of further chapters. Meredith Marra and Mariana Lazzaro-Salazar provide insights into the ethnographic paradigm (‘Ethnographic methods in pragmatics’, pp. 343-366). They describe the foundations of ethnography, the main features of the ethnographic methods in pragmatics as well as the data collection techniques and tools of analysis characteristic of these methods, and they also evaluate their strengths and weaknesses. In the next chapter Andrea Golato and Peter Golato assess ethnomethodological conversation analysis (‘Ethnomethodology and conversation analysis’, 367-394). The chapter not only overviews the methodology of this trend, but it also outlines the historical context of sociology which made its emergence possible. Furthermore, the chapter provides an outlook on the prospects for future research. Anita Fetzer’s chapter focuses on discourse analysis (‘Discourse analysis’, pp. 396-423). After presenting detailed analyses of the micro, meso and macro units of discourse along with the dialectical relations between them as well as sketching the diversity of research frameworks, the chapter concludes that “[i]rrespective of methodology and research framework, the fundamental questions of (1) granularity regarding micro, meso and macro discourse units and (2) the nature of the connectedness between their constitutive parts remain a challenge” (p. 418). Critical discourse analysis is surveyed by Piotr Cap (‘Critical Discourse Analysis, pp. 425-451). The chapter describes the schools and models belonging to this trend and reveals how they fit into tendencies shaping the current state of the art in pragmatics, cognitive linguistics and corpus studies. It also includes a case study exemplifying the workability of the legitimization-proximization model in critical discourse analysis.

While Part V focused on qualitative methods within observational pragmatics, Part V overviews quantitative methods. Andreas H. Jucker’s introduction (pp. 355-366) highlights basic properties of large-scale investigations the aim of which is to find generalisations by the analysis of electronic corpora. The main conclusion is that “the tension between such large-scale generalisations and the goal of paying attention to the minute details of each individual occurrence remains a *leitmotif* in all the chapters of part 5” (p. 464). Gisle Anderson’s chapter (‘Corpus construction’, pp. 467-494) discusses, among others, form- and function-based approaches to pragmatics as well as corpus-based vs. corpus-driven studies and a series of further issues. Thereby the author surveys those selective processes that are responsible for different types of corpus construction and touches on the effects of the choices as well. ‘Corpus annotation’ (pp. 495-525) by Dawn Archer and Jonathan Culpeper argues that there is a great potential of pragmatic annotation that has not yet been realized. In the concluding section future prospects of corpus annotation in pragmatics are sketched. The next chapter widens the scope of methods in pragmatics by the historical aspect (‘Historical corpus pragmatics’, pp. 527-553). Irma Taavitsainen reveals differences between the methodology of historical approaches to corpus pragmatics and that of pragmatic investigations into present-day corpus data, calls attention to both the pitfalls and the achievements of historical corpus pragmatics, and touches on future trends as well. In the chapter entitled ‘Corpus pragmatics: From form to function’ (pp. 555-585), Karin Aijmer argues for the need to combine corpus findings with a dialogic view of the interaction. Nevertheless, this requires spoken corpora for a great number of languages as well as the analysis of the functions of a series of pragmatic items. ‘Corpus-based function-to-form approaches’ (pp. 587-618) by Anne O’Keeffe examines the possibility of investigating pragmatic phenomena by starting from the function instead of the form. In the last chapter of the volume entitled ‘Corpus-based metapragmatics’ (pp. 619-643), Michael Haugh analyses corpus-based approaches to “the ways in which we display awareness of our use of language through the various ways in which we use language to refer to our use of language” (p. 619).

The handbook is concluded by the short biographies of the authors, a name index and a subject index.

Having overviewed the structure of the volume, let us come back to our introductory remarks on its background assumptions and their relation to the state of the art in current methodological discussions in linguistics. In accordance with both its own background assumptions and the broader methodological context, each chapter is characterized by open-mindedness, tolerance toward different approaches, theories and methods as well as the acknowledgement of the merits of the methodological pluralism of the field. Frequent cross references between the chapters make these issues even more transparent. The introductory chapters to the parts of the book convincingly motivate the topics of the chapters and integrate them into a coherent whole. In sum, the book is inspiring in more than one respect: besides getting an insight into the richness and workability of methods in pragmatics, the reader may also learn how to conduct pragmatic inquiry in a sophisticated, undogmatic and flexible, yet fruitful and constructive way. The handbook is undoubtedly one of the highlights among the recent achievements in pragmatics. Working linguists as well as students of linguistics should not hesitate to consult this seminal work and to use it during their studies and research.

András Kertész

References

Kertész, András & Rákosi, Csilla (2012): *Data and Evidence in Linguistics: A Plausible Argumentation Model.* Cambridge: Cambridge University Press.

Kertész, András & Rákosi, Csilla (eds.) (2014): *The Evidential Basis of Linguistic Argumentation.* Amsterdam & Philadelphia: Benjamins.

Prof. Dr. András Kertész
MTA-DE-SZTE Research Group for Theoretical Linguistics
University of Debrecen
Pf. 400
H-4002 Debrecen
andraskertesz@yahoo.de

Sprachtheorie und germanistische Linguistik (sugl.eu), 28.2 (2018), 285-289
© 2018 by Nodus Publikationen (Münster), ISSN (Online) 2365-8584

Klaus-Peter Wegera, Sandra Waldenberger & Ilka Lemke: *Deutsch diachron. Eine Einführung in den Sprachwandel des Deutschen*. 2., neu bearbeitete Auflage. Berlin: Erich Schmidt Verlag, 2018, 341 Seiten.

In the first two decades of the new millennium a remarkable methodological shift has taken place that seems to affect most subfields of linguistics. Namely, while the second half of the twentieth century saw the rise of linguistic theories along with the continuous refinement of their technical arsenal and the deepening of conflicts between them, in the last about two decades it has been the nature of data that has gained serious attention. It is not only the case that new data sources have been considered in order to widen the empirical base of linguistic research, but the diversity of data has also been acknowledged as a prerequisite of the progress of the discipline. The book under review fits into this process of the evolution of linguistics.

Wegera et al.'s volume is the second edition of an introduction to the history of German. It makes use of a sort of 'big data' in historical linguistics: its structure, the empirical underpinnings of the findings concerning linguistic change as well as the didactic tools applied are rooted in digital and annotated historical text corpora. The first edition that appeared in 2012 has already been characterized by this property, and the second edition even widens the electronic corpora referred to. It also considers the latest developments concerning the topic of the book as well as critical reflections on the first edition.

It consists of 6 chapters, a register of the sources, the list of digital historical data bases of German, an extremely rich list of references, a glossary and a subject index. The chapters are uniformly structured insofar as they comprise two levels: the main text and typographically marked additional information explaining details and background of the issues introduced in the main text.

Chapter 1 clarifies basic notions and main features of the approach to the history of German. Within historical linguistics, it distinguishes between the 'external' and the 'internal' history of language and within the latter, between diachrony and the historical-synchronic perspective. The title of the book has already indicated that what the authors have in mind is diachrony. However, they use this term in a broad sense:

> Primär geht es zwar um die diachronen Veränderungen des Deutschen von den schriftlich überlieferten Anfängen bis in die Gegenwart; dies ist aber nicht möglich, ohne jeweils auch auf synchron-historische Zustände zurückzugreifen. Da sprachliche Veränderungen immer auch durch außersprachliche Einflüsse begleitet, durch diese verursacht, aber auch behindert werden können, sind sprachgeschichtliche Ereignisse immer ein wichtiger Teil der Entwicklung. *Diachrone Sprachwissenschaft wird in diesem Sinne als diejenige Teildisziplin der Linguistik verstanden, die versucht, Einzelsprachen übergreifende Sprachwandeltheorien und die Sprachgeschichte einer Einzelsprache zusammenzubringen.* (11-12; emphasis added)

This chapter also clarifies in a very concise way what kinds of data the diachronic linguistics of German sets out to analyze. Presupposing that the readers of this book have had already some idea of how synchronic linguistics proceeds, it contrasts the data types of the latter with the data base of diachronic research. While synchronic linguistics may use introspective data, experimental data, elicitation with the help of questionnaires as well as oral and written corpora, diachronic investigations are basically restricted to the evaluation of written corpora, and to a lesser extent, metalinguistic statements which have been available since the advent of the modern era. However, since cognitive processes are assumed to be universal, the cognitive basis of different historical periods of a language is similar to that of its current state. Having clarified these issues, the chapter also touches on the consequences of the varieties of German for diachronic linguistics and the problem of how to determine diachronic periods.

Chapter 2, which is of central importance, introduces the notion of language change emphasizing that language change takes place on every linguistic level and even by transgressing the levels, and that it is neither monocausal nor teleological. The first subchapter argues that language change has several dimensions and can basically be viewed from at least four perspectives. One of them is the social perspective including phenomena like language contact, contact of language varieties, cultural and social change. However, language change is also a cognitive phenomenon. The reader gets a relatively detailed overview of different kinds of analogy – as the extension of rules – illustrated by easily understandable examples from the history of German. Then, cognitive processes on the lexical level are overviewed. Thereby, it is metaphorical, metonymical and synecdochical processes that are highlighted. The authors summarize findings of cognitive linguistics without, however, citing the original works e.g. by Lakoff and Johnson and others. Furthermore, a very short subchapter touches on the biological-physiological conditions of language change. The last perspective considers language change as related to human creativity. Here mention is made of the ways the lexicon may be enriched by contacts between languages, of language purism and of the role of metaphor, metonymy and synecdoche as products of the creative treatment of language. A separate section raises the issue of the relationship between language change and language acquisition. The second subchapter is devoted to the types of language change. After a brief discussion of the two types of quantitative change (i.e. the elimination of elements and the enrichment of language by new elements), qualitative change is discussed at length. Among others, the notion of grammaticalization is introduced. The last subchapter deals with typological change which may be of three kinds: prosodic, morphological and syntactic.

The third chapter overviews the history of the Latin script as applied to German. By citing basic historical documents, the first subchapter briefly touches on the principles along which the Latin script was borrowed. The second subchapter discusses the problems of the adaptation of the Latin script focusing on the ways in which the notational system based on Latin was extended as well as the differences between Latin script and the sounds of vernacular German. Then, a quite detailed subchapter goes into problems of the orthography of German from a historical perspective. The fourth subchapter on graphical systems and their development explains one of the central problems of historical linguistics, which is raised in a clear and concise way:

> Methodologisch werden historische Lautverhältnisse aus der überlieferten Schriftlichkeit ermittelt. Die Zuordnung eines Schriftzeichens zu einem (vermuteten) Laut erfolgt in der Regel reflektiert oder unreflektiert etymologisch über einen Wortkörper, d.h. unter Rekurs auf zuvor erschlossene Laute. […] Aus einem graphischen Befund kann nicht unmittelbar auf das zugrunde liegende Lautinventar geschlossen werden. Mit entsprechendem Vorbehalt sind Inventarübersichten zu historischen Texten zu lesen […] Vielmehr ist für jeden einzelnen Schreiber bzw. Text auf der nächsthöheren Ebene für jede Schreibstube, jede Kanzlei oder Druckoffizin und auf einer weiteren Ebene für jede Schreib-Landschaft zu ermitteln, mit welchem Inventar jeweils gearbeitet wird und wie sich das jeweilige graphische System zu dem (vermuteten) Lautsystem (Phonemsystem) verhält. (p. 95)

Chapter 4 is a detailed analysis of the sound change processes of German. The chapter summarizes well known facts in a systematic way and adds new insights. Its leading idea is that the articulatory processes that govern sound change closely interact with syllable structure and word structure. After presenting a brief overview of the basic types of sound change such as phonetic and phonemic, where the latter comprises paradigmatic and syntagmatic change as well, a long subchapter follows on the processes of sound change. It starts with assimilation processes in Old High German, and among others it discusses the changes in the syllable structure of Old High German as well as the restructuring of syllable structure. Within paradigmatic processes of sound change, a series of phenomena are discussed such as the Middle High German monophthongization and the New High German diphthongization, lenization, fricativization, palatalization and further ones.

Chapter 5 is devoted to the changes of the morphological and the syntactic subsystem of German. It provides a sophisticated presentation of the highly complex process that led from the dominantly synthetic structure of Old High German to the morphological and syntactic structure of New High German, which has both analytic and synthetic features. However, the chapter demonstrates that this process is not linear and not unidirectional. Rather, it has been shaped by minor changes in local regions and has also been influenced by a series of historical factors like borrowing from other languages or the establishment of norms. After the brief overview of the essence of these issues, the second subchapter goes into the discussion of the changes affecting the structure of the noun phrase, and the third one reveals the restructuring process of the verb phrase. The last subchapter concentrates on the position of the verb whose changes are central for the syntactic structure of German.

The six subchapters of the last chapter systematically overview lexical change, semantic change and the history of word formation. It reveals the rich network of different factors that are responsible for the complicated processes that result in phenomena which also ordinary speakers of German without linguistic erudition may realize in certain cases and to certain extents.

The above summary of the content and of the conception of book may have already indicated the reviewer's evaluation. First, it synthesizes knowledge of the history of German cumulated over many decades of research. Second, the presentation of the issues discussed is highly differentiated and sophisticated insofar as it highlights the complexity of factors whose interplay influenced the particular phases of the development of German. The book successfully avoids the kinds of oversimplification which often endanger the quality of textbooks.

Third, it is characterized by a wide perspective in that it also reflects on current findings of synchronic linguistics. Finally, and most importantly: its data handling technique fits into the current methodological renewal of the language sciences. The book should be recommended both to students of German and to all those who, besides the particular history of German, are also interested in approaches to linguistics in general.

András Kertész

Prof. Dr. András Kertész
MTA-DE-SZTE Research Group for Theoretical Linguistics
University of Debrecen
Pf. 400
H-4002 Debrecen
andraskertesz@yahoo.de

Sprachtheorie und germanistische Linguistik (sugl.eu), 28.2 (2018), 291-297

Ekkehard Felder: *Einführung in die Varietätenlinguistik.* Darmstadt: Wissenschaftliche Buchgesellschaft, 2016, 176 Seiten (Germanistik kompakt)

Fragen zur Heterogenität der Sprache, zur sprachlichen Variation, zu den Varietäten des Deutschen waren und sind auch in der Gegenwart ein zentrales und spannendes Thema der sprachwissenschaftlichen Forschung und Lehre. So sind auch eine Reihe von wissenschaftlichen Arbeiten zum Thema von verschiedenen Autoren erschienen, um nur einige einen Gesamtüberblick zum Thema geschriebene Arbeiten der letzten Jahre hervorzuheben (Barbour & Stevenson 1998, Löffler 1997, Dovalil 2006, Sinner 2014). Grundsätzlich hatten bis in die 80er Jahre des 20. Jahrhunderts die Arbeiten zum Thema Variation und Varietäten überwiegend einen dialektbasierten Hintergrund. In den letzten Jahren erlebt aufgrund neuerer Forschungsansätze und neuerer methodischen Instrumentarien die sprachliche Variationsforschung einen deutlichen Aufschwung, wodurch die linguistische Variationsforschung um wichtige Ansätze zu mehreren ihrer Teilaspekte bereichert wurde, wie z.B. die vorwiegend auf areale Aspekte ausgerichtete Arbeit von Schmidt & Herrgen (2011), die eher typologisch fokussierte Arbeit von Roelcke (2011) oder das auf den regionalsprachlichen Aspekt fokussierende Werk von Lenz (2013).

Vor diesem Hintergrund ist es zu begrüßen, dass Ekkehard Felder nun mit seiner Einführung ein neuartiges, vierdimensionales Varietätenmodell des Deutschen vorlegt, das zwar in einigen Details bekannt erscheint, jedoch in dieser Vierdimensionalität, untermauert mit Analysen zahlreicher Beispiele, z.B. in der Lehre bislang noch unbekannt und noch nicht eingebürgert ist. Meine Sicht auf diese Einführung ist geleitet durch die Einsetzbarkeit und Angemessenheit des Werkes in der ausländischen Germanistikausbildung sowohl für Lehramtsstudierende als auch für Masterstudierende, zumal die Varietätenfrage im Spektrum der germanistischen linguistischen Teilbereiche einen zentralen, wichtigen und interdisziplinären Bereich darstellt.

Gegenstand dieses Bandes ist eine umfassende Einführung und Darstellung der Varietätenlinguistik, indem neben den bekannten, traditionellen Ordnungsfaktoren wie Raum, Gruppe und Situation noch weitere Aspekte wie die der Medialität, der Fachsprachlichkeit, der Textualität sowie der diachrone Faktor in einer Synthese vorgestellt und erläutert werden. Dieses so entstandene neue multidimensionale Modell steht im Mittelpunkt der Erläuterungen in jedem Kapitel.

Das Buch ist in 6 Kapitel gegliedert, die einer logischen Struktur folgend auf den zentralen Gegenstand, auf die Erläuterung des Vier-Dimensionen-Modells der Varietäten ausgerichtet sind. Die einzelnen Kapitel folgen einer didaktisch übersichtlichen Gliederung mit klar strukturierten Unterkapiteln. Die Kapitel beginnen mit einem kurzen auch typographisch gut abgehobenen Überblick zu den wesentlichen Fragen, Grundsätzen des Kapitels. Vom Fließtext abgehoben, farblich unterlegt sind die wichtigen Zitate und Stichworte, eigentlich zu verstehen als Merksätze zum leichteren Verständnis. Der zentrale Begriff des Kapitels erscheint jeweils in einem Rahmen. Die einzelnen Unterkapitel sind überschaubar und verhältnismäßig kurz gefasst. Jedes Kapitel schließt mit einigen Fragen (unter dem Titel „Auf einen Blick"), eine kurze Liste kommentierter Literatur rundet die Kapitel ab. Die zahlreichen Abbildungen erleichtern den Überblick über die Vielfalt der Einordnung und Kategorisierungen der im Buch besprochenen – mitunter zahlreichen – Begriffe.

Im ersten Kapitel, das als Einleitung zur Einführung gedacht ist, werden zunächst die zwei zentralen Grundbegriffe wie Variation und Varietät geklärt, um dann varietätenlinguistisch relevante Phänomene exemplarisch auf der Wort-, Satz- und Textebene darzustellen. Dies führt zu den zwei aus variationslinguistischer Sicht zentralen Herangehensweisen, zur Abgrenzung der Stichworte Varietätenlinguistik und Soziolinguistik, womit gleichzeitig das Spannungsverhältnis von Sprachgebrauch und Sprachsystem angedeutet wird, das auch in weiteren Kapiteln der Einführung einen sprachtheoretischen Blick ins Spiel bringt. Demnach untersucht die Varietätenlinguistik die sprachliche Ausprägung unter einem systemlinguistischen Aspekt, und korreliert diesen mit sprachexternen Faktoren, wohingegen die Soziolinguistik aus sprachexternen Faktoren ausgeht und diese mit den systemlinguistischen Ordnungsschemata spiegelt (S. 14). Das Kapitel schließt mit der ersten Vorstellung des Felderschen Vier-Dimensionen-Modells, das im ganzen Buch durchgehend als roter Faden in allen Kapiteln näher und aus einem jeweils anderen Blickwinkel beleuchtet wird.

Das umfangreiche und begriffslastige zweite Kapitel fokussiert die Schlüsselwörter der Varietätenlinguistik (S. 20-57), die teils als bekannte Begriffe erscheinen, wie „innere und äußere Mehrsprachigkeit, Standardvarietät, Mündlichkeit und Schriftlichkeit, Nähe- und

Distanzkommunikation, Text- und Gesprächssorte", doch darüber hinaus noch viele andere Begriffe aufführt, die m.E. nicht unbedingt im varietätenlinguistischen Bereich erwähnt und geklärt werden müssen (vgl. Text-Gesprächssorte, Stil, S. 32-34, 46). Zu Unsicherheiten und Verwirrungen kann der Umgang mit einer terminologischen Vielfalt des ohnehin komplexen Themenbereiches der Varietäten führen, wenn nicht auf die Heterogenität bestimmter Begriffe hingewiesen wird, die für Studierende bereits bekannt sind, doch hier einen anderen begrifflichen Fokus, teils eine andere Bezeichnung bekommen (z.B. Gemeinsprache – Standardsprache – Standardlekt). Die Frage der Norm im Zusammenhang von Ad-hoc-Vorkommen (S. 35) wird durch die fiktive Figur von Lilo Lingue thematisiert und wahrscheinlich gedacht als didaktische Herausforderung bei der Analyse von Variantenphänomenen. Hier geht es ja – und das ist ein besonders wichtiger Aspekt im DaF-Studium u.a. für Lehramtsstudierende – um die Richtigkeit und Angemessenheit des sprachlichen Handelns, das für Nicht-Muttersprachler in einem völlig anderen gesellschaftlichen und sprachlichen Umfeld oft mit Schwierigkeiten verbunden ist. Die Erläuterungen zur Abgrenzung der Begriffe Sprachsystem, Norm und Sprachgebrauch sind hier genauso hilfreich wie das Verstehen der Problematik der Überschneidung der sprachexternen und -internen Bestimmungsfaktoren, deren Ineinandergreifen oft zu Analyseschwierigkeiten führt.

Im Mittelpunkt des zentralen Kapitels 3 wird das Vier-Dimensionen-Modell in voller Ausführlichkeit als zusammenfassende Darstellung eines multimedialen Ansatzes der Varietätenlinguistik dargeboten. Dieses Modell ist „ein Ordnungs- und Orientierungsschema mit vier Analysezugängen" (S. 59), die laut Felder in ihrer Synthese zur Beschreibung einer Variante notwendig sind und anhand konkreter Sprachbeispiele dargestellt werden. Diese vier Dimensionen werden unter der Perspektive:

> „der kommunikativen Reichweite der Ausdrücke (Markiertheit der Ausdrucksformen z.B. hohe, überregionale, mittlere und lokale Reichweite),
>
> der funktionalen Reichweite (Markiertheit der Semantik, des Inhaltssystems, z.B. geringer, mittlerer, hoher Fachlichkeitsgrad),
>
> der Medialität der Zeichen und Zeichentypen (gesprochen, geschrieben, multimedial),

> der diachronen Entwicklung unter Berücksichtigung der historischen Zeitstufen" (S. 74) zusammengefasst.

In diesem Modell bildet die Kombination dieser vier Perspektiven den neuen Aspekt, integriert darin sind jedoch bereits bekannte, die arealen (kommunikative Reichweite) und funktionalen (Fachlichkeitsgrad) Dimensionen, die um weitere zwei, der zeitlichen und medialen Dimension ergänzt werden. Der Vorteil dieses Modells besteht eindeutig in der Synthese zahlreicher Teilaspekte, vor allem darin, dass die Variationsphänomene aus einer holistischen Sicht betrachtet werden. Verständlicherweise kann nicht jedes sprachliche Phänomen, jede Variante, vollständig anhand dieser vier Dimensionen beschrieben und eindeutig kategorisiert werden, was wohl für jeden empirischen Bereich der Wissenschaftszweige wegen der bekannten Diskrepanz zwischen theoretischem Forschungsinteresse und der sprachlichen Wirklichkeit gilt. Zur Überwindung dieses Problems werden Modelle herangezogen, die – wie Felder meint – „idealtypisch vielfältige Ausprägungen im Rahmen eines konstruierten Gesamtsystems" erklären und begründen können (S. 79).

Diese Begründung des Varianzreichtums sprachlicher Phänomene erfolgt anhand der näheren Erläuterung inner- und außersprachlicher Merkmale der Varietäten in den Kapiteln vier und fünf. Hierbei geht es um „das Offenlegen einer inneren Ordnung", um eine weitere detaillierte Auffächerung und Sicht auf die innersprachlichen Merkmale, die in den vier Dimensionen des Modells gefasst sind. Felder bezeichnet die so entstandene Feinfächerung Subdimensionen, wie die der sozialräumlichen (in Bezug auf gesellschaftliche Umstände z.B. Sozialstatus und räumliche Lebenswelt der sprachlich Agierenden wie Bayer, Sachse, etc.) und die der sozietären (gruppenbezogenen) Subdimension. Die Subdimensionen erlauben – nach Meinung des Autors – präzisere Variantenanalysen und eine überschaubarere und sichere Varietätenbestimmung. Doch ob diese Teilaspekte tatsächlich alle zentral sind und durch ihre feine Differenziertheit nicht auch den Kategorisierungsvorgang, die Analyse selbst erschweren – besonders bei Nicht-Muttersprachlern – wird sich erst im Späteren zeigen müssen. Nach Auffassung des Autors garantiert die enge Verflechtung und die gleichzeitige Geltendmachung der vier Dimensionen mit den Subdimensionen die Möglichkeit, mehrere problematische Kategorisierungsfälle auszuklammern (S. 104-105). In Kapitel IV.4 wird die Grundlage der Dimension der Medialität mit der diachronen Entwicklung des Deutschen, mit der Genese der Entstehung der gesprochenen deutschen Gesamtsprache in einem kompakten Überblick begründet.

Die außersprachlichen Varietäten-Merkmale in Kapitel 5 werden in drei Kategorien gegliedert. Diese sind: der virtuelle Raum, die Zeit, der Ort, die Individuen als Teil sozialer Gruppierungen wie z.B. Alter, Geschlecht, Identität, Lebensstil, Milieu, Herkunft, Gruppenzugehörigkeit. Das sind zum einen Analyseaspekte, die teils aus dem Löfflerschen Varietätenmodell bekannt sind, hier jedoch feinkörniger bezeichnet werden. Das dritte außersprachliche Merkmal ist die Kommunikationssituation, und deren Charakteristika und Typik, wozu die sozialen Rollen, Erwartungshaltungen, die Loyalität gegenüber den Normen, Akteure und Interessen, gehören. Hierbei geht es um Analyseaspekte, die in erster Linie durch den Kontext erschlossen werden können, worauf der Autor durch die Erläuterung der Distinktion zwischen den Begriffen Situation, Kontext und Kotext entsprechend aufmerksam macht. So haben wir es bei dem hier vorgestellten Vier-Dimensionen-Modell, dargestellt in der Abbildung des „Varietäten-Auges" (S. 128) mit einer komplexen Analyseaufgabe zu tun: Wir haben es mit dynamischen Prozessen von sprachlichem Agieren von Individuen zu tun, und gelangen bei der Analyse der sprachlichen Variation an einen Schnittpunkt von linguistischen, kommunikativen, textuell-diskursiven und teils auch soziologischen Fragestellungen.

Das abschließende sechste Kapitel versucht die eingangs gestellte Frage weiter zu präzisieren, die lautet: „Wie ist die sprachliche Vielfalt mit Hilfe der gängigen varietätenlinguistischen Fachausdrücke begriffssystematisch zu erklären? " (S. 131). Hier wird teilweise jener auch didaktisch wichtige Mangel behoben, der eine knappe Zusammenschau der bisherigen varietätenlinguistschen Modelle und der dazu gehörenden Terminologie erörtert, hier verglichen mit der eigenen Terminologie des Vier-Dimensionen-Modells, dieses nochmal in eine Begriffsystematik gefasst und die Vorteile und den Nutzen des Modells zusammenfassend dargestellt (S. 156-157) im letzten Satz:

> Eine solche Analyse erfasst systematisch das Zusammenspiel innersprachlicher und außersprachlicher Merkmale im Vier-Dimensionen-Modell zur Identifizierung signifikanter Merkmalbündel als Bestimmungskriterien von Varietäten (S. 159).

Zusammenfassend bekommen wir mit der vorliegenden Einführung einen interessanten Beitrag aus einer neuartigen Perspektive der Varietätenfrage. Aus der eingangs erwähnten Sicht der Rezensentin ist das Buch vor allem Studierenden der Germanistik sowohl im deutschen Sprachgebiet als auch in der Auslandsgermanistik zu empfehlen, wobei ein kurzes Kapitel mit einem Gesamtüberblick zu einer sprachtheoretischen Fundierung und zur Entwicklung der Varietätenlinguistik didaktisch willkommen und notwendig wäre, da die Studierenden bereits über Variation und Varietätenlinguistik einiges gelernt haben. Bei der Überschau und der gemeinsamen Klärung der vielen Begriffe der Einführung werden sich den Studierenden die Anweisungen ihrer Dozenten sicherlich dienlich erweisen. Hervorgehoben werden soll jedoch die Darstellung einer inhaltlich neuen Perspektive auf eine multidimensionale Sicht der Varietätenfrage, die didaktisch löbliche Struktur und der den Studierenden angepasste, leserfreundliche Schreibduktus mit den vielen Analysebeispielen.

Erzsébet Knipf

Literatur

Barbour, Stephen & Stevenson, Patrick (1998): *Variation im Deutschen. Soziolinguistische Perspektiven*. Berlin/New York: de Gruyter.

Dovalil, Vitek (2010): Zum Begriff 'Varietär' und dessen Verfelchtung mit 'Norm' und 'Stil'. In: Gilles, Peter et al. (Hg.): *Variatio delectat. Empirische Evidenzen und theoretsiche Passungen sprachlicher Variation.* Frankfurt/Main: Peter Lang, 44-57.

Lenz, Alexandra (2003): *Struktur und Dynamik des Substandards. Eine Studie zum Westmitteldeutschen*. Stuttgart: Steiner Verlag (ZDL Beiheft 125).

Löffler, Heinrich (2016): *Germanistische Sozioinguistik.* Berlin: Erich Schmidt Verlag (Grundlagen der Germanistik 28).

Roelcke, Thorsten (2010): *Fachsprachen.* Berlin: Erich Schmidt Verlag (Grundlagen der Germanistik. Bd. 37).

Schmidt, Erich Jürgen & Herrgen, Joachim (2011): *Sprachdynamik. Eine Einführung in die moderne Regionalsprachenforschung.* Berlin: Erich Schmidt Verlag (Grundlagen der Germanistik Bd. 40).

Sinner, Carsten (2014): *Varietätenlinguistik. Eine Einführung*. Tübingen: Narr Verlag (Narr Studienbücher).

Prof. Dr. Erzsébet Knipf
Eötvös-Loránd-Universität
Institut für Germanistik
H-1088 Budapest
Rákóczi út 5.
knipf.erzsebet@btk.elte.hu

Hinweise für Autoren

Sprachtheorie und germanistische Linguistik veröffentlicht Beiträge in deutscher und englischer Sprache. Autoren deutschsprachiger Beiträge werden gebeten, die neue Rechtschreibung zu verwenden. Die Manuskripte werden computergeschrieben als MS Word- oder RTF-Datei an den Herausgeber erbeten. Tabellen, Abbildungen und sonstige Grafiken sollen als selbständige Dateien beigefügt sein.

Die einzureichenden Beiträge sollen nach den in elektronischer Form vorliegenden Formatvorlagen formatiert werden. Diese sind von der Website http://www.sugl.eu/ herunterzuladen oder von der technischen Redakteurin Frau Marianna F. Balogh zu erhalten (e-mail: balogh.marianna@arts.unideb.hu).

Aufsätze und Forschungsüberblicke sollen eine englischsprachige Zusammenfassung (max. 150 Wörter) und 3-5 Keywords enthalten.

Den Autoren wird eine Korrektur ihres Beitrags zugeschickt. Die Redaktion bittet um sorgfältige Durchsicht.

Im Text sollen alle in objektsprachlichem Sinne vorkommenden Ausdrücke (z.B. sprachliche Daten) sowie inhaltliche Hervorhebungen durch Kursivierung, vorexplikativ verwendete Begriffe bzw. uneigentlicher Wortgebrauch durch Apostrophe und Zitate durch Anführungszeichen markiert werden.

Zitierweise im Text: „[…] wie etwa in Tronka (1997: 18) erwähnt wird, liegen Befunde vor (vgl. Grewendorf et al. 1987: 250 ff.) […]". Längere Zitate sollten als eingerückte Paragraphen angeführt werden.

Zitierweise im Literaturverzeichnis:

Literatur

Grewendorf, G., Hamm, F. & Sternefeld, W. (1987): *Sprachliches Wissen. Eine Einführung in moderne Theorien der grammatischen Beschreibung*. Frankfurt a.M.: Suhrkamp.

Tronka, K. (1997): Optimalitätstheorie. Ein beschränkungsbasierter phonologischer Ansatz. *Sprachtheorie und germanistische Linguistik* 5, 17-35.

Strohner, H. & Stoet, G. (1996): Sind geschälte Äpfel eher weiß als rund? Inferenzprozesse bei Adjektiv-Nomen-Kompositionen. In: Habel, Ch., Kanngießer, S. & Rickheit, G. (Hrsg.): *Perspektiven der kognitiven Linguistik. Modelle und Methoden*. Opladen: Westdeutscher Verlag, 233-255.

Inhalt / Contents

Aufsätze / Articles

Rezensionen / Reviews

http://www.sugl.eu