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Usage-based linguistics and conversational interaction

A case study of German motion verbs

Abstract: Speakers' linguistic experience is for the most part experience with language as used in conversational interaction. Though highly relevant for usage-based linguistics, the study of such data is as yet often left to other frameworks such as conversation analysis and interactional linguistics (Couper-Kuhlen and Selting 2001). On the basis of a case study of salient usage patterns of the two German motion verbs *kommen* and *gehen* in spontaneous conversation, the present paper argues for a methodological integration of quantitative corpus-linguistic methods with qualitative conversation analytic approaches to further the usage-based study of conversational interaction.

Keywords: construction grammar, interaction, corpus linguistics, methodology

DOI 10.1515/gcla-2015-0008

1 Introduction

Conversational language is by far the most important source of speakers' linguistic experience – according to Biber's (1993: 248) estimate, speakers' input contains “roughly 90% conversation”. It is also the main arena for linguistic innovation and change. Although these properties make it highly relevant for usage-based linguistics, corpus-based studies of spontaneous spoken language are still somewhat marginal in Cognitive Linguistics.¹ In part, this may have to

¹ Outside Cognitive Linguistics in the narrower sense, however, there are a number of kindred approaches where attention to naturalistic interaction is in fact essential. These include traditional functionalist research on conversation (e.g. Thompson and Mulac 1991), studies in the framework of Emergent grammar (cf. Hopper 1987; Bybee and Hopper 2001; Auer and Pfänder 2011) and the more recent theory of Dialogic Syntax (DuBois 2014). Furthermore, observational

do with genuine shortcomings in properly appreciating the social-interactional dimension of language (Croft 2009) and a resultant neglect of conversation data in the field. The major obstacle, however, would seem to be that suitably large and diversified corpora are much more difficult to obtain, to annotate and to analyse than in the case of written language. As a result, it is not uncommon to base inferences to cognitive entrenchment properties of given constructions on the analysis of written data alone, even though the observed tendencies need not carry over to the (input-wise) much more central domain of situated interaction with its many peculiar constraints (Auer 2009). As a result, comparatively few constructionist studies have investigated whether, in which sense and why particular resources show special characteristics in everyday spoken interaction (though see e.g. Imo 2007 for German).

The present paper discusses the potential of such approaches in an analysis of selected uses of the two motion verbs *kommen* ‘come’ and *gehen* ‘go’ in spoken German. The complementary perspectives on motion events afforded by verbs denoting COME and GO make them an interesting object of study for cognitive linguistic research (Fillmore 1972; Di Meola 1994). Moreover, such verbs are common inputs to grammaticalisation processes and usually heavily poly-functional (Bybee et al. 1994). As a result, they are also highly frequent in speech: for instance, *kommen* and *gehen* are both among the five most frequent lexical verbs in the German national conversation corpus FOLK (Schmidt 2014).

We present an integrated quantitative-qualitative approach to distinctively oral usage patterns of *kommen* and *gehen* that combines exploratory corpus-linguistic methods with fine-grained interactional analyses of relevant utterances in context: first, suitably large samples of both verbs are extracted from five different text types (private conversation, institutional interactions, informal computer-mediated communication, fiction, scientific texts) and coded for a broad variety of formal and semantic properties. Next, we zoom in on the patterns thus obtained in three steps: first, we identify argument realisation patterns of the target verbs that appear to be distinctive for the spoken mode. At this point, only formal properties are considered. Associations between particu-

studies of spontaneous speech of course also figure prominently in usage-based approaches to child language acquisition (cf. Tomasello 2003; Ambridge and Lieven 2011).

lar morphosyntactic patterns and the spoken mode are identified via Correspondence Analysis (Le Roux and Rouanet 2010). Second, within the subset of the data thus delimited, we identify distinctive meanings of these patterns in our data. To this end, all instances of the distinctively oral patterns identified in step 1 are coded for the semantic frame (Ruppenhofer et al. 2006) that they evoke and the results are again submitted to Correspondence Analysis. Third, for the frame emerging as most distinctively associated with (a particular subtype of) our spoken data, we present a detailed qualitative analysis of the interactional properties of relevant uses within their larger sequential context.

2 Data and methods

The spoken data were extracted from the ‘private conversation’ and ‘institutional interaction’ strata of the German national conversation corpus FOLK (Schmidt 2014). The CMC data came from a subset of the German giga web corpus DECOW2012 that contains informal, quasi-spontaneous productions as found in e.g. forum discussions (cf. Schäfer and Sayatz 2014). The written fiction and science data were obtained from the DWDS-Kernkorpus (Geyken 2007) with a restriction to texts dating from the two most recent decades included in the corpus. For the form-based analysis, all samples were coded for the following properties:

- Predicate properties: POS (STTS), person, number, tense, mood, voice, negation, co-occurring modal, part of a serial verb construction (yes/no), part of a complex predicate (yes/no),
- Properties of complements and adjuncts coded (subject, directional complement (SOURCE/PATH/GOAL/VAGUE), genitive object, accusative object, ‘free datives’, prepositional objects, adverbials of time, place, manner, cause and measure): presence (yes/no), POS of head (STTS), lemma of head, topological position,
- Additional properties: co-occurring modal particles, number of complements realised, sentence type, verb position.

In sum, these properties amounted to 68 data points per attestation. Analyses were performed for 500 instances of both verbs in each of the five text types, i.e. $500 \times 2 \times 5 = 5000$ corpus samples. The results reported in this paper are based on a preliminary analysis comprising only 200 samples per text type, i.e. 2000 attestations in total. The data were coded in a maximally surface-oriented, ‘as-is’ manner.

In the second step, semantic frames were assigned to a particular subset of the data by two independent annotators. Frame descriptions were either modelled on entries in the English FrameNet project (Ruppenhofer et al. 2006) or its closest German counterpart SALSA (Burchardt et al. 2009) or, where no applicable predefined frame was found, devised as appropriate.

Finally, the interactional analysis linked semantics and pragmatics: we investigated which features make up the sequential context of one frame that we found to be associated with one specific type of interaction. This involved determining what kind of action the clause containing *kommen/gehen* performs and what larger communicative project it is typically part of. We were also interested in criteria for choosing either *kommen* or *gehen* within the target frame and how these properties are motivated by their lexical semantics.

3 Results

3.1 Syntax and semantics

Due to the strongly surface-oriented coding, a great number of different argument realisation patterns was obtained. For instance, indicative usages of a motion verb combining with a subject and a goal complement, indicative usages of the same verb with a subject, a goal complement and an additional path complement, and also imperative usages of the same verb with a goal complement but no overt subject were all recognised as different types. Performing a correspondence analysis on this level of abstraction produced a highly cluttered plot that did not provide any helpful insights. The patterns were therefore recoded on a higher level of abstraction, distinguishing between

- directional usages (with SOURCE/PATH/GOAL as well as directionally VAGUE complements or any combination of such elements),
- usages in which *kommen/gehen* was part of a complex predicate (e.g. *jmdm auf die Nerven gehen*, ‘to get on sb’s nerves’),
- usages with prepositional objects (e.g. *wie kommst du darauf*, ‘what makes you think that’),
- all other argument realisation patterns found in the data (e.g. intransitive usages such as *das geht nicht*, ‘that doesn’t work’).

Essentially, then, we made a two-way distinction between usages in which the motion verb combined with an AdvP or a PP functioning either as a directional

complement, a prepositional object or as part of complex predicate (arguably the formal ‘core’ usage to be expected for motion verbs) and all remaining patterns in the data, and then focused on the former. Likewise, we first abstracted away from possible intra-mode differences (between private conversation vs institutional interactions on the one hand and fiction vs science texts on the other) and simply distinguished between spoken and written data, with the CMC category in between. With only three mode categories (SPK: spoken, CMC: medially written, conceptually oral, WRI: written) and three form categories (CPR: complex predicate, DIR: directional complement, P.OBJ: prepositional object) in this analysis, the correspondence analysis plot² for *kommen* in Figure 1 looks very tidy now:

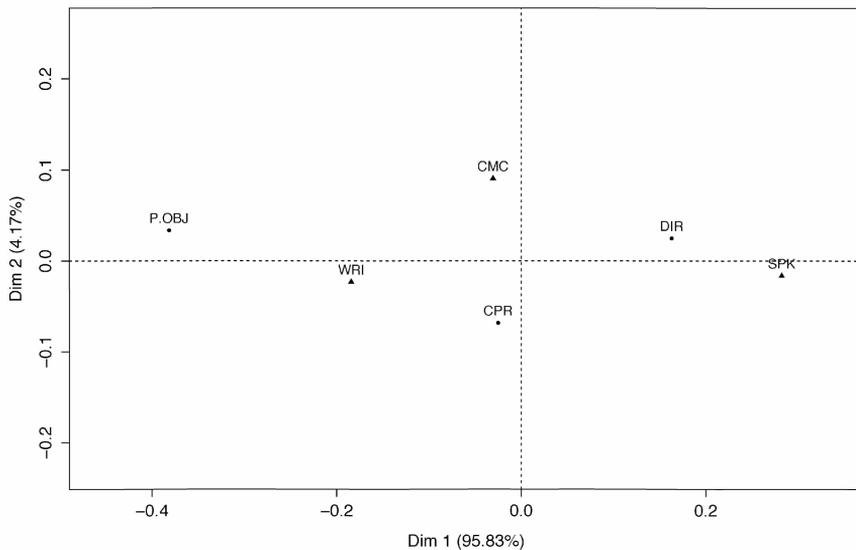


Fig. 1: Correspondence analysis plot: broad usage types (*kommen*) ~ modes

The plot illustrates that usages with prepositional objects are most commonly found in written texts, complex predicates show an unspecific distribution, and

² Plots were generated with the r-package *factoMineR* (Lê et al. 2008).

directional usages are particularly common in the category SPK. Table 1 reports the precise figures:

Tab. 1: Formal patterns: *kommen*

Pattern	SPK	CMC	WRI
CPR	54 (28%)	26 (25%)	83 (30%)
DIR	119 (62%)	56 (53%)	119 (43%)
P.OBJ	18 (9%)	24 (23%)	73 (27%)

The data in Table 1 point to a significant association of directional complementation with the spoken mode ($\chi^2 = 25.71$, $df = 4$, $p < .001^{***}$). For *gehen*, the figures for the written and spoken categories look very much alike, although the association of directional complementation with the spoken mode is still significant ($\chi^2 = 18.01$, $df = 4$, $p < .01^{**}$). We skip the correspondence analysis plot here for reasons of space.

Tab. 2: Formal patterns: *gehen*

Pattern	SPK	CMC	WRI
CPR	60 (28%)	44 (41%)	67 (29%)
DIR	110 (52%)	31 (29%)	117 (51%)
P.OBJ	41 (19%)	32 (30%)	44 (19%)

From here, we further zoomed in on uses of *kommen* and *gehen* that occurred with a directional complement. The dominant semantic subtype among these is complementation with a GOAL specification (accounting for more than 50% of all cases for both verbs). We therefore restricted our attention yet further to uses of *kommen* and *gehen* with an overt GOAL complement. Such uses may be both concrete or figurative in meaning:

- (1) a. *Aber du kannst ja am Wochenende zu mir in den Garten kommen.*
 ‘But you can come to me in the garden this weekend.’
 (DWDS: Jentzsch, Kerstin, *Ankunft der Pandora*, Berlin: Verl. Das Neue Berlin 1996, 342)

- b. *Als sie in Haft kam, war sie sechszwanzig Jahre alt.*
 ‘When she was arrested, she was twenty-six years old.’
 (DWDS: Jentzsch, Kerstin, *Ankunft der Pandora*, Berlin: Verl. Das Neue Berlin 1996, 143)
- (2) a. *...wenn du von dem Platz a noch weiter Richtung Fluss a gehst...*
 ‘if you go from [MASKED NAMED ENTITY] yet further towards [MASKED NAMED ENTITY]’
 (FOLK: E_00049_SE_01_T_01, c716: student conversation)
- b. *weil es ja von minus nach plus geht*
 ‘because it goes from minus to plus’
 (FOLK: E_00009_SE_01_T_01, c393: school lesson)

We annotated all +GOAL uses of both verbs for the semantic frames that they encoded. Figures 2 and 3 show the results of a correspondence analysis for these datasets.³ In terms of typical meanings encoded by *kommen/gehen*+GOAL, both plots show a division between spoken (‘SPK’) and written (‘WRI’) data with the conceptually oral web language (‘CMC’) located in between (in the case of *gehen* more similar to the written data than to the spoken category). Though some labels are difficult to read due to overlaps in the plots, the diagrams also show that some frames are only found with one verb whereas others are common to both, thus pointing to parallel figurative extensions of the core ‘Motion’ sense for both verbs. For instance, the usages in (3) do not profile motion as such, but rather denote a specific action that is performed at the GOAL (‘Perform action’: ‘eating’ and ‘studying’ in these cases) and the examples in (4) express that the subject referent not just changes location to a GOAL, but rather takes up a new occupation there (either to be inferred from the context or expressed by an *als*-phrase).

- (3) a. *Wenn dann einer viel seltener zum Essen kommt als seine Nachbarn, kann man ihn bevorzugt bedienen.*
 ‘If somebody comes to dinner much less often than their neighbours then, they can be given priority service.’
 (DWDS: Rechenberg, Peter, *Was ist Informatik?*, München: Hanser. 1991, 152)

³ Only frames that were evoked at least three times in our data were included in the analysis.

- b. *Ich kann wirklich nicht behaupten, daß ich gerne zur Schule ging, aber der Unterricht von Professor Nachtigaller besaß eine einzigartige Qualität.*

'I can't say I liked going to school, but Professor Nachtigaller's teaching possessed a unique quality.'

(DWDS: Moers, Walter, *Die 13 1/2 Leben des Käpt'n Blaubär*, Frankfurt a.M.: Eichborn 1999, 138)

(Frame: 'Perform_action')

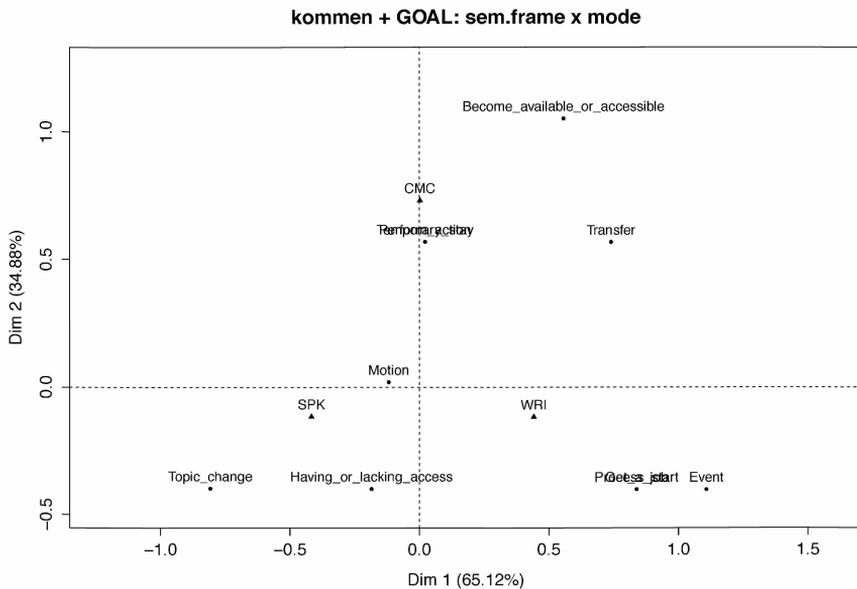


Fig. 2: Correspondence analysis plot: semantic frames (*kommen+GOAL*) ~ modes

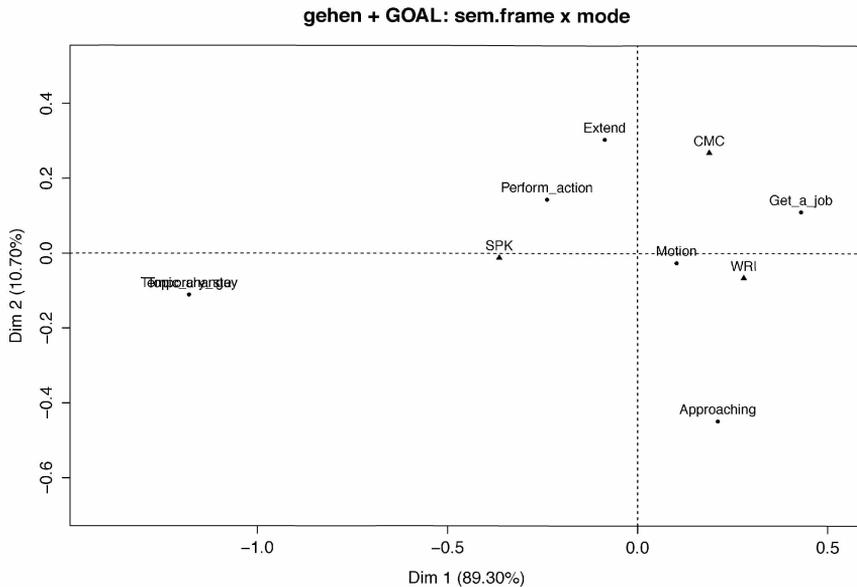


Fig. 3: Correspondence analysis plot: semantic frames (*gehen+GOAL*) ~ modes

- (4) a. *1948 kam sie an die Mailänder Scala, wo sie 1952 Violetta und Susanna sang.*
 ‘In 1948, she came to La Scala in Milan, where she sang Violetta and Susanna in 1952.’
 (DWDS: Fath, Rolf, *Reclams Lexikon der Opernwelt Band 5*, Stuttgart: Reclam 1998, 6121)
- b. *1926 ging er als erster Heldenbariton nach Hamburg, später an die Berliner Staatsoper (1932–44), 1928–42 sang er in Bayreuth, trat in London und Chicago auf.*
 ‘In 1926, he went as the first heldenbariton to Hamburg and later to the National Opera in Berlin (1932–44). From 1928 to 1942, he sang in Bayreuth and performed in London and Chicago.’
 (DWDS: Fath, Rolf, *Reclams Lexikon der Opernwelt Band 1*, Stuttgart: Reclam 1998, 4089)
 (Frame: ‘Get_a_job’)

Furthermore, the plots provide information about meanings that appear to be distinctive for a particular mode. This is indicated by a given mode category’s

placement in the plot vis-à-vis the location of the remaining mode categories relative to a given frame. For instance, for both *kommen* and *gehen*, the meaning most distinctively associated with spoken language appears to be a discourse-deictic function – a frame which we identified as “Topic_change”. The plots visualise this connection by placing it far beyond the category ‘SPK’ as seen from the positions of the remaining mode categories ‘CMC’ and ‘WRI’.

On closer inspection, however, Figures 4 and 5 on the next page show that this is not the full picture. These plots show that if the broad mode categories ‘SPK’ and ‘WRI’ are broken down into different text types (here: ‘SPK-PRI’ vs ‘SPK-INS’ and ‘WRI-FIC’ vs ‘WRI-SCI’), it is actually only the more formal institutional interactions in which ‘Topic_change’ is prominent. Private conversations, by contrast, show greater similarities to CMC and written fiction data than to institutional interactions and mostly employ the two lexemes to express concrete motion events. Section 3.2 now turns to these “Topic_change” uses in detail and motivates their marked association with institutional interactions.

3.2 Interaction

We defined the frame ‘Topic_change’ as follows: A COMMUNICATOR turns to a (new) TOPIC. The frame element TOPIC represents an abstract instantiation of the frame element GOAL within the source frame Motion. ‘Topic_change’ is evoked by *kommen/gehen* and a PP with the prepositions *zu*, *auf* or *in* as in examples (5)–(8).⁴ In the examples, the respective *kommen/gehen* clause is given with some context, which will be referred to in the analysis below.⁵

⁴ The frame is also evoked by a few complex verbs containing *kommen* and *gehen*, such as *zurückkommen auf* ‘(re)turn to’ and *übergehen zu* ‘turn to’. FrameNet does not yet contain a frame that captures the semantics of *turn to* or *move on to*, but only the related frame Topic, which is evoked by verbs like *diskutieren* ‘discuss’, *thematisieren* ‘address’ and *ansprechen* ‘bring up’.

⁵ The transcription follows the rules of GAT 2 (Selting et al. 2009). Punctuation marks delimit intonation phrases, not syntactic boundaries.

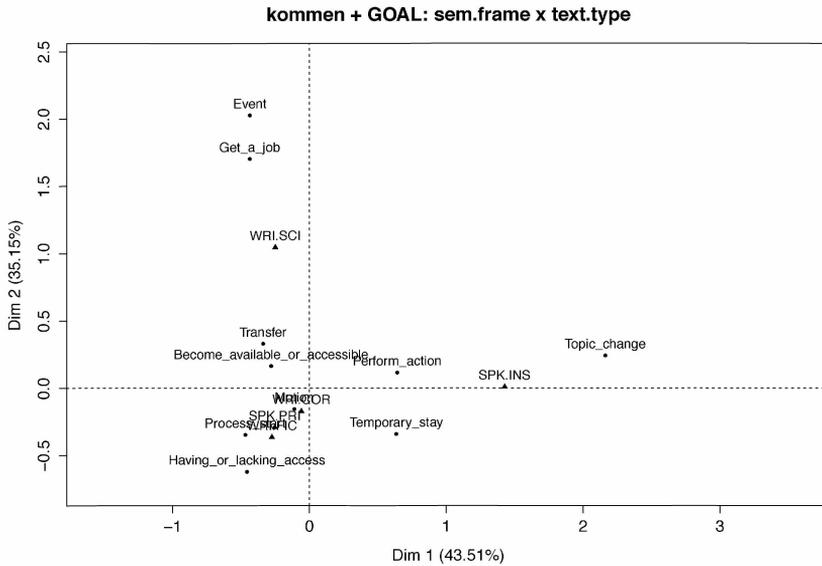


Fig. 4: Correspondence analysis plot: semantic frames (*kommen*+GOAL) ~ text types

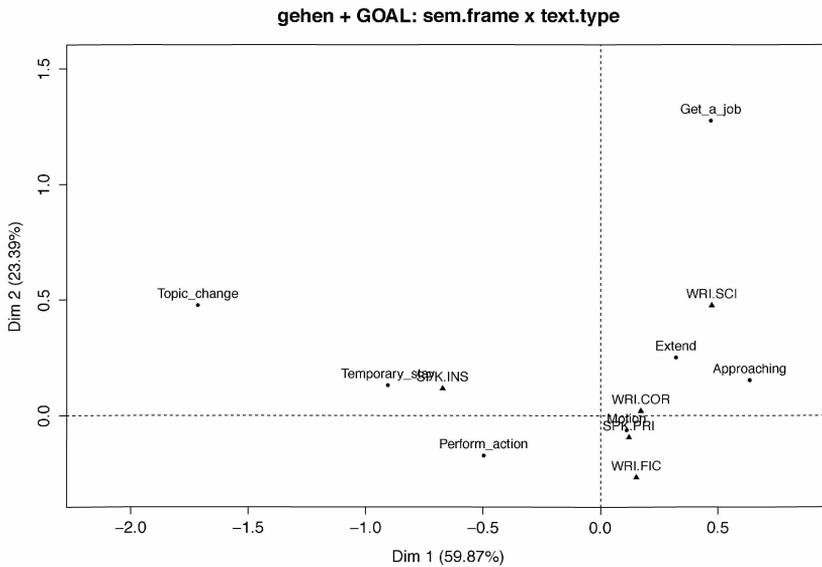


Fig. 5: Correspondence analysis plot: semantic frames (*gehen*+GOAL) ~ text types

- (5) 1. *gut. jetzt jetzt kommer mal zu der*
 okay now now come_PRN.1PL PTCL to the
RUhestromabschaltung.
 interruption_of_stall_current.
2. *der mOdor DREHT; (0.42) kann dann die*
 the motor turn.3SG; can then the
ruhestromabschaltung noch (.) aktIV sein.
 interruption_of_stall_current still active be.3SG
 ‘Okay. Let’s turn to the stall current interruption. The motor is running.
 Can the stall current interruption still be active?’
 (FOLK_E_00001_SE_01_T_01, c156: school lesson)
- (6) 1. *gut. kommen wir zur KLAge;*
 okay come.1PL PRN.1PL to_the lament
2. *sie ham ja schon die- (.) inwiefern*
 PRN.3PL AUX.PRF.3PL PTCL already the in_how_far
kann man sagen dass diese KLAgen,
 can PRN.INDEF.3SG say.3SG that these laments
 ‘Okay. Let’s turn to laments. You already – in how far can these laments
 be said [to ...]’
 (FOLK_E_00061_SE_01_T_01, c457: university exam)
- (7) 1. *g ä:h- (.) GEHen wir dann ma:l, (.) ü über*
 g um go.1PL PRN.1PL then PTCL o over
saussure in den prager linGUIStenkreis.
 Saussure into the Prague linguists’_circle
2. *°h äh wo haben die alle nun profitIERT.*
 um where AUX.PRF.3PL PRN.3PL all now profit.PTCP
 ‘Let’s turn to Saussure and the Prague linguistic circle. In how far did
 they all profit [from the structuralists’ ideas]?’
 (FOLK_E_00028_SE_01_T_01_DF_01, c130: university exam)
- (8) 1. *°h dann (.) gehen wir jetzt zur SPRACHdidaktik.*
 then go.1PL PRN.1PL now to_the language_teaching
2. *(0.2) hm- (.) ((schnalzt)) ich hab jetzt keine*
 hm PRN.1SG have.1SG now no
wirklich sehr GÜte überleitung,
 really very good transition

‘Then let’s turn to language teaching. Hm, I can’t think of a really good transition.’

(FOLK_E_00034_SE_01_T_01_DF_01, c449: university exam)

The instantiations of the frame show a couple of further recurrent formal features: The clause is often marked as a request by an adhortative verb form (in the first person plural, which also requires the subject to be realised as a post-verbal pronoun, *wir* ‘we’), and if there is a preverbal constituent, it is often one of the adverbs *jetzt* ‘now’ or *dann* ‘then’, which alternatively also occur after the verb quite often, sometimes in combination with the modal particle or adverb *mal*. The overall pattern can be summarised as follows: (*dann/jetzt*) *kommen/gehen* NP.1SG|PL_{SUBJ} (*dann/jetzt*) (*mal*) *in/zu/auf* NP_{OBL}.

In our data, the use of this pattern is tied to a specific sequential context: metacommunication about a progression to the next topic in interactions with an agenda (institutional interactions such as meetings, lessons and exams). Example (9) is a typical occurrence from an oral exam at university:

- (9) 1. CH *weil selting da* (.) SELBST *noch anders gearbeitet hat*.
 because Selting then herself differently work.PTCP AUX.3SG
 ‘Because Selting used to work differently then herself.’
2. FR [hm_hm.]
3. CH [°h] öhm hh°
4. **jetzt** (.) **gehen wir dOch** (.) **noch mal zu diesen**
 now go.1PL PRN.1PL still once again to these
 dresdner FALLbogen. (.)
 ‘Dresdner Fallbogen’
 ‘Now, let’s (re)turn to this “Dresdner Fallbogen”’
5. [also] *dass wir ma ma SEhen*–
 I_mean that PRN.1PL PTCL PTCL see.1PL ...
 ‘I mean, so that we can see ...’
6. FR [ja]
- (FOLK_E_00015_SE_01_T_01_DF_01, c206: university exam)

After the professor (CH) has elaborated on and closed a topic (transcription systems, line 1), he initiates a change to a new topic by introducing the prosodic phenomenon *Dresdner Fallbogen* as the directional adverbial of *gehen* (line 4).

In a conversation analytic or interactional linguistic perspective, the analysis of the functional context of this pattern does not end at this point, but only properly begins here: It describes the recurrent *sequential* pattern within which

‘Topic_change’ occurs, i.e. it determines whether it is mostly used at turn-beginnings, turn-internally or turn-finally (or equally frequently in all positions), what verbal action it and the preceding and following turn-constructural units perform and in what way this overall structure is motivated by general principles of turn-construction. This way, the embedding of a clausal pattern within larger patterns specific for and dependent on conversational language can be captured.

For the pattern that invokes the ‘Topic_change’ frame the following generalisations can be made: In interactions with an agenda, requests to change the topic occur when a previous topic cannot be dealt with anymore, either because time is running out or because nothing more can or should be said about it. The last full turn preceding the explicit change of topic can be one by the same or a different speaker. In the case of exams, the student may either have answered a previous question sufficiently or not have given a precise enough answer. This may then trigger an excursus by the professor, as in (9), which requires a responsive turn by the student. Therefore, the ‘Topic_change’ clause most often occurs at the beginning of a new turn by the professor, often preceded by a resumptive particle like *gut* ‘okay’. The request is usually followed by an account for or elaboration on the importance of the topic or a more precise question (cf. line 5 in [9] and the continuations of the turns containing the *kommen/gehen* clauses in [5]–[8]).

Both *kommen* and *gehen* are used frequently in requests by the person leading the respective institutional interaction, and they have the same overall function – the verbs are interchangeable in most cases, with only slight differences in perspective (see below). But *kommen* shows a broader applicability within the ‘Topic_change’ frame: it is not restricted to requests within the above sequential pattern, but is also used for metacommunication about topics that are currently in focus but should not be (cf. [10]) or topics that have not been talked about, but should be sooner (cf. [11]) or later (cf. [12]).

- (10) 1. *jetz sind sie schon beim methodischen VORgehen.*
 now be.1PL PRN.2SG already at_the methodical approach
2. ***dAhin kommen wir auch noch GLEICH, aber jetzt***
 there come.1PL PRN.1PL too also soon but now
BLEIben wir erst nochmal bei den-
 stay.1PL PRN.1PL first once again at the

3. *°h ZIElen oder– °h TEILLEistungen– die geF:Ordert*
 goals or partial_achievements that require.PTCP
werden;

AUX.PASS.3PL

‘Now you’re already talking about the methodical approach. We’ll turn to that in a minute. Let’s keep talking about goals and required partial achievements first.’

(FOLK_E_00032_SE_01_T_01_DF_01, c64: university exam)

- (11) 1. *jetzt– °h sind wir auf den*
 now AUX.PRF.1PL PRN.1PL on the
kompeTENZbegriff– noch gar nicht:(0.66) geKOMmen,
 concept_of_competence still at_all not come.PTCP

2. *da müssen wir aber kurz noch HIN,*
 there must.1PL PRN.1PL PTCL briefly to

‘Now, we haven’t turned to/talked about the concept of competence yet. But we should do this briefly now.’

(FOLK_E_00033_SE_01_T_01_DF_01, c387: university exam)

- (12) 1. *also ich ich würde beHAUpTen, dass*
 well PRN.1SG PRN.1SG would.1SG claim.INF that
es im prinzip Alle in dEm sinne,
 PRN.3SG in_principle all in this sense

2. *also (.) LYrik, (.) Epik, °h und– <<all>al zur*
 that_is lyric_poetry epic_poetry and to
dramatic KOMM ich gleich (dann) mal, >
 dramatic_poetry come.1SG PRN.1SG soon (then) PTCL

3. *(.) beDIENT werden,*
 attend_to.PTCP AUX.PASS.3PL

‘Well, I would claim that in principle all of them, that is lyric poetry, epic poetry and – I’ll turn to dramatic poetry in a minute –, are attended to.’

(FOLK_E_00061_SE_01_T_01_DF_01, c29: university exam)

While all of the examples for ‘Topic_change’ requests ([5]–[9] above) with *kommen* and *gehen* in the corpus were produced by teachers or professors, both students (cf. [12]) and professors (cf. [10]–[11]) use ‘Topic_change’ with *kommen* in non-requests. *Gehen* is never used in non-requests.

Reasons for the broader applicability of *kommen* within the ‘Topic_change’ frame can be deduced from semantic features that distinguish it from *gehen*. Independently of the frame that they evoke, the two verbs have complementary deictic perspectives: *kommen* denotes a motion towards the deictic center, *gehen* denotes a motion away from the deictic center. This also results in different information structural tendencies of their directional complements – in Fillmore’s (1972) terms, *kommen* is “goal-oriented” (the GOAL is contextually given), *gehen* is “source-oriented/neutral” (the SOURCE is often contextually given). Moreover, as Di Meola (1994) has pointed out, the use of *gehen* is restricted by three semantic conditions: a motion event denoted by *gehen* is always active, intentional and unimpeded. If a motion event lacks one of these features, it cannot be denoted by *gehen*. In contrast, *kommen* can be used for both motion events that fulfill all three conditions and motion events that do not. Therefore, the *kommen* clause in (13) is ambiguous, while the *gehen* clause is not:

- (13) a. *Er ging ins Krankenhaus.*
 ‘He went into the hospital.’
 b. *Er kam ins Krankenhaus.*
 ‘He came/was brought into (the) hospital.’

These deictic and semantic features are also relevant for certain abstract, metaphorical motion events denoted by the two verbs, such as the one lexicalised in the ‘Topic_change’ frame: if a topic has already been mentioned or is implicitly relevant, it must be talked about, so there is no room for an intentional decision. Therefore, *kommen* is used (cf. [10]–[12]). In contrast, a change to a topic that is not contextually given (but part of the agenda) affords an intentional decision. Both *kommen* and *gehen* can be used in this case. *Gehen* highlights the intentionality and the act of leaving the “source”. This can be interpreted as the reason why interactants only use *gehen* when they are entitled to determine the agenda: students in university exams do not assume the right to change the topic at any time, they only make metacommunicative comments about the agenda when an upcoming topic is already given, and they only do so using *kommen*.

The qualitative analysis shows that the ‘Topic_change’ usage is not simply statistically associated with institutional interactions as such, but with a specific sequential pattern that frequently occurs within them. Flexibly combining with the different deictic perspectives provided by the two verbs, the adhorta-

tive ‘Topic_change’ pattern provides a routine format to deal with the recurrent communicative task of explicitly changing the topic of a conversation.

4 Discussion

We have presented a combined quantitative-qualitative approach to the analysis of interactional data on the example of particular usages of the two German motion verbs *kommen* and *gehen*. We began by identifying structures that appear to be distinctive for either the spoken mode as such or for a particular subcategory of spoken data. Next, we examined the semantic frames that such formal patterns preferentially encode in the different text types under scrutiny. Finally, one particular usage pattern that emerged as distinctive for institutional interactions from this analysis – AdvP *kommen/gehen* NP.1SG|PL_{SUBJ} (*mal*) *in/zu/auf* NP_{OBL} – ‘Topic_change’ – was analysed functionally within its surrounding interactional context. On the basis of these findings, it is now time to assess the theoretical status of this pattern and to consider the contributions that both components of our analysis can make to this assessment.

On the theoretical level, the question is whether we are dealing with specialised verb readings (i.e. lexical polysemies) or a specialised construction. On a conservative approach, a (non-lexical) construction is usually posited if

- the relevant form-meaning pairing is at least partially schematic (i.e. there are other verbs which convey the same meaning when they are used in the argument structure pattern in question), and
- the pattern in question possesses an idiosyncratic property of some kind that does not follow from independent regularities.

The present target pattern combines complex intransitive syntax (V+PP/AdvP) with an abstract discourse-deictic function, and it occurs in certain typical environments (i.e. specific lexicogrammatical and sequential contexts, cf. Section 3.2). Looking up the typical syntagmatic context pattern in a corpus produces a number of other verbs that perform the same function as *kommen* and *gehen* when used in this environment:

- (15) a. *Dann kehren wir mal zu hoffentlich Bekannteren Filmen zurück: ...*
 ‘So let’s return to hopefully more popular movies: ...’
 (DECOW2012QS:
<http://www.schwarze-welle.de/archive/index.php/t-85-p-6.html>)

- b. *Aber springen wir mal weiter zum Spiel gegen Schalke, dort sind mir einige beängstigende Dinge bzgl des VFL aufgefallen: ...*
 ‘But let’s jump ahead to the match against Schalke, where there were a number alarming things that occurred to me with regard to the VFL.’
 (DECOW2012QS:
<http://www.projektstarwars.de/forum/sitemap/t-7011-p-8.html>)
- c. *Um mich verständlich zu machen: Die sogenannte effektive Freiheit gib’s ja sowieso nicht. Einverstanden? Aber bleiben wir mal bei dem Begriff Freiheit.*
 ‘To make myself clear: So-called effective freedom doesn’t exist anyway. Agreed? But let’s stay with the notion of freedom for a moment.’
 (DECOW2012QS: <http://www.reisegeschichte.de/geschich/rox2.htm>)

Apart from *kommen* and *gehen*, the pattern also takes certain other motion verbs such as *zurückkehren* ‘return’ and *springen* ‘jump’ as well as verbs that denote an *absence* of motion (e.g. *bleiben* ‘remain’, in which case the function of the pattern is to *prevent* a possible change of topic). The verb can also be omitted altogether:

- (16) *Damit zu den 5 Attributen. Das ist gar nicht mal so einfach, aber...*
 ‘And with this, now to the five attributes. This is not all that simple, but...’
 (DECOW2012QS: <http://www.bloodchamber.de/interview/c/490/>)

Apart from that, new discourse topics can also be introduced with a number of semantically different verbs like *schwenken* ‘turn to’, *schauen* ‘look at’ and *nehmen* ‘take’:

- (17) a. *Also liebe Forenmitglieder nicht gleich anfangen zu schrauben sondern erstmal die Frage in der “Gemeinschaft” einwirken lassen ... so und jetzt schwenken wir mal zu den Scharnieren der Motorhaube ueber, da gibt es sicher auch noch etwas.*
 ‘So, dear community, don’t start tinkering with the car straight away but let the question sink in with the community first ... right, and now let’s turn to the hinges of the bonnet, there’s surely something there, too.’
 (DECOW2012QS):

<http://www.blacklandy.de/blboard/forum/archive/index.php/t-40045.html>)

- b. *So und nun schauen wir mal auf das Wochenende. Sonntag wird sich zeigen ob wir gewinnen können.*

‘So and now let’s look at the weekend. Sunday will show if we can win.’
(DECOW2012QS):

<http://www.freezers-fanforum.de//archive/index.php/t-1439.html>)

- c. *Bleiben wir mal bei der Rasse, wo ich es am Besten beurteilen kann und nehmen wir mal einen Züchter, den ich kenne (ohne Namen zu nennen) ...also dieser Züchter besitzt 3 Rüden...*

‘Let’s stay with the breed where I know best and let’s take a breeder that I know (naming no names) ... so, this breeder has three male dogs...’
(DECOW2012QS:<http://forum.deine-tierwelt.de/archive/index.php/t-1776.html>)

Hence, it appears that there are at least two different conventional metaphorical conceptualisations of new topics that are to be introduced into the discourse: a conceptualisation of topics as *locations* that can be moved to (*kommen/gehen zu, zurückkehren zu, springen zu*), and one of topics as *objects* that can be oriented to (*schauen auf, schwenken zu*) or actively brought into the field of interaction partners’ joint attention (*nehmen*).

Given the examples discussed so far, however, a possible difference between the two variants springs to mind: with non-motion verbs such as *schauen* or *nehmen*, speakers are free to introduce *any* new topic into the discourse, including referents that are genuinely novel and non-anticipated by the interaction partner. By contrast, the discussion in Section 3.2 suggests that the motion construal of ‘traversing’ through topic space requires a pre-established thematic agenda of some sort that all interaction partners are aware of: intuitively, it would be odd to say e.g. *ok, damit komme ich zu X* ‘ok, this takes me to X’ if it is not already mutually understood that there is in fact a particular *set* of issues that require attention. Should this prove correct, we would indeed be dealing with an idiosyncratic property of the pattern in which *kommen* and *gehen* are found, thus pointing to its status as an independent construction. First, however, these intuitions would require testing, and our initial hypothesis would probably need to be fleshed out some more.⁶

⁶ Some points to pursue in this regard would be: When can an interaction (or local episode within an interaction) in fact be said to have an *agenda*? Does the construction only work if *all*

Even though we do not pursue the topic further at this point, we hope to have demonstrated how the two analytical traditions can be combined in a fruitful way: first, exploratory corpus studies can be used to discover potentially interesting structures in the data. Second, sequential analysis can be employed to work out patterns' interactional functions and constraints beyond the sentence level (including the specifics of who is entitled to use them when and under which conditions). And third, the hypotheses devised in the second step can then be tested against new data, thus leading to a new corpus study.

A combined strategy along these lines can also help to avoid certain pitfalls of both approaches as applied in isolation: on the one hand, the results of the interactional analysis in Section 3.2 show that apparent associations of given linguistic structures with particular text types or registers (as discovered by exploratory corpus methods) are not just generally in need of qualitative interpretation, but may even invite potentially misleading conclusions if the analytical categories are too coarse-grained. For instance, little insight is to be gained from the observation that our target pattern appears to be distinctive for spoken language (as suggested by Figures 2 and 3). Rather, it is because a substantial proportion of a particular subtype of our spoken data *has a predefined thematic agenda* that linguistic resources for initiating a change of discourse topic are often found in such interactions. In case our data had included large numbers of written texts with similar properties (e.g. reviews), it is conceivable that the apparent tendency could vanish or even reverse. Similarly, topic changes of course also occur in thematically unrestricted conversations and in written fiction – here, however, they are not introduced by means of our target construction. So what really matters is not whether the pattern is produced in speech or in writing, but whether the specific contextual requirements of the construction are met.

On the other hand, interactional and conversation analytic studies often start out from given functions and verbally performed actions rather than particular linguistic forms, which makes it difficult to identify relevant data in a principled manner. And also where the starting point is form-based (e.g. looking at collections of examples of a particular word or construction), most research in this tradition still eschews explicit quantification: data analysis is typically based on small numbers of hand-picked 'good examples' which serve to illustrate the analyst's argument. This makes it difficult to assess the general validity of the conclusions reached, to identify possible confounds in the analysis and to

partners can be trusted to be aware of this fact? And is it also necessary for all partners to know (beforehand) specifically *which* topics constitute the agenda?

refine the initial hypothesis where appropriate. With the growing availability of suitably annotated data, such approaches can therefore only benefit from incorporating more properly corpus-linguistic components into their analytical toolbox, too.

Acknowledgement: We would like to thank Arnulf Deppermann for discussion. Thanks also go to Sabrina Brunckhorst, Elena De Angelis, Melanie Jahn, Annika Knöpfle, Roxana Müller and Martina Seidler for their help with the data coding.

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