



**Demonstrative vs. personal and zero pronouns  
in spoken German**

Regina Weinert, Sheffield

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In a range of spoken genres, German demonstratives *der, die* etc. and personal pronouns *er, sie* etc. are equally frequent, in some demonstratives even dominate. In terms of function, the two pronoun classes appear to complement each other. While some features of demonstratives are associated with a foregrounding function, in other cases demonstratives are virtually or close to being the default pronoun. This paper provides evidence that demonstrative pronouns are in some contexts aligned with zero pronouns in spoken German, apparently violating models of referent accessibility. This aspect confirms that demonstratives are not necessarily focusing in spoken German, rather they contribute to reference and discourse cohesion. They have also been shown to signal involvement and affect. Despite the central role that German demonstrative pronouns play as cohesive and social devices in everyday interactions, they tend to receive only marginal attention in pedagogical materials. It is hoped that the growing body of corpus-based analyses will help to promote a shift towards greater recognition of the realities of spoken language.

### 1. Introduction

Nothing is more “every-day” than the use of pronouns in conversation – they typically make up 50%–60% of all referring expressions and this can rise to over 80% in clause-initial position (in main clauses). Demonstratives match personal pronouns in frequency and the two pronoun classes behave in a complementary fashion in spoken German, in contrast to more formal written language, where the use of demonstratives is restricted. Demonstratives have an equal stake in reference in both informal as well as more formal conversations, and are crucial for discourse cohesion. They can also signal involvement and positive affect, contrary to some claims and perceptions that their use is impolite or pejorative (Bellmann 1990, Tauch 1995). The findings for German have implications for theoretical work on anaphora and noun phrase accessibility, but what prompted me to investigate them in the first place were queries from advanced university students of German, who were unable to find detailed information on the use of demonstratives in their reference grammars. The present study is part of a project into both referential and non-referential uses of German pronouns. The paper begins with an overview of the role of personal and especially demonstrative pronouns in spoken German when used as referring expressions (*er ist Politiker/der ist Politiker*). It then focuses on the relationship between

German demonstrative and zero pronouns, which is drawn out by a particular goal-oriented interaction, the map task. The analysis is an important piece of the puzzle in understanding the distribution and function of demonstratives. Their widespread use in conversation has been noted for some time (Bethke 1990), although the use of personal pronouns to refer to entities is still often considered the norm (Ahrenholz 2007, Weinrich 1993/2003, Zifonun et al. 1997, but see Engel 1988, Psarudakis 2001). Despite calls to include information on demonstratives in reference and teaching materials (Thurmair 1997), their consideration in such works is at best marginal, even where features of spoken German are dealt with (Duden 2005, Durrell 2002, Rug and Tomaszewski 2003). This may partly be because more extensive corpus-based analysis is relatively recent. Yet this work is continuing to expand our view of the relative frequencies and functions of the two pronoun classes. Bosch et al. (2003) found that in a spoken language corpus of appointment-scheduling dialogues 80% of masculine pronouns were demonstratives. Weinert (2007) shows roughly equal frequency for masculine, feminine and plural pronouns which refer to entities in informal conversations (c. 52% demonstratives) and a higher proportion of demonstrative pronouns in academic consultations (65%), and an even higher one in the map task (83%), the object of this paper. Using the same calculation, i.e. excluding *das* and *es*, the P-MoLL data in Ahrenholz (2007) yields a lower, yet still substantial 40.5% of demonstratives.<sup>1</sup>

Corpus analysis has revealed a number of features of demonstrative and personal pronouns, especially in declarative main clauses, which are the most frequent clausal unit in spoken language. More work is needed on dependent clauses, interrogatives and imperatives, for instance, as well as on situative uses, but the main point in this paper is to provide a summary and an account of the most common clauses. Pronouns are very frequent in spoken language and in order to cover their uses across a range of text types, corpus size has to be kept manageable. Table 1, Appendix 1, gives an overview of pronoun distribution and their main formal features in four corpora. It is based on everyday informal

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<sup>1</sup> The pronoun *das* is in fact the most frequent of all but is treated separately because it is most common as a discourse deictic referring to clauses or discourse sections and also occurs for generalised or underinflected reference, e.g. *Wo ist der müll? Das hab ich schon runter gebracht. Dies* etc without noun is very infrequent, c. 1% in Ahrenholz (2007) and 0.5% in Weinert (2007).

conversations among speakers who know each other as friends or relatives (labeled *familiar*); consultations regarding academic presentations or dissertations between lecturers and students who know each other a little and use the formal pronouns of address (labeled *academic*); the data labeled *unfamiliar* involves informal conversations among students who do not know each other, largely about their background, their studies, living arrangements and future careers<sup>2</sup>; the map task data is detailed below. Each data set covers a wide range of speakers from across Germany. In line with transcription conventions, capitalisation is not used when quoting spoken examples.

## 1.2 Some myths about demonstrative pronouns

It is useful at this point to expose some of the main myths about demonstratives which the earlier and more recent studies mentioned above have shown to be largely without base:

- Demonstratives are not specifically associated with impoliteness or colloquial speech.
- Demonstratives rarely disambiguate discourse entities. They *can* be used for disambiguation, especially exophorically, in which case they are usually stressed.
- Demonstratives do not primarily shift attention from one entity to another.

The first two points have been demonstrated very clearly in previous research, although anecdotal evidence suggests that among highly educated speakers, demonstratives appear to have negative connotations on a meta-linguistic level. This point deserves further study. The third point is rather more controversial and will be discussed throughout this paper. The claimed association of demonstratives with rhematic or new entities and hence a focusing function, contains some truth, but the reality is more subtle. They are not rhematic *per se* (i.e. not like indefinite articles) and the notion of *focus* is used differently by different authors, a point also made by Ahrenholz (2007). Similarly, the related claim that demonstratives prefer object antecedents (Bosch et al. 2007) and shift attention from expected subject topics is only partly true as it hinges on a written language bias in some of the examined data.

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<sup>2</sup> I am grateful to Anna Linthe for making available her data (Linthe 2010).

### 1.3 The complementary role of demonstrative and personal pronouns

The data presented in Table 1 is based on Weinert (2007) and the present study, in order to allow for consistency of analysis.<sup>3</sup> The results are broadly compatible with Ahrenholz (2007), who uses different calculations and comparisons, and who also analyses some different text types which draw out a range of additional points. Primarily the present paper is concerned with clarifying the complementary roles of personal and demonstrative pronouns and especially with attempting to tease out the nature of the focusing and foregrounding function of demonstratives. The main findings are as follows (examples of demonstratives can be found in Appendix 2):

#### Demonstrative pronouns

- Demonstratives are at least as frequent as personal pronouns, both with human and non-human referents, for endophoric (i.e. discourse internal) reference, where they are mostly unstressed.
- Demonstratives are the preferred pronoun in pre-verbal<sup>4</sup> position, virtually exclusively/obligatorily in the case of direct objects.
- Demonstratives are highly preferred in cases where a noun phrase is pronominalised for the first time. In most cases the entity is new, but it is often already salient.
- Demonstratives, like personal pronouns, can have vague, non-specific reference and in this case they can be rhematic, i.e. introduce a new referent.
- In informal conversations, more antecedent noun phrases of demonstratives are subjects than objects. In other data types objects predominate, but subjects are not infrequent.
- There is some limited evidence that demonstratives prefer close antecedents, but there are also cases where other third person referents intervene.
- Demonstratives are as common as personal pronouns for maintaining entities in pronoun chains.
- Demonstratives can be used to signal continued importance of an entity and mark the newsworthiness of information *about* an entity. There is also evidence that they can signal involvement. This then applies regardless of position.

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<sup>3</sup> Not included are constructions where demonstratives are obligatory and where personal pronouns cannot normally be used, see Appendix 2.

<sup>4</sup> The label pre-verbal is used since some pronouns are preceded by prepositions, but the vast majority are in fact clause-initial.

## Personal pronouns

- Personal pronouns are the preferred pronoun in post-verbal position. There is some evidence in the unfamiliar student data that they are also more frequent in dependent clauses.
- Personal pronouns are dispreferred in the context of a first pronominalisation of an entity introduced by a noun phrase.
- Personal pronouns are used to maintain entities in pronoun chains.
- There is some limited evidence that personal pronouns can be involved in long distance anaphora and that other third person referents can intervene.
- There is some limited evidence that personal pronouns are the preferred pronoun in indirect speech (but not direct reported speech, where both pronoun classes occur).

More research is needed in a number of areas, but some trends are well documented. Both Weinert (2007) and Ahrenholz (2007) show that demonstratives are largely anaphoric, i.e. they refer to entities which have already been introduced into the discourse.<sup>5</sup> Clausal position, while not producing categorical results, clearly divides the two pronoun classes, with demonstratives typically being clause-initial and personal pronouns clause-internal in main clauses (*der kommt nicht mehr; den verkaufen wir nicht mehr; wir nehmen sie mit; ich hab sie schon gefragt*). As the overview of the data in Appendix 1 shows, this complementarity manifests in a ratio of at least roughly two-thirds to one-third, although it can be higher depending on genre. There is certainly evidence that demonstrative are associated with a foregrounding function, which has been noted by previous studies, for instance Bethke (1990) and Ahrenholz (2007) talk of *Reliefbildung*, i.e. a raised profile. Weinert (2007) found that the single most frequent pronoun in a main clause is a demonstrative subject in pre-verbal position (c. 45%) and demonstratives occur much more often in the context of new referents than personal pronouns. In addition, demonstratives can be associated with the disambiguation of entities and they occur in focusing constructions such as NP + clauses, e.g. *meine mutter die kocht gut*, and focusing NPs, e.g.

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<sup>5</sup> Ahrenholz (2007) also distinguishes “Anaphora” from “Anadeixis” in order to separate reference continuity from resumption of reference across other entities and utterances, but the criteria are not entirely consistent. In spoken language referent tracking is complicated since utterance units are difficult to segment and more than one speaker is involved. The issue cannot be dealt with in detail here, but see also Weinert (2007).

*der da*. However, previous work tends to overestimate this role and to ascribe to demonstratives a special function of focus on entities, often implying that personal pronoun use is neutral. Given the salience of the pre-verbal position, foregrounded vs. backgrounded information is likely to be aligned with demonstrative vs. personal pronoun choice, but in a complementary fashion. Demonstratives fit into the larger picture of cohesion in spoken German, characterised by frequent clause-initial, pre-verbal or pre-phrasal positioning of deictics and pronouns. Weinert (2007) suggests a medium level of “alertness” conveyed by such pro-forms, rather than a constant high state of attention. This is supported by a number of features. Firstly, a substantial number of referents are already salient or are unique in the previous utterance, i.e. they have already been introduced with special constructions or are the only third person referent. This is in contrast to what is claimed by experimental studies which use written examples such as *Max rief Moritz an. Er/der hatte eine neue Arbeit* (Bosch et al. 2003). Here the use of *er* is said to be preferred in reference to *Max* as a sign of topic continuity (aligning subject status with topicality), whereas *der* is considered to signal a topic shift to *Moritz*, the less salient object. Secondly, clause-initial direct object personal pronouns are virtually absent and ungrammatical, leaving demonstratives as the default pronoun.<sup>6</sup> Thirdly, personal pronouns have largely left the ground of first pronominalisation to demonstratives, which is possibly approaching a norm. Finally, as also pointed out by Ahrenholz (2007), demonstratives also occur in a substantial number of cases in other clause positions and both demonstratives and personal pronouns can refer to established entities which have been mentioned more than once before and maintain them in pronoun chains. Their foregrounding is therefore strongly focusing, in the sense of highlighting an entity, only in a minority of cases. In others, foregrounding occurs on secondary levels, not centrally as a direct focus on the entities themselves, but in terms of marking information relating to the entities as newsworthy and separating this from personal pronoun domains. Alternations between personal and demonstrative pronouns happen in reference to established entities – not only as a factor of new ones – and in pronoun chains. The details cannot be presented here, but see Weinert (2007) and also

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<sup>6</sup> Meinunger (2006) finds some highly restricted contexts of acceptability for clause-initial object *es*, but without explicitly addressing the issue of differences in spoken vs. written usage and without details regarding methodology.

Ahrenholz (2007), who shows, for instance, that personal and demonstratives alternate according to whether reference is to a main protagonist or involves the introduction *and* maintenance of new referents in narratives. Personal pronouns are then associated with backgrounding, indicated by their preference for post-verbal position and to some extent dependent clauses. Their status requires further consideration, since the complementary roles of the two pronoun classes in spoken language suggest that personal pronouns cannot be considered a neutral choice, nor, as will be shown further now, are they the only choice for reference to highly accessible entities.

## 2 Demonstratives and zero pronouns

Spoken German pronominal usage appears to present a paradox: zero and demonstrative pronouns can occur in similar contexts, contexts in which personal pronouns are dispreferred, odd or even ungrammatical, as illustrated in (1). (English glosses of all numbered examples can be found in Appendix 4.)

- (1) A: ich hab dir die neue brigitte mitgebracht  
 (1a) B: die hab ich schon  
 (1b) B: hab ich schon  
 (1c) B: \*sie hab ich schon  
 (1d) B: ??sie ist gut

The acceptability in B's response to A of zero or demonstrative pronoun as referring to the entity introduced by the NP *die neue brigitte* (*Brigitte* is a German magazine) runs counter to various models of referent accessibility, e.g. Ariel (1988, 2000, 2004), Chafe (1976), Givón (1983) and Gundel et al. (1993). Such models propose a hierarchy of referring expressions, with lower accessibility markers containing more lexical material than higher accessibility markers to aid retrieval. Leaving aside for the moment agreement markers and distinctions within categories, the proposed order from most to least accessible is:

zero > clitic > personal pronoun > demonstrative pronoun > definite noun phrase > indefinite noun phrase



In other words, the use of zero indicates that the entity being referred to is considered most accessible to the hearer/reader, the use of a personal pronoun indicates high accessibility and the use of noun phrases indicates low accessibility.<sup>7</sup> On this scale, demonstrative pronouns indicate a lower degree of accessibility than personal pronouns and they are at some distance in this respect from zero. Gundel et al. (1993) group zero and pronouns together as associated with the cognitive status of *in focus* and demonstratives are considered less salient, but *activated*, as opposed to *uniquely identifiable* definite noun phrases. Ahrenholz (2007) also invokes the hierarchy in his account of demonstratives, distinguishing between preverbal and post-verbal position and placing the latter above the former, but both below unstressed personal pronouns.

Accessibility is also considered a matter of *salience* in most accounts, for instance Ariel (2000: 206) suggests that in the following list, the entities on the left are more salient than those on the right:

- a. Speaker > addressee > nonparticipant (third person)
- b. High physical salience > low physical salience
- c. Topic > nontopic
- d. Grammatical subject > nonsubject
- e. Human > animate > inanimate
- f. Repeated reference > few previous references > first mention
- g. No intervening/competing referents > many intervening/competing referents

Ariel sees these as more relevant for the formation of agreement inflections and adds a unity criterion for anaphoric reference, which refers to the strength of the connection between the referring expression and its antecedent. Yet the latter also includes distance and degree of cohesion, factors which appear in the above list. Indeed, much work on anaphora has interpreted salience in terms of (a-e). Going back to example (1), whichever way one may define accessibility and salience, the referent *die neue brigitte* is salient as it

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<sup>7</sup> Givón (1983) also includes syntactic constructions such as left-dislocation, clefts etc. in his model of topic continuity.

has just been mentioned and a 3rd person personal pronoun marked for feminine gender would have a unique antecedent; the demonstrative should not be necessary (recall that even a subject pronoun would be dispreferred and odd in this context, i.e. *die ist gut* vs. *sie ist gut*).

The hierarchy is claimed to be universal, but to some extent language-specific, given that languages vary in the forms of grammaticalised referring expressions. Chinese and Japanese make wide use of zero and the use of personal pronouns is highly restricted, compared with English, for instance (Ariel 1988, 2000). This then affects the level of accessibility indicated by referring expressions within language-specific scales, and there are no universal absolutes. Furthermore, examining the hierarchy for specific languages does not simply start with identifying which expressions to include, e.g. whether a language has clitics, zero or personal pronouns. Languages also vary in the extent to which expressions are grammaticalised, grammaticalisation is not necessarily categorical and analysis may come to quite different conclusions when considering written vs. spoken discourse. Jim Miller's analysis of Russian in Miller & Weinert (1998/2009) shows that zero is much more frequent in spoken than in written language and it is most frequent in real-life dialogues rather than in spoken narratives, especially in terms of zero objects, which in real-life dialogues tend to refer to situationally evoked entities, as opposed to textually evoked entities in spoken narratives and written texts.<sup>8</sup> Finally, as Ariel (2000) points out, accessibility is not necessarily matched by markedness in terms of frequency and distribution. Zero is considered the unmarked member of the zero/pronoun distinction in Chinese, but the marked member in English, and indeed in German.

Approaches which are based on establishing the cognitive and information status of referents (e.g. Fox 1987, 1996, Prince 1981) and then examine how this status is realised linguistically lend some support to the hierarchy but readily reveal that a purely local, sentence-based approach cannot capture the complexities of usage. Even the more differentiated models of local coherence such as those developed from Centering Theory (Grosz et al. 1995, Walker et al. 1998) have been shown to run into problems in accounting

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<sup>8</sup> The terms *textually* and *situationally evoked* come from Prince (1981).

for the use of full noun phrases vs. pronouns, the former regularly being used to refer to highly accessible entities (e.g. Yoshida 2008) and have said little about the use of different types of pronouns (see Poesio et al. 2004 for a comprehensive discussion). Attempts to bring in discourse units have so far not succeeded in consistently identifying global units (Poesio et al. 2004). Interactional, stylistic and reasons of variety have been shown to be relevant to the selection of a particular referring expression in context.

The accessibility hierarchy captures the nature of demonstrative pronouns to some extent. In certain contexts such as the introduction of referents into the discourse, they clearly indicate higher accessibility than a noun phrase, for instance when they are used to pronominalise for the first time a noun phrase which is in close proximity (*du kennst doch otto der ist wieder verheiratet*), as opposed to reference with a noun phrase to an entity which had been introduced into the discourse at some earlier point. A demonstrative can also indicate a contrast with an entity which is referred to with a personal pronoun and is then often stressed (e.g. *max rief moritz an der hatte eine neue arbeit*). It is generally claimed that subject entities are more accessible than object entities (see Ariel's list above) and there is some psycholinguistic evidence that language users expect a clause initial pronoun to refer to the first mentioned or subject entity of the previous clause (Tanenhaus and Trueswell 2006), at least for written language when both entities appear in the same clause. In spoken German, disambiguation through a demonstrative is not common, however, and as will be shown later in the map task data, demonstratives regularly have ambiguous reference. Their psycholinguistic status remains to be fully investigated.

The following section examines the relationship between zero, personal and demonstrative pronouns, and to some extent full noun phrases and clitics, in goal-oriented dialogue, with additional examples from everyday conversations. The analysis focuses on reference to entities rather than discourse deixis, which has been examined before and will be outlined below. The goal-oriented data is particularly illuminating since it allows a relatively clear tracking of referring expressions and the entities they refer to in a context where they are crucial to the completion of a task. Identifying and tracking referring expressions and entities is often more problematic in everyday conversations, and the goal-oriented data helps the analysis proposed for the more diffuse data. It further supports the view that demonstrative pronouns are not especially marked in spoken German and do not primarily

shift attention to unexpected, new entities. While zero is overall less frequent than personal pronouns, in some contexts zero is preferred and aligned with demonstratives where personal pronouns are highly dispreferred or ungrammatical. The choice of a demonstrative over a personal pronoun in spoken German cannot merely be accounted for in terms of differences in referent accessibility and antecedent salience.

### 3. The data

The main analysis is based on the German Map Task Corpus, 30 000 words of data collected by the author and Gillian Razzaki in 1994. It is a German version of the HCRC Map Task Corpus (Anderson et al. 1991), involving spontaneous, unplanned face-to-face dialogues. It includes 14 dialogues from 14 native speakers, aged 22-36 from a variety of geographical areas. The map task involves two participants, one instruction giver (IG) and one instruction follower (IF), labels used in the coding of the corpus. Each participant has a map marked with various landmarks, some are shared, others are unique to one or the other map. In addition, the instruction giver has a route marked around the various landmarks and has to instruct the instruction follower how to draw this route (see Appendix 3 for a sample). The participants cannot see each other's maps and do not have eye-contact. They are told that they each have a map, that one map has a route marked, the other does not and that the person with the route has to instruct the other person how to draw it; they are also told that there may be some differences between the maps. Apart from the context of being recorded, the tasks are relatively informal. Additional examples come from 20,000 words of informal everyday conversation, stratified in terms of speakers' social and regional background and dating from 1990-2006.

### 4. Background to German zero and demonstratives

Zero in German is discussed here in relation to demonstrative pronouns. The use of German zero subjects and objects, especially of the 3rd person, is highly restricted. It is associated with verb-first clauses, i.e. most commonly assumed to occur clause-initially and seen as a cohesive device in place of anaphoric pronouns (Auer 1993, Fries 1988). The focus in this paper is on discourse internal (endophoric) rather than situational (exophoric) 3rd person reference, i.e. examples such as *ist zu* uttered standing outside a closed shop will not be

discussed (nor is the mental reality of the endophoric / exophoric distinction an issue for the present analysis). Zero discourse deictic reference appears to be much more common than zero reference to entities. Eckert (1998) reports 38 cases of discourse deixis and 15 cases of reference to entities in 12 German Map Task Corpus dialogues. This is consistent with the figures for the conversational data used in the present study, with 39 vs. 13 cases. Eckert states that zero has to occur clause-initially. While this is typical, some clause-internal zeroes are possible, and the conversations contain 5 cases. They will not be discussed further here.<sup>9</sup>

Eckert suggests that zero reference to entities is possible where the antecedent occurs in a question since it is then highly salient, as in (2), from the conversations (*ne* represents a tag).

- (2) hör mal du kennst doch safran ne  
hast du ja schon gegessen

In (3) the antecedent occurs in a main clause. The two zeroes, in A2 and C, can be seen as referring to the entity 'yellow', i.e. the yellow saffron thread (as opposed to the red one) which doesn't taste so good, or it could be the mass of saffron with yellow threads in it.

- (3) A1: und dann ist immer noch ein sind immer noch welche die die gelben noch  
mal rauspuhlen damit das wieder wertvoller wird  
B: ja gelb muß raus  
A2: ja schmeckt nicht so gut  
C: nee sieht auch nicht gut aus vor allem mit nem horn

Distinguishing between zero discourse deixis and reference to entities is not always easy with neuter entities. The map task has a few ambiguous cases which occur with the verb *haben* e.g. (4).

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<sup>9</sup> Examples include declarative main clauses (in B there is an intonation break after *mach*):  
A: radieschen machen wir nicht wieder die sind billiger im markt B: ich mach Ø doch ich hab noch das da  
and imperatives (where zero could conceivably also occur in initial position):  
A: und zwar hat tim doch letztes jahr wie er in spanien war so tolle grillrezepte gehabt die hab ich irgendwo noch B: schreib Ø mal auf

- (4) A: südöstlich äh des aussichtspunktes habe ich n zaun  
 B: mhm hab ich auch

Eckert claims that in (4) zero refers to the state of the fence being south east of the view point. It could equally refer to the entity “the fence”. B could have said *den hab ich auch* or *das hab ich auch*. It could be argued that where participants are clearly having to focus on landmarks, it is the entity which they refer to. In this particular example participants are comparing their maps, providing information about the existence and location of the landmarks at the same time, and it is plausible that zero reference is to a state. However, this varies throughout the data. In fact, a few turns later the same participants have the following exchange, still establishing whether their maps correspond:

- (5) A: und wenn ich weiter die linie vom aussichtspunkt zur rui- äh zum zaun  
 gehe und die verlänger komme ich auf eine ruine  
 B: die hab ich auch ja

Here the feminine pronoun signals reference to the entity and zero would also be possible. In exchanges such as (4), when a pronoun is used, reference to an entity is the norm in the data. In any case, while some ambiguities with neuter entities exist in the different data sets, there are plenty of masculine, feminine and plural cases. Returning now to the relationship between zero and demonstrative pronouns, Eckert (1998) questions the assumption that discourse deixis involves topic shift. She examines the use of demonstrative *that*, personal pronoun *es* and what she refers to as “null” topics. Eckert shows that in the data discourse deictic reference (93 cases) is to highly salient non-NP antecedents (that is to events, states, propositions etc.) and is expressed primarily by demonstrative pronouns (56%), followed by a substantial proportion of null topics or zero (32%), with only 12 % unstressed personal pronouns. In other words, zero is aligned with demonstratives rather than with unstressed personal pronouns. 87% of discourse deictic reference occurs in clause initial position, which Eckert calls the *topic position*. She concludes that discourse deictic reference therefore involves an expected topic, contrary to the assumption that discourse deixis involves a topic shift (Webber 1991, Gundel et al. 1993). Demonstrative *that* in the data therefore refers to elements which are in focus. Eckert proposes that a null topic or zero reference is discourse deictic by default (reflected in a rate of 72% vs. 28% non-discourse

deictic) and that reference to entities is highly restricted.<sup>10</sup> Eckert also points out that discourse deictic reference has primarily an object function, with 75% of null topics fulfilling this role in the map task (and a similar figure for demonstratives according to my count). She argues that it is therefore not surprising that demonstratives and zero should feature since object personal pronouns are ungrammatical in these contexts. This applies to the contexts in question. It is not a sufficient explanation of the use of demonstratives, however. In contrast to discourse deictic reference, clause-initial pronouns which refer to entities are predominantly subjects (c. 75% in Weinert 2007) and hence ungrammaticality of personal pronouns cannot explain the overall high use of demonstratives. Nor is it clear that the interpretation of zero is discourse deictic by default, which is a psycholinguistic issue.

## 5. The Map Task data: Results and analysis

Given the accessibility hierarchy mentioned in the introduction, a brief comment on clitics or reduced pronouns is in order at this point. They are not in fact used to refer to the entities examined in this paper. Clitics or reduced pronouns occur post-verbally, apart from one preverbal case, and all 27 cases are discourse deictics, the most common expression being *dann gehts* + direction [e.g. *nach oben rechts*], with 11 cases. Table 2 provides an overview of the referring expressions used to refer to landmarks in the German Map Task data. It also shows their distribution according to second and subsequent (2nd + 1) mention. (Not surprisingly, all first mentions are coded by full noun phrases.) Noun phrases are highly preferred and this can be explained by the task. The landmarks are central to its completion and participants use them to specify directions, goals and reference points, often referring to a number of landmarks within one turn. They are regularly used in second mentions (although proportionately less frequently than in subsequent mentions), not only when other landmarks intervene, but also in cases where the referent has just been mentioned.

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<sup>10</sup> The figures in her Table 1 and Table 2 and the subsequent text do not match. However, my own count confirms that in the 12 dialogues there are 15 cases of reference to entities.

**Table 2: Reference to landmarks in the Map Task**

	Second mention	Subsequent mention	Total
Noun Phrase	120 66%	979 87%	1099
Demonstrative Pronoun	49 27%	111 10%	160
Personal Pronoun	2 1%	28 2.5%	30
Clitic / reduced pronoun	0	0	
Zero	11 6%	7 0.5%	18
Total	182 100%	1125 100%	1307

Second mentions are often crucial in establishing the presence and absence of landmarks. The fact that zero is possible here, but personal pronouns occur only twice is therefore somewhat surprising. In subsequent mentions, personal pronouns are more frequent, but still far outnumbered by demonstratives. Overall the ratio of demonstratives to personal pronouns is 83% to 17%.

So what happens with personal pronouns? They are more frequent than zero, but the 30 cases are not evenly spread. One dialogue contains 13 cases. 9 of these are neuter *es*, used in the long description of a lake (which is masculine), so the references are global and abstract (*du hast n [masculine] dann vielleicht ein bisschen zu spitz gemalt es [neuter] ist mehr so ähm es [neuter] ist oben ein wenig waagerecht*). A further dialogue contains 7 cases produced by the same speaker, all feminine pronouns referring to four different landmarks. In other words, map task participants typically produce one personal pronoun to refer to a landmark per dialogue.<sup>11</sup>

Just over 70% of all pronouns occur in main clause initial or preverbal position, compared with 62.6% and 74% in the conversations and academic consultations in Weinert (2007). Almost 93% of these are demonstratives, compared with 80% and 73% of preverbal pronouns in the conversations and academic consultations. In the Map Task, 80% of demonstratives are preverbal (c. 85% in the conversations and academic consultations) and 40% are objects – a considerably higher figure than the 25% for the conversation and

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<sup>11</sup> There are only 8 further personal pronouns used to refer to entities such as the route, for instance.



academic consultations in Weinert (2007), but since 60% are subjects, personal pronouns would not be ungrammatical or unacceptable in these contexts. The map task data therefore provides further evidence for considering demonstratives common cohesive devices. In addition, they mostly refer to highly accessible entities which have been singled out for attention (e.g. *hast du ne wiese - die hab ich*), as examples (6-13) in the following discussion further illustrate. It is sometimes claimed that demonstratives prefer rhematic object antecedents and that this is a sign that they draw attention to a dispreferred, unexpected new topic or entity (Bosch et al. 2003). While this tendency may apply to written language, Weinert (2007) shows that this does not generally apply to spoken conversation. In the map task data 64% of demonstratives do indeed have object antecedents, however, the antecedents are highly salient. In addition, the last but one mention is often a subject. It is the nature of the task which leads to a preponderance of constructions in which the immediate antecedent is an object, rather than any cognitive status of the relevant entities as new. As the following examples show, antecedents can be a mixture of objects or subjects within the same turn or clause.

- (6) B1: die palme hab ich ich hab aber noch n brunnen davor also ich hab  
die palme und links neben der palme ist n brunnen  
A1: ja den brunnen hab ich nicht aber  
B2: den hast du nicht

In (6) the well (*brunnen*) is first introduced as the object of the verb *haben*, in the second mention it is the subject of locative *sein* and in the third mention it is the object of *haben* again before it is pronominalised for the first time.

- (7) B1: ich hab die ostsee  
A1: nee die hab ich auch aber da ist noch n westsee der westsee ist  
B2: nee die hab ich nicht

In (7) we have the *ostsee* introduced as the object of *haben* in B1 before it is pronominalised in A1. On the other hand, the *westsee* in A1 is the subject of existential *da sein*, repeated as subject in a broken *sein* clause (possibly intended to provide a location)

before being pronominalised in B2<sup>12</sup>. In each case the entity is highly salient and the grammatical function in the first or immediately preceding mention, or any other mentions, would appear to be irrelevant to its cognitive status. Nor is it the case that the use of personal and demonstrative pronouns helps to avoid ambiguity. Demonstratives can have ambiguous reference. Example (8) is the opening of a dialogue.

- (8) A1: ähm also der startpunkt ist unten am toten baum  
 B1: äh  
 A2: hast du den  
 B2: der ist unten beim äh toten baum

In (8) two masculine nouns, *startpunkt* and *toten baum*, are candidates for the pronoun *den* in A2. In (9), another opening sequence, two feminine entities are candidates for the pronoun *die* in A2. Underlining indicates overlapping speech and the question marks indicate that the utterance was not fully intelligible.

- (9) A1: die route fängt direkt über der telefonzelle an  
 B1: ja ?ich seh es?  
 A2: die ist unten links

In (8) it is the first entity, the subject, which is being referred to. Recall that research based on written language would suggest that *den* should therefore refer to *toten baum*. In this case topic continuity may play a role in allowing B to identify the *startpunkt* as the intended referent, the subject of the clause in A1. In (9), on the other hand, it is the second, non-subject entity in the clause, in the prepositional phrase, which is the referent. However, a landmark is more likely to be located at the bottom than the route (which is likely to spread to other parts of the map) and this aids disambiguation. (10) is similar to (8) in its ambiguity and also rules out the demonstrative-as-disambiguator explanation.

- (10) A1: ok ich hab diesmal ähm fang unten rechts an da ist n toter baum  
 B1: mhm

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<sup>12</sup> In the map task speakers at times assign feminine instead of masculine gender to *see* because of the association with *die Ostsee*, i.e. the Baltic.

- A2: das heisst ich hab n startpunkt drei zentimeter rechts vom toten baum  
 B3: drei zentimeter rechts vom toten baum  
 A3: ja  
 B3: den hab ich nicht  
 A4: aha aber du hast den toten baum  
 B4: ja

In (10) the ambiguity may have led A in A4 to check whether he has correctly interpreted *den* in B3 as referring to the starting point, not the dead tree, given that B acknowledges the dead tree in B1 (A is possibly confused by B3). In other words, while participants take care to provide essential information and negotiate the task in detail, they do not use the personal vs. demonstrative pronoun distinction to disambiguate reference to entities. Instead, demonstratives are used as anaphors, referring to salient entities as first and subsequent mentions. While the use of zero is infrequent, it supports the view of demonstratives as referring to highly accessible entities. This is illustrated by (11-13), where zero is used in the same context as demonstratives are in the data.

- (11) A1: hast du die ruine  
 B1: ja  
 A2: hast du auch
- (12) A: dann kommt pyramide flugzeug  
 B: hab ich nicht
- (13) A1: dann hab ich raketen  
 B1: interessant hab ich auch nicht  
 A2: die hast du nicht  
 B2: wo sind die

The use of zero may seem unexpected, especially where landmarks are not shared, but it is clear to participants that landmarks are important and they carry out the task step by step, frequently seeking and offering clarification. In each of these zero contexts a demonstrative would be a candidate pronoun, as shown by the earlier examples (6-10). The virtual ungrammaticality of clause-initial object personal pronouns does not only leave demonstratives as the default pronoun, it supports the alignment of demonstratives with zero, be this in object or subject function.

## 6. Summary

The map task data further shows that demonstratives are used as a cohesive, anaphoric device in clause-initial position and as the first pronominalised reference to an entity (only 2 out of 51 second mentions are expressed with a personal pronoun). The large majority of demonstrative references is to subsequent mentions, nearly 70%. Reference is to highly salient entities, yet in some cases referents are ambiguous. While in most cases the immediately preceding antecedent is an NP, 25% of cases are pronouns. While only 20% of demonstratives occur in postverbal position, this figure is higher than the c. 15% found in conversation and academic consultations in Weinert (2007). Furthermore, there are more postverbal demonstratives than personal pronouns, 32 vs. 20. The Map Task further questions the notion that demonstratives prefer object antecedents *per se* and that they help to shift attention to new entities. It could be argued that the map task foregrounds landmark entities and that the whole task therefore engenders a heightened attention state. A foreground/background distinction in the use of demonstrative and personal pronouns is certainly indicated by their respective distribution. But the alignment of demonstratives with zero shows that the entities in question are highly accessible and expected. The interpretation of the data has to be consistent, either demonstratives and zero do not shift attention, or they both do. The data supports the first option. This paper therefore provides further evidence that the choice of demonstrative over personal pronouns in spoken German cannot merely be accounted for in terms of differences in referent accessibility and antecedent salience. The map task, which largely involves a transactional, information-based exchange, has helped to draw out the referential cohesive function of demonstratives. More work is needed in determining the restrictions on clause-initial personal pronouns, given that even some subject uses are dispreferred and questionable.

## 7. Conclusion and future research

Frequency does not equal grammaticality or acceptability. For instance, both preverbal personal pronoun objects and *dies* account for only 1% each of pronouns, yet the former is virtually unacceptable while the latter is not. But frequency does affect respective roles and functions. Personal pronouns are not the default pronoun in spoken German, demonstratives are equal partners. Demonstratives are associated with foregrounding

through their preferred clause-initial position, the fact that they are the preferred choice for the first pronominalisation of an NP and a slight tendency to be closer to preceding NPs than personal pronouns. At the same time, they regularly refer to salient entities, are aligned with zero in certain contexts and are virtually the default clause-initial object pronoun. This means that demonstratives function as anaphors to highly accessible entities. This paradox does not necessarily affect the accessibility hierarchy per se (although, as suggested in the introduction, there are a number of challenges to the hierarchy). Rather, German demonstratives can be regarded as not prototypically demonstrative in spoken language, rather they complement personal pronouns. They clearly deserve a new label, but this is somewhat hard to come by. Ahrenholz (2007) uses the term *d-pronoun* and this seems a possible solution. The fact that relative pronouns are also d-pronouns is not necessarily a problem since they are also anaphoric; the term *demonstrative* can then be confined to *dies* etc. But personal pronouns also need to be re-examined, rather than being considered a “neutral” choice – both demonstratives and personal pronouns are “personal”. I shall leave the issue of terminology for the future. The corpus-based research also has implications for future studies of pronouns. Discourse analysis can usefully be complemented by experimental studies in order to assess the cognitive status of pronouns and illuminate the margins of acceptability, but great care needs to be taken to reflect spoken language usage.

This is certainly not the end of the story for pronouns in (spoken) German, not only in terms of reference. While they clearly have referential and cohesive functions, Weinert (2007) suggested that the foregrounding vs. backgrounding function of the two pronouns can serve interactional and modal functions. Demonstratives appear to be associated with newsworthiness and involvement. Weinert (forthcoming) suggests that personal pronouns can signal detachment and a variety of associated functions, such as distancing, respect and uncertainty. While referent accessibility hierarchies may capture some core facts about reference, non-referential functions of third person pronouns deserve further cross-linguistic attention, including the distinction between speaker and hearer perspectives. Finally, while many subtle functions regarding the use of German pronouns remain to be investigated, some features, especially of demonstratives, display strong tendencies. It is therefore time to reflect the important role which demonstratives play in everyday interactions at work and at play in pedagogical materials.

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**Keywords:** anaphora, reference, salience, demonstrative, spoken language, German



## Appendix 1: Table 1 Overview of personal and demonstrative pronoun use

<p><b>The data:</b> Informal conversations (mostly familiar), informal student conversations (mostly unfamiliar), formal academic consultations (mostly vaguely familiar); map task (mostly unfamiliar): 30 000 words each; masculine, feminine + plural pronouns in main clauses analysed: 500 in familiar conversation (c. half of the total), all 317 in unfamiliar conversation, all 150 in academic consultations, all 208 references to landmarks in the map task.</p> <p><b>1. Frequency:</b>  Familiar: Demonstrative 50% Personal 50%  Unfamiliar: Demonstrative 54% Personal 46%  Academic: Demonstrative 65% Personal 35%  Map Task Demonstrative 83% Personal 17%  (Ahrenholz (2007) Demonstrative 40.5%)</p> <p><b>2. Human Referents</b>  Familiar: Demonstrative 56%  Unfamiliar: Demonstrative 52%  Academic: Demonstrative 56.5%  Map Task N/A</p> <p><b>3. Clausal position in main clause</b>  <u>Percentage of demonstratives in pre-verbal position:</u>  Familiar: 80%  Unfamiliar: 75%  Academic: 73%  Map Task: 80%  (Ahrenholz (2007) 70%, including <i>das</i>)</p> <p><u>Percentage of personal pronouns in post-verbal position:</u>  Familiar: 77%  Unfamiliar: 63%  Academic: 67%  Map Task: (very low numbers)</p> <p><b>4. Grammatical function</b>  <u>Overall percentage of subjects:</u>  Familiar 84%, Unfamiliar 95%, Academic Consultation 80%, Map Task 60%</p> <p><u>Personal pronoun direct objects in pre-verbal position:</u> 1%</p> <p><b>5. Antecedents</b> (the last mention of the entity in question – from Weinert 2007)</p> <p>a) <i>What is the form of the antecedent?</i></p> <p>noun phrase: 80% demonstrative 20% personal pronoun  pronoun: c. 50%/50% demonstrative and personal pronoun</p> <p>b) <i>What is the grammatical role of the noun phrase antecedent?</i></p> <p>Conversations: 57% subjects, 43% objects  Academic consultations : 19% subjects, 81% objects  Map Task: 36% subjects, 64% objects</p>
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## Appendix 2: Uses of demonstrative pronouns in spoken German

### Grammaticalised

Some uses of demonstratives are grammatical and occur in both written and spoken language:

die/\*sie, die keinen Pass haben sollten sich bei der Botschaft melden  
 ‘those who do not have a passport should contact the embassy’

ich stehe zu dem/\*ihm/\*ø, was ich gesagt habe  
 ‘I stand by what I said’

### Focusing

Focus is here meant in the sense of highlighting an entity for contrast, introduction, resumption etc.:

#### Exophoric (stressed)

A: welchen meinst du B: DEN  
 ‘which one do you mean B: THAT one’

#### Endophoric (stressed or unstressed)

A: gut ich nehm die blaue bluse B: die meinte ich nicht  
 ‘ok I’ll take the blue blouse B: I didn’t mean that one’

#### NP + Clause construction

The demonstrative can be stressed but is often unstressed; it is largely obligatory, although the occasional use with a personal pronoun has been noted. See Altmann (1981) and also Miller and Weinert (1998/2009) for a discussion of terminology and analysis.

meine mutter die/\*sie kocht gut ‘my mother she cooks well’

### Vague, non-specific reference

Both personal and demonstratives can be used (mostly unstressed), but personal pronouns require some context.

#### Introduction (conversation opener)

die/??sie bauen ne neue brücke über die elbe ‘they are building a new bridge across the elbe’

### Anaphoric reference

#### Preverbal subject, first pronominalisation, continued reference

ich hab immer gesagt ich will ich wohn hier mit männern zusammen die sind unkomplizierter die sind nicht zickig  
 ‘I used to say I want I’ll share a flat with men they’re more easy-going they’re not catty’

#### Postverbal object and subject, preverbal object; first pronominalisation, continued and bridged reference

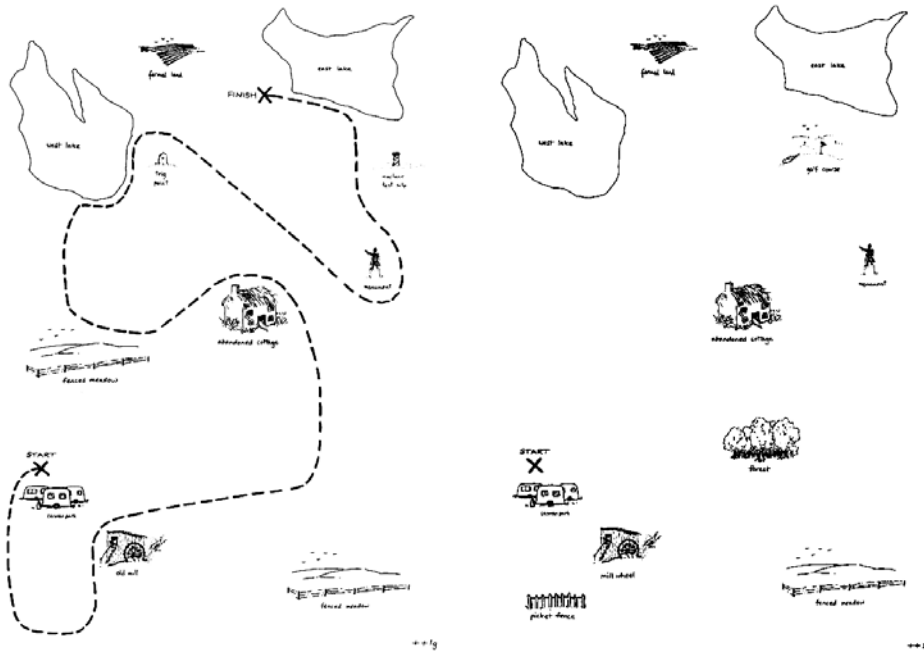
du haben wir denn die bilder schon fertig willst du die dann mitnehmen auf unserem computer oder sollen die einfach eh auf der kamera bleiben und die willst du denn selber überspielen  
 ‘listen have we got the fotos ready do you want to take them on our computer or should they just eh stay in the camera and you’ll then transfer them yourself [i.e.onto your own computer]’

#### Preverbal subject, first pronominalisation, continued reference; a personal pronoun in B would not seem felicitous, despite the subject role, suggesting a non-referential/interpersonal function of pronoun choice

A: die letzten tomaten die du geholt hast waren besser die waren fester B: die waren gut ne

A: ‘the last tomatoes that you bought were better they were firmer’ B: they were good weren’t they’

### Appendix 3: Map Task sample



Instruction Giver

Instruction Follower

### Appendix 4: English glosses of numbered examples\*

- (1) A: ich hab dir die neue brigitte mitgebracht  
'I have you the new brigitte [magazine] brought'
- (1a) B: die hab ich schon  
'Dem.Pro have I already'
- (1b) B: hab ich schon  
'ø have I already'
- (1c) B: \*sie hab ich schon  
'Pers.Pro have I already'
- (1d) B: ??sie ist gut  
'Pers.Pro is good'
- (2) hör mal du kennst doch safran ne  
'listen you've heard of saffron haven't you'  
hast du ja schon gegessen  
'ø have you Modal Particle already eaten'
- (3) A: und dann ist immer noch ein sind immer noch welche die die gelben noch mal rauspuhlen damit  
das wieder wertvoller wird  
'and then there is one there are some who pick out the yellow ones so that it  
becomes more valuable'
- B: ja gelb muß raus  
'yes yellow must be removed'

- A: ja schmeckt nicht so gut  
'yes  $\emptyset$  tastes not so good'
- C: nee sieht auch nicht gut aus vor allem mit nem horn  
'no  $\emptyset$  looks as-well not good Verb Particle especially with a horn'
- (4) A: südöstlich äh des aussichtspunktes habe ich n zaun  
'southeast eh of the view point I have a fence'
- B: mhm hab ich auch  
'mhm  $\emptyset$  have I as-well'
- (5) A: und wenn ich weiter die linie vom aussichtspunkt zur rui- aeh zum zaun  
gehe und die verlänger komme ich auf eine ruine  
'and if I continue to follow the line from the view point to the rui- eh to  
the fence and extend it I get to a ruin'
- B: die hab ich auch ja  
'that [the ruin] have I as-well yes'
- (6) B1: die palme hab ich ich hab aber noch n brunnen davor also ich hab  
die palme und links neben der palme ist n brunnen  
'the palm tree I've got but I've got a well before that so I've got the palm  
tree and to the left of the palm tree is a well'
- A1: ja den brunnen hab ich nicht aber  
'yes the well I don't have but'
- B2: den hast du nicht  
'that have you not'
- (7) B2: ich hab die ostsee  
'I have the east lake'
- A3: nee die hab ich auch aber da ist noch n westsee der westsee ist  
'no that have I as-well but there is also a west lake the westlake is'
- B3: nee die hab ich nicht  
'no that have I not'
- (8) A1: ähm also der startpunkt ist unten am toten baum  
'eh well the starting point is at the bottom by the dead tree'
- B1: äh  
'eh'
- A2: hast du den  
'have you that'
- B2: der ist unten beim äh toten baum  
'that is at the bottom at-the eh dead tree'
- (10) A1: ok ich hab diesmal ähm fang unten rechts an da ist n toter baum  
'ok I have this time ehm start bottom right there is a dead tree'
- B1: mhm  
'mhm'
- A2: das heisst ich hab n startpunkt drei zentimeter rechts vom toten baum  
'that is I have a starting point three centimetres to the right of the dead tree'
- B3: drei zentimeter rechts vom toten baum  
'three centimetres to the right of the dead tree'
- A3: ja  
'yes'
- B3: den hab ich nicht

- ‘that have I not’  
 A4: aha aber du hast den toten baum  
 ‘ah but you have the dead tree’  
 B4: ja  
 ‘yes’
- (11) A1: hast du die ruine  
 ‘do you have the ruin’  
 B1: ja  
 ‘yes’  
 A2: hast du auch  
 ‘ø have you as-well’
- (12) A: dann kommt pyramide flugzeug  
 ‘then come pyramid aeroplane’  
 B: hab ich nicht  
 ‘ø have I not’
- (13) A1: dann hab ich raketen  
 ‘then I have rockets’  
 B1: interessant hab ich auch nicht  
 ‘interesting have I also not’  
 A2: die hast du nicht  
 ‘those have you not’  
 B2: wo sind die  
 ‘where are those’

\*The glosses are intended to convey the content while retaining the German structures up to a point. Those clauses which contain the pronouns and zero (ø) under discussion have been glossed as precisely as possible.