

The Distribution of Downtoning Gestures: A Pilot Study

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Abstract

This paper deals with the distribution of downtoning co-speech gestures in German. On the basis of three types of video recordings (sports reports, talk shows, and parliamentary debates), it is investigated (1) how a number of downtoning gestures are distributed over these three types of settings, (2) to what extent their distribution differs from that of verbal downtoners, and (3) which factors may have influenced the distribution of the gestures.

Keywords: German; downtoning; headshake; intersubjective deictic; beat

Introduction

One of the typical features of spontaneous spoken German is the use of modal particles. These elements, such as *ja*, *denn*, *doch*, and *eben*, are used to add an (inter)subjective nuance to the utterance, in that they indicate the speaker's position vis-à-vis the content of the utterance, the expected hearer reaction, or the relation of the utterance to the context.¹ Following Waltereit (2006), this phenomenon of nuance adding is referred to as 'downtoning'.

However, modal particles are not the only elements which can be used for downtoning. Most work on other downtoners has focused on other lexical elements or morpho-syntactic structures, but analyses of particular gesture patterns, mainly belonging to the category of interactive gestures as distinguished by Bavelas et al. (1992), have shown that these can have downtoning functions as well. As for the headshake, for instance, it has been shown for English (e.g. McClave, 2000; Kendon, 2002) and German (Schoonjans, Feyaerts & Brône, in prep.) that it is often used in assessments and that it functions as an intensifier or as a marker of exceptionlessness. In that respect, it resembles the German particle *einfach*, which is also often used in assessments, functioning as an intensifier or marking that the described fact is, according to the speaker, obvious or the only way things could possibly be (Thurmair, 1989). The headshake thus has a downtoning function highly similar to that of *einfach*.

The headshake is not the only downtoning gesture in German, however. Others include so-called intersubjective deictics and beats. Intersubjective deictics are pointing gestures directed at the interlocutor, not in order to identify him as the referent of a second-person pronoun, but to show agreement with him. In this respect, its meaning can be paraphrased by 'as you know' or 'as you just said', which reminds of the typical meanings attributed to *ja* (marking

that something is known to the hearer, uncontroversial, or agreed upon) (Rinas, 2007). Beats, on the other hand, are typically said to emphasize the verbal utterance they accompany (McNeill, 2005): they make the utterance more prominent or more emphatic, or increase its illocutive force. Similar effects can be created by means of modal particles (e.g. *ja* and *eben* in assertions, *doch* and *bloß* in orders...).

This paper presents the results of a pilot study on the distribution of these gestures with downtoning function. After a short general overview of this distribution, a comparison with the distribution of verbal modal particles is undertaken, and the question is raised which factors may have influenced the distribution of the gestures. First of all, however, some methodological comments are called for.

Methodology

For this pilot study, three types of video recordings have been investigated: televised sports reports,² talk shows on television, and parliamentary speeches. In total, about ten hours of recordings were looked at, distributed more or less evenly over the three settings.

As for the identification of the gestures, it is important to note that complex gestures were included as well if one of their dimensions is one of the downtoning gestures under investigation. It is known at least since McNeill (2005) that gestures can indeed be complex, for instance a deictic with a superimposed beat. Such gestures were included in the count of the beats, as well as in the count of the intersubjective deictics provided that the deictic dimension is indeed to be interpreted intersubjectively (hence, it is possible that the same complex gesture is counted twice). Furthermore, note that in the case of the beats, beat sequences were counted as gestures, not every single up-and-down movement.

It is important to recall that this is a pilot study, conducted in order to get a view of which factors may influence the distribution of downtoning gestures. A verification of the described tendencies and their significance in a more extended and diversified data set, taking into account other downtoning gestures as well, still remains a desideratum. The goal of this pilot study is thus to give an overview of potential factors and lines of thinking to take into account in follow-up studies, not to present final results.

¹ See e.g. Thurmair (1989) and references therein for more elaborate introductions to modal particles.

² It is not actually the event reporting itself that has been analyzed, but rather interviews with athletes and experts just before and after the events and during the breaks.

Overall distribution

Regarding the overall distribution of the downtoning gestures, the difference between the parliament speeches and the televised material is striking: the politicians use more than twice as many downtoning gestures as the speakers in the television settings (3.58³ versus 1.11 in the sports reports and 0.97 in the talk shows). This number was even higher in the speeches that were broadcasted live on television (3.99 versus 3.17 in the speeches without live broadcasting). Similar distinctions can be made for the other data sets: the recordings from the more serious ARD talk show 'Beckmann' contain more downtoning gestures than those from the more informal ZDF-program 'Volle Kanne' (1.20 and 0.83, respectively), and the sports reports on ARD contain clearly more downtoning gestures than those on ZDF (1.46 and 0.80, respectively).⁴

Looking at the three gestures separately, it turns out that their distributions are rather different. The most striking observation is that headshakes are completely missing from the data with the highest number of downtoning gestures, i.e. the parliamentary speeches, although they are rather evenly distributed over the other two settings (0.54 and 0.64 in the sports reports and the talk shows, respectively). The beats show a tendency in the opposite direction: although not being absent from sports reports and talk shows (0.46 and 0.19 occurrences, respectively), they are far more frequent in the parliamentary speeches (3.47 occurrences). As for the intersubjective deictics, the difference across the settings is clearly less important: 0.11 in the sports reports, 0.14 in the talk shows, and 0.12 in the parliament speeches. In all these cases, the gesture under investigation is somewhat more frequent in the parliamentary speeches with live broadcasting when compared to the other speeches, and in the ARD shows and sports reports when compared to the ZDF programs.

Comparison with verbal particles

The importance of downtoning gestures in parliamentary speeches also becomes apparent when comparing with the amount of modal particles⁵: in the parliament speeches, the gestural downtonings clearly outnumber the verbal particles (3.58 versus 1.11 per minute on average, respectively), whereas the opposite image is found in the sports reports and talk shows (1.11 versus 1.46 and 0.97 versus 1.29, respectively). Therefore, the parliament recordings and the televised data will be treated separately in this section.

As for the talk shows, the amount of verbal particles used does not show a lot of variation: it fluctuates between 1.70

and 2.30, the average being 1.82 for ARD and 1.98 for ZDF. As for the gestures, the data are somewhat further apart, with the higher rate this time for ARD (cp. above). The sports reports show some more variation in the number of verbal particles, but still the image is largely the same: ZDF is slightly ahead of ARD when it comes to the particles (1.49 versus 1.43), whereas the ARD data contain slightly more gestures (cp. above). Within both data types, there also seems to be a tendency for the number of verbal and kinesic downtoners to evolve in parallel, but note that this does not hold across the data types (cp. below).

Looking at the individual particles in the television data, two interesting tendencies show up. Whereas most particles have similar frequencies in both ARD and ZDF data, the particle *einfach* is clearly more frequent in the ARD data (0.62 versus 0.19 in the talk shows and 0.78 versus 0.32 in the sports reports), whereas the particle *ja* is used more frequently in the ZDF materials (1.21 versus 0.61 in the talk shows and 0.66 versus 0.18 in the sports reports). Interestingly, similar tendencies can be found at gesture level. This is most apparent for the headshake, which was said above to be closely related to *einfach*: just like the particle, it is clearly used more often in the ARD data (0.88 versus 0.49 in the talk shows, and 0.61 versus 0.32 in the sports reports). As for the intersubjective deictics, which are closer to *ja*, the tendency found at the verbal level is reflected at the kinesic level at least in the talk shows, the ZDF data containing more intersubjective deictics than the ARD recordings (0.20 versus 0.06). In the sports reports, on the other hand, ARD is ahead of ZDF in the use of intersubjective deictics (0.16 versus 0.06), which reflects the higher overall number of downtoning gestures in the ARD data rather than the more frequent use of *ja* in the ZDF data.

Turning to the parliamentary speeches, it is clear that they show a lot more variation: the amount of verbal particles used varies between 0.12 and 2.17, and the gesture rates go from 0.83 to 8.94. When comparing the live broadcastings to the other speeches, it turns out that the live broadcasted speeches contain more downtoners at both the verbal and the kinesic level (1.27 and 3.99 on average, respectively, versus 0.95 and 3.17 for the non-broadcasted speeches). Looking at the individual recordings, however, there does not seem to be a tendency that more verbal downtoning implies more kinesic downtoning or vice-versa: parliament speakers tend to use more downtoners in speeches with live broadcasting, but this increase is not necessarily found at both the verbal and the kinesic level.⁶

One final remark has to be made, however. It has been indicated before that headshakes are completely missing from the parliamentary speeches, and that there seems to be a correlation between the use of headshakes and the use of the particle *einfach*. It seems that this is a kind of downtoning politicians hardly use (at least in the investigated speeches): not only headshakes are missing, but the particle *einfach* is also relatively less frequent in the

³ All frequency indications are averages per minute.

⁴ Claims about the channels are valid only for the programs included in the data set, of course; it remains to be seen to what extent they can be extrapolated as general claims about these television channels.

⁵ For this study, seven particles were counted which at the functional level are to some extent related to the gestures under investigation: *denn*, *doch*, *eben*, *eigentlich*, *einfach*, *halt*, and *ja*.

⁶ Note that there is no support for Zima's (2011) claim that modal particles are more frequent in non-broadcasted speeches.

parliament speeches than in the television data (8.16% of the particle attestations in the speeches, versus 18.23% in the talk shows and 36.63% in the sports reports⁷).

Explaining the distribution

At this point, one may wonder which factors can be referred to in order to explain the observed distribution of the downtoning gestures. One potential (part of the) explanation has been hinted at in the previous section: the amount of downtoners in general, i.e. verbal or kinesic.⁸ That is not the entire story, however: the remainder of this paper gives an overview of some other factors which may play a role.

Idiosyncrasies

A question which is often raised, especially by natives, is to what extent the use of downtoning gestures is idiosyncratic. At least for the three gestures included in this study, it seems that they are not mere idiosyncrasies: each of them is used by different speakers and in at least two different settings in the data set, and I have also witnessed other speakers performing them.

This is not to say, however, that personal factors cannot play a role. Just as every individual has its own language, using particular words and expressions more often than others, gesture is to some extent individual as well: some people gesture more than others, and the gesture inventories different people have need not be identical. This is also reflected in the political speeches under investigation: Josef Cap and Heinz-Christian Strache have a highly resembling particle use (1.35 and 1.40 particles per minute on average, with no significant differences at the level of individual particles), but the amount of gestures used is more divergent (5.31 and 4.14, respectively). Hence, personal 'preferences' do certainly play a role, but the use of the gestures under investigation is not purely idiosyncratic.

In this respect, it should be added that external factors can influence the personal gesture use. It cannot be excluded, for instance, that the television hosts and politicians had some training in efficiently speaking in front of an audience or a camera, and that the attention paid to and the remarks made about gesture in those trainings were different, resulting in different gesture usage by the speakers. Similarly, the television producers or channels may have different policies regarding gesture. On the other hand, regional background of the speakers may also play a role, as the regional distribution of the gestures may differ (this remains to be investigated, however). All these factors could not be taken into account for the present pilot study, but it should be clear that although gesture use may differ across people, one

⁷ The absolute frequencies per minute are 0.53, 0.35 and 0.09, respectively. These figures are less telling, however, because the total amount of particles per minute also differs across the three data types.

⁸ In order to get a complete view, other multimodal channels which may be used for downtoning, such as mimicry and prosody, should also be taken into account. That was not possible, however, within the scope of this pilot study.

cannot simply claim that the distribution of the gestures is merely due to idiosyncrasies.

Gesture meaning/function

Just as with verbal elements, the distribution of the gestures is also steered by the meanings they convey. As an example, recall that the headshake and the particle *einfach*, which have closely related functions, are both clearly less frequent in the parliament speeches than in the television materials. This may be an indication that this downtoning function, termed 'subjective obviousness' by Thurmair (1989) for the verbal particle, is simply less common in parliamentary speeches, and thus also expressed less frequently, be it at the verbal or the kinesic level. The reason may be precisely the subjective nature Thurmair indicates: what is obvious to the speaker need not be obvious to anyone else and may thus be less convincing as an argument in a political discussion.

On the other hand, the fact that beats are far more common in the political speeches than in the television materials (cp. above) may also be related to their function. As indicated in the introduction, beats are typically used to emphasize an utterance. This is typical for debates and parliament discussions, when there is another party disagreeing with what is argued for. More generally, beats are typically used when the agitation is bigger, which typically is the case in parliament speeches rather than in sports reports or talk shows.⁹ Hence, this factor may also play a role for the distribution.

Physiological factors

Purely physiological factors may also play a role for the gesture distribution. As indicated by Bohle (2007), speakers are less likely to perform hand/arm gestures when carrying out another action while speaking, simply because they do not have their hands available for gesturing because of the other action they are carrying out. In the materials under investigation, it is rarely the case that speakers are doing other things while speaking, but in the television recordings, it sometimes happens that they are holding something in their hands making it harder to perform an intersubjective deictic or a beat. In the sports reports, for instance, speakers are most of the time holding their microphones themselves, making gesturing at least with that hand harder. To what extent this has influenced the data listed above is hard to tell, as one cannot simply assume that the speakers would have gestured if they could, but it certainly is something to take into account when studying gesture distribution.

Combination with other gestures is also a factor to take into account in this respect. As indicated before, the lack of headshakes in parliamentary speeches may be due to its function, but it may also be the case that the prominence of beats in this genre plays a role. Beats are typically vertical up-and-down gestures, whereas a headshake is a horizontal

⁹ Note that the talk shows were not discussion programs with real debates, which more closely resemble parliamentary discussions and may thus contain more beats.

movement. It is not impossible to perform a horizontal movement with the head while moving the hand(s) on the vertical axis, but this is harder than moving both head and hands in the same direction. Therefore, it is less likely to see a speaker shaking his head while performing a beat, which may also be part of the explanation for the lack of headshakes in the parliamentary speeches.

Setting factors

As a final point, it should be indicated that aspects of the setting may also influence the gesturing behavior. In more formal and stiff settings, for instance, speakers may be less likely to perform outspoken downtoning gestures. Similarly, just as modal particles are more typical of colloquial speech than of more distant conversation settings, downtoning gestures may be more typical of more colloquial settings as well. However, this hypothesis is not supported by the data: on the cline 'talk shows – sports reports – speeches', the amount of particles decreases from left to right, whereas the amount of downtoning gestures increases. This could support the opposite claim that in settings in which it is less appropriate to use verbal downtoners, speakers more often recur to kinesic means for downtoning. As indicated before, however, further investigation is required here.¹⁰

It cannot be excluded that other setting factors play a role as well. The downtoning headshake, for instance, is often rather subtle, with a less outspoken amplitude than the negating headshake, which makes it harder to see from a distance. In this respect, it may also be rather useless to use it in parliament, as most hearers will not even notice it. On the other hand, one may wonder to what extent politicians are (consciously or unconsciously) aware of this and have their gesture usage guided by it, especially since it is well-known that speakers also gesture on the telephone, where the hearer certainly cannot see them. Again, further investigation is needed, but one probably should not overestimate the importance of this factor.

Another factor, which may be of more considerable importance, is the degree of interaction. The talk shows and the sports reports contain truly interactional, dialogic conversations, whereas the parliamentary speeches are monologues. Furthermore, the speeches are usually better prepared than the other conversations. This is not unlikely to play a role as well, as an anonymous reviewer suggests. However, the question arises to what extent the aforementioned meaning factors are involved here. If headshakes are rare in parliamentary speeches, this may be because they are specifically functional within interactional contexts, but this itself may be due to the meaning of the headshakes, which is less likely to occur in such well-prepared monologues (cp. above). If a particular meaning is less likely to occur within a particular context, than so are the (verbal and kinesic) forms conveying this meaning. It may be that the degree of interaction and preparation

¹⁰ The factor of live broadcasting in the case of the parliament speeches may be related to this; here as well, further investigation on the precise role of this factor is needed.

directly affects the distribution of the gestures, but it seems that the meaning factors mentioned above should not be lost track of when studying the role of the setting.

Conclusion

This paper presented the results of a pilot study on the distribution of downtoning gestures in three types of settings: sports reports, talk shows, and parliamentary speeches. It was illustrated how the gestures are distributed over the three types of recordings and how this aligns with the distribution of verbal downtoning particles. Furthermore, a number of factors were listed which may have influenced the gesture distribution.

It should be clear that this was just a pilot study, based on a restricted data set and taking into account only a restricted number of particles and gestures. Therefore, the claims made above all have to remain to some extent hypothetical and one has to be reluctant in determining the significance of the figures listed above or in generalizing them, as a verification in a larger data set remains a desideratum.

It also remains to be verified which role the factors listed eventually play and how they interact. It cannot be excluded, furthermore, that still other factors play a role as well. The goal of the present pilot study was mainly to show that there are interesting patterns in the distribution of verbal and kinesic downtoners, and to give an overview of potential factors explaining the distribution of the downtoners, as an onset for further research.

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