

Jana Ningelgen and Peter Auer*

Is there a multimodal construction based on non-deictic *so* in German?

DOI 10.1515/lingvan-2016-0051

Received August 1, 2016; accepted October 25, 2016

Abstract: The existence of multimodal constructions is highly disputed. One of the most straightforward examples of such constructions includes deictics, among them the German manner adverbial *so* ('like this') (cf. Stukenbrock 2014a, Take the words out of my mouth: Verbal instructions as embodied practices. *Journal of Pragmatics* 65. 80–102, 2015, *Deixis in der Face-to-Face-Interaktion*. Berlin, München & Boston: De Gruyter), whose deictic use requires a constellation of grammatical, prosodic and gestural as well as gaze-related features. While this multimodal construction is uncontroversial, this paper tests (and refutes) the broader claim that German *so* is regularly accompanied by gestures (Streeck 2002: 582, Grammars, words, and embodied meanings. On the evolution and uses of *so* and *like*. *Journal of Communication* 52(3). 581–596). We show that non-stressed, non-deictic *so* can but need not be coupled with an iconic gesture and hence doesn't qualify as a multimodal construction.

Keywords: multimodal constructions, non-deictic *so*

1 What is a multimodal construction?

Attempts to extend the idea of construction grammar into the multimodal domain have been made by various researchers; the bulk of construction grammar research, however, is still restricted to verbal language, and the question of whether multimodal constructions exist at all remains disputed (see Zima 2014a, and the introduction to this volume for an overview). The answer depends not least on the chosen criteria for constructionhood. In our view, a multimodal construction needs to obey the criteria for constructions in general. This means that verbal and gestural components each have to play an essential, not only accidental role; unless special contextual conditions hold, leaving out either of them would lead to the construction becoming unrecognizable or meaningless. By 'non-accidental' we do not only mean that the co-occurrence of the gesture with some linguistic structure should not be by chance; we also want to exclude the possibility of a statistically significant co-occurrence of gestures and language that is conditioned by a third factor. For instance, verbal greetings may co-occur with hand shakes in a significant way. Both however are only 'accidentally' linked to each other by the fact that the interacting person wants to greet somebody and uses different resources to do so. Neither does the handshake need a verbal greeting nor the verbal greeting a handshake. The same intention behind both forms of greeting – verbal and bodily – is not sufficient to speak of a construction, as constructions are part of language, and not defined by the intention of the interacting person. In addition, most construction grammarians accept the postulate that the meaning of the construction should not be a composite effect of the meaning of its parts (non-compositionality principle). In a weaker version of CG, this second requirement is relinquished if the particular constellation of verbal and visual features that are thought to constitute to a construction must at least co-occur highly frequently, which is seen as evidence for the entrenchment and separate storage of that construction. Finally, construction grammar is a theory of language-related knowledge, not of language use. Hence, the co-occurrence of the verbal and the gestural component of a multimodal construction must be part of linguistic knowledge; it should be retrievable under adequate experimental conditions or

*Corresponding author: Peter Auer, Albert-Ludwigs-Universität Freiburg, Freiburg im Breisgau, Baden-Württemberg, Germany, E-mail: peter.auer@germanistik.uni-freiburg.de

Jana Ningelgen, Albert-Ludwigs-Universität Freiburg, Freiburg im Breisgau, Baden-Württemberg, Germany

05 hat er so ne [piLotensonnen[brille?
 he has like pilot's sun glasses?

06 [((same iconic gesture, attenuated))

07 B: [mmh,

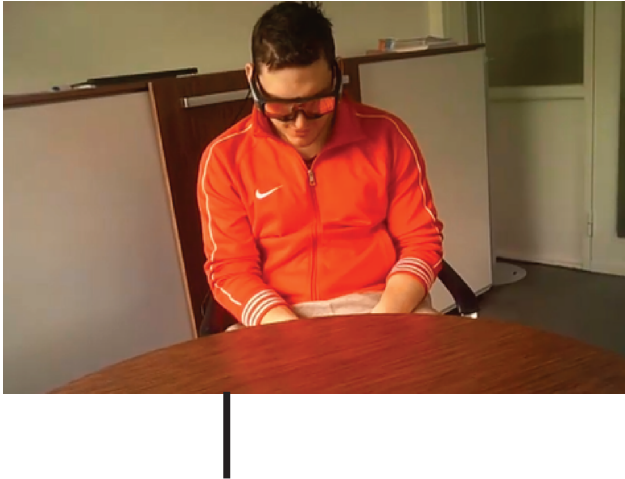
08 A: dann hat_er [HIER so: (.) äh:: so PAPP]
 then he has here like (.) uhm like cardboard

09 [((gesture: ,put in from above`))]
 dinger reingeschoben,
 things put in,

10 [von Oben,
 from the top,

11 B: [((laughter))

12 → A: und dann SCHLÄFT er SO;
 and then he sleep like this;



13 ((enacts sleeping position; slight snoring noise, ca. one second duration))
 14 <<laughing>hn hn> (-)
 15 und die: die stEwardess bringt dann irgendwas VOR?
and the: the flight attendant raises an issue?
 ((etc.))

In line 12, *SO* is used as a deictic adverb in sentence-final, rhematic position, i. e. under focus accent. Right after its production, the speaker enacts the way in which the hero of the movie is sleeping: he snores and has his head lowered. Since this deictic *SO* is coupled with an enactment, the speaker cannot look at it, as it is performed by his own body – the domain of reference for the deictic *SO* is the performing body (as Stukenbrock 2014b says). The last feature of the multimodal *so*-construction (speaker's and hearer's gaze at gesture) is therefore absent. Yet the main defining feature of a multimodal construction is fulfilled: without the gesture, the *SO*-construct would be meaningless.

The data collection used in this paper consists of 338 cases of so as used in two dyadic face-to-face interactions, each of roughly 60 minutes duration, between two male participants. Participants were sitting opposite each other around a table in an office, i. e. they were not engaged in bodily activities. Their gaze was therefore by and large free to monitor each other. Both wore SMI eye-tracking glasses and were additionally recorded with an external camera. For the recording of the data, we used SMI's

recording software iViewETG. The scan path videos were exported using the software BeGaze and then analyzed in ELAN.

With 338 occurrences in ca. 120 minutes of talk, *so* is one of the most frequent words in German. However, in this corpus, we only found three examples of the deictic *SO* construction, which is partly due to the fact that the lack of empractic involvement by the participants and their engagement in displaced speech (mostly they talk about movies they have seen) does not provide an occasion for deixis. The huge number of non-deictic occurrences of *so* raises the question of whether tokens of *so* that do not satisfy the above conditions are also accompanied by gestures in the same systematic way as the deictic ones. If this were the case, an additional, non-deictic multi-modal *so*-construction could be posited.

In his multimodal analysis of German *so*, Streeck (2002: 582) indeed argues for such a wider *so*-constructional scheme, making the following claims:

- 1) *so* in general, i. e. without further functional and formal distinctions, is “typically coupled” with an iconic gesture (which means at least with higher-than-chance frequency);
- 2) the speakers, by using *so*, look at their hands and thereby also direct their interlocutors’ visual attention at their hands (2002: 582);
- 3) not only is *so* in German typically associated with a gesture, but also “when Germans depict the world with their hands as they talk – when they make descriptive (iconic) gestures – they almost always utter *so* in the process” (2002: 581). In other words, *so* and gestures are coupled to each other bidirectionally: in most cases, neither occurs without the other.

The *so* Streeck has in mind is clearly not (or not only) the deictic *SO* described above, as can be seen from the following of his examples:

(2) (from Streeck 2016; translation JN/PA, original transcription)

- 01 Dirk Also ich hatte – ich hatte letztens w- irgendwo a äh
Well I had- the other day I had somewhere u uhm
- 02 äh ähm aufm Arbeitsamt? oder (.) was das war.
uh uhm at the job center? or (.) whatever it was.
- 03 → Da hatte ich ge- äh äh • mal **son son son son • son son**
~~~~~
- 04 Merkblatt äh inner Hand?  
*There I had uh uh • like a like a like a like a • like a like a leaflet uh in my hands?*

The gesture performed during the bracket is that of an ‘open book’, i. e. the speaker raises both hands open palm up and puts them together. During the ~~-phase, he also looks at his own hands. The gesture relates to the semantic content of the noun phrase *son Merkblatt inner Hand* /‘like a leaflet in my hands’. (*Son* is a contraction of *so* and the indefinite article *ein*.)

*So* in this example is not deictic in the sense of ex. (1). Not only does it occur in a different syntactic environment (in the beginning of a noun phrase, whereas it modifies a verb in ex. (1)), it is also unstressed. Instead of drawing the recipient’s attention to the quality of the film hero’s behavior which is enacted by the speaker subsequently, as in the first example, *so(n)* here is part of an elaborate hesitation phase during which ‘Dirk’ is searching for the right noun (*Merkblatt* /‘leaflet’). It functions as a hedge or vagueness marker which indicates that the description of the object is perhaps not the best one that could be given and that the recipient might need additional information (perhaps provided gesturally) in order to recognize the kind of object in question. Although *so* is not used deictically here, Streeck claims that “ohne eine Handgeste ist dieser Satz ungrammatisch und unverstehbar” (‘without a hand gesture this sentence is ungrammatical and unintelligible’, 2016: 62), i. e. it is, in his opinion, as closely linked to a gesture as the deictic *so* in extr. (1) is linked to the performance.



A similar but weaker claim about non-stressed *so* has been put forward by Fricke (e. g., 2014: 1793–1800, 2015: 62–69) who analyzes pre-nominal *so(n)* as an article used for adjoining a gesture in attributive function to a noun (“multimodal attribute”). She speaks of a “deictic denoting a quality” which “obligatorily requires a qualitative description”, which can be “instantiated either verbally or gesturally” (2014: 1794). Fricke’s approach hence makes no prediction whether the gesture should occur systematically or overwhelmingly with *so*. However, her analysis also equates unstressed with stressed *so* (both are deictics for her) and at least indirectly implies a construction including unstressed *so(n)* and explicitly a subsumption of this *so(n)* plus its accompanying gesture under the general attributive construction of German.

In the following we will argue against the equation of deictic (stressed) *SO* (as in ex. 1) and unstressed *so* (as in ex. 2), and against the constructional status of the latter. As already pointed out, unstressed *so* is responsible for the large majority of instances in our data, among them two instances in extr. (1) (lines 03/05 *so ne Pilotenbrille/so ne Pilotensonnenbrille* and lines 08/09 *so Pappdinger*). The meaning oscillates between that of a vagueness marker and that of a focus marker (cf. Wiese 2011, 2012: Ch. 2.8.), sometimes clearly instantiating one or the other function (as in (3a) and (3b)), sometimes combining them both (as in (3c) and (3d)). The syntactic position, in which this *so* occurs, can be the one before a noun, but it can also occur before any other constituent which is the topic (rheme) of the sentence (as in (3a)). Finally, *so* cannot be an article as it can also be used in the slot before an article (as in (3d), also cf. (5a & c) below):

(3) Examples for non-stressed (non-deictic) *so*

- (a) predominantly a vagueness marker, before non-nominal predicate:

(TT11, 3:24)

ein paar jahre SPÄter, brIan ist ungefähr **so** fünfundZWANzisch? (...)  
*a few years later, Brian is about LIKE twenty-five? (...)*

- (b) predominantly a focus marker, before a verb and a noun phrase:

(TT11, 4:31)

und dann hat der natürlich in seinem MANTel drin, (.) den er dann **so** AUFmacht,  
 dann **so** bärte für die FRAUen, alles MÖgliche,  
*and then he has of course in his coat, (.) which he LIKE opens, LIKE beards for the women, all sorts of things,*

- (c) in-between vagueness and focus marker, before a noun phrase:

(TT11, 3:22)

da war halt **son** HEiligenschein obendrüber;  
*there was LIKE a halo on top of it;*

- (d) in-between vagueness and focus marker, before a noun phrase (first occurrence) and before a verb phrase (second occurrence):

(TT11, 20:19)

da konnte man aber hinten auf **son** KNOPF drücken; und dann sind halt VORne **so**; (.)  
 die STAcheln rausgekommen;  
*but in the back you could press LIKE a button; and then in the front LIKE (.) the spikes came out;*

A full analysis of the functions of *so* as a focus/vagueness marker is beyond the scope of this paper. *So* in these examples corresponds with colloquial engl. *like* which is used in very similar ways (cf. Meehan 1991, who traces the meaning of *like* as a vagueness marker back to fourteenth century uses with the meaning ‘approximately’ and also describes the development/grammaticalization from vagueness to focus marker).

Unstressed *so* as a vagueness and/or focus marker is responsible for 178 out of the 338 tokens in our corpus (~53%). The remaining cases of *so*, which are neither deictic nor vagueness/focus markers, are cataphoric/anaphoric uses, degree constructions of the type *so* ADJ *dass* ‘so ADJ that’, emphatic

constructions, mainly with evaluative adjectives, TCU-final *so*, and *so* as a quotative. (For further analysis, cf. Auer 2004; Thurmair 2001; Ehlich 1987; among others.) With the exception of the quotatives, these uses are never coupled with an iconic gesture. Quotative *so*, which accounts for appr. 13 % of the data, is closely related to *so* as a focus particle and often, but by no means in the majority of cases, introduces a “body quote” (Streeck 2002); it is always unstressed. TCU-final *so* has various functions; it can be a postpositioned focus/vagueness as well as a terminating (TCU exit) particle. The deictic adverbial *SO* can also occur TCU-finally, as in extr. (1), if the focus constituent is sentence-final. For reasons of space, we cannot analyse these functions of *so* here and will restrict ourselves to the (by far) most frequent case of TCU-internal *so* as a focus/vagueness marker preceding the constituent in its scope.

### 3 Why *so* as a vagueness/focus marker is not part of a multimodal construction

In this section, we will have a closer look at Streeck’s hypotheses.

First, we ask whether Streeck’s claim (3) is true that German speakers “almost always” use *so* when they produce an iconic gesture. In our data collection, a total of 229 iconic gestures were found. Only about a quarter of them (27.5 %) co-occur in reasonable closeness of *so* (three of which are deictic, the remainder vagueness/focus markers or quotatives). The chance for an iconic gesture to occur without *so* is therefore much higher than the chance of the two co-occurring. Streeck’s third claim is therefore clearly wrong. We will further discuss the relationship between gesture and gaze below.

Let us now consider the opposite case (Streeck’s claim (1)). Of 288 unstressed cases of *so*, 60 are coupled with an iconic gesture (29.8 %). We followed McNeill (1985: 354) in defining “an iconic gesture [as] one that in form and manner of execution exhibits a meaning relevant to the simultaneously expressed linguistic meaning. Iconic gestures have a formal relation to the semantic content of the linguistic unit. The signifier part of the symbol is formed so as to present an image of the signified part.” According to our count, one out of three *so*-tokens with vagueness and/or focus function are not accompanied by an iconic gesture. We therefore have to conclude that Streeck’s first claim is also wrong. This result should be held against the fact that there is no case of stressed (deictic) *SO* in our or Stukenbrock’s (2015) data that is not coupled with an iconic gesture or bodily performance by the speaker.

Let us have a closer look at those cases of *so* as a vagueness and/or focus marker that are not accompanied by an iconic gesture first. In the majority of these cases (86 out of 136), the speaker does not gesture at all (see examples in (4)). His arms and hands are in rest position.

- (4) Unstressed *so* without an iconic gesture in which the speaker’s arms and hands are in rest position (subscripts mark the beginning of the gestural apex, shown in the still, or the various phases of the gesture during its course of production if more than one still is shown)

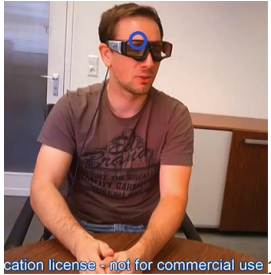
- (a) (TT11, 14:27)

und? (.) wie sahen die *so*<sub>1</sub> AUS, die typischen (.) SEXshopgänger?  
and? (.) what did they *LIKE* look like, those typical (.) sex shop goers?



(b) (TT11, 18:10)

irgend **so**<sub>1</sub> ne komische RUSSin:-  
*some LIKE strange Russian woman-*



In a smaller but still substantial part of the data set (34 examples), the speaker does perform a gesture. But this gesture is not iconic, but metapragmatic (see (5)):

(5) Unstressed *so* with a metapragmatic gesture (the duration of the gesture is shown underneath by squared brackets)

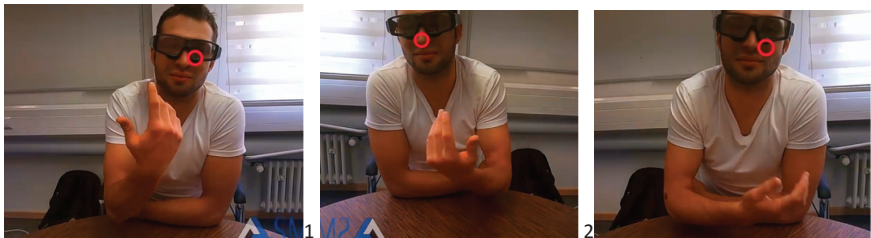
(a) (TT11, 02:53)

BRIan liegt im nescht? Und ISCH halt **so**<sub>-1</sub> (-) der verwEchselte messSIas?  
 [-----]  
*Brian is lying in the nest? and he is LIKE (-) the mistaken messiah?*



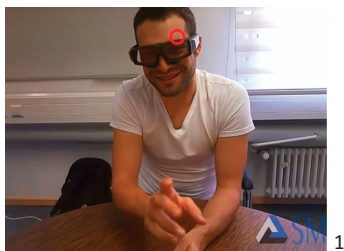
(b) (TT11, 15:55)

Zur nO:t einfach Irgendwas **son**:<sub>1</sub> (-<sub>2</sub>-<sub>3</sub>-) blatt paPIER in\_n mund nehmen;  
 [-----]  
*if need be simply take something LIKE a; (---) sheet of paper in your mouth;*

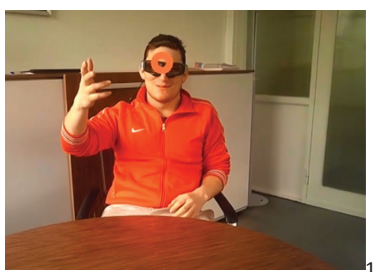


(c) (TT11, 06:36)

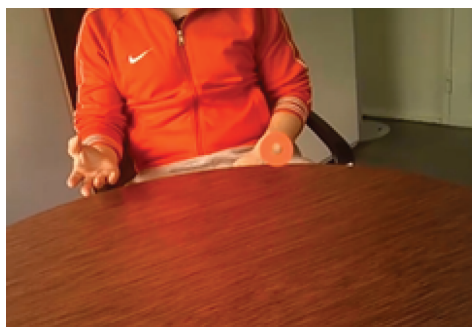
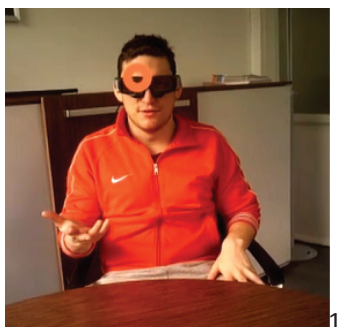
det des is **so** der<sub>1</sub> (-) versteckte WORTwitz bei monty phython,  
 [-----]  
*this this is LIKE the (-) hidden verbal wit in Monty Python's,*



- (d) (TT7, 10:23)  
 das sieht au<sub>1</sub>s wie **so** sechzehntes jahrHUNdert oder so.  
 [-----]  
 it looks like *LIKE* sixteenth century or so.



- (e) (TT7, 23:23)  
 der\_s<sub>1</sub> **so** HÜHNchenkoch u:nd schreibt **so** KO<sub>2</sub>Chbücher?  
 [-----] [-----]  
 he's *LIKE* a chicken cook and he writes *LIKE* cooking books?



The non-iconic gestures that occur with or around *so* can have various forms and functions, and it is by no means clear that they are linked to the particle. For instance, the gesture in (a) seems to be a presentational gesture, and the speaker in (c) performs a pointing gesture; both can be seen to emphasize the speaker's point as expressed in the utterance's focus. But in most cases (as in (b), (d), (e)), the gestures are variants of one particular gesture type which we might call a 'vagueness gesture'. It is usually one-handed, with open hand, palm up or more often lateral. It involves a fast or slow movement, first of opening and outward movement of the palm of the hand, but sometimes also an upward movement of the arm (as in (d)), and then a return into rest position. Sometimes it is accompanied by a shrug (see below, extr. (7); cf. Streeck (2009: 191) on shrugs as metapragmatic gestures). Kendon uses the term "pragmatic" for this type of gesture (2004: 281), but "metapragmatic" seems more adequate (cf. Silverstein 1993; Streeck 2009: 179). The gesture modulates (sometimes enforces, sometimes attenuates)

the verbal utterance by expressing in our case the epistemic stance of the speaker: he contextualizes his own words as an approximation and hence indicates the vagueness and perhaps lack of precision or adequacy of it. It is a gestural equivalent of a verbal hedge such as *ungefähr* ‘approximately, roughly’, and corresponds with one of the functions of *so*. Metapragmatic gestures occurring in similar contexts of word and concept search have been described by Ladewig (2011) (a cyclic movement of one hand from the wrist without movements of the arm).

This meaning of the gesture can be illustrated on the basis of the following extract in which it co-occurs both with *so* and *ungefähr* and is performed in a particularly elaborate version:

(6) (TT07, 9:03) ((extract from a re-telling of a scene from „Django Unchained“))

- 01 A: dann erZÄHLT er halt so (-) dass\_er halt ÄH:; (.) KOPFgeldjäger isch, [...] *then he says LIKE (-) that he well uhm; (.) is a headhunter, [...]*  
 02 U::ND ä:hm; ((gulps)) ((clicking sound))ÄH:; *a::nd uh:m; uh:;*  
 03 → ja=dass er halt **so** seit UNgefähr;<sub>1-6</sub> (.) *[-----]*  
     *yes that he LIKE for roughly; (.)*  
 04 und dann SAGT er halt so; (.) *and then he says like; (.)*  
 05 stimmt des dass er so anderthalb JAHre hier sheriff war und so— *is it right that he was the sheriff here for LIKE one and a half years and so on—*



In this extract the speaker obviously is in trouble summarizing the facts and bringing them into a narrative order. Various hesitation phenomena co-occur with *so* as a vagueness marker. The vagueness gesture occurs in line 03 during the bracketed section while the speaker says *dass er halt so seit ungefähr* (‘that he has for roughly ...’). It is clearly linked to the hedging adverb ‘roughly’, but it might also be linked to *so* which occurs immediately before. The gesture itself is here realized in its full, non-abridged form. The opening of the hand with the fingers spread and stretched out at the apex of the gesture is followed by the opposite movement of closing of the hand. The hand and arm are raised from rest position almost up to the speaker’s shoulders and then returned to rest position. (More examples of *so* as a vagueness/focus marker occur in lines 01 and 05 of this extract, in the latter case also accompanied by a vagueness gesture.)

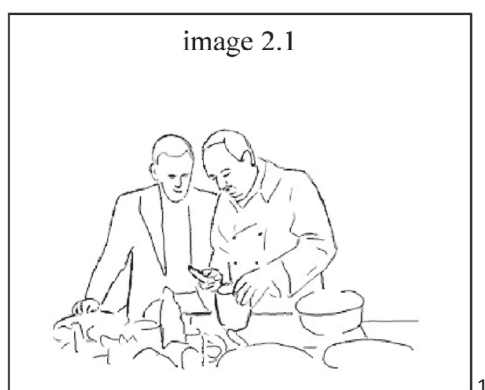
The fact that these non-iconic gestures often occur in the neighborhood of *so*, rather than being evidence for the constructional coupling of the two, should be seen as an indirect effect of both the particle’s and the gesture’s position and function within the processes of hesitation and non-optimal



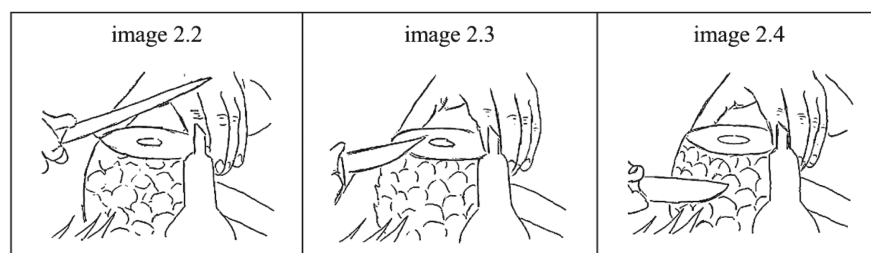
referential description in which the speaker is engaged. These contexts seem to trigger both the metapragmatic gesture and the use of *so* as a vagueness marker.

While the majority of *so*-tokens as vagueness and/or focus markers are not accompanied by an iconic gesture, we also found 54 cases in which there is an iconic gesture which may be related to the part of the utterance which is in the scope of *so*. We will now discuss these examples together with Streeck's second claim, i. e. that speakers look at their *so*-accompanying gestures. Before entering this discussion, we should point out that the verbal scope of *so* and its relationship with a gesture is often hard to establish. This is not just a methodological issue, it is also an important difference between *SO* as a deictic and *so* as a vagueness/focus marker. In the former case, the manner-deictic *SO* either has no scope in the sentence (as in ex. (1)), or it modifies the subsequent adjective, noun or verb. For instance, in the following extract from Stukenbrock (2014a: 87), *SO* modifies the following verb *abschälen* 'to peel'. The coupling of gesture and talk is tied to this exact position. Often speakers even wait to perform the relevant action of presenting or performing exactly at this appropriate point in time in the utterance production:

(7) (from Stukenbrock 2014a: 87)



K2: und<sub>1</sub> wenn man die jetzt mitdem MESSer schneidet,  
and if you want to cut it now with a knife,



→ Muss man al<sub>2</sub>so **SO**<sub>3</sub> Abschä<sub>4</sub>len,  
you have to peel it like this,

The speaker, a cook demonstrating the way to peel a pineapple, prepares for his action in such a way as to be able to perform the peeling action exactly when he utters *SO*.

In the case of unstressed *so* as a vagueness/focus marker, this temporal alignment is much more flexible, and the link between gesture and language much less tight and more indirect. For instance, in the following extract, it is quite unclear (and perhaps a futile question to ask) which part of the verbal utterance the complex gesture is associated with.



(8) (TT07, 39:53)

und dann kann er<sub>s1</sub> IHR<sub>2</sub> quasi:: n also s<sub>s3</sub> **so** ne STEILvorlage

[-----]

dass er<sub>s4</sub> IHR quasi in die<sub>5</sub> schUhe schieben könnte;

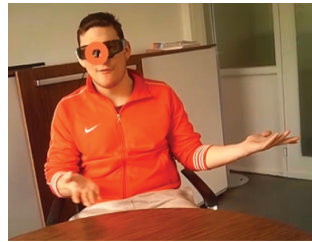
-----]

*and then he can quasi set her well it's LIKE an invitation that he could quasi set her up for it;*

1



2



3



4



5

The complex gesture is iconic in the sense of depicting the 'position' of 'her' as opposed to 'him', i. e. the person who could 'set her up' (cf. stills 2 and 4). (The gesture is egocentric, i. e. the speaker takes his own body to stand for that of the hero, who is 'here', while the hero's antagonist is 'there', away from the speaker-hero; for this specific case of deixis at the phantasm cf. Stukenbrock 2014b). At the same time, parts of the gesture are metapragmatic; the open hand gesture that can be seen in stills 1, 3 and 5 is a variant of the vagueness gesture, here done with both hands.

Much more plausible than linking the *so* in this utterance to a specific gesture, the complex gesture should be seen as being related to the entire utterance, i. e. the idea of 'setting her up for it' (*es ihr in die Schuhe schieben*). Verbal elements of the utterance (*so* and *quasi*) just like gestural elements (the vagueness gesture) metapragmatically contextualize the entire utterance, the meaning of which is conveyed by the verbal description in combination with the gestural depiction. *So* as a vagueness marker is functionally equivalent to the metapragmatic vagueness gesture. In sum: deictic *SO*, like all deictics, establishes a precise link between language and a non-verbal component (in the case of *SO*, by pointing to/depicting/performing a quality), but *so* as a vagueness/focus marker cannot do this job.

Let us finally consider the role of gaze and Streeck's hypothesis 2. Gaze is definitely a central component of the multimodal "package" including deictic *SO* (see Stukenbrock 2014a, 2015). Part of this multimodal deictic construction is that both speaker and recipient look at the gesture which is linked to the deictic word. The speaker uses eye-gaze at the gestures to "put them in the attentional spotlight" (Cienki et al. 2014: 358; also cf. Streeck 1993). The recipient, in turn, displays his or her attention to the gesture by looking at it as well (even though s/he may be able to perceive the gesture in peripheral vision without focussing on it; cf. Gullberg and Holmqvist 2006: 25). The sequence of speaker's gaze followed by recipient's gaze is sequentially ordered, enabling the speaker to use the recipient's gaze as a next-action proof procedure. With this constructional package around stressed (deictic) *SO* in mind, we can now ask whether *so* as a vagueness/focus marker functions in the same way.

Among the 60 cases in which the speaker produces an iconic gesture during or in the vicinity of unstressed *so*, the speaker alone looks at his gesture eleven times (18 %), the recipient alone three times (5 %); in four instances, both speaker and recipient look at the gesture (7 %). In the remaining cases (70 %), nobody looks at the gesture. These numbers correspond almost exactly to the way in which iconic gestures are treated in general in our data (i. e. independently of whether *so* occurs in the verbal utterance): out of 229 iconic gestures, 72% were not looked at by any participant. The speaker looked at his gestures in 17.5 % of these cases, the hearer in 6.5 %, and only in 5.5 % of all iconic gestures did both participants look at them. Of course, the numbers are too small to take these quantitative equivalences very seriously, but it seems that there is no evidence for an impact of *so* on gaze. Again, Streeck's hypothesis is disconfirmed.

We present an example of speaker's gaze at his gesture and an example of mutual gaze at the speaker's gesture. (Gaze into the face of the coparticipant is symbolized by simple arrows, the extension of the gaze pattern by curled brackets; double arrows symbolize eye contact. Downward arrows indicate lowered gaze, in this case to the gesture).

- (9) (TT11, 20:04) The speaker gazes at his own gesture, but there is no gaze at the gesture by the recipient:

(C) ↔ (D)

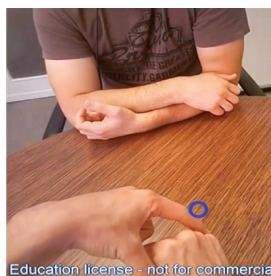
01 D: °h ich find den tYpen ja im prinzip COOL—  
in principle I think the guy ((= Wolverine)) is cool—

(C) → (D)






02 ich hATte nämlich früher so\_ne ACTionfigur wo; °h<sub>1</sub>  
[-----]  
because I once had an action figure where;

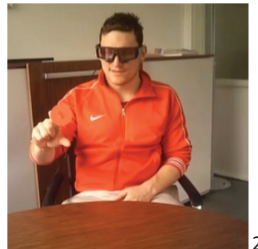
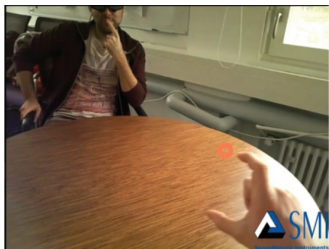
(C) ↔ (D)

03 aus den HÄNden? °h die STAcheln rauskAmen=ja?  
[-----]  
the stings came out from his hands you know?



In the first example, speaker D looks at his hands while he performs a gesture which co-occurs with his verbal description of the 'action figure' (a kid's toy) which had stings coming out from its hands. (The gesture seems to indicate the knuckles from where the stings came out.) While the gesture is clearly iconic, speaker's gaze does not attract recipient's gaze: C continues to look into D's face. The particle *so* in line 02, which occurs before the noun *Actionfigur*, is not able to make the recipient look at the gesture either.

- (10)
- 01 A:  es wurde blUtalkohol von der CREW gemessen;  
the crew's blood alcohol was tested;
- 02  und des war EInfach, (.) wegen den zwei WODkaflaschen die gefUnden  
and it was simply, (.) because of the two vodka bottles that
- 03  wurden; al<sub>1</sub>  so zwei<sub>2</sub>  so kLEIne (.) DIN ger; (1.0)  
[-----]  
had been found; well two like small things; (1.0)



While he adds a detail about the size of the two vodka bottles that were found in the aircraft, speaker A looks at his own right hand with which he performs a conventionalized size gesture with thumb and forefinger. The gesture begins on the word *wurden* 'had been' (line 3); the gesturing speaker looks at it while he utters *also* 'well'. Shortly after, the recipient also turns to his gesture (while the speaker says *zwei* 'two' and still holds the gesture).

Why do recipients sometimes look at the speaker's gesture but sometimes don't? In the literature, at least two factors have been described which positively influence mutual gaze at speaker's gesture in natural conversation: speaker's gaze at gesture and speaker's holding of the gesture (cf. Gullberg and Kita 2009; Gullberg and Holmqvist 2006) – which is exactly what we find in ex. (10). The occurrence of *so* does not play a role in this process. (See the red cursors in stills 1 and 2.)

## 4 Summary and conclusion

As Streeck (2002: 582) argues quite correctly, “*so* can serve as a ‘flag’ that alerts the interlocutor that there is extralinguistic meaning to be found and taken into account [ ... ]. Gaze direction combines with the flag [ ... ] to direct the interlocutor's visual attention to the hands and incorporates the work of the hands into the grammatical structure of the talk.” The only problem with this statement is that its second part only applies to deictic (stressed) *SO*, not to (unstressed) *so*, which function as vagueness/focus markers. We have argued in this contribution that these two usages of *so* need to be distinguished sharply: *SO* as a deictic and *so* as a vagueness/focus marker. By way of a conclusion, we summarized the most important features of these two usages:

### deictic *SO*

stressed

pointing to manner

### *so* as vagueness/focus marker

unstressed

marking focus position or  
indicating vagueness of a description

|                                            |                                                                    |
|--------------------------------------------|--------------------------------------------------------------------|
| coupled with<br>iconic/pointing gesture    | co-occurrence with iconic gesture<br>is possible, but not required |
| no co-occurrence with<br>vagueness gesture | co-occurrence with vagueness<br>gesture possible, but not required |
| speaker and recipient gaze required        | no speaker/recipient gaze required                                 |
| MULTIMODAL CONSTRUCTION                    | NO MULTIMODAL CONSTRUCTION                                         |

## References

- Auer, Peter. 2004. Construction grammar meets conversation: Einige Überlegungen am Beispiel von *so*-Konstruktionen. In S. Günthner & W. Imo (eds.), *Konstruktionen in der Interaktion*, 291–314. Berlin & New York: De Gruyter.
- Cienki, Alan, Bietti, Lucas M. & Kasper Kok. 2014. Multimodal alignment during collaborative remembering. *Memory Studies* 7(3). 354–369.
- Elhlich, Konrad. 1987. *So* – Überlegungen zum Verhältnis sprachlicher Formen und sprachlichen Handelns, allgemein und an einem widerspenstigen Beispiel. In I. Rosengren (ed.), *Sprache und Pragmatik*, 279–298. Stockholm: Almqvist & Wiksell.
- Fricke, Ellen. 2014. Between reference and meaning: Object-related and interpretant-related gestures in face-to-face interaction. In C. Müller et al. (eds.), *Body – language – communication. An international handbook on multimodality in human interaction*, vol. II, 1788–1802. Berlin & Boston: de Gruyter.
- Fricke, Ellen. 2015. Grammatik und Multimodalität. In Ch. Dürscheid & Jan Georg Schneider (eds.), *Handbuch Satz – Äußerung – Schema*, 48–76. Berlin & Boston: de Gruyter.
- Gullberg, Marianne & Kenneth Holmqvist. 2006. What speakers do and what addressees look at: Visual attention to gestures in human interaction live and on video. *Pragmatics & Cognition* 14(1). 53–82.
- Gullberg, Marianne & Sotaro Kita. 2009. Attention to speech-accompanying gestures: Eye-movements and information-uptake. *Journal of Nonverbal Behavior* 33(4). 251–277.
- Kendon, Adam. 2004. *Gesture. Visible Action as Utterance*. Cambridge: Cambridge University Press.
- Ladewig, S. H. 2011. Putting the cyclic gesture on a cognitive basis. *CogniTextes*. 6. <https://cognitextes.revues.org/406>
- Langacker, Ronald W. 2008. Metaphoric gesture and cognitive linguistics. In Alan Cienki & Cordula Müller (eds.), *Metaphor and gesture*, 249–251. Amsterdam: John Benjamins.
- McNeill, David. 1985. So you think gestures are nonverbal? *Psychological Review* 92(3). 350–371.
- Meehan, Teresa. 1991. It's like, 'What's happening in the evolution of like?' A theory of grammaticalization. *Kansas Working Papers in Linguistics* 16. 37–51.
- Silverstein, Michael. 1993. Metapragmatic discourse and metapragmatic function. In J. Lucy (ed.), *Reflexive language: Reported speech and metapragmatics*, 33–58. Cambridge: Cambridge University Press.
- Streeck, Jürgen. 1993. Gesture as communication I: Its coordination with gaze and speech. *Communication Monographs* 60(4). 275–299.
- Streeck, Jürgen. 2002. Grammars, words, and embodied meanings. On the evolution and uses of *so* and *like*. *Journal of Communication* 52(3). 581–596.
- Streeck, Jürgen. 2009. *Gesturecraft: The manufacture of meaning*. Amsterdam & Philadelphia: John Benjamins.
- Streeck, Jürgen. 2016. Gestische Praxis und sprachliche Form. In A. Deppermann, H. Feilke & A. Linke (eds.), *Sprachliche und kommunikative Praktiken*. Berlin & Boston: De Gruyter Mouton.
- Stukenbrock, Anja. 2014a. Take the words out of my mouth: Verbal instructions as embodied practices. *Journal of Pragmatics* 65. 80–102.
- Stukenbrock, Anja. 2014b. Pointing to an 'empty' space: Deixis am Phantasma in face-to-face interaction. *Journal of Pragmatics* 74. 70–93.
- Stukenbrock, Anja. 2015. *Deixis in der Face-to-Face-Interaktion*. Berlin, München & Boston: De Gruyter.
- Thurmair, Maria. 2001. *Vergleiche und Vergleichen. Eine Studie zu Form und Funktion der Vergleichsstrukturen im Deutschen*. Tübingen: Niemeyer.
- Wiese, Heike. 2011. So as a focus marker in German. *Linguistics* 49(5). 991–1039.
- Wiese, Heike. 2012. *Kiezdeutsch*. München: Beck.
- Zima, Elisabeth. 2014a. English multimodal constructions. A construction grammar perspective. *Studies van de BKL – Travaux du CBL – Papers of the LSB* 8. <http://uahost.uantwerpen.be/linguist/SBKL/sbkl2013/Zim2013.pdf>

- Zima, Elisabeth. 2014b. Gibt es multimodale Konstruktionen? Eine Studie zu [V(motion) in circles] und [all the way from X PREP Y]. *Gesprächsforschung – Online-Zeitschrift zur verbalen Interaktion* 15. 1–48. <http://www.gespraechsforschung-ozs.de/fileadmin/dateien/heft2014/ga-zima.pdf>
- Zima, Elisabeth. in press. Multimodal constructional resemblance. The case of English circular motion constructions. In F. Ruiz De Mendoza, A. Luzondo & P. Pérez-Sobrino (eds.), *Constructing families of constructions*. Amsterdam: John Benjamins.