# The deictic identification of similarity

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Starting out from the observation that comparisons and assessments of similarity and difference are fundamental cognitive processes and play an important role in a variety of human activities, this article shows that the most basic verbal means for the expression of similarity are demonstratives of manner, quality and degree (French. ainsi, tel, tellement). It is shown that the gestural (exophoric) use of such demonstratives provides the source of a wide variety of constructions in a wide variety of languages, so that these demonstratives are instantiations of a semantic category of "similatives" par excellence. Building on earlier work by the same author, the article analyses and describes the wide-spread processes of grammaticalisation leading from exophorically used demonstratives to various types of anaphors, to quotatives, conjunctional adverbs, comparative constructions and to affirmative or approximative particles. The illustrations provided for these pervasive changes are mainly taken from European languages, but occasionally also enriched by exemplification from languages outside of Europe.

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## 1. Introduction: Similarity in cognition and language structure

Comparison and assessment of similarity and dissimilarity is an important cognitive activity underlying such activities as perception, categorisation, learning, reasoning, self-assessment and perhaps even the metaphorical use of language. Whether "similarity", the relationship which is at the centre of this activity, is a basic one and also underlies judgments of "identity" or whether similarity should be defined in terms of (partial) identity is a philosophical controversy of long standing, recently also taken up in cognitive science. I will follow Wälchli and Cysouw (2012), Umbach (2007, 2011) as well as the philosophers or cognitive scientists whose studies their work is based on, in opting for the former view, i.e. in regarding "similarity" as basic and "identity" as definable in terms of strong similarity. In fact I want to

show that there is clear linguistic evidence for this view, if we consider the structures of natural languages rather than the formal calculus of scientific reasoning.

In contrast to cognitive science, linguistics is not primarily interested in the quality of "similarity" as an explanatory construct or in the analysis of this concept in terms of transitivity or symmetry, but rather in how this relationship is expressed in languages and which role it plays in the genesis, development and identification of grammatical constructions. As is shown by the papers assembled in this volume, similarity can be expressed by a variety of lexical elements, by verbs (Engl. resemble), by adjectives (Engl. similar, like), by prepositions (Engl. like, as) and by derivational affixes (Engl. -like, -ly). Heine & Kuteva (2002) made an attempt to formulate cross-linguistic generalisations about sources and targets of the "grammatical concept" SIMILE in pervasive processes of grammaticalisation. In their view the concept SIMILE may derive from the three grammatical/ functional concepts HOW?, MANNER, SAY and may, in turn, provide the source for COMPLEMENTISERS and QUOTATIVES. This proposal certainly encapsulates relevant observations, but given the heterogeneity of assumed sources, on the one hand, and targets, on the other, this cannot be the right generalisation. There is a semantic generalisation to be made as far as the source domains are concerned: 'how' is the interrogative counterpart of 'manner', and 'say' erase can be regarded as the result of a reanalysis of a manner expression as quotative marker. Moreover, the development of complementisers from the concept "simile" is very often based on the anaphoric use of manner deictics. It will be shown in this paper, by contrast, that what primarily plays a role in similative and equative constructions in many, if not most, languages are deictic expressions, more specifically demonstratives, of manner, quality and degree. So far very little attention has been given to such demonstratives, since in many European languages there is often only a single expression (e.g. Engl. so; Germ. so) rather than the more common two-term or three-term system of deictic contrasts, so that the analysis amounts to describing the use of a single adverb or particle. Moreover, the exophoric (gestural) use of the manner deictic is very often no longer available and has been renewed with the help of others demonstratives (e.g. It. ecco + si > cosi) or by spelling out the two semantic components of manner deictics separately, as in English like this/that or that/this is the way to do things.

### Demonstratives: General framework of analysis

Demonstratives are a subset of deictic expressions, used for referring to an entity and identifying a referent relative to a centre of orientation (an origo), which is typically provided by the speech situation. More often than not, the use of these

expressions is accompanied by a gesture, e.g. a pointing finger, a direction of gaze, etc. (cf. Streek 2002). The most important role of these expressions is that they establish a joint focus of attention between speaker and addressee (cf. Diessel 2006, 2012). As far as their distribution is concerned, typological studies (Anderson & Keenan 1985; Diessel 1999; Dixon 2003; Krasnoukhova 2012) have pointed out that demonstratives are typically used as pronouns (Engl. this, that), as adnominal modifiers (Engl. this, that), as adverbs (Engl. here/there) and as identificational expressions (Fr. voilà, Russ. vot), but this list by no means exhausts the distributional potential found across languages. Demonstratives exhibit a wide variety of other distributional properties not subsumed by these four categories, as our discussion of manner deictics will show.

As far as their meaning is concerned, demonstratives can very often simply be described in terms of two dimensions, viz. a deictic one indicating the distance, visibility, altitude, position, etc. of a referent relative to the centre of orientation and a content dimension, assigning a referent to a certain ontological type (object, human being or animal, place, time, sex, number, etc.). It is in this list of ontological categories that we also find the categories manner, quality and degree, which will play a central role in what follows. Additional basic distinctions are generally made as far as the use of demonstratives is concerned. In a pragmatic analysis of demonstratives various use types are distinguished, which can be regarded as starting points or stages in the grammaticalisation of these deictic expressions: an exophoric (gestural) use, an endophoric use subsuming the two options anaphoric and cataphoric, a discourse use and a recognitional use, to mention only the most basic distinctions. These different uses provide the source of a variety of wide-spread processes of grammaticalisation, i.e. of the development of demonstratives to markers of specific grammatical constructions, as will be demonstrated with the role of manner deictics in the development of equative and similative constructions below.

Demonstratives seem to be one of those rare expressive devices in languages that are found in all languages and can thus be considered language universals. In language acquisition some demonstratives occur very early and in this sense, too, they belong to the basic vocabulary of a language. Moreover, it will be shown below that they provide a highly important source for the genesis and development of grammatical constructions, in contrast to the wide-spread view that grammaticalisation primarily starts out from major lexical classes (cf. Diessel 2006, 2012 contra Heine & Kuteva 2007). So far no major lexical item has been identified as plausible source for demonstratives of manner, quality and degree. These expressions enter processes of grammaticalisation as grammatical markers and develop into markers manifesting an even higher degree of grammaticalisation.

Bulgarian

taka

## Demonstratives of similarity: Manner, quality, degree

Even a brief look beyond the horizon of European languages shows that demonstratives expressing the content dimensions manner, degree and/or quality are not typically isolated particles with a multiplicity of possible uses and meanings, but deserve a place in systematic analysis of deictic systems, since they often show formal distinctions both in the ontological and in the deictic dimensions rarely found in standard and non-standard European languages. Moreover, the total loss of the exophoric use of a basic demonstrative, i. e. the situation found in Modern English, is by no means a typical one.<sup>1</sup>

#### Distinctions in the ontological dimension (i)

In Germanic languages like German, Dutch and English the manner deictics so or zo can be used for all three dimensions of content, i.e. manner, quality and degree in both their exophoric and their endophoric use. German provides a very clear illustration of this identical encoding of ontological distinctions. In combination with the appropriate pointing or mimicking gestures, German so can exophorically refer to a way of driving (1a), to an external characteristic like obesity of a person (1b) and to the degree of a quality, height in this particular case (1c):

- (1) a. Peter fährt so: + mimicking gesture (indicating behaviour).
  - b. *Peter ist so*: + mimicking gesture (indicating considerable weight).
  - c. *Peter ist so groß* + pointing gesture (indicating height).

In many other languages different deictic expressions are available for these three dimensions of content, as is shown in the following table:

Dimension → Language ↓	Manner	Quality	Degree
German	so	so/solch	SO
French	ainsi/si/tant	tel/pareil/comme ça	(tellement)
Spanish	así	así	tan
Latin	sīc.	talis	tantus
Japanese	koo, soo, aa	konna, sonna, anna	konnani, sonnani, annani

takăv/takava/takova

tolkova

**Table 1.** Formal differentiations in the ontological domain

Cf. König (2012) for a more elaborate discussion of these points.

Since one-term systems can frequently be found for all three content dimensions, I will often use the terms manner deictics or manner demonstratives for all three uses, to avoid enumerating the list all the time.

#### Distinctions in the deictic domain (ii)

Three-term distinctions in the deictic systems of adnominal and local domains are well-known from languages such as Latin or Spanish:

- (2) a. este, ese, aquel 'this, that' b. aquí, ahí, allí 'here, there, (yonder)'
- Such three-term distinctions between "speaker-proximal", "hearer-proximal" and "distal" demonstratives are, however, also found in the ontological domains under discussion. The following differentiations are, for example, found in the dimension of manner:

				V		
	Finnish	Hungarian	Japanese	Armenian	Makhuwa (Bantu)	
S-proximal	näin	így	koo	ays-pes	tsiitsa	'this way'
H-proximal (medial)	noin	úgy	soo	ayn-pes	tsiitso	'that way'
distal	niin	amúgy	aa		tsiitsa(a)le	'that way'
(anaphoric)	niin	(archaic)	$\supset$	ayd-pes		

Table 2. Differentiations in the deictic domain

In addition to no differentiation at all and three-term systems we also find two term systems distinguishing only between "proximal" and "distal", as for examples in Wolof ni vs. na (cf. Robert 1998) or Indonesian (be)gini vs. (be)gitu.

### Simple vs. complex demonstratives

There is another interesting parameter of variation in the formal inventory of manner deictics and of demonstratives in general that deserves mentioning. More often than not demonstratives are simple, unanalysable expressions whose meaning is assigned to them as whole lexemes, even if certain sub-morphemic elements may indicate a basic relatedness (cf. Engl. th-is vs. th-at). In languages like Japanese, by contrast, all demonstratives can be segmented formally into two components, signalling the deictic and the ontological dimension, respectively. In such languages the formal make-up of demonstratives is totally transparent and their meaning is compositionally derived from these two components:

Japanese	Entity	Definiteness	Place	Direction	Degree	Manner
speaker-related: ko-	ko-re	ko-no	ko-ko	ko-chira	ko-nnani	ko-o
hearer-related: so-	so-re	so-no	so-ko	so-chira	so-nnani	<i>SO-0</i>
distal: a-	a-re	a-no	aso-ko	a-chira	a-nnani	a-a

Table 3. Compositional make-up of demonstratives in Japanese

It goes without saying, of course, that in other languages manner deixis can also be expressed by constructions in which a noun denoting the dimension of manner, quality or degree is combined with a basic adnominal demonstrative: as in English (this way, that way, that's the way to do it), Mandarin (zhè-yang, nà-yang; nènmo, zhènmo) or in the Polynesian language East Futunan. But here the relevant demonstratives are composite constructions rather than basic lexical elements:

EAST FUTUNAN (Nuclear Polynesian, Wallis and Futuna; cf. Moyse-Faurie 1997)

(3) a. *fe-nei-'aki > fene'eki* 'like this' (speaker-proximal)

b. *fe-nā-'aki > fena'aki* 'like that' (hearer-proximal)

c. fe-lā-'aki > fela'aki 'like that' (distal)  $(p\bar{e}')$  like' + deictic in the other Polynesian languages, basic deictics being: leinei, lenā, leia)

In these languages a wide variety of different manner, quality and degree deictics can be constructed on the basis of a rich inventory of basic local deictics.

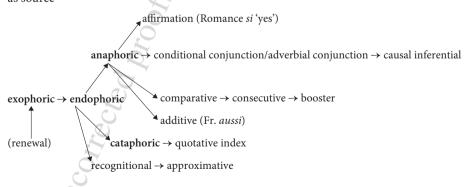
### 4. Meaning, semantic change and the grammaticalisation of similative and equative constructions

Demonstratives referring to the notional domains of manner, quality and degree provide the source for a wide variety of grammatical markers and constructions, most of which can be subsumed under the terms "equative" or "similative". Even though the targets of the relevant grammaticalisation processes may differ from language to language, there are certain general paths and tendencies visible in languages of very different families and regions. Many of the examples used in the following analyses are taken from European languages, but the contributions published in this volume show that many of the relevant processes and targets are also found in languages outside of Europe. Synchronically, the grammaticalisation of manner and degree demonstratives shows up as extensive polysemy or heterosemy of the relevant expressions. As many as 30 different meanings are distinguished in standard dictionaries for German so and English so. Since the exophoric (gestural) use of demonstratives is generally assumed to be the basic use, due to its role in early language acquisition and due to its tie-up with gestures, the development from exophoric to endophoric would be the first step in such developments. Due to the fact that only written sources are available for the early stages of even the best documented language histories, this first step cannot be reconstructed on the basis of authentic data. All we can observe is that very often the relevant demonstratives lose their exophoric use completely and form new complex expressions combining a manner or degree noun with an adnominal demonstrative. This is what happened in English, where the exophoric use of so is now totally marginal and has been replaced by a basic adnominal demonstrative or a combination of such a demonstrative with an expression of similarity. The following examples show that the exophoric use for manner (4b), if found at all in authentic examples, is typically reinforced by the manner expression *like* and that in its exophoric use as degree marker so tends to be replaced by the nominal demonstrative this:

- (4) a. The fish was so/this big (+ gesture).
  - b. Why don't you do it like so/like this (+ gesture)?

What is easier to reconstruct are all the subsequent developments taking the endophoric use, i.e. both the anaphoric and the cataphoric one, as a starting point. It is on these uses that the development of affirmative particles, of equative comparatives, of adverbial connectives, of quotative and of approximative markers is based. The pervasive paths of grammaticalisation, taking the relevant demonstratives of manner and degree as their starting point can thus be represented roughly as follows:

Table 4. Paths of grammaticalisation taking demonstratives of manner and degree as source



Before we discuss and reconstruct these processes with data from European languages, where they are documented with great clarity, let me quote from a grammar of the Polynesian language Tuvaluan, in which analogous developments are also briefly mentioned:

Demonstrative forms whose first element is the prefix *pee-* refer very generally to manner and are glossed 'thus' throughout this grammar... They can function as adverbs and discourse adjuncts... Under various morphological guises, they are used in many different constructions, including quoted speech and thought...; sentence fragments used as incomplete answers... adverb clauses of manner... imaginary conditional sentences...; coordinate constructions...; invariant equational constructions...; and discourse conjuncts...

Besnier (2000: 410–419)

The processes of grammaticalisation discussed below can thus be assumed to be very wide-spread.

## 4.1 The exophoric use: Loss and renewal

The partial or total renewal of the exophoric use of manner deictics already pointed out for English can also be observed in Romance languages, where the current or most recent forms are all the result of reinforcing and renewing a former manner deictic with the help of other demonstratives: It. ecco + si > cosi; Fr.  $accum\ si > ensi > ainsi$ ; Lat.  $si + ce > s\bar{\imath}c$ . A similar, if less advanced phenomenon can be observed in Swedish, where the manner deictic sa tends to be reinforced by the local demonstratives  $h\ddot{a}r$  'here' and  $d\ddot{a}r$  'there' ( $sah\ddot{a}r$ ,  $sad\ddot{a}r$ ), thus introducing a new proximal-distal distinction.

## 4.2 From exophoric to anaphoric uses

The development from a basic exophoric to an anaphoric use is a well-known change as far as adnominal, nominal and (local) adverbial demonstratives are concerned (cf. Himmelmann 1997; Diessel 1999). The development of the definite article in many European languages is a familiar outcome of such changes, leading from Lat. *ille* to the definite article *le* in French and *il* in Italian. A completely analogous development involving manner demonstratives, by contrast, has so far received very little attention. The phenomenon is most clearly visible where *so* has established itself in a variety of complex sentence structures as propositional anaphora in contrast to the usual pronominal anaphora *it*.

(5) a. A. The meeting has been postponed? B. I suppose so.b. Apparently so.

- c. If so we have to react immediately.
- d. John works in the library and Fred does so at home.

If you so wish, we can go there.

(VP-anaphor)

The use of *so* instead of *it* is partly determined by semantic properties of the verbs in the main clause and partly by the syntactic context. So occurs as object after verbs of propositional attitude (assume, think, believe, guess, expect, imagine, suggest, suspect, hope, choose, seem, happen, etc.) and in combination with desiderative verbs (wish, desire, etc.), but is not an admissible pronominal object after factive verbs like regret, prove, claim, maintain, etc. Furthermore, the propositional anaphor so can follow so-called style disjuncts, i.e. attitudinal expressions affixed to a sentence rather than being integrated into it (I am afraid, so; I regret, so; unfortunately, so). Irrespective of verb semantics, so can also be used as a verb phrase anaphora in combination with the auxiliary verb do. This role of a manner deictic is most clearly visible in English, but can also be found in Russian and other European languages in combination with a few verbs.

Is there still a connection between the use of a manner deictic as sentential anaphor and the original meaning of so as a demonstrative of manner, quality and degree? A look at the restrictions mentioned above and at some minimal pairs of the factual anaphor it and the propositional anaphora so clearly shows that the basic meaning of similarity is still present in these uses. Consider the following minimal pairs in English:

- (6) a. She said it. vs. She said so.
  - b. I believe it. vs. I believe so.
  - c. I expected it. vs. I expect so.

The first sentence of (6a) reports the content of somebody else's utterance verbatim, in the exact words of the speaker, whereas the propositional anaphora so indicates a weaker relationship to a preceding utterance: Somebody is reported to have expressed herself in a certain sense. The same applies, mutatis mutandis, to the other two examples. The sentence with the anaphor it expresses a fact and acceptance of that fact by the referent of the first person subject, whereas the second sentence expresses an attitude towards a proposition. In other words, the reporter of the sentence with the anaphora so expresses that his/her views are only similar to the view reported on. Analogous uses of manner deictics can be found in Russian, but they seem to exhibit stronger lexical restrictions as far as the verbs are concerned (cf. Letuchiy 2012).

Based on the anaphoric use of manner deictics is, furthermore, their use as affirmative particles found, for example, in Polish tak, English yeah swa > yes, Italian si and French si, as used after negative interrogatives (Il n'est pas malade? – *Si*!). Similar uses are found in a variety of other languages.

### 4.3 From anaphora to clausal connectives

It is not only in object positions that manner deictics can signal anaphoric relations to a proposition in the preceding discourse. We also find these relations in complex sentences with adverbial clauses, where the anaphorically used manner deictics relate to a preceding or following adverbial clause. These uses can be observed in a wide variety of languages, but are especially visible in Germanic languages. Let us first consider conditionals. Here we find manner deictics used as connectives both in the protasis and in the apodosis. The following examples from German are typical instances of the conditional use of manner deictics:

#### **GERMAN**

- (7) (conjunction)
  - a. So Karl rechtzeitig komm-t, geh-en wir
    If Charles in.time come-3sg.pres go-3pl.pres we
    ins Kino.
    to.the movies

'If Karl comes in time we'll go to the movies.'

(conjunctional adverb)

b. Komm-t Karl rechtzeitig, so gehen wir come-3sg.pres Charles in time then go-3pl.pres we ins Kino.

to.the movies

The use of the manner deictic as connective in the main clause exemplified by (7b) is to be expected on the basis of what has been said before. What is more surprising is the occurrence of such deictics as subordinating conjunctions in the protasis, as in (7a). This use can also be found in Early Modern English (8) and especially in Romance languages (Fr. si, It. se, Span. si, etc.). As is shown by examples like (9), manner deictics may show up in French both in the subordinate and in the main clause of conditionals:

### **ENGLISH**

(8) It is no matter how dirty a bag it is conveyed to him in, ... so the money is good. (OED, 1750) 'provided'

FRENCH (cf. si, It. se, Span. si)

(9) *S'il venait aussi, ainsi nous pourrions jouer au tennis.* 'If he also came, (this way) we could play tennis.'

In Polynesian languages manner deictics show up as markers of optative conditionals, as is shown by the following examples from Futunan and East Uvean:

EAST FUTUNAN (fela'aki is the distal manner deictic) (Claire Moyse-Faurie, p.c.)

(10) fela'aki ake la loa ke 'ua be.like.that DIR DEMARC SUCC that rain OBL ART evening 'If only/Wish it would rain this evening!'

EAST UVEAN (fēia is the distal deictic marker) (Claire Moyse-Faurie, p.c.)

age ke fualoa toku ma'uli (11) fēia be.like DIR that last long my.life 'If only I could live for a long time!'

A conditional use of manner deictics or of non-deictic expressions of manner is also found in several African languages discussed in this volume (Caron on Zaar, Zaugg-Coretti on Yemsa). In Germanic, manner deictics combine with all kinds of adjectives and adverbs to form connectives of various adverbial meanings:

#### **GERMAN**

(12) so-fern 'provided', so-weit, so-viel 'as far as', so-bald 'as soon as', so-lange 'as long as', so-gleich, so-fort 'immediately', so sehr 'however much', so oder so, sowieso 'either way, anyway", etc.

Moreover, the conjunctional adverb so is used in a variety of interpretations depending on the context.

How does this use of manner deictics or other expressions of manner tie in with what we said about similarity and identity? First of all we may note that the conditional use is not surprising at all, since according to certain analyses of conditional sentences, these are true in a world which is like the real one except for the change expressed by the conditional protasis (Stalnaker 1968). The connection between manner and conditionality is also visible in the English conjunctional adverb otherwise, which can roughly be paraphrased by 'if not (so)'. Through the additional specifications by adjectives or adverbs listed in (12) for German this similarity may become very strong and approach identity. Of the positions the original deictics are found in, it is the occurrence in the protasis which provides the major puzzle, whereas the use in the apodosis is easier to reconstruct. This latter use is purely anaphoric and indicates, loosely speaking, that in a situation strongly or weakly similar to the one expressed by a preceding subordinate clause the main clause is true. As far as conditionals are concerned, it seems to be the

case, however, that it is the use of manner deictics in the protasis that is the more wide-spread occurrence.<sup>2</sup>

### 4.4 From anaphoric/cataphoric to comparative

One of the major construction type where manner or degree deictics also show up are equative comparatives (Haspelmath & Buchholz 1998). Haspelmath (this volume) classifies equative comparatives with manner/degree deictics and relative clauses introduced by manner interrogatives, as we find them in many European languages, as one of eight major strategies of forming equative comparatives. The following Latin example is a case in point:

- (13) a. Claudia tam docta est comparee degree marker parameter is quam Julius.

  standard marker standard of comparison 'Claudia is as learned as Julius.'
  - b. John is as tall as Bill.

Before looking at the role of manner and degree deictics in such comparatives, let us take up a question also raised by Haspelmath (this volume): Do these constructions express identity of degree, since they express similarity on just one dimension, viz. intelligence and vertical extension, respectively, in (13)? Since height is an easier parameter to measure, we will use (13b) for further discussion. There are several facts which argue against the view (taken by Haspelmath) that the two persons compared in sentences like (13) are identical along the dimensions mentioned, i.e. height:

- a. Comparative utterances like (13) can be continued as follows without contradiction: *John is as tall as Bill, if not (even) taller.*
- b. As a result of specific modifiers such sentences can indeed express identity (*John is exactly as tall as Bill*), but also mere approximation (*John is nearly/about as tall as Bill*). In other words without such modifiers the comparison is an approximation and the comparative is simply vague in its meaning.

<sup>2.</sup> A particularly interesting case of a conditional use with partly anaphoric and partly deictic character is provided by examples like the following:

<sup>(</sup>i) Wenn wir mit dem Zug gefahren wären, wären wir jetzt zu Hause. So aber, müssen wir im Regen warten. (German)

<sup>(</sup>ii) If we had taken the train we would be home by now. As it is we have to wait in the rain. (English translation) In such sentences the manner deictic relates contrastively to a counterfactual conditional, on the one hand, but refers to the real situation, on the other.

c. If negated, such sentences express that the comparee, i. e. the person to be compared, does not reach the standard, but has a lower value. In other words, it does not only deny identity on the relevant dimension, which also applies to values above the relevant standard, but denies attainment of the standard specified (John is not as tall as Bill).

What these observations show is that the so-called "equative comparatives" also express similarity, rather than identity, even in those cases where only one parameter of comparison is under discussion. If these parameters expressed by the relevant adjectives (beautiful, entertaining, impertinent, helpful, etc.) do not allow quantitative measurement the situation is even clearer: The so-called "equative comparative" expresses similarity on the dimension expressed by the adjective or adverb, which can be strengthened or weakened by suitable modifiers to express identity or approximation to similarity.

Languages like German show with great transparency how equative comparisons are based on an anaphoric and/or cataphoric use of basic deictics of manner or degree.<sup>3</sup> Consider the following exophoric (gestural) uses of the deictic so in German. Note that these uses could and typically would be accompanied by a mimicking gesture:

- (14) a. *Peter ist so* (+ gesture imitating a heavy person) 'Peter is like this.'
  - b. Peter ist so schwer wie Paul (schwer ist). 'Peter is as heavy as Paul.'

These two examples show how close the relationship between an exophoric, gestural use of manner deictics and their use in comparatives is. In the comparative use the gesture is replaced by an expression providing the parameter of comparison and a (reduced) relative clause introducing the standard. The relative pronoun or standard marker corresponds in this case to the interrogative pronoun for manner or degree, as it does in many European languages, but may also have a deictic root itself. If the parameter is already introduced in the sentence with the exophoric manner deictic it is only the relative clause that is added to derive the corresponding comparative construction:

<sup>3.</sup> In all types of comparatives the standard of comparison must be known to the addressees. Otherwise the sentence would be irrelevant and uninformative. In that sense equative comparatives are anaphoric. On the other hand, since the standard of comparison follows the degree marker, the degree deictic can also be considered as being cataphoric. The anaphoric function of degree markers is clearly visible in examples like the following:

There were about fifty people there. I had never seen the room so/that/as crowded.

- (15) a. *Peter ist so groß* (+ gesture indicating height). 'Peter is as tall as that.'
  - b. Peter ist so groß wie Paul (groß ist). 'Peter is as tall as Paul (is tall)'.

In the two preceding cases we find degree deictics. Sentences with exophoric and anaphoric uses of manner deitics manifest analogous properties:

- (16) a. *Peter fährt so* (+ gesture imitating a style of driving). 'Peter drives like this.'
  - b. Peter fährt wie Paul (fährt). 'Peter drives like Paul.'

Here, too, a relative clause with the appropriate relative marker replaces a mimicking gesture.

The English counterparts of these sentences differ only in so far that English has lost the exophoric use of so (replaced by like this/that) and uses its reinforced form (as < eal swa) as comparative marker in affirmative sentences, though retaining the original basic manner deictic so in negations (Fred is not so tall as George.)

Constructions as exemplified by (14)-(16) from German are very frequent in European languages, even if they look slightly different for the reasons mentioned above (loss of exophoric use, reinforcement of forms), as is the case in English. Related constructions are found in languages from many different families. In Nengone (Melanesian, New Caledonia), for example, comparatives of this type are formed by combined lexical expression of similarity with basic deictics expressing proximity to the speaker. The following two sentences are cases in point:

NENGONE (Melanesian; Susi Bearune, p. c.)

- thadrere in-o-om puaka 3sg ipfv snore be.like-prep-deic art pig 'He snores like a pig.'
- (18) Buic ci rue in-o-om ko hna acidan-on ore. 3PL IPFV do be.like-PREP-DEIC always ART PAST habit-TR 'They are acting as is their habit.'

It is a specific property of English and Scandinavian languages that they also allow measure phrases as a standard of comparison instead of entities exemplifying the relevant dimensional property to a similar degree as the comparee. As in most other languages these measure phrases may precede the relevant adjectives, but may also follow these adjectives in equative comparative constructions:

- (19) a. Most of the residents in this home are ninety years old.
  - b. Some of these people are as old as ninety.

What such comparatives express is typically a variable with the quantity given as maximal value of a series of possible values also including lower ones:

- (20) a. This little boy can jump as high as two meters.
  - b. Sometimes these programs are on as late as midnight.
  - c. Lindsay olives are as low as \$0.18.
  - d. Some of them made as many as twenty mistakes.

Another, related use is an evaluative one: The measure phrase given is evaluated as extreme on a relevant dimension for a specific context:

- (21) a. The problems begin as early as chapter one.
  - b. The canal is as narrow as 300 yards.
  - c. John arrived as late as two-forty.
  - d. Likewise, this county had only one paved road as recently as thirty years ago.
  - e. As early as 1620 it was clear to the opposing parties that the war was not fought for religious reasons only.

What we find in these constructions is again the anaphoric use of the manner deictics, in our particular examples the reinforced form *as* (< *eall swa*) in English. Whether the meanings distinguished above are contextual variants of one basic meaning is not so clear. What is clear, however, is that comparatives with measure paraphrases as standards are rare in European languages and possibly also across languages. In German they are typically translated by scalar focus particles, such as schon ('as early as'), noch, ('as late as'), erst ('as late as', 'as recently as'), gleich ('as many as'), etc. (cf. König 1982).

A further target of the anaphoric use of manner or degree deictics is additive focus particles. Expressions like Engl. also, likewise, Fr. aussi, Germ. ebenso, Russ. takže or Span. también are cases in point. The origin of these expressions in paratactic comparatives is most obvious in examples like the following:

- (22) a. John is very tall. Fred is also very tall.
  - b. John drives very fast. Fred also drives very fast.

#### GERMAN

(23) Peter ist 1,80 m groß. Paul ist ebenso/auch so gross.<sup>4</sup> 'Peter is 6 foot tall. Paul is equally tall/?is so tall, too.'

<sup>4.</sup> In this paratactic arrangement the anaphoric character of so is more apparent than in the complex "equative" construction.

If the anaphoric use of these expressions is extended to contexts other than those expressing degree or manner or if that original anaphoric use is lost for preceding measure phrases (cf. 23), as it is in English, the additive particles can be used in all contexts where another value instantiates a predication given in a preceding sentence. By extending its use from degree and manner contexts to all others, English *so* has developed into a verb phrase anaphor. As a result anaphoric *so* in coordinations may include the manner expression in its reference, as in (24a), but it does not require such a preceding adverbial for subsuming another event token under the same type:

- (24) a. John is slicing the salami with great care and so is Bill.
  - b. John is slicing the salami and so is Bill.
- (25) a. John collects stamps and Bill also collects stamps.
  - b. John collects stamps and so does Bill.

Finally, there is one more anaphoric and comparative use of manner and degree deictics that needs to be mentioned at this point: These demonstratives also underlie degree resultative clauses, purposive clauses as well as certain adverbs of degree of the type often called "boosters" in English grammars. There are several ways of specifying a standard of comparison: a deictic of degree with a pointing gesture, a relative clause (equative comparative), a measure phrase, provided the relevant dimension can be discussed in terms of quantity, and a degree modifier together with a resultative clause (soparameterthat)..). The following examples illustrate these options with a simple example from German:

#### **GERMAN**

- (26) a. Peter ist so groβ (+ gesture indicating height).'Peter is as tall as that.'
  - b. *Peter ist so groß wie Paul*. (equative comparative) 'Peter is as tall as Paul."
  - c. Peter ist zwei Meter groß. (measure phrase) 'Peter is two meters tall.'
  - d. *Peter ist so groß, dass er auf uns herabblickt.*'Peter is so tall that he looks down on the rest of us.'

The choice between these roughly equivalent constructions is a matter of pragmatics, i.e. of relevance, of a need for precision, of background knowledge or of activities under discussion, and will not further be discussed at this point. The relevant observation here is that the degree is specified by a potential for activities in such cases. From here it is only a small step to resultative and purposive clauses,

which differ from (26d) in English only in the position of demonstrative so, which does not modify an adjective anymore, but is part of a connective:

- We left early, so that we were at the airport in good time. (27) a.
  - b. We brought some toys along, so that the children were kept busy.

Finally, whether the use of degree deictics as intensifiers ("boosters") is based on resultative degree constructions or simply on the basic exophoric use is not clear. Suffice it to mention at this point that it is a wide-spread phenomenon:

- *John is so/SOOOO attractive!* (28) a.
  - This lady is ever so nice!

I mention in passing that in French another degree modifier, namely trop ('too (pleasant)') is used in this function.

(29) Vous êtes trop gentil. 'You are too kind'

#### From cataphoric to quotative 4.5

The cataphoric use of adnominal or nominal demonstratives is also a well-known phenomenon. With the help of these demonstratives new discourse referents can be introduced, which typically provide the topic of a subsequent narrative. Whenever a system of spatial contrasts (proximal – distal) is available, it is usually the proximal member that manifests this cataphoric function:

(30) Suddenly this man comes into the room and starts telling us a story. He was...

This cataphoric use is also found for manner demonstratives. As a consequence of the ontological dimension expressed by such demonstratives there is no reference made to a person or thing but to a unit of behaviour, to a verbal or non-verbal act of communication or to a non-communicative action. If we disregard gestural uses, the most typical "objects" anticipated are ideophones, as well as direct and indirect speech. Hence the term "quotative marker" has become established for these cataphoric uses of manner demonstratives. English<sup>5</sup> does no longer have the relevant use for so and the cataphoric use of thus is also archaic. Other European languages, like German, French and Finnish, however, provide clear examples of that use:

<sup>5.</sup> In English it is the basic lexical manner expression *like* that is used in the informal spoken language as quotative marker (And I'm like 'Don't!' and he's like...), a phenomenon that has attracted the attention of many linguists (Buchstaller & van Alphen 2012).

#### **GERMAN**

- Der Präsident hat es so formuliert: "..." (31) a. 'The president put it like this: ...'
  - Sie habe, so die Kanzlerin, den Plan kritisiert. 'She had criticized the plan, the Chancellor said.'
  - Und ich so "...". Und er dann so: "..." 'And I'm like ... and he's like ...'

#### **FRENCH**

(32) DSK s'est exprimé ainsi: "J'ai commis une faute morale." 'DSK expressed himself like this: "I made a moral mistake".

#### **FINNISH**

(33) Hän sanoi sen näin: 'He said it like this'

In German the sole manner deictic so is used extensively as a quotative marker. It is typically used at the end of a clause with simple tenses and before the non-finite verb with complex tenses, but it can also occur parenthetically before the completion of the reported speech. In French it is the reinforced and also exophorically usable demonstrative ainsi that is used cataphorically, and Finnish, with its three term system of deictics, uses the proximal form näin for this purpose, whereas the distal form *niin* is used anaphorically.

In Güldemann (2008) rich and detailed evidence is presented for the historical development and synchronic use of quotative markers in African languages. It is convincingly argued that manner demonstrative and non-deictic expressions of manner provide the main source for quotative markers in a wide variety of language from this continent and that in many cases such expressions of manner have been reanalysed as verbs of saying. The following example is a case in point:

### MURLE (Nilo-Saharan)

(34) a-ne-k oroz tan (Güldemann 2008: 338) IPFV-QV-GOA dog cow thus IPFV-QV "The dog replied to the cow, "..." (The cow) agreed.

Deictic and non-deictic expressions of manner as sources of quotative markers are also mentioned in several papers of this volume (e. g. Caron on Zaar) and attested in a wide variety of other languages, as for instance in Japanese and in Kambaata (Treis 2008: 278f.):

adab-éechch-u hitt-íta<sup>6</sup> (35) Ku cúlu ass-anó DEM1.M.NOM pleasure do-3M.IPV.REL boy-SG-M.NOM like:this-F.ACC y-ú-s "[...]" y-í alláa'll-u-a-n-s íkke. say-m.nom-3m.poss say-3m.pco beg-m.pred-m.cop2-L-3m.poss inact 'The beautiful boy's speaking as follows "[direct speech]" was a plea.' (K4:46)

The use of manner demonstratives as quotative markers is well in harmony with the fact that these deictics are not only associated with pointing gestures, but above all with mimicking gestures with the voice used as instrument in most cases. In so far they introduce a reenactment of the speech reported on, either indirectly or directly.

#### The recognitional and the approximative uses 4.6

In addition to the exophoric and endophoric uses of demonstratives a recognitional use is frequently distinguished. This term was introduced by Himmelmann (1996) for referents that are newly introduced into the discourse, but represent known information for speaker and addressee. In German this use is particularly found in connection with the all-purpose manner deictic so in pre-nominal position, where this adverb is typically fused with a following indefinite article to either son or sone:

- Wir haben doch damals so(eine)n Biergarten besucht. (36) a. 'You remember this biergarten we went to on that day?'
  - Ich möchte son Kleber. 'I would like this kind of glue'.

The first of these two sentences is a typical instance of a recognitional use, used by the speaker to remind the hearer of an event and a referent. The semantic dimension expressed by prenominal so or solch is that of quality and thus the hearer is presented with information on a type of referent, but has to find the exact token in his memory, rather than in a preceding text as in the case of an anaphoric use (cf. Hole & Klumpp 2000). In the second example reference is only made to a type of glue which the hearer is asked to identify on the basis of general knowledge. This is the kind of invitation we often accompany by phrases like "You know what I mean". Here there is no known information, unless we assume the evoking of background knowledge like "the one people typically buy". Such situations require elaborate cooperation between

<sup>6.</sup> Hitt-ita is here used cataphorically, but has not been grammaticalised as a quotative marker (Yvonne Treis p. c.)

the speech participants to work out a clearer identification of what the speaker has in mind. Since there is no comparison expressed in any way, there is also no implication of similarity with some standard. Overall, it seems to be a use related to the anaphoric one without being related to a preceding text but rather to what is assumed to be stored in memory. In spite of all differences between these two types of examples they share the property of being extremely unspecific and vague in their reference.

Such vagueness is also found in instances of what we will call the "approximate use", most clearly exemplified by combinations of manner deictics and numbers:

- There are about 50 students or so in my class. (37) a.
  - Ich habe so 50 Studenten in meiner Vorlesung. (German translation)

Here a figure is given and the relevant number phrase is accompanied by a manner deictic. The effect of that combination is that an approximation to the number given is expressed. The relevant value is not exactly known to the speaker and described as being similar to some salient value. A similar use is also attested in other languages such as Yulu (Boyeldieu this volume).

### Conclusion

The facts and analyses presented here support the view that among the lexical items relating to the concept of similarity demonstratives of manner, quality and degree play a particularly important role as markers of similative and equative constructions. In addition to their use as (degree and/or standard) markers of equative comparatives, primarily in European languages (cf. Haspelmath this volume), they manifest a wide variety of other uses in the identification of grammatical constructions: They show up inter alia as sentential anaphora, as markers of affirmation, as clausal connectives in a variety of adverbial constructions, as additive focus particles, as quotative markers and as markers of approximation. Even if the inventories of manner, quality and degree demonstratives differ from language to language, there are striking similarities in the use of these expressions across languages.

It was one goal of this paper to reconstruct the development of these demonstratives to markers of similative and equative constructions, taking well-described European languages as a starting point. Starting out from a short typological discussion of manner, quality and degree demonstratives, it was shown that these processes of grammaticalisation are strikingly similar and analogous to those processes documented and reconstructed for other groups of demonstratives, such as adnominal ones underlying the development of definite articles. In pointing out parallels between the developments in European languages and in some African languages a contribution has also been made to attempts of integrating the language-specific analyses of specific African languages into a more general framework.

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### Abbreviations

1, 2, 3	first, second, third person	NOM	nominative
ACC	accusative	OBL	oblique
ART	article	PAST	past tense
DEIC	deictic	PL	plural
DEMARC	demarcating particle	POSS	possessive
DEM	demonstrative	PRED	predicative
DIR	directional	PREP	preposition
F	feminine	PRES	present tense
INACT	past tense, counterfactual	QV	quotative
GOA	goal	REL	relational marker
IPFV, IPV	imperfective	SG	singular
M	masculine	SUCC	successive
L	linker	TR	transitive

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