

136. Deixis, gesture, and embodiment from a linguistic point of view

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Abstract

This chapter gives an overview of the relation between deixis, gesture, and embodiment from a linguistic point of view. Differences between the Bühlerian and the Anglo-American traditions of deixis theory with respect to four main points are treated: 1. the scope of the notion of deixis, 2. the concept of origo, 3. the concepts of deictic reference and deictic object, and 4. the role of the human body, including gestures. Although the term “deixis” is originally based on the idea of drawing attention to something by means of pointing, it is shown that linguistic deixis is not limited to pointing, nor can verbal deixis be derived from pointing gestures alone. Moreover, iconic gestures produced with the deictic utterance are revealed to be an indispensable part of multimodal deixis. In the following, theoretical contradictions inherent in both traditions of deixis theory are discussed, and Fricke’s proposal of origo-allocating acts and her distinction between deixis at signs vs. non-signs are presented.

1. Introduction

The term “deixis”, which comes from a Greek word meaning ‘pointing’ or ‘indicating’, is “based upon the idea of identification, or drawing attention to, by pointing” (Lyons 1977: 636). In linguistics, the term is now mainly used to refer to verbal expressions with a deictic function (e.g., Bühler [1934] 1982a, 1982b, 1990; Fillmore 1982, 1997; Lyons 1977; Levinson [1983] 1992, 2004). For mutual understanding in face-to-face interaction, speakers and their addressees need to be simultaneously engaged in perception, imagination, and other cognitive processes. Deixis assumes a particular function in the coordination of mental representations as well as social interaction: It can be understood as a communicative and cognitive procedure in which the speaker focuses the attention of the addressee by the words, the gestures and other directive clues that he uses; these diverse means of expression co-produce context as a common ground (e.g., Bühler [1934] 1982a, 1982b, 1990; Clark 1996, 2003; Clark, Schreuder, and Buttrick 1983; Diessel 2006; Ehlich 1985, 2007; Enfield 2003, 2009, volume 1; Fricke 2002, 2003, 2007, in preparation a, b; Goodwin 1986, 2000a, 2000b; 2003; Hanks 1990, 1992, 1993, 2005, 2009; Haviland 1993, 2003; Hausendorf 2003; Kendon 2003, 2004; Tomasello 1995, 2008, 2009; Streeck 1993; Stukenbrock 2013). According to Tomasello, joint attention implies viewing the behavior of others as intentionally driven: “Thus, to interpret a pointing gesture one must be able to determine: what is the intention in directing my attention in this

way?” (Tomasello 2008: 4). He claims that the abilities of human and non-human primates differ in this respect: Whereas humans are normally adept at “intention-reading”, apes appear to be capable of only “imperative pointing”, which does not necessarily involve joint attention (cf. Tomasello 2008).

Despite many publications on deixis and pointing in the recent years, the multimodal collaboration of gesture and deixis in language and multimodal utterances is still an understudied area in linguistic pragmatics and semantics, as well as in gesture studies. Since gesture is one important way to focus the addressee’s attention on the visible context of the utterance, it has a central role in deixis (Bühler 1990; Levinson 2004). Some occurrences of verbal deictics, e.g., the demonstrative *this* in the utterance *I mean this book, not that one!*, obligatorily require a directive pointing gesture to accompany them (Bühler 1990: 107). Fillmore (1997: 62–63) termed such multimodal occurrences (both optional and obligatory ones) the “gestural use” of verbal deictics, in contrast to symbolic and anaphoric use.

Within gesture studies, there have been several investigations into pointing that focus on the different articulators that might instantiate this directive function, e.g., pointing with the lips (Sherzer 1973; Enfield 2001; Wilkins 2003), with gaze (e.g., Goodwin 1980; Heath 1986; Kendon 1990; Kita 2003a; Streeck 1993, 1994, 2002; Stukenbrock 2013), with the nose (Cooperrider and Núñez 2012), and of course with different kinds of hand movements (e.g., Haviland 1993, 2003; Kendon 2004; Kendon and Versante 2003; Fricke 2007, 2010; Jarmolowicz-Nowikow this volume; Stukenbrock 2013; Wilkins 2003). Further relevant perspectives are provided by other fields of research, for example, child development studies (e.g., Butterworth 2003; Butterworth and Morissette 1996; Clark 1978; Goldin-Meadow and Butcher 2003; Liszkowski 2005; Pizzuto and Capobianco 2005), psychology (e.g., McNeill 1992, 2003, 2005; Levy and Fowler 2000; Kita 2003a, for an overview see Kita 2003b), primatology (e.g., Povinelli, Bering, and Giambone 2003; Tomasello 2008; for an overview see Pika et al. 2005), conversation analysis (e.g., Goodwin 2000b, 2003; Mondada 2002, 2007; Schmitt and Deppermann 2010; Streeck 1993, 1994, 2002; Stukenbrock 2013; for an overview see Mondada volume 1), anthropology (e.g., Enfield 2001, 2009; Hanks 1990, 2005, 2009; Haviland 1993, 2003; Senft 2004), linguistics and semiotics (e.g., Enfield 2001, 2003, 2009; Fricke 2002, 2003, 2007, in preparationa,b; Harweg 1976; Hausendorf 2003; Müller 1996; Schmauks 1991), and linguistics of sign language (e.g., Cormier 2012; Engbert-Pedersen 2003; Liddell 2000; Pizzuto and Capobianco 2008; for an overview on speech, sign, and gesture see Wilcox volume 1). For an introductory overview covering a wide range of fields, see the collected volume *Pointing: Where Language, Culture, and Cognition Meet* edited by Sotaro Kita (2003c).

However, deixis is not limited to pointing, nor can verbal deixis be derived from gestural deixis alone, as Bühler (1990) emphasizes. Although Bühler uses the analogy to pointing as a starting point for analyzing verbal deictics, he makes it unmistakably clear that he considers “the deictic origin of language”, which means the temporal priority of pointing without naming, a “myth” (Bühler 1990: 100–101). “Pointing is pointing”, Bühler states, “and never anything more, whether I do it mutely with my finger or doubly with finger and a sound to accompany the gesture” (Bühler (1990: 102) (for details, see section 3). It should be noted that, according to Bühler (1990: 127), the pointing gesture and its function can also be replaced “by indirect situational evidence or conventional interpretation clues”, e.g., the origo and what he calls the “tactile body image”, whose participation is indispensi-

ble for any deictic function (Bühler 1990: 146) to be fulfilled. “Without such guides”, Bühler claims, “every deictic word would in a sense be sent off in random; it would indicate nothing more than a sphere, a ‘geometrical place’ to us, but that is not enough for us to find something there” (Bühler 1990: 127–128).

2. Deixis and indexicality: The Bühlerian and the Anglo-American traditions

Deixis has been generally characterized as introducing context-dependent properties into language (for an overview, see Levinson 2004). With respect to different lines of deixis theory, there are mainly two senses in which deixis is discussed: The Anglo-American tradition considers indexicality (context dependency in the broader sense) as the defining criterion for deixis, whereas the European tradition, in the line of Bühler, defines deixis as origo dependent (context dependency in a narrower sense) and considers deictic expressions as obligatorily standing in relation to the origo (cf. Fricke 2002, 2003, 2007). According to Bühler, the origo is the indispensable deictic clue mentioned above and constitutes the deictic center of the utterance, which in the default case is instantiated by the temporal and local coordinates of the actual speaker as well as his actual communicative role.

In Anglo-American deixis theory, deictic expressions are conceived of as indexical expressions that depend on context elements in the utterance situation but are not necessarily relative to the origo (e.g. Fillmore 1982, 1997; Levinson 1992, 2004; Lyons 1977). Levinson (2004: 97) characterizes the terms “deixis” and “indexicality” as “coextensive – they reflect different traditions [...] and have become associated with linguistic and philosophical approaches respectively”. However, in the Anglo-American tradition, if Bühler’s term “origo” is used at all, it is conceived of as “the indexical ground of reference” (Hanks 1992; see also Fillmore 1982: 45). According to Hanks, “deictic reference organizes the field of interaction into a foreground upon a background, as Figure and Ground organize the visual field” (Hanks 1990: 40–41). The distinction between Figure and Ground (see also Talmy 1978) within Anglo-American deixis theory can be traced back to Fillmore (1982: 45), who gives the example of verbal local deictics that use the speaker’s body (or in some cases the addressee’s body) as perceivable Ground. In contrast to Bühler, deixis here is entirely limited to perceptual deixis, or *demonstratio ad oculos* in Bühlerian terms. Imagination-oriented deixis (e.g., displacement), as conceived by Bühler, is classified as non-deictic: “What justifies me in describing it as non-deictic is its not being anchored in the current speech event in which the utterance is produced” (Fillmore 1982: 38). Following Fillmore, nearly the entire Anglo-American line of deixis theory limits the general term “deixis” to perceptual deixis and, in addition, to the actual speaker and his spatio-temporal coordinates (Fricke 2002, 2003, 2007; see also Hanks 2005: 196 on “spatialist” and “interactive” point of views in Anglo-American deixis theory). This limitation can also be observed with respect to the common distinction between the terms “deictic” and “intrinsic” in local deixis (cf. Fricke 2002, 2003). Miller and Johnson-Laird give the following characterization:

We will call the linguistic system for talking about space relative to a speaker’s egocentric origin and coordinate axes the deictic system. We will contrast the deictic system with the intrinsic system, where spatial terms are interpreted relative to coordinate axes derived from

intrinsic parts of the referent itself. Another way to phrase this distinction is to say that in the deictic system spatial terms are interpreted relative to intrinsic parts of ego, whereas in the intrinsic system they are interpreted to intrinsic parts of something else. (Miller and Johnson-Laird 1976: 396)

In this quotation, the concept of deixis is not clearly distinguished from the concept of an intrinsic frame of reference. Rather, the intrinsic system of the speaker is opposed to that of a non-speaker: If a deictic system is present, then the speaker makes himself and his intrinsic coordinates a reference point for a linguistic localization. However, if an intrinsic system is present, then the reference point lies with an entity that is not the speaker and is derived from the inherent properties of that entity. The object referred to must have a clear front and back so that a spatial coordinate system can be constructed and fixed, e.g., vehicles, like a car. Examples of non-intrinsic entities are balls, bushes, and columns. The concept of intrinsic can also be traced back to Bühler, who, without actually using the term, deals with the intrinsic as part of deixis:

[...] we may view the important case, for example, of a vehicle (carriage, ship, locomotive, car) where one's orientation immediately and not only conceptually, but of necessity perceptually, follows the conventional direction of movement of the object. Just as naturally as with animals and other humans. When a teacher of gymnastics facing a dressed line of gymnasts gives commands, the orders *left* and *right* are conventionally given and understood according to the gymnasts' orientation. That is the paradigmatic case for whose explanation one must note the astonishingly easy translatability of all field values of the visual system and the verbal deictic system from someone in another plane of orientation. (Bühler 1982b: 36–37)

In his approach, Bühler argues for a movable origo conceived of as an abstract mathematical point in a Cartesian coordinate system, whereas Miller and Johnson-Laird assume an “origo” fixed to the speaker and his actual spatio-temporal coordinates in perceptual space. Therefore, they exclude phenomena that they consider to be non-deictic but that fall under Bühler's wider concept of deixis. It is worth pointing out that the direction of transfer of the respective coordinate systems is exactly the opposite one: Miller and Johnson-Laird use the intrinsic coordinate system of an object as the starting point and conceptualize the deictic system as an intrinsic coordinate system connected to the actual speaker. Consequently, the intrinsic coordinates become, so to say, “deictic”. This means that, in their approach, speaker deixis is derived from object intrinsics, whereas Bühler derives object intrinsics from speaker deixis. In contrast to Miller and Johnson-Laird, Bühler allows for moving of the egocentric origo to other people, creatures, and objects. As long as verbal expressions and gestures are relative to the origo, they are covered by his notion of deixis (for further details, see Fricke 2002, 2003, and 2007: 17–53). It is beyond the scope of this section to discuss this issue more deeply, but it should be noted that the Anglo-American and the Bühlerian traditions differ with respect to the following main points:

- (i) the scope of the notion of deixis,
- (ii) the concept of origo or deictic center (concrete and fixed vs. abstract and movable),
- (iii) the concepts of deictic reference and deictic space (perceivable entities vs. perceivable as well as imaginary entities), and
- (iv) the role of the human body (marginalized vs. crucial).

The following sections are based on the Bühlerian tradition of deixis theory. He is considered to be the most influential founder of modern deixis theory. Most basic categories can be traced back to him (Klein 1978). Nevertheless, the crucial role of the human body in Bühlerian concepts, e.g., the “tactile body image”, which anticipates the concepts of “image schema” and “embodiment” in current cognitive linguistics (e.g., Johnson 1987; Lakoff 1987; Geeraerts 2010; Hampe 2005; for an overview on image schemas and gesture see Cienki 2005, volume 1; on embodiment Ziemke, Zlatev, and Frank 2007; Sonesson 2007; Zlatev volume 1), and the investigation of pointing gestures in particular, have been neglected in recent researches, which would no doubt benefit from a thorough reflection on his theoretical approach. Moreover, considering that no video recordings were available in Bühler’s time, his *Sprachtheorie* [Theory of language] (1934) offers surprising insights into deixis based on his precise observations of everyday communication.

3. Deixis, pointing, and naming: Commonalities and differences

3.1. Pointing in Bühlerian deixis theory

In contrast to “symbols” or “naming words”, according to Bühler (1934, 1982b, 1990), “deictic words” or “pointing words” are characterized by the fact that they are only interpretable by recourse to an origo, which by default is connected with the speaker. Deictic words belong to the “deictic field of language”, whereas naming words or symbolic words belong to its “symbolic field”. Bühler introduces his chapter on the deictic field of language with the description of a signpost imitating an outstretched arm: “The arm and finger gesture of man, to which the index finger owes its name, recurs when the signpost imitates the outstretched ‘arm’; in addition to the arrow symbol, this gesture is a widespread sign to point the way or direction” (Bühler 1990: 93). He continues: “If all goes well it does good service to the traveler; and the first requirement is that it must be correctly positioned in its *deictic field*” (Bühler 1990: 93).

To paraphrase the essence of the first paragraphs of his introduction, imagine your arm is performing a pointing gesture. It is as if a straight line is drawn between two points, i.e., the tip of your extended index finger and the point where your body is located, the origo or origin. Depending on who performs the pointing gesture, you or a different person, and depending on where in the room the speaker is, the extension of the straight line would lead to different target points in the room. Bühler assumes similar properties for certain verbal expressions like *I, you, here, there, now, or then*. These verbal expressions, called “deictics”, refer to different situational context elements, depending on when, where, and by whom they are uttered. According to Bühler, verbal deictics like *here* and co-speech pointing gestures can only be interpreted in relation to an origo: They are origo-relative expressions (cf. Fricke 2002, 2003).

It should be mentioned that Bühler emphasizes an aspect called “sociocentricity” (Hanks 1990: 7) in later approaches. He considers deixis to be a “complex human act” and a social undertaking within which “the sender does not just have a certain position in the countryside as does the sign post; he also plays a *role*; the role of the sender as distinct from the role of the receiver” (Bühler 1990: 93). Bühler further points out that “it takes two to tango, two are needed for every social undertaking, and the concrete speech event must first be described in terms of the full model of verbal communication.

If a speaker ‘wishes to indicate’ the sender of the present word, he says *I*, and if he wishes to indicate the receiver he says *thou*” (Bühler 1990: 93).

Bühler’s concept of linguistic deixis is derived from the analogy to pointing but differs from it with regard to two main aspects: Firstly, as mentioned above, linguistic deixis cannot be fully derived from pointing, and secondly, linguistic deixis requires the presence of at least a minimal ingredient of naming or, in other words, deictics are signals as well as symbols and manifest the functions of both appeal and representation in Bühler’s organon model of language (Bühler 1990). Bühler cannot be misunderstood on this matter, as he makes the following statement about verbal deictics:

They, too, are *symbols* (and not only *signals*); *da* and *dort* (there) symbolize, they name an area, they name the geometrical location, so to speak, that is, an area around the person now speaking within which what is pointed at can be found; just as the word *heute* (today) in fact names the totality of all days on which it can spoken, and the word *I* all possible senders of human messages, and the word *thou* the class of all receivers as such. (Bühler 1990: 104)

According to Bühler, “the simple reference to something to be found here or there, at a certain place in the sphere of actual perception, must clearly be distinguished from the quite different information that it is of such and such character” (Bühler 1990: 102). From this, Bühler concludes that “pointing is pointing and never anything more”, but it may complement the naming function of the sound. This means that naming and pointing cannot be derived from each other although, according to Bühler, “they are able to complement each other” as parts of utterance formation, later called “gesture-speech ensembles” by Kendon (Kendon 2004: 127). Bühler also clearly recognizes the parallel between symbolic naming and iconic imitation: “A mute gesture, too, can characterize what is meant by imitating it; the sound symbolizes it” (Bühler 1990: 102).

With respect to the complementary function of co-speech pointing, Bühler states the necessity of deictic clues in general, not only simple pointing but also substitutes like situational evidence or particular conventionalized clues. Concerning the necessity of co-speech pointing in utterances containing particular verbal deictics, the case is relatively clear. In order to focus the addressee’s attention on the reference object intended by the speaker, the latter is obliged to use directive body movements accompanying the utterance *I mean this book, not that one!*, already introduced above. It should be noted that obligatory pointing “might hold true for certain deictics but not for all cases to be included” (Hausendorf 2003: 262). An example of situational evidence is using the noun phrase *this book here* in order to refer to the only single book present in the utterance situation. It is obvious that in this case no complementary directive information is necessary. But what is meant by “conventionalized clues”? Bühler illustrates this case by analyzing the anaphoric use:

Where is there supposed to be such a sensual guide when in German I use the words *dieser* and *jener* [respectively this = the latter and that = the former] to refer to what has just been spoken of in the utterance? In this case there is admittedly no sensible guide. But to replace it, a convention takes effect that the hearer should look back at what was last named as the nearer thing when he hears *dieser* [this, the latter] and at what was first named as the more remote thing when he hears *jener* [that, the former] and that he should resume thinking about them. (Bühler 1990: 128)

It should be mentioned that German differs from English in this respect. In English *former* and *latter* use the beginning of the text as the origin of reference, whereas in German the origin is instantiated by the point at which the verbal deictics actually occur (Bühler 1990: 128). These contrary conventions in anaphoric use might also shed light on the contrary directionality of the Bühlerian and Anglo-American conceptions of deictic and intrinsic in deixis theory already mentioned above.

So far we have distinguished between pointing, deixis, and naming. Although Bühler himself only deals with co-speech pointing gestures as complements to verbal deictics, we are allowed to ask: How deictic are pointing gestures in themselves? Bühler leaves no doubt as to how the question should be answered: To be considered as fully deictic, pointing gestures require a complementary naming function characterizing the reference object intended by the speaker.

3.2. Examples of pointing and “naming” in gesture

Considering co-speech gestures alone, particular forms of conventionalized pointing gestures can be conceived of as integrating the Bühlerian naming function and, therefore, as fully deictic. Examples are the G-form, with an extended index finger and the palm oriented downwards, and the palm-lateral-open-hand gesture (PLOH). Analogous to verbal local deictics, which differ with respect to their *denotatum*, e.g., space (*here*) vs. object (*this*), these two typified forms of pointing are at the same time semanticized with different meanings. The G-form is semanticized with a meaning which can be paraphrased as ‘pointing to an object’, whereas the meaning of the palm-lateral-open-hand gesture is directive (‘pointing in a direction’).

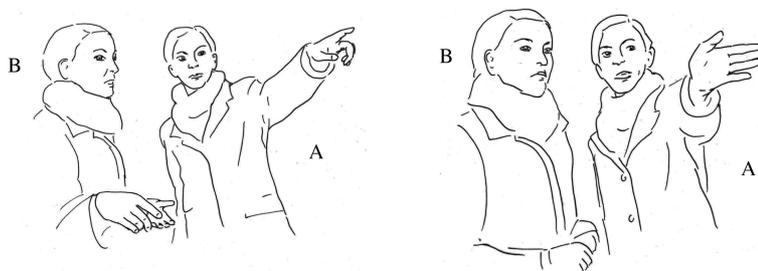


Fig. 136.1: Two types of pointing gestures in German: G-form and palm-lateral-open-hand (Fricke 2007, this volume)

Differentiation between the palm-lateral-open-hand gesture and the G-Form has been observed with respect to both form and meaning – at least for single occurrences – in Italian (Kendon and Versante 2003; Kendon 2004) and, as a quantitative study has shown, also in German (Fricke 2007, 2010; for this differentiation in other languages, see also Haviland 1993, 2003; Jarmolowicz-Nowikow this volume; Wilkins 2003). Fricke classifies such partially conventionalized form-meaning relations – in contrast to fully lexicalized ones – as “kinesthematic” (Fricke 2010, 2012, this volume). Since other non-conventionalized body movements, for example, pointing with the elbow, provide purely directional information without characterizing the target to which the speaker is drawing

the addressee's attention, from a linguistic point of view, they are to be classified as only proto-deictic. Proto-deictic instances of pointing serve as optional or obligatory complements in concert with verbal deictics to achieve the full deictic function required by the type of utterance as well as the communicative goal of the speaker. Since both co-speech gestures alone and verbal deictics alone are capable of instantiating the full deictic function by integrating pointing and naming, this implies that gesture as a medium shows the potential for unfolding language-like properties in the Bühlerian "deictic field" (cf. Wundt [1900] 1973).

4. The deictic relation I: The origo

In the simplest case, the deictic relation is conceived of as a two-place relation between the origo and the deictic object. More elaborated concepts provide a three-place relation consisting of the origo, the deictic object, and an optional *relatum* object (Herrmann and Schweizer 1998: 51). Let us consider the following situation in Fig. 136.2 and assume that the speaker wants to inform the addressee about where the pliers are located:

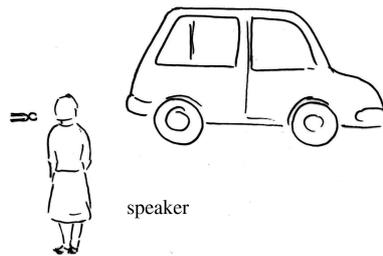


Fig. 136.2: The deictic relation according to Herrmann and Schweizer (1998)

From the conditions shown in the illustration, the speaker can produce the following three equally appropriate utterances:

- (1) *The pliers are in front of me.* (Origo: speaker, *relatum*: speaker, intended object: pliers).
- (2) *The pliers are behind the car.* (Origo: car, *relatum*: car, intended object: pliers).
- (3) *The pliers are to the left of the car.* (Origo: speaker, *relatum*: car, intended object: pliers).

The object to be located, the pliers, is called the intended object and is the same in all three utterances. This intended object is located in relation to another object, the *relatum*, and to the origo. The *relatum* and the origo can be instantiated by different entities, in this case, either by the speaker or the car. The utterances can be divided into two groups, namely three-point localizations and two-point localizations, depending on whether there are three different entities or only two that instantiate the position of the origo, the *relatum*, and the intended object. Utterance (3) is an example of three-point localization, whereas utterances (1) and (2) are examples of two-point localization. Herrmann's 6H-model consists of altogether six main variants, which result from assigning the origo either to the speaker, to the addressee, or to a third party.

4.1. The Bühlerian origo and tactile body image as predecessors of image schemas

Bühler's term "origo", which in a first step is derived from the analogy to a pointing gesture (see section 3.1), is conceptualized in a second step as the origin of a Cartesian coordinate system, which is used to organize the personal, temporal, and spatial structure of utterances.

Let two perpendicular intersecting lines on the paper suggest a coordinate system to us, 0 for the origin, the coordinate source: [...] My claim is that if this arrangement is to represent the deictic field of human language, three deictic words must be placed where the 0 is, namely the deictic words *here*, *now* and *I*. (Bühler 1990: 117)

As it will be demonstrated in the following section 4.2, Bühler's definition of origo is not completely adequate to specify the phenomena associated with deixis, but it takes an important aspect into account, namely, that the origo is under no circumstances to be identified with a concrete component of the situation. The Cartesian coordinate system, adopted from the sphere of mathematics, implies that Bühler thinks of origos in terms of abstract mathematical points. The direction of his thinking progresses from the concrete pointing gesture as a starting point, via abstract geometrical vectors, to abstract single points expressed in terms of algebra. Such origos are included in the meaning of the respective deictic expressions, e.g., the deictic *here* is considered to be origo-inclusive. This means that the respective relation to the origo has to be anchored in the utterance situation by instantiating it with perceptible or imaginary entities. Bühler's second way of detaching the origo from concrete perceptible entities is to assume the existence of a tactile body image, which resembles modern concepts of image schema as embodied experiential gestalts. Image schemas are defined as "a recurring dynamic pattern of our motor programs that gives coherence and structure to our experience" (Johnson 1987: xiv). The core list of image schemas, taken from Johnson 1987 and Lakoff 1987, includes the body axes, e.g., FRONT-BACK and UP-DOWN. Bühler's tactile body image is similarly grounded in sensory experience and connected with the speaker's body axes:

[...] When the same person uses words like *in front – behind*, *right – left*, *above – below*, another fact becomes apparent, namely the fact that he senses his body, too, in relation to his optical orientation, and employs it to point. His (conscious, experienced) *tactile body image* has a position in relation to visual space. (Bühler 1990: 129)

The tactile body image plays a crucial role in processes of deictic displacement, which is the so-called second main case of Bühler's *deixis am phantasma* (imagination-oriented deixis). The origo is displaced within perceptual space or imagined space. Thus the verbal deictics used by the speaker are not interpreted in relation to his current orientation but rather in relation to another grounding system, a virtual image that he creates of himself. The speaker's tactile body image wanders with the origo as it is described by Bühler in the following quotation:

When Mohammed feels displaced to the mountain, his present tactile body image is connected with an imagined optical scene. For this reason he is able to use the local deictic words *here* and *there* (*hier*, *da*, *dort*) and the directional words *forwards*, *back*; *right left* on

the phantasy product or imagined object just as well as in the primary situation of actual perception. And the same holds for the hearer. (Bühler 1990: 153)

The explicit link between the concept of origo and the concept of tactile body image reveals Bühler's conception to be an early predecessor of crucial concepts of embodiment in cognitive linguistics. Concerning modern deixis theory, one important implication of his thoughts is that by abstracting the origo from pointing and the whole body from mere sensory orientation, Bühler makes way for leaving behind the limitations of the so-called "canonical utterance situation" (Lyons 1977: 638). One argument against a concrete, physically defined origo fixed to the speaker is the phenomenon of movable origos in deictic displacements. A physical point in space and time cannot be mentally shifted (for a detailed discussion, see Fricke 2002, 2003, 2007). The assumption of a movable origo is not limited to Bühler alone and became widely accepted by later approaches. However, Bühler (1990: 117) seems to assume one single origo for all dimensions: a mutual starting point for personal, local, and temporal deixis. This raises the question of whether the assumption of one origo is sufficient. Sennholz (1985: 24) notes that there cannot be a single origo for all dimensions since, in some circumstances, several deictics used in one and the same speech sequence can each have their own origo. Fricke (2002, 2003) gives examples of co-speech gestures that can only be analyzed if basic concepts of deixis theory are changed: firstly, the concept of origo (section 4.2), and secondly, the concept of the deictic object (section 5).

4.2. Fricke's model of origo-allocating acts

Fricke's empirical analyses of multimodal deixis show that, with respect to the local dimension, not only several inter-dimensional but also intra-dimensional origos are present (see example 4 and Fig. 136.4 in section 4.3). Therefore, her concept of origo-allocating acts suggests a hierarchical structure of origos, beginning with a primary origo connected to the role of the speaker. As turn-taking results in changes of communicative

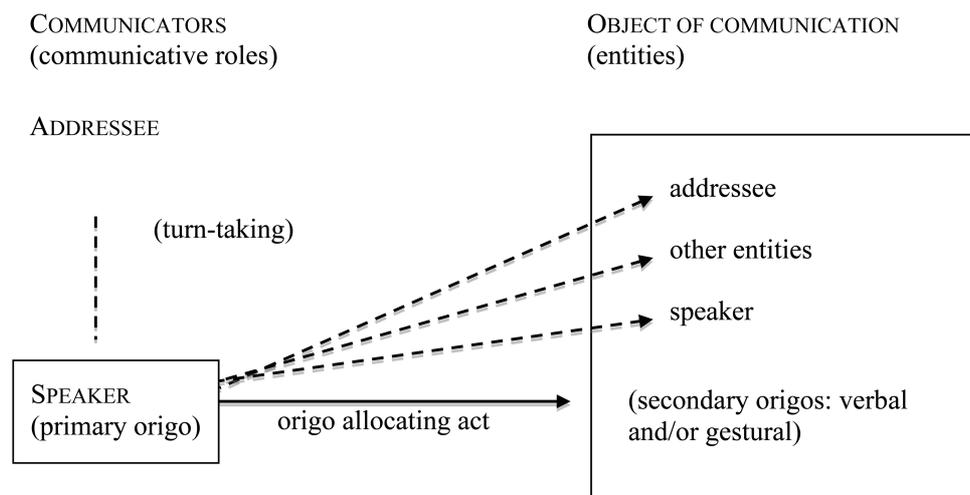


Fig. 136.3: The origo-allocating act according to Fricke

role, whoever is the speaker attains a primary origo and with it the possibility of intentionally creating secondary origos by means of origo allocation. In multimodal communication, these secondary origos can be instantiated by perceptible and imaginary entities, which can be interpreted either as signs or non-signs (Fricke 2002, 2003, 2007, in preparation b).

If we assume that an origo is not necessarily fixed to the speaker but can be transferred to other people and objects, then origo allocation is not simply a result of acquiring the speaker's role during turn-taking. When origos are allocated, it can be presumed that there is an intentionally driven *agent* who carries out origo allocation and instantiation (Fricke 2002, 2003). By talking to somebody, a person acquires the speaker's role, and with it the right to allocate local origos or to provide the local origo with intrinsically oriented entities. Such an entity can also be the speaker himself (Fricke 2002, 2003). Therefore, it is important to distinguish between two different things: firstly, the speaker who, in his role as speaker and as holder of a primary origo, allocates the secondary origos intentionally; and secondly, the speaker who, as an intrinsically arranged entity, instantiates a secondary origo. If we assume that the function of origo allocation is connected with the role of the speaker, then the personal dimension is the highest dimension in the hierarchy. Thus, the right to allocate origos changes with the communicative role.

4.3. Examples of verbal and gestural displacement as origo-allocation

The following examples are taken from video recordings of route descriptions at Potsdamer Platz in Berlin. The speaker in example 4 has not physically followed the route at Potsdamer Platz herself. She tries to relay to the addressee, as precisely as possible, the route description given to her by a third person. We can observe that while the intended deictic object at the verbal and gestural level is the same, namely the Stella Musical Theater, the gestural and verbal origos differ. The speaker allocates the verbal local origo to the addressee and localizes the theater with the verbal expression *rechts von dir* [on your right] in relation to the body axes of the addressee standing opposite to her, whereas she allocates the gestural local origo to her own body and its actual orientation.

- (4) *Und dann soll dort ein großer Platz sein und [rechts von dir] ist dies Stella-Musicaltheater ...*
 'And then there should be a large square and [on your right] the Stella Musical Theater ...'

The Peircean concept of sign (Peirce 1931–58) can be applied to explain the disparity between the gestural and verbal origos in example 4: By using the verbal utterance *rechts von dir* [on your right], the speaker, as holder of the primary origo, allocates a secondary local origo to the addressee B' as an imaginary wanderer on the verbal level. At the same time, on the gestural level, she allocates a secondary origo to her own body and its front-back and left-right axes. Since the body of the speaker, in his capacity as a human being, is analogous to that of the addressee B' projected into the future, the speaker allows herself to be understood as a model that represents the addressee B'. Thus, on the gestural level, the speaker does not shift her perspective so that it correlates



Fig. 136.4: Pointing gesture accompanying *rechts von dir*

with that of the addressee, but rather she instantiates the origo by her own body, which functions as an iconic sign of the imaginary wanderer (for a detailed discussion, see Fricke 2002, 2003).

Since the origin of the typical pointing gesture is the body of the person who is performing it, one would tend to think that no gestural displacements are possible. But this is not true, as the example of the palm-lateral-open-hand gesture in Fig. 136.1 demonstrates. The direction of the speaker's palm correlates with the front-back axis of the addressee. While the speaker is uttering *und gehst hier geradeaus* [and go straight ahead], the gestural local origo and the verbal origo are both instantiated, not by the speaker, but by the body of the addressee. Why is this? If the speaker had allocated the gestural origo to her own body, then the palm-lateral-open-hand gesture would have been in parallel with her own front-back axis. In this example, the speaker does not place herself in the shoes of the future addressee but uses the body of the actual addressee B as an iconic sign for the addressee B' projected into the future.

5. The deictic relation II: The deictic object

5.1. Bühler's distinction between perceptual deixis and imagination-oriented deixis

With regard to the deictic object, Bühler (1990) distinguishes between perceptual deixis, or *demonstratio ad oculos*, and imagination-oriented deixis, or *deixis am phantasma*. The perceptibility of an entity is the criterion for classification as *demonstratio ad oculos*, and the imaginary presence of an entity is the criterion for classification as *deixis am phantasma*. Within imagination-oriented deixis, he further distinguishes between three main cases. The first main case is characterized as a kind of theater stage on which the speaker performs like an actor. The second main case corresponds to processes of displacement already introduced above, where the "mental" origo is not instantiated by the actual speaker but displaced to new positions or transferred to other entities. The third main case is characterized by the fact that "the person who is having the experience is able to indicate with his finger the direction in which the absent thing is seen with the mind's eye" (Bühler 1990: 152). The speaker does not shift a secondary origo (as in the second main case), nor is the intended object localized as an imaginary object within the actual perceptual space of speaker and addressee (as in the first main case). The difference to

demonstratio ad oculos is simply that the intended object – in Bühler’s example, the object pointed at – is hidden and perceptually not accessible in the actual utterance situation. This classification has been challenged by the impact of gesture studies on deixis theory. Based on her analyses of deixis in multimodal utterances, Fricke’s claim is that the distinction between perceptual deixis and imagination-oriented deixis is based on the more fundamental distinction between deixis at non-signs vs. signs (Fricke 2002, 2003, 2007, 2008).

5.2. Beyond perception and imagination: Deixis at signs vs. non-signs

The distinction between perception and imagination as introduced by Bühler for his deictic modes is not a genuinely linguistic one. The scope of linguistics covers conventionalized signs that stand for other things. What these other things are has long been a matter of controversial discussion (e.g., Lyons 1977: 95–114). Accepting for the moment the view that all deictic communication between humans takes place by means of verbal or gestural signs, then it would be preferable to have a concept for the deictic object based on the sign relation itself, instead of relying on non-linguistic ontological differences. In the following, we will focus on Bühler’s first main case of *deixis am phantasma*, which is characterized as a kind of theater stage on which the speaker performs like an actor:

‘Here I was – he was there – the brook is there’: the narrator begins thus with indicative gestures, and the stage is ready, the present space is transformed into a stage. We paper-bound people will take a pencil in hand on such occasions and sketch the situation with a few lines. [...] If there is no surface to draw a sketch on, then *an animated speaker can temporarily ‘transform’ his own body with two outstretched arms into the pattern of the battle line.* [italics added by E.F.] (Bühler, 1990: 156)

Considering the last sentence of this quotation, we can observe that the battle line which is embodied by the speaker’s outstretched arms is perceptible and not imaginary. Although perceptibility is the distinguishing criterion for *demonstratio ad oculos*, this example is classified as *deixis am phantasma*. What is Bühler’s motivation for this? The answer lies in the alternative interpretation: If classified as *demonstratio ad oculos*, pointing at a “real” battle line in a battle could not be differentiated from pointing at an embodied battle line in a narration. Thus, the precise nature of the distinction that Bühler wishes to draw with regard to deictic modes and objects is in certain aspects unclear. This is the reason why Fricke claims that the distinction between perceptual deixis and imagination-oriented deixis is based on the more fundamental distinction between deixis at non-signs vs. signs (Fricke 2002, 2003, 2007; see also Goodwin’s concept of a “semiotic field” in Goodwin 2000b). Considering Bühler’s characterization of imagination-oriented deixis, what all the examples he gives in the above quotation above have in common is that the deictic object the speaker refers to, regardless of whether it is imaginary or not, is interpreted as a sign standing for something else. The embodied battle line in Bühler’s example is not just a perceptible object but rather a perceptible sign that depicts an absent battle line (Fricke 2007, 2009).

5.3. Examples of deixis at signs vs. non-signs in multimodal interaction

5.3.1. Deixis at non-signs

The term “deixis at non-signs” refers to the default case of deixis in which both communication partners have perceptual access to the reference object intended by the

speaker. However, the respective concepts are essentially different. Based on the Peircean concept of sign, deixis at non-signs is characterized by the fact that the pointing gesture or the verbal deictic refers to *is not interpreted as a sign*. This is illustrated by the following example, which is equivalent to the “canonical situation of utterance” introduced by Lyons (1977: 637):

- (5) A: [du kommst hier **vor**ne raus an **dieser** Straße (.)]
 ‘you come out here right in front at this street (.)’



Fig. 136.5: Deixis at non-signs in example (5) (Fricke 2007 demonstratum = intended reference object)

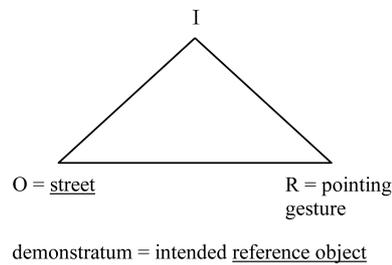


Fig. 136.6: Deixis at non-signs as Peircean sign configuration (Fricke 2007)

The pointing gesture in example (5) is directed at a target point instantiated by the entity “street” to which both the speaker and the addressee have perceptual access while communicating. The target object, or *demonstratum*, does not stand for something else. Therefore, it is not interpreted as a sign according to Peirce but is identical to the reference object intended by the speaker. In other words: With respect to both the speaker and addressee, the street is the street and nothing else; the *demonstratum* pointed at and the deictic reference object intended by the speaker do not differ at this point of their conversation.

5.3.2. Deixis at signs

The term “deixis at signs” is used when the deictic object (*demonstratum*) is an entity that is interpreted as standing for something else, as it is illustrated by the following example:

- (6) A: [**das** iss die Arkaden/]
 ‘that is the Arkaden’

While giving directions in the absence of the route described, the speaker (A) is pointing at the flat left hand of the addressee (B). This flat hand represents a certain building at Potsdamer Platz in Berlin, namely the Arkaden, a glass-covered shopping mall. In contrast to deixis at non-signs, the *demonstratum* and the reference object intended by the speaker are not identical but differ: The flat hand that the speaker is pointing at is interpreted as a sign for the intended reference object, the Arkaden. This relation is illustrated by the Peircean configuration of the sign processes in Fig. 136.8 on the right: The *demonstratum* of the pointing gesture R_1 is the flat hand of the addressee, which is



Fig. 136.7: Deixis at signs in example (6) (Fricke 2007)

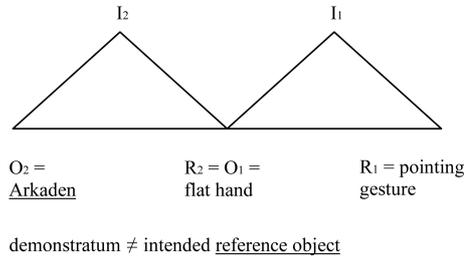


Fig. 136.8: Deixis at signs as Peircean sign configuration (Fricke 2007)

the object O_1 of the first sign relation. But, at the same time, the flat hand functions as the sign vehicle, or *representamen* R_2 , in a second sign relation that stands for the intended reference object, the Arkaden (O_2), which is not present in the actual utterance situation. This example is part of a longer sequence of interaction during which both communication partners collaboratively build up a shared map-like model of the Potsdamer Platz by verbal and gestural means (Fricke 2007: 208; for collaborative use of gesture space, see also Furuyama 2000 and McNeill 2005: 161). Other sequences in this data collection show that speakers can produce the deictic object and the respective pointing gesture simultaneously with their right and left hands, as illustrated by the following example (Fig. 136.9–12). The right hand is an iconic sign for a particular street at Potsdamer Platz and functions at the same time as the *demonstratum* that the speaker is pointing at with her left hand. The other pointing gestures refer to “imaginary” target points standing as signs for paths and buildings at Potsdamer Platz (for phenomena of so-called “abstract pointing”, see McNeill 2003, 2005; McNeill, Cassell, and Levy 1993).

- (7) A: (rh = right hand): ¹[{ja} also wenn hier so die Straße iss (.) von da Fußgängerweg und von da auch Fußgängerweg (.) und da iss McDonalds/ (xxx)]¹
 ‘so if the street is here (.) from there footpath and also from there footpath (.) and there is McDonalds’ (Fricke 2007: 128)

Examples like this show that deictic objects are not necessarily given prior to the utterance in question but can also be produced by speaker and addressee as part of their face-



Fig. 136.9: Deixis at signs: pointing gesture (lh) 1



Fig. 136.10: Deixis at signs: pointing gesture (lh) 2



Fig. 136.11: Deixis at signs: pointing gesture (lh) 3

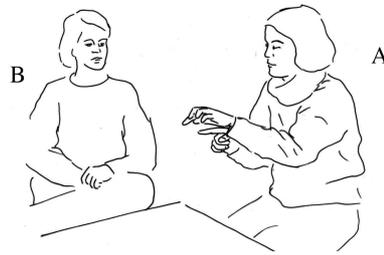


Fig. 136.12: Deixis at signs: pointing gesture (lh) 4

to-face interaction and the respective utterance itself. Consequently, the contribution of co-speech gestures to linguistic deixis is twofold: firstly, pointing gestures as proto-deictics and complements to verbal deictics, and secondly, iconic gestures as potential deictic objects.

6. Conclusion and outlook: The embodied deictic relation

Although the term “deixis” is originally based on the idea of drawing attention to something by means of pointing, linguistic deixis is not limited to pointing, nor can verbal deixis be derived from pointing gestures alone. Moreover, the latter are not the only type of co-speech gestures that contribute to deixis. For example, iconic gestures that form part of the multimodal utterance may instantiate the deictic object of the deictic relation. In the Bühlerian tradition of linguistic deixis theory, iconic gestures of this kind are classified as part of imagination-oriented deixis (*deixis am phantasma*) in contrast to perceptual deixis (*demonstratio ad oculos*). The inherent contradiction of Bühler’s classification substantiates Fricke’s distinction between deixis at signs vs. non-signs as being more fundamental. Based on Herrmann and Schweizer’s (1998) model, the deictic relation has been defined above as a three-place relation consisting of the origo, an optional *relatum* object, and the deictic object.

With regard to the origo, the term and concept of origo has been traced back to Bühler, who defines it as the zero-point of a Cartesian coordinate system, which is the mutual starting point for all deictic dimensions (personal, local, and temporal deixis). In contrast to the Anglo-American tradition, Bühler conceptualizes the origo as a mathematical point with no volume, which allows it to move, and also allows for deictic displacement. At the same time, the Bühlerian origo is anchored in the “tactile body image” of the speaker, a notion which strongly resembles modern concepts of image schemas as experiential gestalts. As pointed out, this explicit link reveals Bühler’s conception to be an important predecessor of embodiment theory in cognitive linguistics. With her concept of origo-allocating acts, Fricke broadens Bühler’s original concept, which assumes a mutual origo for all deictic dimensions. Her concept of origo is based on the assumption of an intentionally driven agent who allocates and instantiates the origos provided by the deictic utterance: Origo-allocating acts are hierarchically structured. The primary origo is connected to the role of the speaker who, as the current holder of the primary origo, intentionally allocates secondary origos to his own body, or to other perceptible or imaginary entities. Analogous to deictic objects, these instantiations of

secondary origos can also be interpreted as signs or as non-signs. With respect to embodiment in deixis, it turns out that the complete set of deictic relations may be instantiated either by the speaker's body or by his gestures: the secondary origo – by the speaker's torso (or other body parts) and his tactile body image (section 4); the deictic expression – by pointing gestures (including “naming”) (section 3.2); and the deictic object – either by the speaker's body or by iconic gestures produced during the utterance (section 5).

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