Imagined spaces as a resource in interaction

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This paper examines the interplay between verbal and visual bodily resources in referential practices used to construct imagined spaces in a learning environment. It addresses the question of whether and how these practices differ from multimodally accomplished reference to visible spaces. The analysis contributes to a growing body of empirical research on referential practices (Eriksson, 2009; Goodwin, 2003; Hanks, 1990, 1992, 2005; Hindmarsh & Heath, 2000; Mondada, 2007) and introduces a new perspective by studying the situated, embodied production of reference to imagined phenomena. With very few exceptions (Schmitt & Deppermann, 2010; Haviland, 2000; Liddell, 2000; Murphy 2005; Stukenbrock, forthcoming a), the multimodal construction of imagined spaces has not yet been examined systematically.

Drawing on Bühler's (1965/1934) theory on deixis, the paper analyses how a particular deictic mode, i.e. Deixis am Phantasma (deixis in the imagination), is brought about and used in face-to-face interaction. It will be shown that based on the perceptual, cognitive and interactive resources also used in demonstratio ad oculos (pointing to visible phenomena, cf. Stukenbrock,
2009), participants likewise accomplish a shared, albeit imagined, perceptual and cognitive orientation in cases of *Deixis am Phantasma*. The analysis focuses on the way in which spatial transpositions or displacements are brought about; it also looks in detail at how verbal deictic and concurrent bodily practices function together in shifting the indexical ground away from the participants’ actual space of perception to an imagined spatial domain and back again to the here-and-now of the ongoing interaction.

Situated within the theoretical and methodological framework developed by conversation analysis (Sacks, 1992; Schegloff, 1984, 2007) and interactional linguistics (Selting & Couper-Kuhlen, 2001a, 2001b), the analysis starts from the assumption that the use of visual resources such as gaze, gesture, body movement, etc. form an integral part of utterance construction in face-to-face interaction and need to be accounted for in linguistic analysis. This paper is thus very much indebted to the growing body of research on multimodality (Goodwin, 1980, 2000, 2007; Kendon, 1990, 2004; Mondada 2007; Stivers & Sidnell, 2005; Streeck, 2009).

2. The data

The data used for the analyses consist of 12 hours of video recordings of self-defence training sessions for 12- to 16-year-old girls in different secondary schools in Germany. The courses took place in the school gym and were recorded over a time span of several weeks. Access to the field was provided by a student who worked as an assistant to the self-defence trainer and was also part of the research team who collected the data. The training sessions are intended to heighten the girls' awareness of potential dangers and to familiarize them with basic self-defence techniques. Phases of physical exercises alternate with phases in which the trainer either gives further instructions and offers suggestions for improvement or discusses related aspects with the group.

In these sessions, the participants' imagination is mobilized as a resource to simulate different aspects of potentially dangerous situations in the safe environment of the gym. The simulations include the imaginative construction of relevant places (dark streets, bus stops, etc.), participation frameworks and participant roles (aggressor, victim, bystander, etc.), bodily configurations in both stationary and mobile situations as well as verbal and physical actions in problematic encounters. The activities undertaken by the participants in this particular setting provide a great number of instances for the multimodal study of deictic practices that constantly shift between the here-and-now of the participants and imagined scenarios beyond the actual surroundings of the gym.
3. Theoretical background: A note on deixis

The following analysis builds upon the concept of *Deixis am Phantasma* as it was first formulated by Bühler (2011/1934) in his theory of language. Bühler's approach to deixis offers a theoretical framework that helps us to understand what happens linguistically when interlocutors shift between perceptually accessible and imagined spaces.

Bühler proposes a two-field theory of language according to which linguistic elements are divided up into two distinct fields. They belong either to the *symbolic field* (*Symbolfeld*) or to the *deictic field* (*Zeigfeld*) of language. The elements in the deictic field are organized with respect to the three dimensions time, place, and person. These dimensions constitute a coordinate system of subjective orientation, which is generally held to be structured egocentrically (for a different view see Hanks, 1990). According to Bühler, the zero-point of this coordinate system is called *origo*; it defines the I-now-here-centre of the speaker's subjective orientation within the deictic field.

Bühler distinguishes between three modes of pointing: 1.) *demonstratio ad oculos et ad aures*: i.e. pointing to visible phenomena in the immediate surroundings, 2.) *anaphora*: pointing to elements in the context of speech, and 3.) *Deixis am Phantasma*: the use of deictic expressions for reference to phenomena available only in the imagination. This means that we "deal with the situative phantasy products, the imagined objects, on and to which 'pointing' takes place within the imagination" (Bühler 2011/1934: 150). In English, *Deixis am Phantasma* is usually called *deixis in the imagination* or *imagination-oriented deixis*.

Three different sub-types of *Deixis am Phantasma* can be distinguished. Their common central feature is that the referent has to be constructed in the imagination. In the first type, the speaker refers to something absent as if it were present and locates it within the immediate space of perception. The participants thus imagine something absent as being transposed within the actual order of perception. The second type works the other way around: The speaker displaces his *origo* to an imagined space and takes up a certain viewpoint (perspective) within that space. From there, he points and refers to imagined phenomena and thus locates them relative to his own position in the imagined space. The third type constitutes an intermediate case between pointing to something present and pointing to something absent; this means that the immediate space of perception is expanded imaginatively so as to include some liminal phenomenon, something on the border between presence and absence.

The analyses presented in this study focus on the first and second types of *Deixis am Phantasma*. They represent those instances of embodied deictic practices which are grounded in the ongoing activities of simulating dangerous
scenarios. The first and the second types are similar in that when participants make use of deictic displacements, they are grounded in their immediate spatial surroundings, while at the same time they evoke spatially and/or temporally remote, or even purely fictitious spaces. They can either populate the surrounding space with non-present entities (first type), or they can construct an imagined space and endow that space with properties which resemble perceptual, spatial and interactional configurations that exist in "real space" (second type). In both cases, participants can be observed both verbally and visually pointing to their constructs as if they were there.

Bühler illustrates the difference between the first and the second type as follows: "To put it in the manner of a parable, either Mohammed goes to the mountain or the mountain comes to Mohammed" (Bühler 2011/1934: 150). Whereas in the first type, the imagined phenomenon "comes to us, that is, into the given order of actual perception, within which it can be localized, though not quite 'seen'" (Bühler 2011/1934: 150), the opposite occurs in the second type in which Mohammed goes to the mountain. This means that "one is displaced in imagination abruptly, suddenly to the geographical place of what is imagined, one sees what is imagined in front of one's mind's eye from a certain reception point which one can identify and at which one is situated in imagination" (Bühler 2011/1934: 151).

To understand how embodied deictic reference mobilizes imagined spaces or entities in those two types of *Deixis am Phantasma*, we first need to examine deictic practices which refer to and establish perceptually accessible spaces and entities.

### 4. Space as a resource in *demonstratio ad oculos*

The first example illustrates some fundamental aspects of how space is made relevant and interactively constructed as a shared perceptual and cognitive phenomenon when participants (verbally and gesturally) point to visible phenomena in the immediate surroundings. In the theory on deixis, cases such as this have become known as *demonstratio ad oculos* (Bühler 1965/1934).

The following extract is part of a larger sequence in which the trainer instructs the girls to perform certain movements with their legs. The trainer is standing on one side of the gym facing the girls who are either lying or sitting on the mats. The mats are dispersed in an orderly manner on the floor. The girls have just finished an exercise and have assumed different bodily orientations towards each other and towards the trainer. To rearrange the group in space for the next exercise, the trainer instructs the girls to orient themselves in the same direction. To anchor her instruction in the surrounding space and to enable the girls to align themselves bodily with one another, she constructs two different sub-spaces – a *here* (*hier*) and a *there* (*da*). These sub-spaces...
constitute spatial poles along a horizontal plane along which the girls conform their axis:

**Example 1: hier und da/here and there (MM_C3_00:22:07)**

1  T: vielleicht EINigen wir uns mal drauf-
    maybe we agree *PART* upon
2    dass alle den KOPF,
    that all put the head
3    (0.5)

4  Jetzt zum *beispiel HIER* haben,
    now for example *here*

5  und die *füße DA*.
    and the feet *there*

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2 The data are transcribed according to the GAT 2 conventions (see Selting et al. 2009).
The trainer’s instruction concerns the way in which the girls are supposed to orient themselves bodily in space while keeping their position on the mats. It consists of two parts. The first part refers to the spatial orientation of the head (l. 2-4), and the second to the respective placement of the feet (l. 5). To construct two different spaces within the perceptual surroundings of the participants, the trainer uses two spatial deictics: hier (here) and da (there). The deictics are used gesturally (Fillmore, 1997: 62f.), which means that they can only be understood if the participants closely monitor the bodily actions of the speaker. The deictics co-occur with two pointing gestures that are temporally aligned with the articulation of the verbal deictics. The gestural peaks coincide prosodically with the main stress placed on the two deictics.

The multimodal packaging of these pointing actions and their temporal coordination with the addressees emerges as follows: The trainer introduces her instruction by projecting the desired outcome as an interactive achievement agreed upon by the participants (l. 1: "vielleicht EINigen wir uns mal drauf-", 'maybe we agree upon'). The subsequent subordinate clause (l. 2: "dass alle den KOPF", ‘that all of you the head’) introduced by the verbum dicendi (l. 1: "einigen", 'agree upon') remains grammatically incomplete and thus projects more to come. However, the trainer does not immediately continue her turn, but pauses (l. 3).

While some of the girls are sitting upright on their mats and are visually oriented towards the trainer, others are stretched out on the mats and are not looking at the trainer (im. 1). The pause in l. 3 allows and prompts some of the formerly inattentive girls to reorient themselves towards the trainer, who then continues her turn at talk (l. 4). Simultaneously, she lifts both her arms above her head (im. 2). In doing this, she projects a bodily action to come and establishes her body as a perceptually relevant resource which has to be monitored by the girls. Along with the articulation of the proximal deictic "HIER", ‘here’ (l. 4), she lowers her arms and moves them in a wide sweep to the left side. Both her index fingers are extended and pointing downwards (im. 3). Her gaze is likewise oriented to the left. With this orientation, termed body
torque by Schegloff (1998), she directs her addressees' attention away from her own body towards the sub-space referred to as "HIER", 'here'.

At the beginning of the next utterance (l. 5), which contains the second part of the instruction, the trainer lifts her right arm up above her head again (im. 4). In temporal alignment with the articulation of the second deictic "DA", 'there' (l. 5), she moves her arm downwards and stretches it out to the right side (im. 5). At the same time, she also orients her head/gaze to the right. Her right arm is now in a position that mirrors the position of her outstretched left arm. The left arm remains frozen in its pointing position throughout the trajectory delineated by the movement of the right arm. In contrast to the local deictic "HIER", 'here', the local deictic "DA", 'there' constructs a second space the addressees have to orient themselves towards as well.

In the course of the second part of the trainer's instruction (l. 5), which concerns the spatial orientation of the feet, we can observe that those girls who are oriented in a different way begin to reposition themselves (im. 4-6). By following the instruction and reorienting themselves in space in the indicated way, they display that they have perceptually taken notice of the pointing act and bodily document their understanding of its meaning.

At the end of her turn, the trainer freezes her body posture as well as her pointing gestures and looks towards the addressees (im. 6). Gesturally, she thus upholds the two spaces created by the pointing acts along with the horizontal plane laid out among those spatial poles. Perceptually, she monitors the visual orientation of her addressees and checks, first of all, whether they perceive what they are supposed to perceive – namely the pointing gestures and the indicated spaces – and secondly, whether they are going to follow her instruction to turn around and conform to the required spatial orientation of their bodies. When those girls who are unfavourably oriented begin to shift their position on the mats and rearrange their bodies in space, the trainer can conclude that they have seen her gestures, understood her talk, and are willing to comply with her instructions.

To understand how space is used as a resource in this demonstratio ad oculos instruction, it is important to take a close look both at the sequential format and the multimodal packaging of the pointing acts. Whereas the first pointing gesture is done with both arms parallel, index fingers extended (im. 2-3), the second one is performed only with the right arm (im. 4-5). Note that in the meantime, the left arm is held in a frozen position thus indicating that the first space remains relevant throughout the second pointing act. This has to do with the spatial particulars of the instruction. Since the girls are required to arrange their bodies in a particular axial orientation in space, the here only makes sense with respect to the there and vice versa. The girls have to project their bodies along a horizontal line defined by the poles of the here-space on the one hand and the there-space on the other hand. Presupposing
the intrinsic orientation of the human body and calculating from the local anchoring of the head in interactional space, the spatial positioning of the feet is relative to the spatial orientation of the head.

The first analysis concludes with a few general observations on deictic reference to visible phenomena in the participants' surroundings. Along with verbal deictics, concurrent bodily practices (particularly pointing gestures) and a typical gaze pattern are integrated into a sequential format that is, by its very nature, both multimodal and interactive. It constitutes a basic and at the same time flexible format for deictic actions (Stukenbrock, 2009, forthcoming a). The different resources involved in this format include grammatical means (deictic categories), prosodic means (stress), and visual bodily practices (gestures, bodily orientation, gaze direction, etc.) which form locally adaptable multimodal action packages. Moreover, the format builds upon a systematic use of different orders of perception as a crucial mechanism for the interactive construction of joint attention to visible phenomena.

In the example, the second order perception which came about by the trainer's monitoring of her addressees' perception constitutes a recurring control mechanism in deictic practices in face-to-face interaction (Stukenbrock, 2009, forthcoming a). Speakers monitor that they have been understood, and addressees display both their perception and their understanding by orienting their bodies to the relevant space and by performing conditionally relevant next actions.

To sum up, perception functions as a key mechanism in the construction of shared spaces by the use of deictic practices: Firstly, perception/perceptibility of visible phenomena in the local ecology of the participants' surroundings (A can see a phenomenon P) enables them to use those phenomena as interactional resources to construct joint attention. Secondly, reciprocal perception/perceptibility (A can see his interlocutor B and B can see A) constitutes the prerequisite for A to perform a pointing gesture in order to orient B's attention to P and for B to see A's pointing gesture. Thirdly, perception of the interlocutor's perception, i.e. meta-perception (B displaying his perception of the relevant phenomenon P and A witnessing B's perception of the phenomenon P), serves to turn joint attention on a phenomenon P into an intersubjectively known accomplishment. With these initial observations in mind, we will now move on to look at the interactive construction of imagined phenomena and spaces.

5. Imagined spaces as a resource in interaction

5.1 First type of Deixis am Phantasma

In contrast to the first example where the deictic action performed by the trainer referred to a here and a there within the participants' actual space of
perception (Bühler's *demonstratio ad oculos*), the next example represents a typical instance of Bühler's *Deixis am Phantasma*. Within the deixis theoretical typology, it represents the first type of *Deixis am Phantasma* where, according to Bühler's imagery, the prophet comes to the mountain.

In the extract, the trainer uses a deictic term in coordination with a set of bodily actions to make part of the surrounding space of perception relevant and to place an imagined entity there. The sequence occurs at the juncture between two different activities. The girls were doing an exercise where they were lying on the mats and performing kicks to their left and right at an imaginary aggressor. After finishing, the trainer proceeds to give the girls follow-up instructions for a partner exercise. The task is to practice the same movements with a partner who simulates the aggressor:

**Example 2: der Angreifer/the aggressor (MM_C3_00:23:14-23:42)**

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**image 1**

trainer

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01 T: und wir machen die Angreifer-
and we are going to make the aggressor
02 jetzt mal=n bisschen realIStischer,
now a bit more realistic
03 (0.8)
04 das HEISST,
that means
05 =<<acc>also meine Vorstellung,>
thus my imagination
The trainer introduces the new phase announcing that the aggressor will be simulated more realistically than before (l. 1-2). She is at the far end of the gym facing the girls (im. 1). During the pause (l. 3), she starts moving towards the middle of the room heading for a free mat. While walking, she commences a new turn (l. 4: "das HEISST", ‘that means’). The reformulation indicator (Gülich & Kotschi, 1987, 227) projects an explanation that will clarify what she considers to be a realistic simulation of an aggressor. She explicitly refers to her imagination (l. 5: "also meine VORstellung", ‘thus my imagination’) and thus frames the following as hypothetical and imaginary. This new footing (Goffman, 1974, 1981) is just as relevant for the verbal part of her utterance as it is for its visible bodily component, i.e. her pointing gesture.
Next, the trainer constructs a space and populates it with a phantom, namely the imagined figure of the victim. She locates the victim with a proximal deictic (l. 6: "jetzt HIER ist das opfer ja?", 'now here is the victim, right?') and a rich use of bodily resources. They all work together in the online construction of an imagined scenario anchored in the spatial ecology of the gym. This emerges as follows: The trainer is still moving when she utters the local deictic "HIER", 'here' (l. 6). It carries the prosodic stress of the intonation phrase and is used gesturally: A pointing gesture or some other kind of visual cue is needed to disambiguate the meaning of the deictic form. Thus, the pointing gesture that the trainer is about to perform is required and strongly projected by the verbal deictic. Note that the trainer's arms are in a position that also foreshadows further forelimb movement.

The pointing gesture is performed with both arms and hands (im. 2-3). The hands are brought into an open hand palm down form (Kendon, 2004; McNeill, 2000; Müller, 1998) and moved downwards (im. 3). In the trajectory of this movement, the palms are directed at an empty mat on the floor right in front of the trainer where she comes to a halt (im. 4). In line with her gesture, her gaze is also directed at the empty mat. The trainer places the imagined victim on the mat and simultaneously orients her entire body towards it, starting with the positioning of her feet and reaching all the way up to her torso, head, and gaze.

Just as in *demonstratio ad oculos* (cf. ex. 1), verbal and visual resources – i.e. a deictic term (the local deictic hier/here), directional body movement, posture and orientation of the torso, pointing gesture, and an ostensive display of gaze orientation – all work together in bringing the phantom victim in and locating "her" in the spatial surroundings of the here-and-now.

Although this is an instance of *Deixis am Phantasma* where the referent cannot be found within the actual space of perception, the similarities between this case and cases of *demonstratio ad oculos* are striking. We can observe that the domain of scrutiny, in this case the sub-space defined by the mat, has to be picked out and made relevant just as in *demonstratio ad oculos*. The decisive difference, however, between the present example and ex. 1 lies in the following: In *demonstratio ad oculos*, both the domain of scrutiny as well as the target of a pointing act, i.e. the demonstratum, are perceptually accessible. In the present case, however, only the domain of scrutiny is perceptible. It is delineated by a visible object, the spatially anchored,
perceptually accessible mat. Whereas the domain of scrutiny is materially anchored and made visible by the empty mat, the *demonstratum* (the ghost victim) is not. It has to be imagined by the participants. According to Bühler's theory on deixis, this sequence exemplifies the first type of *Deixis am Phantasma*.

The analysis of the second example has shown some recurring features regarding the way in which deixis as a grammatical resource can be used to construct a spatially anchored shared imagination. Something absent is imaginatively brought into the participants' shared space of perception and located there. The space, so to speak, is "real"; the object, however, is not. It has to be imported and located there in an act of collaborative imagination.

The multimodal deictic action serves to cite the imagined entity (in this case the ghost victim) into the space of perception and to locate it at a specific place. The specificity of the locating act – the fact that a concrete, precise location is chosen for the imaginative "insertion" of the victim – is relevant for the multimodal formatting of the utterance and its similarities to *demonstratio ad oculos* with one categorical difference: Although deictically anchored in the participants' space of perception and its concrete local ecology, the *demonstratum* itself remains invisible.

### 5.2 Second type of Deixis am Phantasma

In the previous section, the way the trainer populates the here-and-now space of the immediate surroundings with an imagined entity was examined. She made use of the spatial ecology of the gym and its local arrangement with mats to anchor an imaginary victim on an empty mat in front of her.

After the imagined victim has been deictically placed on the mat, "she" constitutes an established, albeit "invisible" entity that can be referred to and acted upon in the course of the activities to come. The figure of the victim is there, though not perceptibly so. In what follows, the trainer uses the once-established shared imagination of a victim lying on the floor to show how to act out the role of the aggressor: First, she gives a negative example of how the role of the aggressor should not be done, and then contrasts this with a positive example of how it should ideally be performed in the upcoming partner exercise.

When the trainer moves from explaining to actually performing the negative and positive examples, a change of footing occurs. In terms of a deixis-theoretical perspective, she has to displace her *origo* into another entity. This means that we are no longer dealing with the first type of deixis in the imagination, but with a mechanism of *origo shifting* that defines the second type. The following analysis focuses on how linguistic and bodily resources come into play simultaneously when the trainer displaces her *origo* in order to demonstrate two different ways of simulating the aggressor.
5.2.1 First displacement: performing how it should not be done

05 T: «<<acc>>also meine VORstellung,>
thus my imagination

06 jetzt HIER ist das OPer ja?
now here is the victim right
07 ihr mAcht dann nicht SO-
you don’t then go like this

After the trainer has placed an imagined victim on the empty mat in front of her, she uses the once-established image for subsequent demonstrations. When her gaze returns to the addressees, she continues to keep both hands in the open hand palm-down position (im. 5), thus holding the victim in place and contextualizing that it will be still be relevant.

Introducing the sequence with the modal deictic "SO", 'like this' (l. 7), she first enacts how the girls should not perform the role of the aggressor. During the pause in l. 8, she changes the muscular tonus of her entire body. She leans

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forward, lets her shoulders droop, bends her knees and opens both arms sideways with open hands and palms facing outwards in a gesture of helplessness (im. 6). The feet are not placed firmly on the ground, but perform stumbling movements (im. 7). The whole body falls out of balance and embodies insecurity and cautiousness rather than a strong-willed attack. The trainer’s caricature of a weak person with little energy and strength indicates that such a performance will not do in a role-play that demands a threatening male aggressor.

It must be noted that the teacher’s displacement goes beyond a simple shifting of her *origo* into the generic role of the aggressor. Instead, it also includes a displacement into the girls as bad performers of the role of the aggressor in the partner exercise. Thus, the displacement into the role of the aggressor constitutes a second-order displacement resulting from a first-order displacement into the girls. This means that the trainer is shifting her *origo* in several ways which results in intricate multi-layered displacements when she performs the role of the aggressor.

Before she enacts the positive example, the trainer returns to the here-and-now and explains to the girls what is expected of them in the upcoming exercise. The *origo* is shifted back to her I-now-here-center of subjective orientation (im. 8). Again, she deictically refers to the imagined victim on the mat (l. 9: "da ... DRAN", ‘there at’) and simultaneously stretches out her arms towards its location (im. 9):

09  <acc>sondern ihr versucht da wirklich irgendwie DRAN zu kommen;
   but you try to really get at it somehow
10   also deutet das mit den Armen an;
   meaning to hint at it with the arms
11   dann müsst ihr nicht Unten so nah DRAN,>
   then you don’t have to get so close down there
5.2.2 Second displacement: performing how it should be done

Then the trainer enacts the positive example: She slips into the role of the aggressor, embodies his threatening body posture, performs his movements of attack and thus demonstrates how the girls should simulate the role of the aggressor:

image 10

image 11

12 aber **SO**, but like this
13 und dann **HIER RUM**, and then around here

image 12

image 13

14 un=nochmal **HIER**, and again here
15 un=dann=nochmal **SO**, and then again like this
16 und (.) dann nochmal **WEITER**, and then again some more
17 und irgendwie **SO; ja?** like that somehow right
18 versUCHT mal; just try
19 da DRAN zu kommen; to get at it
Once again, the trainer introduces the performance with the modal deictic "SO", 'like this' (l. 12). Used gesturally, its function ranges from contextualizing iconic gestures that indicate a visually accessible quality of an object or action, to introducing multimodal performances done with the speaker's entire body (cf. Streeck, 2002; Stukenbrock, 2010). In our sequence, the modal deictic is followed by gesturally used local deictics (l. 13: "HIER RUM", 'around here'; l. 14: "HIER", 'here'). They are accompanied by body movements directed at the spatial location of the imagined victim (im. 12-13).

Note that the trainer does not entirely slip into the role of the aggressor, but remains partly in her own role as a teacher explaining what she is doing. While she performs the role of an aggressor who is attacking an imagined victim on the floor, she comments online on her bodily performance, thus mixing different roles at the same time. This role mixing, which already occurred when she enacted the negative example, is made possible by the fact that multimodal resources can be distributed among different roles such that on the verbal level, the trainer can continue to speak from her own perspective, whereas on the level of embodiment or of bodily performance, she can slip into the role and perspective of a male aggressor.

Drawing on Bakhtin's concept of polyphony and research on prosody (Bakhtin, 1981, 1986), where multiple voicing has been called layering of voices (Günthner, 2002, 2007a, 2007b), this multimodal instantiation of different frames of reference for different origines will be conceptualized as layering of corporeal frames. In the example, the trainer performs the role of the aggressor while simultaneously providing her pupils with verbal descriptions and instructions, both of which have different origines.

The analysis has shown that multiple transitions between spaces of perception and spaces of imagination occur. These transitions go along with and are partly brought about by changes between different deictic modes, namely between demonstratio ad oculos and different types of Deixis am Phantasma. The most notable observation, however, concerns the fact that multiple origines can come into play simultaneously. In our example, the trainer first produces a pointing act that constitutes the first type of Deixis am Phantasma and integrates an imaginary victim in the surrounding space of perception by locating "her" at a specific place in the gym. Later, this collaboratively imagined victim – although an "immaterial ghost" – constitutes the spatial anchor for actions whose performance relies on deictic displacements which constitute the second type of deixis in the imagination. These multiple displacements and origines are represented in the following illustration:
The multiple embedding of different origins does not only lead to a layering of corporeal frames, but to a layering of the respective spatial frames of reference and thus a *layering of spaces*. This *layering or lamination* (Haviland, 2000) of spaces challenges our notion of clearly-defined boundaries between perception and imagination. It both reflects and constitutes a subtle interplay between perception and imagination which emerges in the ongoing interaction without being overtly marked or consciously noticed. Laminated spaces are created, upheld, modified by multimodal actions which can comprise verbal deictics, gaze, spatially-oriented (pointing) gestures, body movements, and full-fledged enactments.
6. Conclusion

The empirical analysis started with a case of *demonstratio ad oculos* to point out general features of how space is made relevant and interactively constructed when participants have shared perceptual access to the ecology of their immediate surroundings (section 4). The subsequent analyses focused on two different types of *Deixis am Phantasma*. Whereas the second sequence represented Bühler’s first type (section 5.1), the following sequences (section 5.2) built upon the second sequence and constituted complex instances of the second type of *Deixis am Phantasma*.

The sequential analysis of a typical instance of the first type of *Deixis am Phantasma* (section 5.1) has shown how speakers cite an absent phenomenon or ghost into the interlocutors’ space of perception and integrate it there by allocating a specific place to it, by imagining it to be located at a clearly demarcated place in the perceptual surroundings. Imagined phenomena do not necessarily have to be concrete objects such as a sofa in an empty room that needs furniture, or specific persons, but they can be generic figures or categories, such as a victim in a dangerous situation. The multimodal format of the first type of *Deixis am Phantasma* very much resembles the format that can be observed for *demonstratio ad oculos* – with one major distinction: Although the *domain of scrutiny* is perceptually accessible, the *demonstratum* itself is not. It has to be created in the imagination and imaginatively anchored in an assigned space specifically constructed for that purpose. Thus, perception and imagination interact in a specific way to construct a multi-layered semiotic field that integrates visible and invisible phenomena. Whereas spatial perception and monitoring of the speaker’s bodily resources are required to locate the *where* of the ghost, imagination is needed to construct the *what*, i.e. the ghost itself. The first type of *Deixis am Phantasma* constitutes a lamination of spaces where absent phenomena are imported, cited, brought into the participants’ space of perception, and located. In our example, a single mat served as a visible spatial anchor for the projection of the ghost victim into the local ecology of the gym. It delineated a perceptually accessible location for the otherwise invisible ghost victim.

According to Bühler, the second type of *Deixis am Phantasma* is the exact opposite: We ourselves become the ghost and displace ourselves to another, perceptually inaccessible space. However, as our analyses in section 5.2 have revealed, we need to move beyond the idea of clear boundaries between a present, perceptually accessible *here* and an absent, perceptually inaccessible *there*. Changes between one deictic mode and another do not occur abruptly, but often take place as subtle displacements on only one deictic dimension (e.g. person deixis). Besides, the participants do not remain permanently in the imagined space. Instead, they rebuild it again and again;
they interrupt it, transform it, and step in and out of it in order to reflect on what they are experiencing in the imagined situation. Thus, they continuously shift between an imagined space, entity or perspective and the immediate space of perception. Interactionally, they must manage these shifts, display them, and make them clear to each other. They are continuously confronted with the fundamental task of situating the interaction. This requires an interplay between imagination and perception and a constant shifting between different modes of anchoring ourselves in space that are part of our everyday practice.

**BIBLIOGRAPHY**


