Establishing joint imagined spaces in game explanations
Differences in the use of embodied resources among primary school children

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This study builds on the observation that establishing joint imagined space is an integral part of a wide range of discursive practices (e.g. telling a story or discussing architectonic problems). Conceptualizing imagination as a co-operative and interactively organized activity that involves the participants’ embodied co-orientation to absent entities, we examine in detail how an imagined space of a game board is created in the activity of explaining a game. The analysis is based on video recordings of children with varying capabilities as they engage in game explanations with an adult. Drawing on multimodal conversation analysis and Bühler’s theory of deixis, we examine how two children come to terms with the epistemic and perceptual tasks involved in establishing joint imagined spaces. Findings demonstrate that both children demonstrate considerable skills in dealing with the perceptual task (i.e. mobilizing and monitoring the addressee’s visual co-orientation).
They differ, however, in how they attend to the epistemic task (i.e. take into account differential states of knowledge and reorganize the indexical ground).

Keywords: joint imagined space; deixis; explaining; heterogeneity; multimodal conversation analysis

Introduction

Whenever participants talk about past or fictitious events (Ehmer, 2011; Heller, 2019; Stukenbrock, 2014), discuss architectonic problems (Murphy, 2005), give directions (Weissenborn, 1988), provide instructions, such as on how to defend oneself (Stukenbrock, 2017) or on how to play a game (Hausendorf, 1995; Kern, 2003; Stude, 2005), and whenever children engage in pretend (Sidnell, 2011) or language play (Cekaite, 2018), joint imagination is at work. This phenomenon is therefore not restricted to fictitious genres but forms an integral part of a wide range of discursive practices. In this sense, Vygotsky (2004, p. 9) regards imagination as ‘an important component of absolutely all aspects of cultural life, enabling artistic, scientific, and technical creation alike’. This view implies that imagination cannot simply be conceptualized as an individually performed, disembodied cognitive activity. From Vygotsky’s socio-cultural psychological perspective, the process of imagination entails, but is not confined to, mental acts; instead, this process is ‘completed only when imagination is embodied or crystallized in external images’ (ibid., p. 28). Understanding imagination as a social and situated activity, we would add that the creation of ‘external’ (i.e. openly observable) images is vital for imagination to fulfil certain communicative purposes (e.g. enabling a co-participant to construct an image of a game board in order to understand explanations on how the game is played). Taking face-to-face interaction as our focus, we thus conceptualize imagination as a special way of ‘seeing in common’ (Goodwin, 2018, p. 300); that is, as a co-operative and interactively organized activity that involves the participants’ embodied co-orientation to past, fictive, or hypothetical entities (Heller, 2019; Murphy, 2005; Stukenbrock, 2017) and that is usually embedded within larger discursive practices.

Of course, joint imagination takes on specific forms within different discursive practices. In storytelling, the speaker creates an imagined space as a stage for (re)enacting personally significant experiences; these (re) enactments are not only used to illustrate a course of events but to invite listeners to ‘empathetically insert themselves’ (Goffman, 1974, p. 504) into the imagined scene (Heller, 2019; Stukenbrock, 2017) and become
emotionally involved (e.g. Günthner, 2011). In giving instructions, which serve to eliminate a displayed or an assumed knowledge deficit on the part of an addressee (Antaki, 1994; Blum-Kulka, Hamo & Habib, 2010; Keppler & Luckmann, 1991; Quasthoff, Heller & Morek, 2017), joint imagination rather takes the form of creating a shared visual concept of relevant, yet absent materials. In game explanations, for instance, establishing a game board as a joint imagined space is crucial for the recipient to understand the actions and rules important to properly playing the game. Due to the communicative problem that explanations are designed to overcome – resolving the knowledge asymmetry –, the recipient’s participation in joint imagining will mainly consist in displaying his/her understanding of the explanation so far (Deppermann & Schmitt, 2008). Regardless of the particular discursive practice, joint imagination generally consists of the speaker referring to absent entities as if they were present, a process that Bühler ([1934]2011) refers to as ‘Deixis am Phantasma’. This requires the speaker to reorganize the indexical ground in recognizable ways, i.e. to ‘instruct’ the addressee to relate mentioned referents or deictic actions, which in fact point to “‘empty” spaces’ (Stukenbrock, 2014), to an imagined game board.

In our study, we are interested in how children manage the reorganization of the indexical ground for creating a joint imagined space. Our interest stems from the assumption that this skill is essential for achieving intersubjectivity when engaging in discursive practices with peers, family members, and in the classroom. Taking explanations of ‘Mensch ärgere dich nicht’, a board game similar to Parcheesi or Ludo, as an example, we examine in detail how children create joint imagined spaces by using diverse embodied resources. Furthermore, we explore whether and how children (of the same age) differ in the use and coordination of these resources. The case study is part of a larger project that examines both age-related differences in explanatory practices as well as differences within age groups in order to shed light on the discursive heterogeneity prevalent in inclusive schools. Consequently, all children in our study attend inclusive classes, and some of them are diagnosed with a so-called learning disability. Although we still know little about the discursive skills of these children, existing studies suggest that their discursive skills are not fundamentally different from those of other children, but only develop at a slower pace, also depending on the extent of interactive support provided by their family and school environment (Ward-Lonergan, 2010). The inclusion of
children with learning disabilities in our study thus makes it possible to better capture the actual heterogeneity existing in classrooms. Drawing on the methodology developed by multimodal interaction analysis (Goodwin, 2018; Streeck, Goodwin & LeBaron, 2011) and Bühler’s non-logocentric approach to deixis (Bühler, [1934]2011; Heller, 2019; Stukenbrock, 2014, 2017), the present study thus aims to contribute to our understanding of joint imagination as a co-constructed and embodied practice and how it is accomplished by children with varying capabilities.

**Theoretical framework**

Bühler’s notion of *Deixis am Phantasma*, often translated as ‘deixis in the imagination’ is central to our analysis of creating joint imagined spaces when explaining a game. In contrast to *demonstratio ad oculos et ad aures*, i.e. pointing to visible or audible entities in the immediate spatio-temporal surroundings, deixis in the imagination requires a reorganization of the indexical ground, establishing a frame of reference other than the actual space of perception. Among the three subtypes of deixis in the imagination (cf. Bühler, [1934]2011, p. 117f), only the first one is relevant here. In this subtype, the speaker refers to absent entities as if they were present. With her/his tactile body image (the origo) s/he remains grounded in her/his actual order of perception but draws into the participants’ perceptual space objects that are factually not there. Through verbal denotation and/or gestural depiction, s/he can ‘deposit’ (Streeck, 2008) or ‘place’ (Haviland, 2000) something that is imagined in front of or next to her-/himself and this way prompt the addressee to create a virtual image. In game instructions, for instance, speakers gesturally draw an imagined game board, refer to particular areas (e.g. starting/finishing fields), and populate them with tokens. Now, the participants jointly ‘see’ the board before their minds’ eye.

The reorganization of the indexical ground is a central aspect of the ‘working consensus’ (Goffman, 1959, pp. 9–10), i.e. the participants’ shared understanding of the activity-in-progress. We argue that reorganizing the indexical ground for establishing joint imagined spaces requires the participants to manage epistemic and perceptual tasks. The *epistemic task* entails that the speaker must be aware of how the visual concepts (of a game board) of the participants differ. Awareness of differential states of knowledge (Goodwin, 2018, p. 102) is a prerequisite for the speaker
to establish an imagined object as an ‘external, visible, and therefore jointly accessible structure’ (Streeck, 2011, p. 73). To this end, s/he needs to ‘instruct’ the recipient that his/her verbal and nonverbal actions refer to absent objects (instead of objects in the immediate surroundings), and that the recipient is expected to construct them in the imagination. The reorganization of the indexical ground thus needs to be projected in an observable way, such as by temporally coordinating verbal and bodily-visual means (e.g. depictive gestures such as drawing, model world making, or modelling, cf. Streeck, 2008). In explanations, epistemic tasks also include managing (i.e. marking) which elements of the game were already introduced and which are new. In addition, the recipient’s displays of (non-)understanding must be continuously monitored and taken into account. The use of embodied resources for establishing a joint imagined space presents the explainer with the perceptual task of establishing visual attention as a relevant resource (Goodwin, 2018; Heller, 2019; Stukenbrock, 2014, 2017) and monitoring participants’ visual co-orientation moment by moment (Goodwin, 1980). Taking into account the recipient’s state of knowledge and visual co-orientation is vital for the achievement of joint imagination.

It is obvious that handling the two tasks is quite demanding. There has been hardly any research at all so far into how children come to terms with this demand. In his study on age-related differences in ‘giving directions’, Weissenborn (1988) shows that this ability takes a long time to be acquired. Whereas pre-school children are not yet able to mark the transposition from the actual space of perception to a remote or absent space, older children anticipate that they need to define a frame of reference. Weissenborn suggests that the main problem in creating a joint imagined space is to de-contextualize or dissociate deictic expressions from the actual space of perception and to reuse them to refer to points within a specially constructed imagined space. Studies adopting a cognitivist framework suggest that the main challenge – especially for children with learning disabilities – is to take the addressee’s perspective into account and make appropriate inferences about shared knowledge (e.g. Schneider, Williams & Hickmann, 1997). Yet these studies do not consider interactive and embodied aspects of discursive practices. With regard to children’s use of embodied resources in explanatory activities, findings indicate that older children use more coverbal gestures (Colletta & Pellenq, 2010; Kern, 2003). How children coordinate gestures and verbal resources to handle the reorganization of the indexical ground has not been in focus so far.
Data and method

Our study draws on a corpus of video recordings of children (aged 7;0 to 13;6 years) as they engage in different explanatory activities (game explanations, word explanations, explanations dealing with causal relations, cf. Barbieri, Colavita & Scheuer, 1990; Beals, 1993; Morek, 2012) with different interlocutors. A total number of 75 monolingual and multilingual children, who attend inclusive classes in primary and secondary school (grade 1, 3, 4 and 6) in Germany, participated in the study. Sixteen children are diagnosed with a learning disability. In order to constitute an explanandum (Morek, 2012), the adult explained that he worked in the afternoon care at a primary school where he was asked to play the game ‘Mensch ärgere dich nicht’, a board game similar to Parcheesi or Ludo. He stated that he was unfamiliar with the game because it does not exist in his country of origin. Usually, the children signalled their understanding and immediately assumed the role of a principal speaker (the ‘explainer’, cf. Morek, 2012). During their explanations, the children did not have access to the game material. The adult actively signalled his understanding or non-understanding throughout the process of explaining (see Kern, this volume). In order to allow space for the child’s explanation, he oriented towards the ‘etcetera principle’ (Garfinkel, 1967), i.e. the assumption that what was left unsaid so far will be delivered in a later stage of the explanation. Therefore, he asked only a limited number of questions, for instance ‘And who wins in the end?’ if the children did not mention the objective of the game. This allowed us to gain insights into what the children explained on their own initiative. Yet it meant that it was only later in the process of explaining that children received more explicit feedback on the recipient’s incomprehension.

All interactions were recorded on video and transcribed following the GAT 2 conventions (Selting et al., 2011). Please find transcription notation details at the back of the special issue. To represent relevant bodily gestures and actions, still photographs were taken from the videos and temporally aligned with the relevant verbal utterance.

The analysis of the game explanations indicated that establishing a joint imagined space is one phenomenon in which differences between groups, but also within age groups become apparent. While only a quarter of the first-graders observably reorganized the indexical ground to establish a virtual board as a shared frame of reference, around half of the fourth
graders and sixth graders managed this task. With two exceptions, children with learning disabilities were among the group children who did not yet reorganize the indexical ground for establishing the game board as a joint imagined space. To describe differences in more detail, we selected two third graders from our data, Sophie (8;6 years) and Junus² (9;9 years; diagnosed with a learning disability). While their explanations illustrate differences that occur among this age group, they do not represent distinct groups in terms of +/- learning disability. In our data, differences form a continuum, and establishing joint imagined spaces within the activity of explaining is demanding for a large group of children.

Sophie

Extract 1 shows that Sophie (SOP) closely orients her explanation to her addressee’s state of knowledge and visual perception: Right at the beginning of her explanation, she establishes an imagined game board as a frame of reference, drawing on gaze, gesture, and verbal resources. Moreover, she mobilizes and continuously monitors her addressee’s visual co-orientation.

Extract 1.1: Establishing a joint imagined space before introducing the game material

010   EW2    und Ich komm ja aus der türKEI; (...)  
        and you know I’m from Turkey
011   und da GAB es das spiel überhaupt nich. 
        and there was nothing like the game
012   ich weiß überhaupt nich wie das GEHT; 
        I don’t even know how it works
013     (2.0)
014   SOP    also mensch ärger dich nich, 
          so mensch ärger dich nicht
015     ähm: (...) da hât man (...) eine Plattform [vor sich,] |  
        uhm you have a platform in front of you
        (((indicates distance)))

016   EW2    [((nods))]

[Image of a child standing in front of another child]

[Diagram showing a platform in front of a child]
After the adult displayed his knowledge gap with regard to the game (ll. 10–12), Sophie projects a big package (Sacks, 1995, p. 354–359) by the discourse marker ‘so’ and repeating the name of the game (l. 14). She then introduces the game board as ‘a platform’ (l. 15), using the indefinite nominal determiner ‘a’ (l. 15) to mark this entity as new knowledge to her listener (Schneider et al., 1997). Simultaneously with introducing the noun phrase ‘a platform’, her outstretched arms ‘place’ or ‘deposit’ the object within the joint space of perception. Indicating a distance with her arms (l. 15), she depicts the object’s dimensions (Streeck, 2008, p. 292) and this way evokes an image of a square object with a specific size. By combining verbal and gestural resources, the game board, which is factually absent, is
brought as an image into the actual space of perception of the participants. This shows that Sophie orients herself to the epistemic task: She acts on the assumption that her addressee does not yet share a visual concept of the game board and therefore creates an external and visible structure. The imagined game board could then serve as a frame of reference in which further referents such as particular fields, game pieces, or game actions can be anchored. By keeping her eye on the adult’s face at the end of her phrase (l. 15), Sophie monitors both the recipient’s visual attention and understanding, which the latter indicates with a nod (l. 16). Thus, she also handles the perceptual task.

By using existential constructions (l. 19: ‘there are’; l. 23: ‘then there are’; McNally, 2016), Sophie then enumerates the game’s constituents and provides more detailed information about it (l. 17: ‘four puppets’, l. 19: ‘several colours’, l. 23: ‘four fields). Having established the ‘platform’ as a frame of reference in the beginning of the explanation, she could then refer to particular areas of the game board, in this case the starting fields (l. 23f.), and rely on the recipient’s knowledge on what is meant by ‘fields’ (l. 23). In order to convey a more precise image of the starting fields, Sophie combines verbal and bodily-visual resources: while saying the word ‘fields’, she depicts a round shape with her hands. Additionally, she provides information about the function of these fields within the game by stating that the addressee, addressed with the personal pronoun ‘you’ (l. 23), can put his puppets on it. The addressee visually co-orients his ideas to Sophie’s depictions, and again, Sophie monitors her addressee’s visual attention and then adds information about the arrangement of these fields (l. 24: ‘they are very close together’). The coupling of such verbal descriptions and bodily-visual depictions supports the addressee in constructing a virtual image of the game board.

Extract 1.2: Further elaborating the image of the board while explaining game rules

025  SOP  Und wenn du dann (−) eine SECHS gewürfelt hast,=
       and if you then have rolled a six
026  −<all>man darf nur DREIma hinternander würfeln?> ();
       you can only roll three times
027  <all>also (.) |wenn man | (. ) noch
       so if you are
       |((gaze at EW2))|
       in sein HAUS is |so |zusagen?
       in your house so to speak
       |((gaze at EW2))|
Subsequently, Sophie explicates the rules of the game. Embedded in these rule explications are descriptions (Rehbein, 1984) regarding the game board that serve to add to the addressee’s concept of the board. Starting with ‘and if you then’ (l. 25), Sophie sets out to explicate the rule ‘You must throw a six to move a piece from the starting circle onto the first field on the track’, which includes reference to particular fields. Because the starting fields have been described in terms of their appearance and
function beforehand, Sophie is then able to use the game-specific proper name ‘house’ (ll. 27, 29). By hedging the proper name with ‘so to speak’ (l. 27), she also indicates verbally that the term stands for something that has been introduced before. This way, the addressee can link the new term back to the starting fields (ll. 23–24). After formulating the conditional part of the rule (l. 28: ‘so then if you have rolled a six’), she suspends the rule explication and inserts a description of a field that has not yet been introduced (the field on which the pieces start their course across the board) (ll. 29–31). Sophie thus observably takes into account what knowledge is required for understanding the rule. When introducing the field, she uses an indefinite nominal determiner (l. 30: ‘like a field’) to mark the information as a new element of knowledge. Furthermore, the German vagueness/focus marker ‘so’ (‘like’) in prenominal position and the shift of gaze to the gesturing hand (l. 30) (Ningelgen & Auer, 2017) alert the addressee to look at Sophie’s hand where additional meaning is found: Her hands form a circle (ll. 29–30) and depict the shape of the field. The verbal description provides further information about the location of the relevant field in relation to the already introduced starting fields (l. 29: ‘in front of your house’). After this small digression, Sophie continues explaining the rule by providing the apodosis (l. 32).

As demonstrated in this extract, Sophie uses the established frame of reference to further enrich the addressee’s image of the game board. To this end, she embeds verbal descriptions and gestural depictions within the explication of rules. This is another way how she closely takes into account her addressee’s changing states of knowledge. This goes hand in hand with continuously monitoring the addressee’s visual attention and understanding, which can be seen from her gaze frequently being turned to her interlocutor (ll. 27, 28, 29, 30, 31) who indeed maintains his visual attention on Sophie and her gestural depiction. The reconstructed pattern of enriching the imagination of the board by inserting verbal and nonverbal descriptions is also found in Sophie’s explication of the goal of the game in the unfolding explanation (not included here).

Junus

Extract 2 shows how Junus (JUN) explains the board game. The analysis reveals that he is able to mobilize and monitor the addressee’s visual perception when talking about the elements of the game. Yet some elements of
the game are treated as 'common ground' (Clark, 1996), with the corollary
that the imagined game board is not introduced as the relevant frame of
reference.

**Extract 2.1: Introducing the game’s constituents**

016 EW2 also ich weiß nich wie das GEHT.
well I don't know how it works
017 (---)
018 JUN AUCH: mensch ärger dich nicht-
so mensch ärger dich nicht
019 (du) dann du kriegst dann [WURF]el? (-)
020 (you) then you got die then
together])
021 EW2 ((holds curved hands
022 JUN und da sind so: [ein [KLEInes teil so wie männchen?]]
and there are like a small piece like a little man
023 EW2 ((holds fingertips together))
024 JUN [(short nod)]
025 JUN [=dann musste ANfangen?]
and then you have to start
026 EW2 [(nods slightly)]
027 JUN [Jeder (.).] also VIER dürfen mitspielen,=
everyone so four can play
028 EW2 [(nods)]
029 JUN [(<all> (einen) DA,>=
one there
030 JUN [(points twice in two different places)])
As a response to the constituted knowledge gap (l. 16), Junus projects an explanatory big package, employing the discourse marker ‘so’ and repeating the game’s name. He begins his explanation by introducing parts of the equipment: First, he mentions the ‘die’ (l. 19) and simultaneously demonstrates its handling (Streeck, 2008, p. 293). Second, he introduces the game pieces (l. 21) by an existential construction with the discourse deictic expression ‘there’ (referring to the previously mentioned game, cf. Lyons, 1975) and a periphrasis (l. 21: ‘and there are like a small piece’). Here, he employs the indefinite nominal determiner ‘a’ to mark the item for the addressee as new knowledge. Furthermore, he uses the German vagueness/focus marker ‘so’ (‘like’) in prenominal position. Together with the gaze shift towards his hands, ‘so’ alerts the addressee that relevant information should be gathered from closely watching his bodily demonstration. The adult partner responds to this request by shifting his gaze from Junus’s face to his hands. Only then Junus begins to depict the object by a holding gesture (Streeck, 2008, p. 292). Through mobilizing and monitoring his addressee’s visual attention towards his bodily demonstration, Junus handles the perceptual task.

The gestures enable Junus to displace what is absent (here: the game pieces) into the given order of perception. Note, however, that Junus performs the gestures close to his body, in front of the lower part of his torso. This way, his hands do not ‘place’ (Haviland, 2000) or ‘deposit’ (Streeck, 2008) something in the interactional space between the speaker and the addressee where they could also evoke the spatial domain of the absent game board. Junus thus employs the gestures only for depicting the game pieces, not for evoking a virtual image of the game board. The epistemic task is thus handled to a certain extent: The addressee is provided an idea of individual elements of the game equipment, but he has not received any instruction yet with regard to how these elements are spatially organized on a board.
The next instance of ‘there’ (l. 23: ‘there it says START’) is meant to refer to a particular place on the absent game board. Note, that Junus does not combine it with a deictic gesture. In order to disambiguate for the addressee that the local deictic should not be understood to refer to something in the here-and-now but instead to an imagined spatial domain, he would have needed to establish a fictional game board as a frame of reference (e.g. by mentioning the game board and/or gesturally drawing its outline). Instead, the game board is still treated as common ground. What Junus does, however, is to introduce game actions. The following turn constructional units ‘there it says START,’=’ functions as a prelude to a demonstration of preparatory actions (that immediately follow in l. 25: ‘=and then you have to start’). Junus mentions the number of the players and again illustrates this by a depictive gesture, with closely guiding and monitoring the addressee’s gaze (l. 27). Following this, he demonstrates with his open hands where the players or game pieces are positioned (ll. 29–33). This is the first time that Junus implicitly evokes a virtual image of the game board, albeit rather *en passant*: If the addressee relates ‘one’ to the game pieces, he can infer that the latter are placed at four corners. Since the addressee does not express a problem of understanding but continually nods (ll. 20, 22, 24, 26, 28, 30, 32, 34), Junus continues his explanation.

So far, we could show that Junus transfers relevant knowledge to his addressee. Objects that are actually handled in the act of playing and thus experienced tactually (a die that is thrown, game pieces that are moved forward) are both verbally mentioned and gesturally depicted. The gestural depictions serve both to provide illustrations and to compensate for lacking terms (‘game piece’). Furthermore, Junus is able to coordinate his embodied demonstrations with his co-participant’s visual attention. This way, he introduces game materials and actions. Objects that are not actively handled but only provide the visually perceptible background of the game actions—the game board—are not introduced but treated as common ground. Furthermore, introducing the game board would have required a reorganization of the indexical ground (i.e. to instruct the addressee in which space—the actual order of perception or an imagined space—local deictics and depictive gestures are anchored). Although Junus tries to point in the imagination, the epistemic task of enabling his addressee to construct a visual concept and to orient towards the relevant frame of reference is not fully solved. This has repercussions on the further course of the explanation (2.2).
Subsequently, Junus starts out to explicate the goal of the game (ll. 35/36). This requires reference to particular fields, especially the ‘home fields’ on the game board which have not yet been introduced. After several restarts, Junus completes the formulation of the goal (l. 36: ‘who has won first’; l. 40: ‘well, then he has won’), albeit without explicating the condition for winning (the protasis that is typically projected by ‘if’). This turn constructional component is designed to close the big package: the resumption of the initial discourse marker together with the falling final pitch movement and the longer pause (l. 41) indicate the end of the explanation.

At this point, the addressee displays problems of understanding by inquiring after the conditions for winning (l. 42). The other-initiated repair (Schegloff, Jefferson & Sacks, 1977) contains a partial repetition of the previous utterances and the question word ‘who’. With the focus accent on ‘who’ and the German modal particle ‘denn’ the addressee indicates that he did not understand the conditions for winning. In his attempt to remedy the problem, Junus mentions a new referent (l. 43: ‘the boy’), relying on the addressee to relate the ‘boy’ to a game piece or a player. The utterance is aborted at the point when a typical action (‘run’) that has not been introduced is mentioned. Here, Junus seems to monitor that the addressee does not yet know about this element of the game. Initiating a self-repair (Schegloff et al., 1977), he replaces ‘run’ by ‘who was faster’
(l. 44) and clarifies the conditions for winning. This shows that as soon as an other-initiated repair makes troubles in understanding visible – Junus delivers knowledge that is a prerequisite for making sense of the goal of game (2.3).

**Extract 2.3: Describing basic actions**

045 JUN [wenn du zum beispiel du BIST noch am anfang;] if you for example you are still at the start
046 EW2 [[[nods slightly]]
047 JUN [[NE?]]
    right
    [[[gaze at EW2]]]
048 EW2 [[[nods]]
049 JUN [und du würfel ZEHN;] and you roll [a] ten
    [[[die movement]]]
050 EW2 [[[nods]]
051 JUN [[NE?]]
    right
    [[[gaze at EW2]]]
052 EW2 [[[nods]]
053 JUN [und dann darf der ZEHN schritte vorher gehen;] and then he can move ten steps forward
    [[[rotates i-finger three times]]]
054 EW2 [[[nods]]
055 JUN [und Sie]
    and you
    [[[points with his arm to EW2, gaze at EW2]]]
    sie würfeln jetzt KInen,=
    you roll [a] one
    [[[points behind him, gaze at EW2]]]
056 EW2 [[[nods]]
057 JUN [[= (darfst) die MIN schritte gehen;]] (can) move one step forward
    [[[forward movement with finger, gaze at gesture, then at EW2]]]
With his next turn (l. 45: ‘if you for example you are still at the start’), Junus returns to a previous point of the explanation and at the same time tries to evoke a joint image of the starting field. To achieve this, he projects a scenario (marked by ‘if’ and ‘for example’), directly addresses his co-participant (personal pronoun ‘you’) and stresses the verb (‘ARE’). These markers prompt the addressee to imagine a starting point. Junus again closely monitors the addressee’s co-construction; his tag question (l. 47: ‘right?’) constitutes a prompt for the addressee to provide a confirmation of understanding which is produced in l. 48. Through nodding, the addressee confirms his attention and understanding.

Junus goes on to demonstrate a basic action of the game, namely what it means to throw a die. To this end, he formulates a condition (i.e. the protasis in l. 49: ‘and you roll [a] ten’ which is also illustrated by an acting gesture (Streeck, 2008), and the consequence (i.e. the apodosis in l. 53: ‘and then he can move ten steps forward’). Again, he directs and monitors the addressee’s visual attention and checks his understanding with another tag question (l. 51). This procedure is repeated for two further examples (ll. 55–58: throwing a one – moving one field forward, ll. 59–63: throwing a five – moving five fields forward). Junus thus provides detailed illustrations of a basic action of the game; yet the basic fact that there is a circle of fields, over which the game pieces move in clockwise direction, does not come up at all. Throughout the production of the big package, Junus closely monitors the addressee’s visual attention; the sequence is
closed by a metadiscursive check of understanding (l. 64) which receives a confirmation (l. 65).

The analysis shows that after the addressee has displayed a problem of understanding (l. 42), Junus makes a sustained effort to remedy the problem and to take the knowledge of his interlocutor into account, for instance by checking the addressee’s understanding. He states the objective of the game and demonstrates a basic action – what it means to throw a die – combining verbal and bodily resources. Although the addressee is prompted to return to the beginning of the game, he does not receive any guidance on where to locate the starting field (on an imaginary board) and on how to link the action of rolling to the overall procedure of the game. Without further interactive support, Junus could not autonomously solve the epistemic problem of establishing joint imagination.

**Discussion**

Starting from the assumption that creating joint imagined spaces is a co-operative activity that involves the participants’ embodied co-orientation to virtual entities, we have developed an analytical framework that helped us to tease apart perceptual and epistemic tasks. The analysis revealed that joint imagination is a ‘skilled practice’ (Ingold, 2001) that entails awareness of differential states of knowledge and continuous mobilization and monitoring of visual co-orientation. Confirming and expanding the findings by Weissenborn (1988), we suggest that the main challenge in using Deixis am Phantasma within the discursive practice of explaining a game is to combine verbal and bodily resources in a way that ‘instructs’ the addressee to link the speaker’s talk to points within a specially constructed imagined space. Our framework also allowed us to examine and observe differences in how children with varying capabilities organize processes of joint imagination. These variances can be summarized as follows:

- **Mobilization and continuous monitoring of visual co-orientation (perceptual task).** The analysis revealed that both children managed to mobilize the visual attention of their recipient. Through temporally coordinating verbal (German marker ‘so’ in prenominal position) and nonverbal means (a shift of gaze to the gesturing hand), they established visual perception as a relevant resource. Throughout the production of their big packages, they gazed at the addressee to monitor and maintain visual co-orientation.
Taking into account differential states of knowledge and establishing a virtual game board as a frame of reference (epistemic task). Sophie introduced the ‘platform’ as a frame of reference right at the beginning of her game explanation, using both verbal and nonverbal means such as depictive gestures (Extract 1.1); this way, she created an external and visible structure and prompted the recipient to construct an imaginary board. Having established the virtual board as a frame of reference allowed her to refer back to the board. In contrast, Junus did not introduce the game board at the beginning of his explanation (Extract 2.1); since the addressee lacked frame of reference, he could not anchor local deictics and locate referents such as particular fields of the game. Yet after the displayed lack of understanding (Extract 2.3), implicit ways of evoking the game board could be observed.

Further enriching the image of the game board as a prerequisite for explicating rules or goals. Part of the epistemic task is that knowledge needs to be transferred in a way that the recipient can develop his image of the board in a stepwise fashion. Sophie oriented her explanation to this need and incrementally enriched the virtual board by introducing new referents and describing playing fields, deploying both verbal and bodily-visual means (Extract 1.1 and 1.2). In this way, her interlocutor could develop an idea of the function of important playing fields and link this knowledge to the rules that Sophie explicates. In contrast, Junus focused on introducing game materials (s. Extract 2.1) and game actions.

In summary, whereas Sophie handled both the epistemic as well as the perceptual task on her own initiative, Junus independently managed the perceptual task, but only parts of the epistemic task (e.g. introducing game material and actions, marking items as new). Reorganizing the indexical ground posed a considerable problem for him. The analysis thus showed that some children need more interactive support (Kern, this issue) and feedback in terms of explicit displays of (non-)understanding to develop an awareness of ‘how others perceive and know the world in differential fashion’ (Goodwin, 2018, p. 102). Examining how co-participants provide and how children relate displays of non-understanding to the need to reorganize the indexical ground is thus relevant for future research. This is of crucial importance for how these children participate in social activities, including classroom discourse, which is built on the organization and transformation of differential knowledge.
About the authors

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Notes

1 ‘Mensch ärgere dich nicht’ is a German board game. The goal is to move your four game pieces as fast as possible from the starting field over a circle of fields to the ‘home row’, by rolling a die. At the same time, the players can prevent another from winning by taking pieces of other players off the board so that they need to start all over again.
2 Both names are pseudonyms.
3 For the game, a typical die with numbers from 1 to 6 is used (so rolling a ten is not possible).

References


establishing joint imagined spaces in game explanations


