Frozen: Children in Argumentation Between the Agonistic and Cooperation

KATI HANNKEN-ILLJES

Institut für Germanistische Sprachwissenschaft, AG Sprechwissenschaft
Philipps-Universität Marburg
35032 Marburg, Germany
kati.hannkenilljes@uni-marburg.de

INES BOSE

Institut für Musik-, Medien- und Sprechwissenschaft, Abteilung Sprechwissenschaft und Phonetik
Martin-Luther Universität Halle-Wittenberg
06099 Halle (Saale), Germany
ines.bose@sprechwiss.uni-halle.de

Abstract: In this study, we consider the ways different degrees of dissent are established in interaction, especially in interactions among children. One important aspect in the development of the ability to argue is the framing of interactions as rather cooperative or agonistic. Different framings seem to allow for different forms of argumentative activity. The focus in this paper is on the mediation of degrees of dissensus in argumentation in child-child communication. It is established, we argue, through verbal as well as non-verbal means, and the agonistic and cooperativity can be indicators for the space argumentation has in child-child interaction.

Résumé: Dans notre étude, nous nous intéressons à la manière dont les différents degrés de désaccord s'établissent dans l'interaction, en particulier, dans l'interaction entre enfants. Un aspect important dans le développement de l'habilité d'argumenter est la description des interactions comme étant coopératives ou compétitives; des descriptions différentes semblent permettre différentes formes d'activité argumentative. Dans cet article, l'accent est mis sur la médiation des degrés de désaccord en argumentation dans la communication enfant-enfant. Nous affirmons que cela est établi par des moyens verbaux ou non verbaux et que la coopération et la compétition peuvent être des indicateurs de l'espace argumentative dans l'interaction enfant-enfant.

Keywords: dissensus, agonism, child argumentation, stasis, multimodality, oral argumentation, cooperative argumentation

1. Introduction

This paper provides an analysis of oral argumentation among preschoolers. It is part of a larger study on the establishment of validity through argumentation in authentic child-child communication (see Bose and Hannken-Illjes 2016, 2019; Hannken-Illjes and Bose 2018). The study aims at contributing to the description and modeling of the development of argumentation competence[1] in children. It shows that one important aspect of this development could be the framing of interactions as rather cooperative or agonistic. Different framing seems to allow for different forms of argumentative activities. The focus of the case study in this paper is therefore the mediation of degrees of dissensus in argumentation in child-child communication and how this mediation is performed multimodally. The analysis offers an account of the interaction that integrates verbal and vocal-articulatory as well as bodily features and interprets the freezing of the interaction on these levels as potentially marking a stark notion of agonism. In oral argumentation, the verbal layer is always mediated by other-than-verbal forms, hence a multimodal approach allows for a more comprehensive analysis.

In this paper, we aim at refining the distinction between agonistic or cooperative argumentation by describing different forms of framing argumentative interaction as rather agonistic or rather cooperative. In order to do this, we shall first give a brief overview of argumentation in child-child communication among preschoolers with a focus on the entry point for research in this area, which is oftentimes local dissensus. We shall then outline the discussion of

[1] The notion of argumentation competence is a complicated and controversial issue requiring a longer discussion than we can provide. We use the term to refer to a notion of competence that includes (and stresses) the dimension of motivation and self-efficacy next to knowledge and ability. In our general understanding, argumentation competence is interactionally constitued, context-bound, and defined by the ability to avoid incompetence, that is, the ability to avoid failure in achieving communicative goals. For a further discussion see, among others, Hannken-Illjes (2003).

argumentation between agonism and cooperativity before describing our methodological take as well as our data. This will be followed by the analysis of a building game between two preschoolers that considers the relation of their argumentation to agonistic and cooperative framings. We shall make a twofold argument: first, that "dissensus" is a gradual concept rather than an absolute one, and second, that in order to make statements about the development of argumentation competence, argumentation in framings that lean toward the cooperative pole should gain more attention.

2. Entry points into studying argumentation among children

Linguistic studies, older and more recent, have shown that children start to give reasons and thus engage in argumentation as early as in their third year, that is, from the age of 2.0 (Arendt 2015; Völzing 1982). Although these early forms of oral argumentation often lack linguistic markers of causal connection, they can be framed as proto-argumentation (for a definition of the term see Bose and Hannken-Illjes 2011; Brumark 2008)—as practices that exhibit first argumentative forms. They often lack the incorporation of counter-arguments (Crowell and Kuhn 2014; Muller-Mirza, Perret-Clermont, Tartas and Iannaconne 2009) as well as the explicit ending of the concluding stage of the argumentative sequence (Bose and Hannken-Illjes 2011).

When Brumark uses the term proto-argumentation, however, she uses it in a specific sense that indicates a crucial point of discussion when studying the development of argumentative skills. Brumark (2008) has described sequences of contradiction and reiterated contradiction (for example yes-no sequences) without further argumentative elaboration, that is, without the giving of reasons, as proto-argumentation. In doing so, she takes a typical approach with regard to the interactional situations investigated under the heading of early argumentation; proto-argumentation is often searched for and researched in agonistic settings, that is, in open local dissensus. As we shall see, she is not alone in this approach.

The tendency to take dissensus as the entry point might be due, in part, to the broad sematic field of the term "argument" in English, which is not mirrored in other languages. As the term "argument"

can have different meanings in English, we will briefly lay out the definition we are starting from in our work. When talking about argument, we refer to what O'Keefe has labeled argument$_2$ (1977) and follow Wolfgang Klein's definition of argumentation as "transferring something collectively questionable into something collectively valid by means of something collectively valid" (1980, p. 19, translation ours). The strength of this definition is that it points out two main functions of argumentation: dealing with dissensus and establishing and actualizing validity. The latter one could be labeled as the epistemic function. It refers to argumentation as actualizing what can count as knowledge and thereby refers to the topoi in an argumentative exchange. Research into the development of argumentation competence has often focused on the first function and has taken dissensus in an interaction as the starting point of the research asking: when children quarrel, establishing an open, local dissensus, what means do they employ to resolve the dispute? Do they make use of argumentative procedures and reasoning?

Many studies found that for preschoolers, argumentation is not the main instrument to resolve disputes, especially in child-child interaction[2]. This is reflected also in self-report data from children. In a study, Valtin (1991) asked children of different ages what they would do in order to resolve a dispute (*Streit*). Younger children (age five to eight) named several strategies: using physical force, calling adults, leaving or just saying sorry. They did not name argumentation, as opposed to older children (age ten to twelve). This finding from interview data is mirrored in observational, interactional data. Arendt (2014, 2015) reports that although preschoolers in her data engage in argumentation in an arising quarrel, they do not seem to trust it as a means to finally resolve the conflict. After brief argumentative exchanges, they resort to other verbal and nonverbal means like physical force or calling upon an adult to sort things out (2014, pp. 30-31). For the children in her data, argumentation seems to be a means they try out in case of a dispute, but

[2] When investigating children's argumentation, a distinction between argumentation in child-adult settings and argumentation in child-child settings is necessary as adults will often model their communicative and argumentative practices in the sense of scaffolding practices that allow children to enter the zone of proximal development.

without trusting it to carry them all the way to a resolution. A study conducted by Komor (2010) has similar findings. She shows that five-year olds are not able to resolve a dispute by means of argumentation despite making several attempts to do so (p. 117). Although the children in her data give arguments, these arguments are directed to the hierarchy within the relationship rather than the controversial standpoints. Thus, in this study also, children were found to resolve disputes by non-argumentative means like fading out and resorting to other activities (p. 320).

However, the fact that children do not exhibit elaborate argumentative abilities in disputes should not lead to the conclusion that they do not have them at their command. Our own studies have shown that preschool children are able to engage in argumentation in either fictional disputes in role play (Bose 2003; Bose and Hannken-Illjes 2016), or in cooperative interaction in play settings (Hannken-Illjes and Bose 2018). There are further studies that support these findings and that shall be referred to in the following section. The finding that cooperative situations offer a privileged site for the study of argumentation among preschoolers leads to the question of how agonism and cooperation are marked and performed in child-child discourse. This is not only relevant for developmental aspects of argumentation, but it also touches on a bigger issue in argumentation theory: the form of dissensus in argumentation and its relevance for the argumentative exchange. We will lay out this discussion in argumentation in general and then concentrate on argumentation among children, before proceeding to the analysis of our case.

3. Agonism, cooperation, and in-between

Dissensus is considered a defining feature of argumentation distinguishing it from other forms of reason-giving like explaining (see Klein 2001, Morek 2012). The difference between argumentation and explanation could be straight forward – with explaining defined as the giving of reasons in a situation where there is a recognized difference in knowledge, or an epistemic asymmetry, whereas argumentation usually takes place in situations where there is epistemic symmetry. However, when studied in conversational data, this difference becomes fuzzy (see Deppermann and Lucius-Hoene 2006).

Argumentation in interaction may also lack a local dissensus, even when it is clearly not explanatory in nature. Doury (2012) points out that in interaction, participants might argue although they agree on the issue at hand and are not trying to persuade one another. In these instances, argumentation can serve other functions, like cognitive development, identification, or emotional appeal. However, one could argue that although the partners in interaction agree, they have to have at least implicitly constructed a sense of opposition against which they direct their concerted argumentation (as Doury points out also, see pp. 106-107). Similarly, Micheli (2012) suggests a non-persuasive definition of argumentation (which is not to say that argumentation cannot be aimed at persuasion).

Before we launch into this discussion, we would like to clarify some terms (with no claim to arrange the entire field). There are already several concepts in our discussion now: persuasion, cooperation, (local) dissensus. The topic of different degrees of dissensus has produced a variety of dichotomous terms, and the ways in which dissensus is established in interaction may differ considerably from open agonism to cooperative situations in which the dissensus can only be reconstructed implicitly. Hence those may be the endpoints of a continuum rather than discrete concepts.

The terms cooperative, explorative, and epistemic argumentation are often contrasted with agonistic, persuasive argumentation. Cooperative here refers to the overall interactional goal and the relationship between the interactants rather than to the function of the argumentation itself, whereas both explorative and epistemic stress the function of the argumentation in interactions that – depending on that very function – will be framed as cooperative rather than agonistic Explorative then refers to the relationship among the interactants with respect to the *quaestio*: is the *quaestio* under consideration one to which the interactants try to develop a response to through the process of argumentation, or are they trying to persuade other participants of a pre-established belief with respect to the *quaestio*? Epistemic is closely related to exploration and stresses the following function of argumentation: establishing validity and knowledge through argumentation rather than fostering action. These dichotomies serve a heuristic value, and our interest lies especially in the gradations. We do not follow Kock (2017) who

understands epistemic argumentation as relating to validity claims of truth. When we speak of the epistemic dimension of argumentation, we refer to the fact that while arguing, arguers will not only establish what is controversial but also what is taken to be valid, whether that be fact or value based. Positioning the different terms in relation to each other can lead to a list like the following as a starting point for our empirical work:

Relation to argumentation		
Cooperative	*Interactional / overall*	Competitive / Agonistic
Explorative	*Interactional / argumentation*	Persuasive
Epistemic	*Argumentation / function*	Pragmatic
Collective	*Social form*	Individual
Converging	*Outcome*	Diverging

Table 1. Terminology of dissenus

These distinctions do not present a closed list. They are also not, or at least not all, recent ones. Aristotle differentiates between different forms of argumentative exchanges or discourse in which argumentation occurs, most prominently apodictic, dialectical and rhetorical (Wolf, 2010), which correspond to the three major works that include argumentation: the *Analytics*, the *Topics* (and thereby the dialectic) and the *Rhetoric*. As analytical reasoning relies on true as opposed to probable sentences or utterances, it will be left out here. The distinction remains between dialectical reasoning and rhetorical argumentation. In the *Sophistical Refutations* (Aristotle, 1995), Aristotle draws a distinction between dialectic and agonistic

argumentation. Following Wolf (2010, p. 31), agonistic argumentation is conceptualized here as competitive argumentation, which in the sophistic refutations often aligns with eristic argumentation, whereas dialectic argumentation can be viewed as explorative rather than persuasive, and less agonistic.

This distinction is taken up and elaborated in Walton's (2010) seven types of dialogue. Walton also presents a rather fine-grained theoretical distinction between the initial situation, the goals of the participants, and the goal of dialogue. In his discussion of the seven types, he also introduces the notion of cooperativity stating that the inquiry, with its overarching goal to prove or disprove a hypothesis, is "cooperative in nature" (p. 14) as opposed to the adversarial types of persuasion. Deliberation, on the other hand, he identifies as collaborative (not cooperative). In this paper, we shall situate distinctions with respect to the interpersonal framing of an argumentative situation on the continuum of cooperation and agonism.

When speaking of cooperation in argumentation, we do not mean to refer to the conventional understanding of cooperativeness in communication as expressed in the Gricean concepts of the cooperative principle, conversational maxims, and conversational implicatures (Grice, 1989). Even argumentation in the most agonistic setting is still cooperative in that sense as the participants work cooperatively to establish this agonistic setting, and they expect that the other will follow the maxims. Fiehler (1999) distinguishes between cooperation (in the Gricean sense) where participants unconsciously follow underlying conventions without rating an interaction as specifically cooperative, and cooperativity and cooperation as the impression the participants have during or after an interaction that it was cooperative (p. 52). He calls the latter communicative cooperation. According to Fiehler, cooperativity is a certain modality of communication (1999, p. 55) characterized by the fact that the common cause is at the center of the interaction. He offers a list of four interactive accomplishments that characterize communicative cooperativity: performing deeds that enhance the collaborative work on the common cause, joint accomplishments that could have been ascribed to a single person, communicative practices that give contour and focus to activities of others, and cooperative practices that take into account the conditions of the other with respect to

knowledge, abilities and interests (Fiehler, 1999, pp. 55-56). In this sense argumentation in a cooperative framework would be characterized, for instance, by naming reasons brought forward with respect to a *quaestio* as a shared argument and credit given to the others for their argumentative as well as overall communicative contributions. Makau (1999) argues from a normative perspective for cooperative argumentation as argumentation aiming at shared decision making by contrasting it with argumentation that aims to gain adherence of others. She defines cooperative argumentation as "the process of advancing, supporting, modifying, and criticizing claims so that appropriate decision makers may grant or deny adherence." (Makau, 1999, p. 57) She insinuates that the non-cooperative argumentation implies closed-mindedness towards other opinions and arguments.

4. Cooperation and agonism in child-child argumentation

In our study, we are interested in the ways in which different grades of dissent are established in interaction, especially in interactions among children. With respect to the development of argumentation competence as well as the teaching of argumentative skills in school, Ehlich (2014) distinguishes between persuasive and explorative argumentation. For Ehlich, persuasive argumentation aims at establishing divergence, whereas explorative argumentation establishes convergence. This distinction seems especially important when studying argumentation and proto-argumentation in child-child interaction.

In two experimental studies Domberg, Köymen and Tomasello (2018) have examined the reasoning of younger children (five and seven years old) in either cooperative or competitive play contexts. The studies show that the argumentative performance varied between competitive and cooperative settings in two ways: in cooperative settings children produced more arguments, and, different from competitive settings, they also produced what the authors call "two-sided arguments." The authors conclude, "As both studies point out, cooperative situations, in which children have joint goals, provide a more motivation for them to produce arguments and to

discuss more aspects of the question at hand" (Domberg et al. 2018, p. 76).

Other works have also focused on cooperative argumentation among children. Clark et al. (2003) studied cooperative argumentation among children in elementary school as an alternative to the IRE (intervention–response–evaluation) format of classroom discourse. They found that settings that foster cooperative reasoning open up new forms of meaning and also allow for new forms of participation, enabling more children to engage in the classroom. Bose and Kurtenbach (2019) study the argumentation in conversation circles in the kindergarten directed at problems the children introduce themselves. The children search collaboratively for solutions to the problem at hand and follow up on the outcome of the solution. In these conversation circles, the children take up formal *topoi* in a very structured way, similar to the search formulas in classical Roman forensic rhetoric, when engaging in problem solving (Bose, Hannken-Illjes, and Kurtenbach, under review).

A special case in point is the work on argumentation in mathematical education for elementary school children. Krummheuer (1995), for instance, focuses on the way children reason their way towards the solution of mathematical problems and do so collaboratively. In a similar vein, Fielding-Wells (2016) introduces argumentation as a method of mathematical problem solving in the classroom for children ages eight to ten.[3] The distinction taken up by Littleton and Mercer (2013) between disputational, cumulative, and exploratory talk is important to this line of study. Disputational talk refers to stating positions without reasoning or relating them to a common cause; cumulative talk refers to doing non-agonistic work on an issue without attending to others; and exploratory talk refers to doing work on an issue by engaging each other's opinions and searching collaboratively for a joint solution (Littleton and Mercer, 2013). However, in our data the children do not have an externally set task but rather deal with problems that present themselves within their play.

[3] Explorative talk in natural science pedagogy presents a special case as it concerns itself with the role of reasoning in building knowledge. Most of those studies concern school children, so the reference to the didactics of mathematics might suffice here.

In our study, we treat the question of different forms of dissensus in child-child argumentation as a question of degree between agonism and cooperation. Also, we assume, on the basis of earlier case studies, that the notion of cooperation or agonism is not only dependent on the *quaestio*, but that the vocal-articulatory and bodily framing plays a crucial role in determining the degree of agonism in an interaction. That is, irrespective of the sort of problem under discussion, an interaction can be framed according to different degrees of cooperativity. The degree of agonism or cooperativity is, we think, interactively performed by the participants. For child-child discourse, situations marked as rather cooperative allow for more extended and elaborate forms of argumentation. Hence, the framing of an interaction and the form of argumentation are in a reciprocal relationship. We are interested in the framing of argumentative situations as cooperative as we think that argumentation competence in children can best be studied in those situations. Often, the argumentation will be what we call the "epistemic dimension of argumentation" (Hannken-Illjes and Bose 2018).

5. Method and Data

Methodologically, our study is informed by a conversation-analytic, ethnographic approach. We focus on the interactive, sequential establishment of argumentation with a special focus on the way the participants establish an interaction as rather cooperative or rather agonistic. This methodological stance views interaction as a complex phenomenon and does not, even when focusing on argumentation, analyze argumentative sequences in isolation from other interactional aspects. Hence, in contrast to, for example, the pragma-dialectic analysis, we do not (re-)frame argumentation in interaction as a critical discussion (see for example van Eemeren and Snoeck Henckemans 2017), but rather consider argumentation to be something that is embedded in interaction and indicates a certain level of interaction that the participants need to adhere to. This is in line with works from interactional linguistics like Spranz-Fogasy (2006) and Schwarze (2010). From an ethnomethodological and conversation analytic viewpoint, one could argue that participants are confronted with different "problems" or different levels of tasks to attend to.

Kallmeyer (1985) distinguished six levels constitutive of interaction that are simultaneously attended to by participants during the interaction, although one in particular may be in the foreground. The six levels include: organization of interaction, presentation of issues, acting, social relationships and identities, modality, and the establishment of reciprocity. While argumentation brings the presentation of issues to the fore, our study found that attending to the social relationship between the two participants is also crucial.

In our analysis we do not focus solely on the verbal portion, but also consider the other-than-verbal. Given this, we take a multimodal approach to argumentative interaction with a special focus on vocal and prosodic features as well as bodily movement. One of the reviewers for the submissions process to the Argage Conference remarked that it was ironic that a paper submitted to a conference on argumentation and *language* (emphasis ours) would focus its analysis on the non-verbal aspects of argumentation. We think, however, that analyzing oral argumentation without taking into account the non-verbal layers of the exchanges runs the risk of missing crucial aspects of argumentation. This is especially true for argumentation among younger children, as they will often substitute vocal-articulatory and bodily gestures for verbal utterances. When pushing for communicative goals, especially for smaller children, vocal, paraverbal, and bodily means of expression are equal to verbal means (Andresen 2002, 2005; Bose 2003; Bose and Kurtenbach 2014; Garvey 1984; Kirsch-Auwärter 1985; Klein 1985).

Although it a relatively new strand in argumentation analysis, multimodal analysis may support a more detailed analysis of oral argumentation in interaction. The concept of multimodality has not only been prevalent in linguistics and conversation analysis, but also into non-linguistic strands of argumentation studies. The term has been introduced to argumentation studies by Gilbert (1997), who distinguishes between four different modalities in argumentation: the logical, the emotional, the visceral, and the kisceral (p. 79). The visceral modality refers to bodily aspects, the kisceral to "energetic" ones. Despite the obvious problems of differentiating between emotional argumentation and "visceral" argumentation on the same categorical level, Gilbert's work has generated strong

interest in the role modalities beyond the verbal play in argumentation.

When it comes to multimodality in argumentation, visual argumentation is probably the best theorized and analyzed. Other modalities are rather new to the analysis of argumentation, with some exceptions like the work by Bose and Gutenberg (2003), Jaquin (2015, 2018) and Kreuz and Mundwiler (2016). Perret-Clermont et al. (2019) point to the role of elements in argumentation that function as non-verbalized premises (or context knowledge) that are visually available to the participants. When we refer to multimodality in this paper, we follow Schmitt (2005) who states: "multimodal communication refers to a conception of communication as holistic process that ultimately cannot be separated from the bodily aspects of the participants" (p. 18-19, our translation). A modality in this sense is a form or level of expression that contains, or may contain, communicative relevance. For conversation analysis, Schmitt (2005) lists verbality, prosody, gaze, mimic, gesture, position, bodily constellations, and bodily movements as relevant modalities (p. 19).

When analyzing the dimensions of cooperativity and agonism, the concept of synchronicity in interaction becomes central. In our analysis, we will use the notion of synchrony as well as interactional rhythm in order to analyze the other-than-verbal aspects. Here we take the work by Kim (2015) as well as the work by Pfänder et al. (2017) and Zima (2017) as points of reference. These works are informed by an interactional and conversation analytic perspective, thus they view synchronicity as an interactional achievement that can be observed and is directed at working on different levels of the constitution of interaction (managing the relationship, establishing reciprocity, and organizing the overall interaction). Kim (2015) conceptualizes synchronicity in communication and interaction as "an interactional state that occurs when the participants' non-verbal behaviors, including kinesic behaviors (such as facial, hand, and bodily movements) and paralinguistic behaviors (such as the volume, pitch, and speed of vocal speech utterances) are coordinated smoothly both in form and timing" (p. 28). Synchronicity then results in "perceived relational 'entitativity'(Lakens 2010), the sense of being together as a unit in a solid communicative relationship"

(Kim 2015, p. 28). As an effect of synchronization, Pfänder et al. (2017) include, alongside producing understanding, a sense of emotional understanding (p. 77).

The project this paper stems from works with two longitudinal corpora of child-child communication (3.0 – 7.0), one older (50 hours of data), one still being built (10 hours of data). Both corpora focus on the free play of children, the older one videographing children mainly in the private sphere, the newer one in the kindergarten. In the latter case, the kindergarten is taken as an entrance to the field rather than as a field of study itself. The kindergarten this material has been collected from is a rather small (less than 40 children) and allows for a lot of free play during the day. The children are videographed in play interaction including role-play, play with props or building games. In the analysis, we also include field-notes from participant observation. The talk-in-interaction is transcribed using GAT II (Selting et al. 2009). For this paper, we provide the English translation beneath the original German transcript.

6. Who is to decide—the case study

The case study for this paper consists of a longer building game (overall 30 minutes) that engages two boys (Nathanel 5.6 and Onno 5.8). Prior to this sequence, Onno was playing on his own before Nathanel joined him in constructing a compound for animals. Both boys play together often. Their conversation in this play is mainly empractical; they comment on their actions while building, with longer pauses in conversation. In the analysis, we will focus on the sequences that entail reason-giving and will analyze them with respect to the degree of cooperativity and agonism. In the following section, we will present three instances of argumentation during this play sequence. The recording ends at minute 31, and shortly afterwards the play ends as well because the children need to go to the kindergarten's morning circle. The extracts analyzed are presented here in sequential order.

6.1 Wolves next to lions—cooperation

This sequence is situated in the middle of the interaction. Up until this point, both children have jointly constructed what seems to be

an enclosure for a variety of small, plastic animals. The enclosure is constructed mainly of wooden bricks of different sizes.

		(00:15:00)
008	O:	**A:Lso ICH würde jetzt(.)n MITTleren nur ɔch NEHM;||** well I would now only take a middlelong one
009	N:	**(-)(DANN)** then
010	O:	**(-)die WÖLfe-|** the wolves
011		**(.)die MUSST du(.)NEben die löwen machen;|** you need to make them next to the lions
012		**also HIER hin.||** thus here
013		**(.)weil DA(.)da bau ICH grad für die EISbären.||** because there I am just building for the polar bears
014	N:	**ja MACH [ich]** yes I will do that
015	O:	**[so] musst du HIER machen.||** here you have to do it this way
016		**die LIEgen schon in dem (kasten dann da DRIN.||)** they are already lying in the box
017		**(12.0)**

Onno brings two new bricks to the enclosure, looks at it and stops briefly before taking out two animals, presumably wolves, and relocating them. While he does so, he instructs Nathanel on where to place the wolves. He backs this instruction up with a reason: the wolves need to be moved because he is constructing a section for the polar-bears where the wolves were originally placed. Nathanel accepts both the instruction and the reason and follows the demand. It seems to go without saying that wolves and polar bears cannot live next to each other, which is the underlying premise of the argument made by Onno. Prosodically, the situation displays symmetry and calmness—both children take turns in the discussion, and with respect to the dynamic, the volume of their voices is moderate and the articulatory tension is relatively low. Hence, although Onno extra-verbally expresses a potential dissensus when he briefly stops and looks at the wolves, the rest of the sequence is marked as cooperative. Onno gives a reason for his demand, and Nathanel neither questions the instruction nor the reason. The children act in synchronicity besides the brief stop in action.

At the same time, the two children seem to establish a certain hierarchy in this exchange that will become important for the later sequences under consideration. Onno seems to be in charge of the construction and play, and Nathanel, at least in the beginning, follows suit. Of course, Onno has been there longer and had started the play.

		(00:18:21)
101	O:	*<<rufend>* **HIER is die EISbärenhöhle-|** here is the cave of the polar bears
102		**s KLEInere land-|***>* the smaller land
103		**und JETZT bau ich das GRÖßere;|** and now I will build the bigger one
104		**mit DEM ding;|**

		with this thing
105		**dem LETZten GROßen [KLOTZ.||]** the last big brick
106	N:	**[ICH stell] die besser AUCH mal rauf;|** I'd better put them up as well
107		**(.)ERSTmal auf die MAUer;|** first on the wall
108	O:	**beVOR du das geBIRge geBAUT hast NE,||=** before you have built the mountains right
109	N:	**=JA;||** Yes

The play continues in quite a harmonious fashion, as can be seen in this short exchange. Onno backs up an action and the accompanying utterance with a reasoned statement; Nathanel states that he will put "them" (line 106: not visible in the video, but presumably the wolves) up on the wall. Onno backs this statement up by expanding it with a reason, followed with a tag question "ne" that Nathanel answers with "yes" (line 108 and 109). Throughout, the children continue building.

In some sequences one could even argue that both interactants put their cooperation on display to each other when they refer to their abilities as being special. In this case they also exhibit them to Juno, a girl who for some time plays along with the two boys (line 251) but never engages in a conversation with them.

		(00:27:26)
251	N:	*((zu Juno) <<theatralisch>* **DAS können wir ^AUCH.||***>)* *<theatrically>* that we can as well
252	O:	**wir können ALles EAsy PEAsy.||**

		we can do everything easy peasy
253	N:	**(.)ja.||** Yes
254		**(2.2)**
255	O:	**denn für UNS is das(.)(unser) SPIElen.||** because for us it is our play

Interestingly, we find similar sequences in play situations and situations that involve reasoning by other children (Hannken-Illjes and Bose, 2018). Here the children will point out to each other that they are very competent together in what they are doing. This is relevent to the notion of pointing out joint accomplishments when framing an interaction as cooperative (see above).

6.2 It is not up to you to decide!—Agonism

The first instance of agonism can be found at 28:40. Nathanel notices a passage under one of the walls, and Onno responds with the instruction: close it or shut it down (line 287).

		(00:28:40)
284	N:	**HÄ:::?||** Hä
285		**(.)ich WUSSte noch gar nich dass da unten_n <<sehr leise> (DURCHgang is;|)>** I did not even know that there is a passage down there
286		*((lacht)***HÄhähä***)* *((laughs)* hähähä)
287	O:	**MACH BAU_s ZU;||** make close it

288	N:	**(wieso)** why
289	O:	**(ja)** yes
290	N:	**(--)aber ONno:,| ich hab [ne iDEE.||]** but Onno I have an idea
291	O:	**[ja wir] wir SPIElen einfach-|** yes we'll just play
292		**(.)wir KÖNNten das mit diesen KRALlen WEGschieben;|** we could move it with these claws
293		**oKAY?||** okay
294		**(aber es WÄR da drinne;|)** but it would be inside there
295		**und du kannst es auch DAhinschieben.||** and you can move it there
296		**oKAY?||** okay
297		**(--)oKAY nathanel?||** okay nathanel
298	N:	**(.)(WOLLte ja) Aber-[***((richtet sich auf,frontal zu O))* **]** wanted to but *(gets up,position in front of O)*

299	O:	**[***((richtet sich auf,frontal zu N)***wie^SO:;||***)*** *(gets up,position in front of N)* *why*
300	N:	**´BIT^TE:;||** please
301	O:	**ich habs ge^BAUT;|** I have built it
302		**ALso?|** so
303		**(.)^DARF ichs ent^SCHEIden;|** I may decide
304	**N?**	***(möcht)ICH entscheiden.||*** I want to decide
305	O:	*<<sehr schnell>***(deshalb hab ich das nicht)***>* **[geBAUT.||]** <very fast> that is not why I built it
306	N:	**[(ALso ich]** well I
307		**hab schon) das geHÖRT daZU (...)** have already that belongs
308	O:	**du darfst aber nicht be^STIMM(.)daDRÜber;||** but you may not decide on this
309	N:	**JA;|**

		Yes
310		**(-)du AUCH nich;|| [***((guckt an O vorbei))* **]** you neither *((looks past O))*
311	O:	**[***((guckt an N vorbei)***ICH find_s(...)** **nicht ^SO:;||***)***]** *((looks past N)* I find it not so*)*
312	N:	**(.)ich AUCH nich;||** me neither
313		(-)*<<lauter>* **ONno ich hab ne iDEE.||***>* <louder> Onno I have an idea

Nathanel does not consent to this instruction, instead he questions it (line 288: "wieso" / "why") and follows up with an idea for the passage. Onno then presents his idea leaning in slightly towards Nathanel and looking at him. Onno speaks in a rather high voice that is bordering on child-directed speech. He ends his sequence with a double tag question (line 296-297). Nathanel looks at the passage without responding to Onno (line 297). Then the scene changes: both children straighten and come to face each other, and the interaction seems to freeze bodily (line 298 and 299). Prosodically, Nathanel employs a rather nagging tone (line 300: "bitte" / "please"). Onno now introduces a brief reasoning sequence: I have built it therefore I am the one to decide (line 301-303). Here Onno falls back on what he considers to be an established rule: the one who has built something is the one to decide. Nathanel does not debate the rule but rather states and restates that he wants to decide as well (line 304). Nathanel only briefly tries to counter Onno's assertion, then Onno restates that Nathanel may not decide, which is followed by Nathanel's statement that Onno may also not decide. The interaction comes to a standstill at this moment (line 310-311), the

tension with respect to voice and prosody, however, is still rather low, with both children falling into a nagging tone.

The standstill is then overcome by Nathanel saying in a louder, non-nagging tone, "I have an idea" (line 313). This wording—I have an idea—will be used repeatedly from this point on. For the next few minutes, the children alternate posing new ideas on how to proceed with the building of the enclosure saying: "Oder, nein, ich hab eine Idee" ("or, no, I have an idea") thereby rejecting the other's idea while at the same time promoting the play. In this sequence, the children are searching for a resolution to their problem (not knowing how to proceed). They do so by posing more and more new ideas, all of which are rejected by the other. None of them are elaborated argumentatively. Hence, the confrontation and local dissensus about who is to decide is overcome through the introduction of a new thematic focus, not through the brief argumentative exchanges. At the same time, the exchange of ideas constitutes a form of parallelism and thereby a form of synchrony, although with a much higher tension than in the earlier sequences.

This sequence leads to a last, more agonistic situation shortly before the end of the recording (and the play).

6.3 I can do anything?—Agonism and argumentation

		(00:31:30)
376	N:	**NEIN.| wir müssen ERSTmal alles wieder(.)zerSTÖRN,|** no we first need to destroy everything
377		**[(und DANN wei)]** and then furth
378	O:	**[***((lässt sich theatralisch auf Boden gleiten)***NEI:ein-||***)***]** *((slides to the floor dramatically)* no*)*
379	N:	**(-) DOCH;|**

		yes
380	O:	*<<gehaucht, leise-eindringlich>* **NEI:N.||>** *<breathy, low-intensive>* no
381		**(2.6)** *((gucken sich an))* *((look at each other))*
382	N:	*<leise>* **ich MACHS aber jetzt.||>** but I'll do it now
383	O:	**NEE;|** no
384		**DARFST du nich ent^SCHEIden.||** you may no decide
385		**(1.8)** *((gucken sich an))* *((look at each other))*
386	N:	*<<geknarrt, leise>* **ja;|>** *<creeky, low>* yes
387		**(--)aber es IS ja auch nich ^DEINS;|** but it is also not yours
388		**und ich DARF** and I can
389		**(.)und ich darf MAchen was ich ^WILL.||** and i can do what I want
390	O:	*<<eher laut>* **oKAY.||>** *<rather loud>* okay
391		**dann DARF ich auch (DICH),|** then I can you
392		**(-) dann darf ich dir WEHtun-|**

		then I can hurt you
393		**(-) ich darf MAchen was ich ^WILL.||**
		I can do what I want
394		**(1.4)** *((gucken sich an))*
		((look at each other))
395		**ich darf ALles [machen-|]**
		I can do everything
396	N:	**[ONno oKAY.||]**
		Onno okay
397		**(-)wir BAUN (-)n BISSchen ab.|**
		we'll deconstruct a little
398		**oKAY?||**
		okay
399	O:	**(-)oKAY.||**
		okay

The yes-no sequence (line 378-380) is marked by more volume from Onno, although not so much from Nathanel. What stands out is the interactional freezing. From earlier studies (Bose 2003) we take 2.6 and 1.8 seconds of disruption (see line 381 and 385) as interactionally non-fluent. In contrast to earlier sequences where the participants might have longer pauses in speech, but continue playing in a synchronized and rhythmical fashion, here the interaction freezes—all action comes to a halt. In this sequence, the freezing encompasses the argumentative sequence. Onno takes up his earlier argument that Nathanel is not allowed to decide about the play (line 383-384). But this time Nathanel rebuts not only by stating that Onno also does not get to decide, but that he, Nathanel, can do

whatever he wants, referencing a *topos* of personal freedom (line 389)[4]. Onno now takes up this *topos* and uses it for his own cause saying, if that is so, I too can do whatever I want, for example, I can hurt you (line 390-393). Onno here employs an argument from the same material topos of personal freedom. The formal *topos* could be framed in two ways: either as an *argumentum ad absurdum* depicting hurting as so out of the range of possible options for actions as to show that the topos of personal freedom is not entirely valid when taken to its extremes; or as an *argumentum ad bacumlum*, an actual threat; a threat at least to the interaction, but maybe also to the bodily integrity of Nathanel. In the latter case, which does not seem entirely unreasonable to us, the exchange seems to be dealt with argumentatively—if one is willing to ascribe argumentative value to the *argumentum ad baculum*—but constitutes at the same time the resolution of a dissensus through physical threat. Prosodically, the sequence is faster and louder, with higher tension than the previous one. Also, the playful tone that both children employed before is gone. After another pause (line 394: 1.4 seconds), Nathanel gives in (line 396-398). Throughout the play, the underlying question the children work on is who is to decide. Besides addressing the main question, how to proceed with the play, the children also work out aspects of their relationship. Hence, it becomes clear that while engaged in argumentation, the children also work on other levels of interaction.

7. Conclusion

Agonism and cooperativity can be indicators of the role argumentation has in child-child interaction. Agonism and cooperativity are established not only through verbal means of reasoning, but also

[4] We develop the topoi in this analysis from the material, thus we are not relying on one single system of topoi or argumentative moves but rather take topos as the material and /or formal source that allows for the movement from a reason to a conclusion. On a general methodological note, the concept of topos is an uneasy one for an appraoch informed by conversation analysis, as a topos needs to be reconstructed and is not abservable on the discursive surface. For further discussion see Hannken-Illjes and Bose (2018), and Schwarze (2010).

through vocal and bodily expressions in the interaction. Specifically, in cooperative situations, the children exhibit a high degree of synchronicity with respect to loudness, temporal organization of talk, and bodily relation to one another. In agonistic situations, the children display unrhythmical interpersonal coordination and the interaction freezes—the children stare at each other, stop their own movements, and introduce long pauses. This phenomenon can be witnessed in other instances of child-child interaction as well.

This notion of freezing finds its counterpart in argumentation theory in the concept of *stasis* as a point in a confrontation where discourse comes to a standstill. As Willard (1991) puts it, instances of stasis are "argumentative points we reach where the action cannot continue unless something happens" (p. 96). Willard goes on to state that "cooperative discourse cannot proceed until the stasis is breached" (1991, p. 96). Spranz-Fogasy puts it in similarly stating that participants start to argue when their conversational action comes to a halt (2006, p. 31). This does not mean that *stasis* needs to be absolute. On the contrary, we argue that in argumentative interaction we can find different forms or strengths of *stasis* independent of the question under consideration. Agonism and cooperativity do not necessarily relate to the scope of the problem under consideration but can change in degree within the same interaction. Furthermore, agonism is a phenomenon that can be bodily exhibited. In our case study, the two children deal with the same thematic issue when engaging in argumentation: who is to decide. The degrees of agonism and cooperativity differ, however, between the two and throughout the session.

References

Andresen, Helga. 2002. *Interaktion, Sprache und Spiel. Zur Funktion des Rollenspiels für die Sprachentwicklung im Vorschulalter.* Tübingen: Narr.

Andresen, Helga. 2005. *Vom Sprechen zum Schreiben. Sprachentwicklung zwischen dem vierten und siebten Lebensjahr*. Stuttgart: Klett-Cotta.

Arendt, Birte. 2014. Konfliktbearbeitung von Kindergartenkindern - verbale resp. argumentative und nonverbale Muster. *Mémoires de la Société Néophilologique de Helsinki* 92, 21-34.

Arendt, Birte. 2015. Kindergartenkinder argumentieren - Peer-Gespräche als Erwerbskontext. *Mitteilungen des Deutschen Germanistenverbandes*, 62(1), 21-33.

Aristoteles. 1995. *Philosophische Schriften. Sophistische Wiederlegungen* (E. Rolfes, Trans. Vol. 2). Hamburg: Felix Meiner Verlag.

Bose, Ines. 2003. *doch da sin ja nur muster // Kindlicher Sprechausdruck im sozialen Rollenspiel*. Frankfurt am Main: Peter Lang.

Bose, Ines and Norbert Gutenberg. 2003. Enthymeme and prosody: A contribution to empirical research in the analysis of intonation as well as argumentation. In *Proceedings of the Fifth Conference of the International Society for the Study of Argumentation*, eds. Frans van Eemeren, J. Anthony Blair, Charles A. Willard, & A. Francisca Snoeck Henkemans, 139-140. Amsterdam: Sic Sat.

Bose, Ines, and Kati Hannken-Illjes. 2011. Protorhetorik. In *Historisches Wörterbuch der Rhetorik*, ed. Gert Ueding, 966-975. Berlin: de Gruyter.

Bose, Ines, and Kati Hannken-Illjes, Kati. 2016. Wie Vorschulkinder Geltung etablieren. *Studia Linguistica der Universität Wroclaw*, 35: 119-136.

Bose, Ines, and Kati Hannken-Illjes. 2019. Die Entwicklung von argumentativen Fähigkeiten bei Vorschulkindern: Zwischen Agonalität und Kooperativität. In *Kinder im Gespräch - mit Kindern im Gespräch*, eds. Ines Bose, Kati Hannken-Illjes and Stephanie Kurtenbach, 11-31. Berlin: Frank + Timme.

Bose, Ines, Hannken-Illjes, Kati, and Stephanie Kurtenbach, under review. *Vordrängeln – Förderung von argumentativer Kompetenz in einem Gesprächskreis-Projekt der Kindertagestätte*.

Bose, Ines and Stephanie Kurtenbach. 2014. Stimmlich-artikulatorischer Ausdruck in der Kita. Erzieherinnen betrachten mit zwei- und vierjährigen Kindern ein Bilderbuch. In *Prosodie und Phonetik in der Interaktion. Prosody and Phonetics in Interaction*, eds. Dagmar Barth-Weingarten and Beata Szczepek-Reed, 136-161. Mannheim: Verlag für Gesprächsforschung.

Bose, Ines, and Stephanie Kurtenbach. 2019. "Stolpersteine und Wunschsterne". Förderung von Partizipation und Gesprächsfähigkeit in der Kita. In *Kinder im Gespräch - mit Kindern im Gespräch*, eds. Ines Bose, Kati Hannken-Illjes and Stephanie Kurtenbach, 113-147. Berlin: Frank + Timme.

Breyer, Thiemo, Buchholz Michael, B., Hamburger, Andreas, Pfänder, Stefan and Elke Schumann. 2017. *Resonanz - Rhythmus - Synchronisierung, Interaktionen in Alltag, Therapie und Kunst*. Bielefeld: transcript.

Brumark, Asa. 2008. "Eat your hamburger!" - "No, I dont't want to!" Argumentation and argumentative development in the context of dinner conversation in twenty Swedish families. *Argumentation,* 22, 251-271.

Clark, Ann-Marie, Anderson, Richard C., Kuo, Li-jen, Kim Il-Hee, Archodidou, Anthi and Kim Nguyen-Jahiel. 2003. Collaborative reasoning. Expanding ways for children to talk and think in school. *Educational Psychology Review,* 15(2), 181-198.

Crowell, Amanda and Deanna Kuhn. 2014. Developing dialogic argumentation skills: A 3-year intervention study. *Journal of Cognition and Developmeent, 15*(2), 363-381.

Deppermann, Arnulf, and Lucius-Hoene, Gabriele. 2006. Argumentatives Erzählen. In *Argumentieren in Gesprächen*, eds. Arnulf Deppermann and Martin Hartung, 130-144. Tübingen: Stauffenburg.

Domberg, Andreas, Köymen, Bahar and Michael Tomasello. 2018. Children's reasoning with peers in cooperative and competetive contexts. *British Journal of Developmental Psychology*, 36, 64-77.

Doury, Marianne. 2012. Preaching to the converted. Why argue when everyone agrees? *Argumentation*, *26*(1), 99-114.

Eemeren van, Frans and Francisca A. Snoeck Henckemans. 2017. *Argumentation. Analysis and evaluation.* New York & London: Routledge.

Ehlich, Konrad. 2014. Argumentieren als sprachliche Ressource des diskursiven Lernens. In *Diskursive und textuelle Strukturen in der Hochschuldidaktik,* eds Antonie Hornung, Gabriella Carobbio and Daniela Sorrentino, 41-54. Münster: Waxmann.

Fiehler, Reinhard. 1999. Was tut man, wenn man 'kooperativ' ist? Eine gesprächsanalytische Explikation der Konzepte 'Kooperation' und 'Kooperativität'. In *Kooperation in der Kommunikation. Festschrift für Elmar Bartsch,* eds. Annette Mönnich and Ernst W. Jakolski, 52-58. München / Basel: Reinhardt.

Fielding-Wells, Jill. 2016. "Mathematics is just 1+1+=2, what is there to argue about?" Developing a framework for argument-based mathematical inquiry. In *Opening up mathematics education research*, eds. Bruce White, Mohan Chinnappan and Sven Trenholm, 214-221. Aledlaide: MERGA.

Garvey, Catherine. 1984. *Children's talk*. London: Fontana.

Gilbert, Michael A. 1997. *Coalescent argumentation*. Mahwah: L. Erlbaum Associates.

Grice, Paul. 1989. *Studies in the way of words.* Cambridge: Harvard University Press.

Hannken-Illjes, Kati. 2003. *Gute Gründe geben – Ein sprechwissenschaftliches Modell argumentativer Kompetenz und seine methodischen und didaktischen Implikationen.* Frankfurt: Peter Lang.

Hannken-Illjes, Kati and Bose, Ines. 2018. Establishing validity among preschool children. *Argumentation in Context*, 7(1), 1-17.

Jacquin, Jerome. 2015. Multimodal counter-argumentation in the workplace: The contribution of gesture and gaze to the expression of disagreement. *GESPIN*, 4, 155-160.

Jacquin, Jerome. 2018. Multimodal positioning and reference in argumentative talk-in-interaction: Balancing context-dependency and context-independency. *International Review of Pragmatics,* 10(2), 198-218.

Kallmeyer, Werner. 1985. Handlungskonstitution im Gespräch. Dupont und sein Experte führen ein Beratungsgespräch. In *Grammatik, Konversation, Interaktion. Beiträge zum Romanistentag 1983*, eds. Elisabeth Gülich and Thomas Kotschi, 81-122. Tübingen: Niemeyer.

Kim, Young Yun. 2015. Achieving synchrony: A foundational dimension of intercultural communication competence. *International Journal of Intercultural Relations*, 48, 27-37.

Kirsch-Auwärter, Edit. 1985. Die Entwicklung von Sprachspielen in kindlicher Kommunikation. In *Kommunikationstypologie*, ed. Werner Kallmeyer, 154-171. Düsseldorf: Schwann.

Klein, Josef. 1985. Vorstufen der Fähigkeit zu BEGRÜNDEN bei knapp 2-jährigen Kindern. In *Argumente. Argumentation*, eds. Josef Kopperschmidt and Helmut Schanze. 261-271. München: Fink.

Klein, Josef. 2001. Erklären und Argumentieren als interaktive Gesprächsstrukturen. In *Text- und Gesprächslinguistik: ein internationales Handbuch zeitgenössischer Forschung*, eds. Klaus Brinker, A. Burkhardt, G. Ungeheuer, H. E. Wiegand and H. Steger, 11309-11329. Berlin: de Gruyter.

Kock, Christian. 2017. *Deliberative rhetoric. Arguing about doing.* In Windsor Studies in Argumentation, ed. Hans V. Hansen.

Komor, Anna. 2010. *Miteinander kommunizieren - Kinder unter sich*. Münster: Waxmann.

Kreuz, Judith, and Mundwiler, Vera. 2016. "verbAndskasten !MÜS!sen wir haben" Zum argumentativen Potenzial von Prosodie am Beispiel von Einigungsdiskussionen bei Grundschulkindern. *Studia Linguistica der Universität Wroclaw*, *XXXV*, 99-118.

Krummheuer, Götz. 1995. The ethnography of argumentation. In *The emergence of mathematical meaning: Interaction in classroom cultures*, eds. Paul Cobb and Heinrich Bauersfeld, 229-270. Hillsdale, Hove: Lawrence Erlbaum Associates.

Lakens, Daniel. 2010. Movement synchrony and perceived entitativity. *Journal of Experimental Social Psychology*, 46(5), 701-708.

Littleton, Karen and Neil Mercer. 2013. *Interthinking. Putting talk to work*. London: Routledge.

Makau, Josina M. 1999. The case for cooperative argumentation. In *Proceedings of the Fourth International Conference of the International Society for the Study of Argumentation*, eds. Frans van Eemeren, Rob Grootendorst, J. Anthony Blair and Charles A. Willard, 548-551. Amsterdam: SIC SAT.

Micheli, Raphael. 2012. Arguing without trying to persuade? Elements for a non-persuasive definition of argumentation. *Argumentation*, 26(1), 115-126.

Morek, Miriam. 2012. *Kinder erklären: Interaktionen in Familie und Unterricht im Vergleich*. Tübingen: Stauffenburg.

Muller-Mirza, Nathalie, Perret-Clermont, Anne Nelly, Tartas, Valerie and Antonio Iannaconne. 2009. Psychosocial processes in argumentation. In *Argumentation and education. Theoretical foundations and practices*, eds. Nathalie Muller-Mirza and Anne Nelly Perret-Clermont, 67-90. Berlin: Springer.

O'Keefe, Daniel J. 1977. Two concepts of argument. *The Journal of the American Forensic Association*, 8(3), 121-128.

Perret-Clermont, Anne-Nelly, Schär, Rebecca, Greco , Sara, Convertini, Josephine, Iannaconne, Antonio and Andrea Rocci. 2019. *A contribution from argumentation theory to the study of young children's reasoning in play activities*.

Pfänder, Stefan, Herlinghaus, Hermann and Carl E. Scheidt. 2017. Synchronisation in Interaktion: Eine interdisziplinäre Annäherung an multimodale Resonanz *Resonanz* – In *Rhythmus – Synchronisierung Interaktionen in Alltag, Therapie und Kunst*, eds. Thiemo Breyer, Michael B. Buchholz, Andreas Hamburger, Stefan Pfänder and Elke Schumann, 65-83. Bielefeld: transcript.

Schmitt, Reinhold. 2005. Zur multimodalen Struktur von *turn-taking*. *Gesprächsforschung - Online-Zeitschrift zur verbalen Interaktion*, 6, 17-61.

Schwarze, Cordula. 2010. *Formen und Funktionen von Topoi im Gespräch*. Frankfurt am Main: Peter Lang.

Selting, Margareth, Auer, Peter, Barth-Weingarten, Dagmar, Bergmann, Jörg, Bergmann, Pia, Birkner, Karin, . . . and Susanne Uhmann. 2009. Gesprächsanalytisches Transkriptionssystem 2 (GAT 2). *Gesprächsforschung - Online-Zeitschrift zur verbalen Interaktion*, 10, 353-402.

Spranz-Fogasy, Thomas. 2006. Alles Argumentieren, oder was? Zur Konstitution von Argumentation in Gesprächen. In *Argumentieren in Gesprächen*, eds. Martin Hartung and Arnulf Deppermann, 27-39. Tübingen: Stauffenburg.

Valtin, Renate. 1991. *Mit den Augen der Kinder. Freundschaft, Geheimnisse, Lügen und Strafen.* Hamburg: Rowohlt.

Völzing, Paul-Ludwig. 1982. *Kinder argumentieren. Die Ontogenese argumentativer Fähigkeiten*. Paderborn, München, Wien, Zürich: Ferdinand Schöningh.

Walton, Douglas. 2010. Types of dialogue and burden of proof. In *Computational models of argument: Proceedings of COMMA 2010*, eds. Pietro Baroni, Federico Cerutti, Massimiliano Giacomin and Guillermo Simari, 13-24. Amsterdam: IOS Press.

Willard, Charles A. 1991. Adaptation to context. *Argumentation, 5*(1), 91-107.

Wolf, Simon. 2010. A System of Argumentation Forms in Aristotle. *Argumentation,* 24(1), 19-40.

Zima, Elisabeth. 2017. Zum Konzept der Gestenresonanz in der Dialogischen Syntax. In *Rhythmus – Synchronisierung Interaktionen in Alltag, Therapie und Kunst*, eds. Thiemo Breyer, Michael B. Buchholz, Andreas Hamburger, Stefan Pfänder and Elke Schumann, 177-194. Bielefeld: transcript.