

With me it is exactly the same: second stories and their argumentative function in child talk

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Abstract

Conversation circles in kindergartens can foster discursive abilities such as argumentation. This paper analyzes argumentation in conversation circles in a kindergarten with respect to the function of narrative argumentation. We focus on second stories as a specific narrative form that is characterized by relating in content and form to a before told narrative thereby displaying similarity and alignment. In this paper, we will analyze videographed conversation circles in a kindergarten. Our methodological approach is interactional and qualitative, informed by conversation analysis and narrative analysis. We will argue that preschool children use second stories for argumentative purposes in cooperative argumentative exchanges and through them produce interactional alignment.

Keywords Cooperative argumentation \cdot Participation \cdot Problem solving \cdot Co-construction \cdot Similarity \cdot Child talk

Argumentation, participation, and interactional alignment

Argumentation is a form of discourse that is essentially bound to the idea of participation, be it in a broader sense as participation in a democratic society or as taking part on the level of interaction by working out a dissensus or engaging in decision making. Hence, it is important to study how argumentation evolves in childhood: being able to argue means being able to participate. Argumentation thus has social and democratic relevance. In addition, it plays an essential role in the intellectual development of children (Crowell & Kuhn,

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2014). It requires the ability to adopt different perspectives as well as the reflective competence to recognize which reasons are valid to whom in which context. As Bubikova-Moan and Sandvik (2022) point out, the ability to engage in argumentation is at the core of several educational frameworks, like the OECD's Future of Education and Skills 2030 (2019, p. 397). When speaking of argumentation, concepts vary. We follow Klein (1980) and understand argumentation as "transferring something collectively questionable into something collectively valid by means of something collectively valid" (1980: p. 19, translation ours). This definition points to the two main functions of argumentation: dealing with dissensus and establishing and actualizing validity, hence the agonal and the epistemic function (Hannken-Illjes, 2018: p. 24-26).

It has been widely acknowledged that children start as early as in their second year to engage in argumentation (Greco et al., 2018; Völzing, 1981). The first argumentative procedures and a preliminary form of rhetorical engagement can already be found in preschool children (for a systematic review of studies on argumentation in early childhood, see Bubikova-Moan & Sandvik, 2022; Antos, 1985). They can be framed as proto-argumentation, that is as argumentative practices that exhibit first forms but are not yet fully developed argumentative sequences. They often lack the incorporation of counterarguments (Crowell & Kuhn, 2014; Muller-Mirza et al., 2009) as well as explicitly ending the concluding stage of the argumentative sequence (see Arendt, 2019; Bose & Hannken-Illjes, 2012). Also, studies have shown that in disputes, hence agonal situations, younger children resort to argumentation only at the beginning but then tend to resolve the situation by other means, like physical force or calling on adults (Arendt, 2015 and Valtin, 1991 on selfreports by children). When 5-year-olds argue in agonal situations, they do not focus primarily on substantive opposition but give general subjective rebuttals (Komor, 2010). Brumark compares children between seven and ten years old with children between 12 and 14 and finds that the younger group is less elaborate—often not going beyond a (repeated) statement of opposition, sometimes giving a single supporting argument to work on a dissensus (Brumark, 2008). However, other studies show that—especially in non-agonal situations—children much younger than seven years are able to engage in rather sophisticated argumentation.

The last years have shown a rise in research on argumentation in cooperative situations among children. We take cooperation as a specific communicative modality (Fiehler, 1999) characterized by activities that foreground the collaborative notion of a communicative practice rather than the individual. Ehlich (2014) urged researchers to move their focus on teaching argumentation away from what he calls persuasive argumentation—centered around a controversy—towards explorative argumentation that functions to develop a solution to a problem by way of reasoning. Similarly, Mercer has introduced in his "forms of talk" in educational contexts exploratory talk as talk that works out an issue by engaging each other's opinions and collaboratively working out a solution (Littleton & Mercer, 2013). Baker et al. (2019) in their concept of collaborative argumentation take argumentation to be "a type of dialogue oriented towards jointly deciding what should be accepted, by means of exploring arguments for or against a view" (p. 79). All these approaches stress the epistemic rather than the agonal function of argumentation.

In a series of experimental studies on cooperative argumentation among younger children, a group around Köymen and Tomasello has shown for children between the age of three and five years that they will take into account the information available to their partners in discourse when designing their arguments (Köymen et al., 2016). Children age 5 to 7, on the other hand, would produce not only more arguments in cooperative situations, but also take into account more counterarguments (Domberg et al., 2018).

These findings are in line with qualitative studies on argumentation among young children. They also suggest that looking through the lens of cooperative, explorative discourse allows for a more profound description of the children's argumentative abilities. Bose & Hannken-Illjes (2016) and Bose, Hannken-Illjes & Kurtenbach (2020) in studies on preschool children in free play and in conversation circles found that the children give reasons primarily in cooperative settings. In the play context, the children bring arguments for their jointly created play world in a self-initiated way (Arendt, 2015; Kreutz & Luginbühl, this issue). They expand their framework and maintain it through cooperative-collaborative and co-constructive behavior (Bose & Hannken-Illies, 2016). Thus, they use argumentation to establish agreement and consent to proposals that have been made. Köymen and Tomasello (2020) take this relevance of cooperative argumentation among children to be "part and parcel of their more general cooperative approach to all kinds of social interaction" (p. 218). At the same time, cooperativity and agonality in argumentation should not be seen as a dichotomous pair, but rather as a continuum that can be used by the participants in an interaction (Hannken-Illjes & Bose, 2019). Baker et al. (2019) stress a similar point, when they state that "argumentation dialogues can be more or less collaborative" (p. 79).

Focusing on cooperative argumentation from an interactional perspective poses the question of how this cooperation can be detected and how it is displayed in the interaction. Following Pfänder et al. (2017), we take forms of resonance as similarity, alignment, and synchronicity as ways to establish cooperation in interaction. Resonance can take different forms: temporal and rhythmical alignment, bodily synchronization, or the take-up of structural means the interaction used in one's own utterance (Breyer & Pfänder, 2017). For this paper, we focus in our analysis on a specific form of similarity on the discursive level: narrating and renarrating that functions argumentatively.

The notion of synchronicity in argumentation has already been studied for the linkage between cooperative argumentation and vocal and bodily synchronicity. Rendering multimodality an essential part of understanding argumentation and acquisition of argumentation (Mundwiler et al., 2017; Bose & Hannken-Illjes, 2020) has been evolving in the study of argumentation in interaction. When studying argumentation among preschool children, cooperative argumentation is marked by vocal and bodily synchronicity (Hannken-Illjes & Bose, 2019). The link of narrating and arguing in conversation, although studied for institutional (Hannken-Illjes, 2019) and everyday argumentation (Deppermann & Lucius-Hoene, 2003; Schwarze, 2019), has not been looked into for children. Therefore, we are interested in how children use narrative as an argumentative resource. We are particularly interested in the use of second stories: stories that align to a prior told story in form and content and can be viewed as a form of reasoning by analogy when employed with an argumentative function. The question that arises in this context is how the argumentative function of narration develops in children. When are they capable of the complex ability to combine narrating and arguing? What functions can be found in narrative argumentation? With these guiding questions in mind, the study presents a first exploration of the argumentative narrative skills of preschool children and asks if and how kindergarten children already use (second) stories argumentatively and how are these practices related to a form of interactional alignment.

The interrelation of argumentation and narration

The relationship between narration and argumentation has recently gained prominence in argumentation research. At its center are the questions of how narratives can function argumentatively and in what way they differ from non-narrative arguments. Work on this connection reaches into antiquity, as the close connection between *narratio* and *argumentatio* is already emphasized and discussed in classical court oratory (Aristoteles, 2002). In the last years, the interest in the interrelation of argumentation and narration has gained new prominence (Bubikova-Moan, 2021; Olmos, 2017). The argumentative function of narratives is based on their proximity to rhetorical evidence—the enthymeme and the paradigm (Hübner, 2017). On the one hand, the story can serve as an argumentative resource: the narrative core is cited as a reason and used as a premise to draw conclusions from. At this point, enthymematic similarities can be found. These stories convince by being implicitly attached as reasons, used by the audience as an argument, and matching their knowledge of the world (Hoffmann, 1980). Moreover, narratives can function as evidence by example and thus have argumentative, topical potential (Hübner, 2017). Through similarities between the story and an event, a paradigmatic analogy is drawn by the listener. In this context, the appropriateness and credibility of the story in front of a particular audience constitute the actual persuasion (Tindale, 2017).

A concept of narration

Narrative skills are an important means of communication between people and thus also have social importance. They are indispensable for understanding the world and becoming part of it. The ability to narrate starts within the third year in the sense of a narrating as a broader concept, not distinguishing between narrating, reporting, and describing. However, precursory forms can already be found among younger children (Ehlich et al., 2008). The ability to engage in telling stories in a stricter sense—stories that meet the conditions of tellability and a certain degree of performativity—develops during the age from three to seven (Braun, 2007), often supported through co-narrating by adults (Hausendorf, 2001) and other forms of scaffolding.

To conceive of the argumentative potential of stories, it is first worth looking at fundamental aspects of narration. Following Deppermann and Lucius-Hoene (2003), narratives thematize and represent events and actions that contain a temporal dimension of change. Thus, narrating represents a verbal method to access past events and actions (Labov & Waletzky, 1967). In addition to a chronological structure and causal interconnections, a certain tellability and eventfulness of the stories are required (Weixler, 2017). For this study, we understand narrating in its process-oriented notion as a dynamic and interactional process (Spieß & Tophinke, 2018). Hence, narratives are sequential, interactive, and multimodally co-constructed by all interaction participants (Deppermann, 2014).

For the textual surface structure of stories, the model of Labov and Waletzky (1967/1997) has been accepted as a basic structure for everyday narratives (Spieß & Tophinke, 2018). It divides the narrative into functional paragraphs: abstract, orientation, complication, evaluation, resolution, and coda. In the context of argumentation and narration, the argumentative potential is attributed to the evaluation part (Hannken-Illjes, 2018) which can also run through the entire story (Labov, 1972). However, oral narrations are often not told in their full form in everyday life; instead, multiple levels of abstraction of the basic schema are realized. In narrative studies, a distinction is therefore made between so-called micro-narratives, i.e., completed, coherent narratives in the sense of the Labov and Waletzky model (Bleumer et al., 2019) and the "small stories." The latter are fragmented and open-ended tellings

referring to past events and calling up past narrations without telling the entire story with a beginning-middle-end construction (Bamberg & Geourgakopoulou, 2008). Due to their brevity and ephemerality, they are granted a rhetorical function, such as constituting arguments.

Second stories in conversation

One form of narrative that has an argumentative purpose is the *second story* (Sacks, 1995). Second stories are sequential stories in conversation; they follow a first story and are thematically similar to it but are told by a different narrator. The similarities are established in the second story, whereby its tellability is characterized by minor differences to the previous story. It holds a certain eventfulness of its own (Mulholland, 1996 in Karatsu, 2012). As a phenomenon of serial narrating, it could appear counterintuitive as the conversational principle "to oversuppose and undertell" applies (Heller et al., 2015). Nevertheless, it can often be observed in everyday conversations.

Communicatively, second stories can be credited with several functions. On the one hand, they demonstrate that the first story has been understood and that it is taken to be constituting evidence (Sacks, 1995). In addition, the second narrator can express agreement with or doubt about the first person's position, so the second story also has an interactional function (Arminen, 2004; Sacks, 1995). Second stories can thus do both: become the subject of negotiation and provoke an argument or have a supporting effect and calm down an argument (Karatsu, 2012).

Moreover, relating similar experiences through second stories also marks support as it shows understanding and empathy (Sacks, 1995). Arminen has studied the use of second stories in the therapeutic field. At Anonymous Alcoholics meetings, this storytelling practice plays a particular role; through the second stories, the speakers transvaluate and recontextualize the problems related in the first stories to provide resolutions (Arminen, 2004). Thus, mutual help and empowerment are built. In child peer groups, on the other hand, the practice also establishes status and marks membership (Theobald & Reynolds, 2015). The narrators express approval or doubt about the first stories and try to outdo each other with their contributions. In doing so, competitive and collaborative practices become visible. Primarily through its supporting or contesting function and the joint finding of solutions, second stories can be significant in the context of argumentation. Hence, the telling of second stories can be an interactional means to establish similarity and alignment, thereby allowing for participation in developing the response to a question. Our study aims to determine the argumentative role second stories play as a form of similarity and alignment among preschoolers.

Method and data

Procedure

Our methodological approach is qualitative and informed by conversation analysis, combined with Bamberg's (2020) notion of narrative practice. With a conversation-analytical toolkit, the individual contribution is analyzed turn-by-turn according to the "form-function-context" (Deppermann, 2014). The analysis is carried out retrospectively to the preceding contributions and prospectively to the function of the subsequent contributions (ibid.). The analysis rests on a video corpus of conversation circles of the project "Stolpersteine und Wunschsterne" (stumbling stones and wishing stars). These conversation circles take place in a German kindergarten that features this particular program.

Participants

The participants of the study can be divided into two groups: kindergarten children aged 4 to 5 and 5 to 6 years old. Participation in the conversation circles is voluntary. The children discuss with the support of two teachers exclusively topics of their life-world; the everyday life in the kindergarten as well as their life at home (Bose & Kurtenbach, 2019). At the beginning of each session, the teachers pass a basket around from which the children can take a (stumbling) stone or a (wishing) star, symbolizing a problem or a wish. The children and the teachers then work interactively on these topics—from their thematization, through working on them in argumentative sequences and problem-solving procedures to finishing them with a solution that is often evaluated in later sessions (ibid.).

Material

The video corpus includes circles during the periods 2015/2016 (16 circles, children aged 5 to 6 years, total length 4 h 5 min) and 2018/2019 (five circles, children aged 4 to 5 years, total length 1 h 32 min). These are natural and non-elicited data in authentic communication situations. Although the institutional context includes forms of elicitation by the teacher, the researchers did not foster certain forms of behavior. The conversation excerpts have been transcribed according to GAT-2 (Selting et al., 2009), using the minimal transcript with additional focus accents. The transcript's line numbering is based on the lines of the overall transcription from the corpora of 2015/2016 and 2018/2019. All names have been pseudonymized.

Analysis

We analyzed 21 conversation circles in two age groups, with children aged 4 to 5 years and 5 to 6 years. In the data of the younger group, only one second story with a clear argumentative function could be found, which is why our analysis is concentrating on the older preschoolers. Nevertheless, preliminary forms of argumentation do occur in the five discussion circles of the 4- to 5-year-olds. It is noticeable that the children increasingly mark consensus and dissent through markers such as "me too" or "I don't"/ "I do." They thus mark agreement, similarity and support, as well as competition. Nevertheless, four second stories could be found that have both similarities and small differences to the first story establishing tellability. However, they are told without a clearly recognizable argumentative function. It is remarkable that the second stories mark both help and support, as well as status and competition. Although the children support each other and mark synchronicity with markers such as "also" or "as well," they often want to outdo each other with their contributions. However, neither solutions nor conclusions are drawn from these second stories. The second story's argumentative role as a form of thematic similarity and alignment that creates participation could be found only once. The problem of the first story was recontextualized by the second story and solved by an implicit conclusion. However, a connection to the conversation and an explicit conclusion is missing.

Only the circle of the older group contains forms of argumentative narratives. This data encompasses 16 conversation circles with a total of 31 children dealing with 109 topics. The analysis found 20 narratives with an argumentative function, told by eight children. Thematically, the conversations deal with anger, violence, noise in kindergarten, family problems, and learning new skills. Among these 20 narratives, there are 16 that function as argument by example. Eleven of these latter are narratives that refer to similar experiences to those of another participant, and seven are in the position of second stories. In the following, we will discuss two different types of these second stories: second stories that back the credibility of the foregoing speaker and second stories that function as examples. Both categories are not mutually exclusive but rather highlight the main function in the interaction.

Second story type I: small story backing the credibility

The first type encompasses four small stories that support the credibility of other participants. On a structural level, these are small stories in the sense of fragmented and openended tellings that call up past events but do not tell the entire story. The small stories in this group function as second stories; the children "synchronize" with the previous speaker by means of thematical similarities with tellable differences. These second stories are thrown in like little remarks without a further claim to the right to speak. Moreover, the narrations are self-initiated, short, and lack elaboration. The essential function that could be worked out for the narratives from the first category is that of supporting credibility: the children use small stories to support the evidence of statements, solutions, and arguments of other participants.

The supporting function of the narratives is noticeable in several ways. On the one hand, the children support each other with personal experiences similar to the first story. Similarity is also established through linguistic means, via "too" and "also." In addition, all stories are self-initiated and are set appropriately relevant by the children. After their turn, the children show no intention of continuing to speak; in two stories, the narrative sequence is followed by a change of speaker or a change to turn-by-turn talk; in other stories, there is an elaboration question from the educator, which both children serve. In three of the four stories, the educator manages the closing and bridging to the ongoing conversation.

In the following, we present two excerpts to depict the second story's argumentative role as a form of thematic similarity and alignment that creates participation. The children align to the previous speaker thematically, in form (a narrative) as well as in function (argumentative/problem solving), thereby taking part in the conversation.

Example 1: "Being pushed on the stairs" (second story I_1; CC01_20151208; 00:07:15–00:08:54).

Paula's stumbling stone "Being pushed on the stairs" precedes the first excerpt. The girl tells how Edwin pushed her off the stairs when he was at her house (lines 172 and 179–191). This is followed by a transition to the ongoing conversation by the educator in line 192f.

	171	Teach1:	unsere PAUla hat noch_n STOLperstein?
			our Paula has one more stumbling stone
\rightarrow	172	Paula	(.)dass EIner(.)war(.)von der TREPpe runterSCHUBST;
			that one was pushed from the stairs
	173	Anton:	(.)wie bei FAbian.
			as with Fabian
	174	Paula:	hä?
			hä
	175	Anton:	(<i>(zu Fabian)</i> äh EDgar hat dich doch mal vor WUT,
			well once edgar pushed you in anger
	176		(.)die TREPpe runtergeschubst;)
			down the stairs
	177	Fabian:	HÄ?(.)FAST.
			hä nearly
	178	Anton:	(-)also FAST.
·			okay nearly
\rightarrow	179	Paula:	als edwin mal bei mir zu HAUse war,
			once when edwin was at my place
	180		hat(.)ist er RUNtergerannt und da hat er mich
			geTROFfen,
			had did he run downstairs and there he hit me
	181		und da bin ich(.)ähm RUNtergefallen mit PURzelbaum-
			and there I fell down with somersault
	182		von der TREPpe.
			from the stairs
	183	Teach1:	< <bestätigend> mhmh></bestätigend>
			< <confirming> mhmh></confirming>
	184		und was hast du da geMACHT?
	105	D 1	and what did you do
	185	Paula:	da hab ich geWEINT ganz DOLle;
	100	- 11	there I cried, very hard
	186	Teach1:	mhh und hast du mit dem edwin mal geSPROCHen?
	107	D 1	mhh and have you talked to edwin
	187	Paula:	JA aber er hat nicht mal entSCHULdigung gesagt;
	100	m 1 1	yes but he did not even say sorry
	188	Teach1:	mhh was HAST_n zum edwin geSAGT?
	100		mhh what did you say to edwin
	189	Paula:	hör bitte AU:F und sag entSCHULdigung bitte;
	100	m 1 .	please stop and say I am sorry please
	190	Teach:	hatter nicht geMACHT?
	1 0 1	Devile.	he did not do it
	191	Paula:	< <verneinend>mh mh></verneinend>
			< <negating>mh mh></negating>

192

193

194 195

196

197

198

199

Fabian

Teach1:

Teach1:	naja also SCHUBsen auf der TREPpe ist ja sowieSO nich-I
	well pushing on the stairs is not anyhow
	(.)Elgentlich WAS was wir überHAUPT nicht machen wollen.
	something that we do not want to do at all
Fabian:	JA.
	yes
	edgar hat mich mal vor WUT fast(.)von der TREPpe
	RUNtergeschubst.
	once edgar nearly phushed me down the stairs in anger
Teach1:	und was hast DU da gemacht?
	and what did you do

haben wir da noch MEHR kinder da die das schon mal erLEBT haben dass sie auf der TREPpe geSCHUBST worden

do we have more children here who have already experienced being pushed on the stairs

From lines 194 to 198, Fabian tells a self-initiated, small story. In the beginning, he sets relevance and marks confirmation with "yes" (line 194), after which his second story follows. After the teacher asks him to continue, Fabian cannot continue the story, leaving the conclusion—what you do when you get pushed—open. The teacher closes and links the story to the previous conversation in line 199 with a question about other's similar experiences.

mhm äh mm (WEIß ich nicht MEHR; ||)
mhm äh mm I don't know anymore

(WEIßte nicht mehr. ||) don't know anymore

sind?||

Fabian's second story presents a similar experience to Paula's first story—he establishes the similarity through the same story itself as well as through his confirmation and approval in line 194. Moreover, his narrative serves as one new piece of information to make it tellable: as opposed to Paula, he gives a reason why Edgar pushed him in line 195 by "once edgar nearly pushed me down the stairs in anger." What is striking here is the use of the second story. This short small story, which supports the story of the previous speaker by establishing similarities, is primarily used to mark agreement and consensus, establishing an analogy between the first and the second story. Although Fabian does not express a concrete conclusion, he works on two questions: is the first story credible and what can one do, when getting pushed. For the latter, he offers evidence from experience. The missing explicit conclusion must be deduced by the other participants. By marking agreement and using a second story itself, he synchronizes with Paula and backs the credibility of her story.

The consolidating function of the supportive small stories becomes apparent in yet another way. The stories in example 2 function as consecutive second stories. In the following excerpt (example 2), Pauline's stumbling stone is dealt with, which she introduces collaboratively with Julia (lines 272–275). They complain that children trample loudly during bedtime in kindergarten.

Example 2: "Noise during nap time" (Second story I_2 and I_3; CC05_20160209; 00:10:04–00:10:44).

	266	Merle:	äh pauLIne IST dir dein stolperstein wieder
			EINgefallen? pauline do you recall your stumbling stone
	267	Pauline:	((schaut auf den boden))
	207		(looks to the floor)
	268	Teach1:	pauLIne?
			pauline
	269		bei DIR noch irgendwas?
			anything with you
	270	Pauline:	<pre>dass(.)dass(.)unter MITtag die KINder MANCHmal(.)</pre>
			HIE:R, that that during midday break the children here
			sometimes
	271		(.)ich und julia MACHen das ja manchmal nicht weil
	271		wir ja auch (nicht mit)(.)manchmal MITschlafen,
			i and julia sometimes do not do this because we
			sometimes (do not) sleep as the others
	272		und DANN(.)TRAMpeln die ANderen MANCHmal hier(.)aufm
			BOden rum.
			and then the others stomp sometimes here on the floor
	273	?	und dann [()]
			and then
	274	Julia:	[und die und die] SCHREIen auch immer rum-
	275		da können wir nicht EINschlafen.
			and they they always yell and we cannot go to sleep
\rightarrow	276	Merle:	und das LETZte mal wo ich geSCHLAfen habe-
	277		and the last time when i slept
	211		zu antons geBURTStag- on antons birthday
	278		da WAR das(.)da HAB ich das(.)im sportraum AUCH
	270		[gehört.]]]
			there was it then i could hear it in the gym as well
\rightarrow	279	Paula:	[ja:] ich AUCH,
			yes me too
	280		ich hab sogar ZWEImal gehört;
			i even heard twice
	281		das war SO LAUT,
			it was so loud
	282		da KONNT ich gar nicht EINschlafen.
			that i could not go to sleep
	283	Merle:	ich AUCH nicht.
	284	? ??	me neither
	284 285	Teach1:	[()] [(GUCKT) mal was] KÖNnen wir denn da MACHen;
	200	reacht.	see what can we do
			See what can we up

In lines 276–278, Merle tells the first short, personal second story by citing a similar incident. The story illustrates and supports Pauline and Julia's complaint. Paula confirms the credibility of this story with a further second story by "i even heard twice" (I_3: line 280). Thereby, she establishes similarity with Merle's story and adds new information—having even had the experience herself, twice instead of once. Thus, she supports the first narrative and increases the argumentative potential. It is noticeable that Paula's second story expresses agreement and establishes similarities but simultaneously outdoes the other contributions.

In summary, small stories in the form of second stories have two functions: they support the credibility of the first story (and therewith of the narrator) and they give experiential evidence on what to do. The children introduce explorative arguments in a self-initiated way, even if a concrete conclusion or solution to the problem is missing.

Second story type II: story as example

The second recurring argumentative form of second stories is narrative by example: microstories from which conclusions are drawn and used to evaluate another event. In the data, it is noticeable that these narratives often appear in the search for solutions to problems, which might be due to the solution-oriented conversational format. The circles mostly proceed in such a way that children present their concerns, and the group is encouraged to solve them so that a joint solution is finally agreed upon. The teachers' questions such as "someone else an idea how bike | peter do you know how to ride a bike" (II_3: line 205f.) are followed by ideas from the children, which they often support with a personal story. This story recontextualizes the problem of the first story and offers a solution.

In these more extended and more complex argumentative stories, it is noticeable that the children have different levels of competence. This is reflected in the extent to which the narratives emerge through the educator's co-construction and whether and how a conclusion is drawn. There are three occurrences of this form in the data. The following excerpt (example 3) shows an argumentatively used example story. Julia introduces it, searching for suitable solutions for Timo's stumbling stone. For the problem solution, Julia introduces a self-initiated story.

Example 3: "Fell down with the bicycle" (Second story II_1; CC12_20160517; 00:04:58 – 00:06:57).

	063	Teach2:	fangen wir jetzt mal AN;
	064		we will start now hören wir mal dem TImo zu;
	064		let's listen to timo
	065		(.)was ER für einen STOLperstein hat.
	005		what stumbling stone he has
	066		
\rightarrow	067	Timo:	ALso wann ich(.)mit meinem FAHRrad FAHR,
	00,		well when i ride my bicycle
	068		dann(.)fall ich MEIStens immer HIN.
			then i mostely fall
	069	Teach2:	du fällst HIN mit deinem fahrrad.
			you fall with your bike
	070	Timo:	< <bestät> hmhm></bestät>
			< <confirm> hmhm></confirm>
	071		[obWOHL] das erst richtig NEU ist.
			although it is only really new
	072	Teach2:	[okay.]
			okay
	073		und du KANNST eigentlich fahrrad fahren.
			and you can actually ride a bike
	074	Timo:	JA.
			yes
	075		schon LANge.
	076		for a long time aber EINmal ist das UMgekippt,
	076		but once it tipped
	077		weil(.)weil (es HAT) ja auch sieben GÄNge.
	0,,		because because it also has seven gears
	078		und da komm ich dur durcheinANder(.)mit den
			[GÄNgen;]
			and then i get confused with the gears
\rightarrow	079	Julia:	[also TImo] ich kann dir ja mal erZÄHlen,
			well timo i can tell you
	080		ich bin AUCH(.)ich hatt ich hatte AUCH(.)äh:m
			i am too i had i had too

081		AUCH schon ganz LANge fahrrad fahren- en able to ride the bike for a long
082		CHS geworden bin- rned six
083	hatt ich AUCH i also got a n	ein neues fahrrad bekommen, ew bike
084	-	H mal UMgefallen-
085	da hat papa ma then papa once	
086		(je) am fahrrad FEST- me at the bike
087		st er immer MITgerannt, en he alway ran with me
088	und DANN hat e and then he le	r irgendwann LOSgelassen- : t go
089	and then do di	ab dann HAB ich_s geKONNT. d then i could do it
090 Tea	okay	
091 Tin a	that was the s	ame with me
092 Tea	was the same w	ith you
093 vie	with me too	
094 San d	with me it sti	AUCH [noch so.] 11 is like that
→ 095 Tea	vielleicht ein	[< <zu dann="" du="" ja<br="" kannst]="" na="" timo:="">fach mal den papa FRAgen can maybe just ask your papa</zu>
096		i HELfen kann.

In this example, Julia recounts her own experience in analogy to Timo's problem of riding a bike thereby working on the question: what is one to do when one falls off a bike? She even provides a solution at the end (lines 85–89). She cites her personal success story as the reason. The story is quite elaborate; Julia establishes relevance and thematizes by saying "well timo i can tell you | i am too i had i had too | i also have been able to ride the bike for a long time" (lined 79–81). She also establishes similarity five times by linguistic means, beginning in lines 80 and 81, through "i also got a new bike | then i also tipped once" (lines 83 and 84). Although causal connectors between "and then he let" (line 88) and "and then do did then i could do it" (line 89) such as "because of this" or "for this reason" are missing, the child solves this by stringing together actions that ultimately lead to a solution and using the sequential marker "then" in lines 85, 87–89. The teacher expresses the conclusion from Julia's narrative example in lines 95–96. Nevertheless, the story could have stood for itself as the audience can deduce the conclusion from it, but in this case, the teacher co-constructs the story and the argument by binding it to the previous conversation.

By employing the second story as an analogy, the speakers re-evaluate and re-contextualize the problems raised in the first stories to offer solutions. In this way, not only similarity but also mutual help and empowerment are built. The children use the conversation circle to participate in the joint construction of solutions. Furthermore, it is noticeable in the material that the children do not formulate explicit conclusions—the teachers help them out. Nevertheless, the competencies differ. In example 4, it becomes clear that some children are not yet able to tell the stories coherently on their own. Tina's story is only formed into a coherent story through the teacher's assistance.

Example 4: "Trouble with the sister" (Second story II_2; CC11 20,160,503; 00:00:52–00:05:46).

	800	Teach2:	OKAY; GUT.
			okay fine
	009		dann FANgen wir bei der ROsa an.
			then we will start with rosa
	010		erZÄHLST du MAL;
			tell us
	011		was HAST du für einen STOLperstein rosa,
			what stumbling stone do you have rosa
\rightarrow	012	Rosa:	dass mich Amelie(.)heute hier WEHgetan hat,
			that amelie hurt me here today
	013		und mir mich GEStern dolle geÄRgert hat,
			and yesterday irritated me very much
			und °h dass sie mir immer dolle WEHtut-
	0.1.4		and that she always hurts me very much
	014		m mich immer(.)mit mir immer STÄNkert und ÄRgert-
	015		me always always with me bad mouting and irritating
	015		dass sie mich ANbrüllt,
	016		that she yells at me obWOHL man sich verTRAgen kann;
	010		
	017		although one can get along und das find ich [°] h DOOF dass amelie sich nicht
	017		°h entSCHULdigt wenn sie mir WEHtut oder NICH,
			and that I don't like that amelie does not say sorry
			when whe hurts me or not
	018		°h aber wenn die mich ÄRgert dann-
	010		but when she irritates me then
	019		dann sagt sie IMmer entSCHULdigung;
	010		then she always says sorry
	020		aber °h aber am MEISten (.) sagt sie NÖ,
			but but mostely she says no
	021		ich WILL nicht entschuldigung SAgen,
			i don't want to say i am sorry
	022		und dann geht sie einfach WEG;
			and then she just leaves
	022		und DANN,
			and then
	024		und das finde ich ein STOLperstein;
			and i find that a stumbling stone

((the group is searching for solutions)).

	075	Teach1 :	aber vielLEICHT ich hab da eine iDEE,
			but maybe i have an idea
	076		können der TILL(.)oder ICH(-)EINfach mal mit der MAma
			reden,
			can't till or i speak to the mummy at one point
	077		dass DU das alleine nicht KLÄren kannst,
			that you cannot clarify this on your own
	078		ob sie EUCH(-)ob sie sich mit euch allen BEIden
			nochmal unterHALten kann.
	0.7.0		if she could talk once more with both of you
	079		WÄre das was?
		_	would that be something
	080	Rosa:	()hh° JA vietlei °h vielLEICHT KLAPPT das
			yes mayb maybe that would work
	0.01		aber ich WEISS es nicht genau ob dass KLAPPT.
	081		aber ich GLAUbe JA;
	082	Teach2:	but i don't know exactly if it works but I think yes
	082	reacnz:	(.)also wenn du das WÜNSCHT,
	083		well if you wish können wir gerne mal(.)mit der mama REden.
	005		we can talk to the mummy
	084		dass dir das wirklich WICHtig ist-
	004		that this is really important to you
	085		und(.)ob die MAma euch vielleicht dabei HELfen kann.
	000		and if the mummy could probably help the two of you
	086		(-)WENN du das MÖCHtest.
	000		if you want to
	087	Tina:	[jaa]
	007	1 1110 .	
			VAS
	088	Teach1 ·	yes Idas kannste dirl überLEgen II
	088	Teach1:	_ [das kannste dir] überLEgen.
→			[das kannste dir] überLEgen. you can think about it
→	088	Teach1: Tina:	[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen
→			[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern.
→			[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen
→			[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger
→	089	Tina:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers</pre>
→	089	Tina:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the</pre>
→	089	Tina: Pauline:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the</pre>
→	089	Tina: Pauline:	[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina?
→	089 090 091	Tina: Pauline: Teach2:	[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina
→	089 090 091	Tina: Pauline: Teach2:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; </pre>
→	089 090 091 092	Tina: Pauline: Teach2: Tina:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; i tell them</pre>
→	089 090 091 092	Tina: Pauline: Teach2: Tina:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; i tell them und BRINGT das was wenn du mit denen redest? </pre>
→	089 090 091 092 093	Tina: Pauline: Teach2: Tina: Teach2:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; i tell them und BRINGT das was wenn du mit denen redest? and is it successfull when you talk to them</pre>
→	089 090 091 092 093	Tina: Pauline: Teach2: Tina: Teach2:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; i tell them und BRINGT das was wenn du mit denen redest? and is i successfull when you talk to them manchMAL, sometimes MANCHmal BRINGT es was oKAY. </pre>
→	089 090 091 092 093 094 095	Tina: Pauline: Teach2: Tina: Teach2: Tina: Teach2:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; i tell them und BRINGT das was wenn du mit denen redest? and is it successfull when you talk to them manchMAL, sometimes MANCHmal BRINGT es was oKAY. sometimes it is successfull okay</pre>
→	089 090 091 092 093 094	Tina: Pauline: Teach2: Tina: Teach2: Tina:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; i tell them und BRINGT das was wenn du mit denen redest? and is it successfull when you talk to them manchMAL, sometimes MANCHmal BRINGT es was oKAY. sometimes it is successfull okay oder ich sags MAma. </pre>
→	089 090 091 092 093 094 095 096	Tina: Pauline: Teach2: Tina: Teach2: Tina: Teach2:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; i tell them und BRINGT das was wenn du mit denen redest? and is i successfull when you talk to them manchMAL, sometimes MANCHmal BRINGT es was oKAY. sometimes it is successfull okay oder ich sags MAma. or i tell mummy</pre>
→	089 090 091 092 093 094 095	Tina: Pauline: Teach2: Tina: Teach2: Tina: Teach2:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; i tell them und BRINGT das was wenn du mit denen redest? and is it successfull when you talk to them manchMAL, sometimes MANCHmal BRINGT es was oKAY. sometimes it is successfull okay oder ich sags MAma. or i tell mummy wenn sie nich HÖren. </pre>
→	089 090 091 092 093 094 095 096 097	Tina: Pauline: Teach2: Tina: Teach2: Tina: Teach2: Tina:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; i tell them und BRINGT das was wenn du mit denen redest? and is i successfull when you talk to them manchMAL, sometimes MANCHmal BRINGT es was oKAY. sometimes it is successfull okay oder ich sags MAma. or i tell mummy wenn sie nich HÖren. if they do not listen</pre>
→	089 090 091 092 093 094 095 096	Tina: Pauline: Teach2: Tina: Teach2: Tina: Teach2:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; i tell them und BRINGT das was wenn du mit denen redest? and is it successfull when you talk to them manchMAL, sometimes MANCHmal BRINGT es was oKAY. sometimes it is successfull okay oder ich sags MAma. or i tell mummy wenn sie nich Hören. if they do not listen ja(.)und was macht MAma dann? </pre>
→	089 090 091 092 093 094 095 096 097 098	Tina: Pauline: Teach2: Tina: Teach2: Tina: Teach2: Tina:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; i tell them und BRINGT das was wenn du mit denen redest? and is it successfull when you talk to them manchMAL, sometimes MANCHmal BRINGT es was oKAY. sometimes it is successfull okay oder ich sags MAma. or i tell mummy wenn sie nich HÖren. if they do not listen ja(.)und was macht MAma dann? yes and what does mummy do</pre>
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→	089 090 091 092 093 094 095 096 097 098 099	Tina: Pauline: Teach2: Tina: Teach2: Tina: Teach2: Tina: Teach2: Tina:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; i tell them und BRINGT das was wenn du mit denen redest? and is it successfull when you talk to them manchMAL, sometimes MANCHmal BRINGT es was oKAY. sometimes it is successfull okay oder ich sags MAma. or i tell mummy wenn sie nich HÖren. if they do not listen ja(.)und was macht MAma dann? yes and what does mummy do MAma sagts ihnen AUCH. mummy tells them too</pre>
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→	089 090 091 092 093 094 095 096 097 098 099	Tina: Pauline: Teach2: Tina: Teach2: Tina: Teach2: Tina: Teach2: Tina:	<pre>[das kannste dir] überLEgen. you can think about it ROsa bei MIR ist das genau das GLEIche mit meinen großen BRÜdern. rosa with me it is exactly the same with my bigger brothers [ich HAB den] i have the [und was] machst DU dagegen tina? and what do you do against it tina ich SAGS denen; i tell them und BRINGT das was wenn du mit denen redest? and is it successfull when you talk to them manchMAL, sometimes MANCHmal BRINGT es was oKAY. sometimes it is successfull okay oder ich sags MAma. or i tell mummy wenn sie nich HÖren. if they do not listen ja(.)und was macht MAma dann? yes and what does mummy do MAma sagts ihnen AUCH. mummy tells them too</pre>

Tina sets her story relevant in line 89 and marks similarities to the previous story right at the beginning. The teacher expands the second story with follow-up questions: with "and what do you do against it tina | and is it successful when you talk to them | yes and what does mummy do" (lines 91, 93, 98), he keeps the conversation going and guides the speaker. In this form of co-construction, the child serves as a supplier of information who tells the narratives as far as the teacher asks. Here, the adult uses the narrative analogically as an example narrative and is credited with an argumentative strategy. However, the mere telling of a similar story in the context of collaborative problem-solving in the conversational circle is evidence that the child has understood and analyzed the first story. When telling the story and using it as an argumentative example, the child needs support.

Discussion

This paper aimed to analyze the second story's argumentative role in problem-solving talk as a form of thematic similarity. In the data of the first age group, aged 4 to 5, we merely found one argumentative narrative. This is a finding that would need further investigation, as age might not be the only factor influencing the performance. It can be stated that in this particular form of narratives by preschoolers, the narratives have an argumentative function. It has become apparent that the children use their narratives primarily as an argument by example. The persuasive potential here lies in the analogy established by similarities between their second story and the first story. These come in two functions: in credibility supporting small stories, which are self-initiated and independently told (second story type I). Using an implicit analogy, they are used to support other children's positions. An argumentative use of second stories can also be observed in example stories (second story type II). These are longer narratives that aim to find a solution and function as arguments by analogy. Two of these stories are introduced by the child (examples 3 and 4), without assistance by the teacher, and are used for argumentative purposes. In addition, difficulties in formulating an explicit conclusion or linking the narration to the ongoing conversational context become apparent at various points. In all cases, it is the educators who draw an explicit conclusion. Nonetheless, these narratives can certainly convey an argumentative intention: The children deliberately justify with personal experience and their personal success stories to support solution ideas and points of view.

At the same time, one could argue that the use of second stories relieves the children of the pressure to tell their own stories as it could minimize the children's communication effort. However, this can be refuted. The ability to tell a story that fits the context is tellable and eventful on its own, yet has similarities with a previous story and finally also has a cooperative argumentative function, can be rated as a high communicative competence. It could be identified that all eight second stories are being told to support, reinforce, and contribute to finding solutions. Thus, the children already solve complex communicative problems and contribute their personal opinions.

The study has some limitations that allow only for cautious drawing of inferences. The role of the teacher would need some further attention. The two groups do not only differ in age, they also have different teachers facilitating them. From other studies we could see that the style for facilitation—teacher centered versus child centered—has an impact on the way themes are being developed (Bose & Kurtenbach, 2019; Kurtenbach et al., 2013). Also, the data collected stems from only one kindergarten group in a specific kindergarten that values participation of children in dealing with everyday problems and encourages problem solving through deliberation. For future studies, other data should be included to gain a broader picture.

Theoretically, the study shows that narrative and argumentation can be closely interconnected in conversation, not only among adults but also among younger children. Narratives function to establish an understanding of lived experience and to convey it. At the same time as an argument is aligns with other participants experiences. Thereby the persuasive power lies in the establishment of similarity in experience. This study shows that this form of reasoning as well as the establishment of ethos as a prerequisite for reasoning can already be found in younger children.

Methodologically, the study takes up natural data, similarly to the conversation circle in question. The analysis shows the strength of relying on naturally occurring interactions not only in research but also in pedagogical practice. The project resembles what Bereiter and Scardamalia (2010) demand, when formulating the core idea of "knowledge building" as an educational principle: "Real ideas and authentic problems" (p. 2). Although Bereiter and Scardamalia focus in their work on scientific knowledge rather than on knowledge for and from the everyday life, the conversation circle under study can be viewed as a site for knowledge building. The children establish through their discussions of real problems how typical situations can be dealt with. They establish at the same time—with the help of the teacher—how to design a solution process. Argumentation plays a pivotal role for both, again reflecting the double notion of argumentation and learning: learning to argue and argue to learn (Muller-Mirza et al., 2009). The children develop joint solutions, implement them, and reflect on the viability of this solution.

The limitations of this study, the role of the teachers, might also hint at an important finding: the co-constructive practices by the teachers seem to play an important role in supporting children to engage in problem solving on real-life problems. First tentative looks into the data from a contrastive standpoint suggest that the different practices by the teachers yield highly different results. Hence, further study might also support the research on the helpful practices by adults to foster argumentative and narrative competence.

In summary, with respect to aspects of establishing participation interactionally, the second stories in the data under study have two functions: to support the argumentative potential, evidence, and credibility of other children and to re-evaluate, re-contextualize, and solve other children's problems. Thus, the participants build mutual help and empowerment in a collaborative context. The use of argumentative stories is accompanied by the establishment of similarity: on the one hand, through the second stories, which represent similar stories, and on the other hand, through lexical markers. Similarities and proximity seem to be essential aspects in argumentation through second stories. Both in the credibility-supporting small stories and the example stories, the children emphasize the analogy between the events to their narrative brought in. It is important to note that the second stories do not represent mere repetitions, as they are new stories with differences worth telling and specific functions. They rather elaborate on a theme, thereby aligning the story and the speaker to the interaction, marking "taking part," and contributing argumentatively to an overall conclusion. With the argumentative second stories, they contribute to the conversation circles and solve concrete problems. In this way, the children align with each other and participate in their world. Thus, taking part is also established in a broader sense by the second stories: the participation in a common world of shared experiences and a democratic society.

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Declarations

Conflict of interest The authors declare no competing interests.

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References

- Antos, G. (1985). Proto-Rhetorik. Zur Ontogenese rhetorischer F\u00e4higkeiten. In J. Dyck, W. Jens, & G. Ueding (Eds.), Rhetorik. Ein internationales Jahrbuch, 4 (pp. 7–28). Friedrich Frommann Verlag.
- Arendt, B. (2019). Argumentationserwerb im Peer-Talk von Kindergartenkindern: Ausprobieren, fordern und recyceln. In I. Bose, K. Hannken-Illjes, & S. Kurtenbach (Eds.), *Kinder im Gespräch – mit Kindern im Gespräch* (pp. 63–91). Frank & Timme.
- Arendt, B. (2015). Kindergartenkinder argumentieren Peer Gespräche als Erwerbskontext. In Mittelungen des Deutschen Germanistenverbandes, 62 (pp. 21–33). V&R unipress GmbH.
- Aristoteles (2002). Rhetorik. Übers. C. Rapp, & H. Flashar (Ed.). Akademie Verlag.
- Arminen, I. (2004). Second stories: The salience of interpersonal communication for mutual help in Alcoholics Anonymous. *Journal of Pragmatics*, 36, 319–347.
- Baker, M., Andriessen, J., & Schwarz, B. (2019). Collaborative argumentation-based learning. In N. Mercer, R. Wegerif, L. Major, *Routledge international handbook of research on dialogic education* (pp. 76–88). Routledge.
- Bamberg, M., & Georgakopoulou, A. (2008). Small Stories as a New Perspective in Narrative and Identity Analysis. *Text and Talk*, 28(3), 377–396.
- Bamberg, M. (2020). Narrative analysis: An integrative approach. In M. Järvinen & n. Mik-Meyer (Eds.), Qualitative analysis. Eight approaches for the social sciences (pp. 243–264). Sage.
- Bereiter, C., & Scardamalia, M. (2010). Can children really create knowledge? Canadian Journal of Learning and Technology, 36, 1. J.B. Metzler.
- Bleumer, H., Hannken-Illjes, K., & Till, D. (2019). Narration Persuasion Argumentation Narration Persuasion – Argumentation. Zeitschrift für Literaturwissenschaft und Linguistik 49(1), 1–28. https:// doi.org/10.1007/s41244-019-00121-7
- Bose, I., & Hannken-Illjes, K. (2012). Protorhetorik. In G. Ueding (Ed.), *Historisches Wörterbuch der Rhetorik* (Vol. 13). Berlin: de Gruyter.
- Bose, I., & Hannken-Illjes, K. (2016). Wie Vorschulkinder Geltung etablieren. Sprachlich, stimmlich, körperlich. In A. Holmer, & V. Molnár (Eds.), *Studia Linguistica* (Vol. 35., pp. 119–136). Universität Wroclaw.
- Bose, I., & Hannken-Illjes, K. (2020). On the role of voice and prosody in argumentation among pre-school children. Research on Children and Social Interaction, 4(1), 51–72. https://doi.org/10.1558/rcsi.12415
- Bose, I., & Kurtenbach, S. (2019). Stolpersteine und Wunschsterne. Förderung von Partizipation und Gesprächsfähigkeit in der Kita. In I. Bose, K. Hannken-Illjes, & S. Kurtenbach (Eds.), Kinder im Gespräch – mit Kindern im Gespräch. Schriften zur Sprechwissenschaft und Phonetik, 16 (pp. 113– 148). Frank & Timme.
- Bose, I., Hannken-Illjes, K., & Kurtenbach, S. (2020). und was MACHen wir da jetzt um das problem zu LÖsen?ll Argumentation im Kindergarten und ihre Förderung in einem Gesprächskreisprojekt einer Kindertagesstätte. In A. Deppermann, & M. Hartung (Eds.), *Gesprächsforschung* (Vol. 21., pp. 1–29). Verlag Gesprächsforschung.
- Braun, B. (2007). Gemeinsam ein Bilderbuch lesen Vermitteln und Aneignen in der Kommunikation von Mutter und Kind. In K. Meng & J. Rehbein (Eds.), *Kindliche Kommunikation - einsprachig und mehr*sprachig (pp. 127–154). Münster.
- Breyer, T., Pfänder, S. (2017). Resonanz, Rhythmus und Synchronisierung: Interdisziplinäre Perspektiven. In T. Breyer, M. Buchholz, A. Hamburger, S. Pfänder, & E. Schumann (Eds.). Resonanz – Rhythmus – Synchronisierung: Interaktionen in Alltag, Therapie und Kunst (9–29). transcript.
- Brumark, A. (2008). "Eat your Hamburger!" "No, I don't want to!" Argumentation and Argumentative Development in the Context of Dinner Conversation in Twenty Swedish Families. Argumentation, 22(2), 251–271.
- Bubikova-Moan, J. (2021). Credible as Evidence? Multilayered Audience Reception of Narrative Arguments. Informal Logic, 41(2), 187–217.
- Bubikova-Moan, J., & Sandvik, M. (2022). Argumentation in Early Childhood: A Systematic Review. *Human Development*, 66(6), 397–413.

- Crowell, A., & Kuhn, D. (2014). Developing Dialogic Argumentation Skills. A 3-Year Intervention Study. Journal of Cognition and Development, 15(2), 363–381.
- Deppermann, A., & Lucius-Hoene, G. (2003). Argumentatives Erzählen. In A. Deppermann, & M Hartung (Eds.), Argumentieren in Gesprächen. Gesprächsanalytische Studien (pp. 130–144). Stauffenburg.
- Deppermann, A. (2014). Konversationsanalyse: Elementare Interaktionsstrukturen am Beispiel der Bundespressekonferenz. In S. Staffeldt, & J. Hagemann (Eds.), Pragmatiktheorien. Analysen im Vergleich (pp. 19–47). Stauffenburg.
- Domberg, A., Köymen, B., & Tomasello, M. (2018). Children's reasoning with peers in cooperative and competitive contexts. *British Journal of Developmental Psychology*, 36, 64–77.
- Ehlich, K., Bredel, U., & Reich, H. H. (Eds.) (2008). Referenzrahmen zur altersspezifischen Sprachaneignung. Bonn / Berlin.
- Ehlich, K. (2014). Argumentieren als sprachliche Ressource des diskursiven Lernens. In A. Hornung, A., G. Carobbio, & D. Sorrentino (Eds.), *Diskursive und textuelle Strukturen in der Hochschuldidaktik* (pp. 41–54). Waxmann.
- Fiehler, R. (1999). Was man tut, wenn man ,kooperativ' ist? Eine gesprächsanalytische Explikation der Konzepte ,Kooperation' und ,Kooperativität'. In A. Mönnich & E. W. Jakolski (Eds.), Kooperation in der Kommunikation. Festschrift für Elmar Bartsch (pp. 52–58). Reinhardt.
- Greco, S., Perret-Clermont, A.-N., Iannaccone, A., Rocci, A., Convertini, J., & Schär, R. (2018). The Analysis of Implicit Premises within Children's Argumentative Inferences. *Informal Logic 38*(1), 438–470. https://informallogic.ca/index.php/informal_logic/issue/current
- Hannken-Illjes, K. (2018). Argumentation. Einführung in die Theorie und Analyse der Argumentation. Narr.
- Hannken-IIIjes, K. (2019). Siehe da es gab Ermessensspielräume. Argumentatives Erzählen Erzählendes Argumentieren. Behold there was a margin for discretion. Argumentative Narrating – Narrative Reasoning Zeitschrift für Literaturwissenschaft und Linguistik, 49(1), 29–49. https://doi.org/10.1007/ s41244-019-00122-6
- Hannken-Illjes, K., & Bose, I. (2019). Frozen. Informal Logic, 39(4), 465–495. https://doi.org/10.22329/il. v39i4.6028
- Hausendorf, H. (2001). Was ist "altersgemäßes" Sprechen? Empirische Anmerkungen am Beispiel des Erzählens und Zuhörens zwischen Kindern und Erwachsenen. OBST - Osnabrücker Beiträge Zur Sprachtheorie, 62, 11–33.
- Heller, M., Morek, M., & Quasthoff, U. (2015). Mehrfaches Erzählen: Warum wird eine Geschichte im selben Gespräch zweimal erzählt? In E. Schumann, E. Gülich, S. Pfänder (Eds.), Wiedererzählen. Formen und Funktionen einer kulturellen Praxis (pp. 341–368). Transcript,
- Hoffmann, L. (1980). Zur Pragmatik von Erzählformen vor Gericht. In K. Ehlich (Ed.), Erzählen im Alltag (pp. 28–63). Suhrkamp.
- Hübner, G. (2017). Überzeugen. In M. Martínez (Ed.), Erzählen. Ein interdisziplinäres Handbuch (pp. 286– 293). Metzler.
- Karatsu, M. (2012). Conversational Storytelling among Japanese Women. Conversational circumstances, social circumstances and tellability of stories. *Studies in Narrative*, (16). John Benjamins B.V.
- Klein, W. (1980). Argument und Argumentation. Zeitschrift F
 ür Literaturwissenschaft Und Linguistik, 38(39), 9–57.
- Komor, A. (2010). Miteinander kommunizieren Kinder unter sich. Eine empirische diskursanalystische Untersuchung zur Ausbildung kindlicher Kommunikationsfähigkeit. In K. Ehlich (Ed.), Sprach-Vermittlungen. Waxmann.
- Köymen, B., & Tomasello, M. (2020). The early ontogeny of reason giving. *Child Development Perspec*tives, 14(4), 215–220.
- Köymen, B., Mammen, M., & Tomasello, M. (2016). Preschoolers use common ground in their justificatory reasoning with peers. *Developmental Psychology*, 52(3), 423–429.
- Kurtenbach, S., Bose, I., Koch, E., & Kreft, H. (2013). Gesprächskreise in Kindertagesstätten Anlass zur Kommunikationsförderung? Kurtenbach, S. / Bose, I., Gespräche zwischen Erzieherinnen und Kindern. Beobachtung, Analyse, Förderung, pp. 111–118.
- Labov, W., & Waletzky, J. (1967). Narrative analysis: Oral versions of personal experience. In J. Helm (Ed.), Essays on the verbal and visual arts (pp. 12–44). University of Washington Press.
- Labov, W. (1972). The transformation of experience in narrative syntax. In W. Labov (Ed.), Language in the inner city. Studies in the Black English vernacular (pp. 354–396). Philadelphia (PA).
- Littleton, K., & Mercer, N. (2013). Interthinking. Routledge.
- Muller-Mirza, N., Perret-Clermont, A. N., Tartas, V., & Iannaconne, A. (2009). Psychosocial Processes in Argumentation. In N. Muller-Mirza & A. N. Perret-Clermont (Eds.), Argumentation and Education. Theoretical Foundations and Practices (pp. 67–90). Springer.

- Mundwiler, V., Kreuz, J., Hauser, S., Eriksson, B., & Luginbühl, M. (2017). Mündliches Argumentieren als kommunikative Praktik–Schulbuchübungen und empirische Befunde im Vergleich. Gesprächskompetenz in schulischer Interaktion–normative Ansprüche und kommunikative Praktiken, 91–123.
- OECD (2019). An OECD Learning Framework 2030. In: Bast, G., Carayannis, E.G., Campbell, D.F.J. (eds) The Future of Education and Labor. Arts, Research, Innovation and Society. Springer, Cham.
- Olmos, P. (2017). Narration as Argument. Springer.
- Pfänder, S., Herlinghaus, H, Scheidt, C. E. (2017). Synchronisation in Interaktion: Eine interdisziplinäre Annäherung an multimodale Resonanz. In T. Breyer, M. Buchholz, A. Hamburger, S. Pfänder, & E. Schumann (Eds.). *Resonanz – Rhythmus – Synchronisierung: Interaktionen in Alltag, Therapie und Kunst* (65–83). transcript.
- Sacks, H. (1995). Lectures on Conversation, Volume I/II. Blackwell Publishing.
- Schwarze, C. (2019). Erzählen fürs Argumentieren. Das Verhältnis von Narration und Argumentation in Konfliktbearbeitungen im Gespräch. In: Zeitschrift für Literaturwissenschaft und Linguistik (49/1), 51–70. J.B. Metzler.
- Selting, M., Auer, P., Barth-Weingarten, D., Bergmann, J., Bergmann, P., Birkner, K., Couper-Kuhlen, E., Deppermann, A., Gilles, P., Günthner, S., Hartung, M., Kern, F., Mertzlufft, C., Meyer, C., Morek, M., Oberzaucher, F., Peters, J., Quasthoff, U., Schütte, W., Stukenbrock A., & Uhmann, S. (2009). Gesprächsanalytisches Transkriptionssystem 2 (GAT 2). *Gesprächsforschung*, 10, 353–402. http:// www.gespraechsforschung-ozs.de/heft2009/px-gat2.pdf
- Spieß, C., & Tophinke, D. (2018). Alltagspraktiken des Erzählens. In H. Bleumer, S. Habscheid, C. Spieß, & N. Werber (Eds.), Zeitschrift für Literaturwissenschaft und Linguistik, 48(2) (pp. 193–201). J.B. Metzler.
- Theobald, M., & Reynolds, E. (2015). In pursuit of some appreciation: assessment and group membership in children's second stories. Text&Talk, 35(5), 407–430. Mouton.
- Tindale, C. W. (2017). Narration and the Concept of Argument. In P. Olmos, P. (Ed.), Narration as Argument (pp. 11–30). Springer.
- Valtin, R. (1991). Mit den Augen der Kinder. Rowohlt.
- Völzing, P.-L. (1981). Kinder argumentieren: Die Ontogenese argumentativer Fähigkeiten. Informationen zur Sprach- und Literaturdidaktik, 36. Schoningh.
- Weixler, A. (2017). Bausteine des Erzählens. In M. Martínez (Ed.), Erzählen. Ein interdisziplinäres Handbuch (pp. 7–23). J.B. Metzler.

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Current themes of research

- Kati Hannken-Illjes, Ines Bose & Stephanie Kurtenbach. Argumentation in preschool children. Development of conversation competence in children.
- Ines Bose & Stephanie Kurtenbach. Enhancing communication skills in the kindergarten.
- Kati Hannken-Illjes. Epistemic stance taking in conversations in the kindergarten.

Ines Bose. Prosody and voice in childrens role-play.

Stephanie Kurtenbach. Prevention and intervention in speech development in preschool children.

Most relevant publications in the field of Psychology of Education.

Bose, Ines / Hannken-Illjes, Kati / Kurtenbach, Stephanie (Hg.) (2019): Kinder im Gespräch. Mit Kindern im Gespräch. Frank + Timme.

Kurtenbach, Stephanie; Bose, Ines; Hannken-Illjes, Kati (2019). Argumentative Fähigkeiten im Vorschulalter – eine korpusbasierte Analyse. Forschung Sprache, S. 26–36.

- Bose, Ines / Hannken-Illjes, Kati / Kurtenbach, Stephanie (2020): und was MACHen wir da jetzt um das problem zu LÖsen? || Argumentation im Kindergarten und ihre Förderung in einem Gesprächskreisprojekt einer Kindertagestätte. Gesprächsforschung—Online-Zeitschrift zur verbalen Interaktion. Ausgabe 21 (2020), 1–29. (www.gespraechsforschung-ozs.de).
- Hannken-Illjes, Kati / Bose, Ines (2019): Frozen: Children in Argumentation Between the Agonistic and Cooperation. Informal Logic, Vol. 39, No. 4 (2019), pp. 465–495.

Hannken-Illjes, Kati / Bose, Ines (2020): On the role of voice and prosody in argumentation among pre-school children. Research on Children and Social Interaction (RCSI) 4.1. Special Issue. Heller, Vivien / Luginbühl, Martin / Arendt, Birte (eds.): Explaining and arguing: The role of co-construction and multimodality. pp. 51–72.