

Are children as egocentric as adults think?

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Título: Are children as egocentric as adults think?.

Resumen

The present article explores when children start developing perspective-taking when they participate in conversation. That is, when they start taking their interlocutors' needs and experiences into account when tailoring their utterances. According to recent research, children are believed to show initial stages of perspective taking development as early as three years of age, contrary to previous evidence which suggested that children were egocentric speakers who did not consider their interlocutors' needs in conversation.

Palabras clave: perspective-taking, egocentric perspective taking, child conversation.

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Abstract

The present article explores when children start developing perspective-taking when they participate in conversation. That is, when they start taking their interlocutors' needs and experiences into account when tailoring their utterances. According to recent research, children are believed to show initial stages of perspective taking development as early as three years of age, contrary to previous evidence which suggested that children were egocentric speakers who did not consider their interlocutors' needs in conversation.

Keywords: perspective-taking, egocentric perspective taking, child conversation.

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During the last decades a lot of research has been done on dialogue in children. Understanding how children develop effective communication strategies has been focus of recent studies in both comprehension and production. Successful perspective taking, in other words, attending to what the interlocutors know and realising that their beliefs, thoughts and experiences may be different from one's own is essential for effective communication. In fact, it is worth mentioning that perspective taking is not innate, but is a skill which is developed along childhood (Epley, Morewedge & Keysar 2004). In addition, a lot of research has been conducted regarding the attitudes that adults adopt when participating in a conversation and overall they tend to show evidence of taking their interlocutors' needs and experiences into account when tailoring their utterances. However, from the early 1950s children are believed to be egocentric communicators, in the sense that they do not seem to realise that the thoughts of their interlocutors may be different from their own. In fact, it has been reported that it is not until seven years of age when children show evidence of effective perspective taking in conversation. Nevertheless, discerning the age when children acquire and show evidence of initial stages of perspective taking has been cause of recent controversy and much debate in the field of dialogue. In addition, growing research in the area has provided evidence proving that children begin to take interlocutor's beliefs into account at an earlier age. Therefore, these findings cast doubt on the validity of previously reported results and the effectiveness of the methods and procedure used in the experiments. Hence, are really children as egocentric as adults think? Hence, in this essay, I will argue that children as early as three years of age seem to show initial signs of perspective taking in conversation. Therefore, the first part of the essay will be centred on presenting a general overview of early studies in examining the degree of perspective taking in children. Secondly, I will discuss some of the recent studies conducted in the area. Thirdly, I will compare the alleged egocentricity in adult and child conversation. Finally, I will address the issue of methodologies and procedures followed with children.

CHILDREN ARE NOT AS EGOCENTRIC AS ADULTS THINK

In the 1950s children were considered egocentric communicators as the studies were unable to provide evidence of perspective taking until they were seven years of age. For example, it is well-known in the field of children dialogue that the study conducted by Piaget and Inhelder (1956) in order to examine perspective taking in children. They argued that

children realise that their experiences and beliefs may be different from those of their interlocutor at the point when they are able to coordinate different points of view. Therefore, participants aged between four- and twelve-years of age were involved in an inferring task in which they were expected to determine the perspective that a doll may have according to different positions in a mountain. The results showed that they do not acquire this ability of coordinating different perspectives and becoming aware of their particular point of view until stage III which corresponds to seven and eight-year-olds. In fact, they suggested that it is the inability to distinguishing between different points of view which prevents children to be aware of their own point of view and consequently, the roots of egocentric perspective taking in children.

Moreover, since Piaget's influential claim in 1950s that children fail to show perspective taking until the age of seven, a lot of research has been done challenging the validity of this assumption. In fact, recent studies are providing growing evidence supporting that children show perspective taking signs at an earlier age (e.g. Akerman, Szymanski & Silver 1990, Akhtar, Carpenter & Tomasello 1996, Nadig & Sedivy 2002, O'Neill, 1996, Pillow, 1989).

As early as 1970s a number of studies were conducted to prove Piaget's claim. Nevertheless, consistent and increasing evidence was obtained supporting perspective-taking in children at an earlier age than seven. In fact, they realised that the procedures followed by Piaget and Inhelder (1956) may have posed high cognitive and linguistic demands on children (Sonnenschein & Whitehurst 1984) and therefore, they claimed that the results obtained may be biased by these methodological difficulties. Hence, subsequent experiments attempted to design simpler tasks attending the abilities of children.

Thus, Maratsos (1973) developed an experiment, in which three-, four- and five-year olds were expected to describe a toy to other participant who could or could not see the object. He reported evidence supporting initial signs of perspective taking in children aged three, as they tended to shape their descriptions according to the blind or acknowledged condition of their interlocutors. In addition, Menig-Peterson (1975) examined whether three- and four-year olds show evidence of audience design strategies using a combination of *story events* and *participatory events*. She found that children do attend their interlocutor's knowledge into account when tailoring their messages. Similar results were reported by Marvin, Greenberg and Mossler (1976) who conducted an experiment to examine the effects of conceptual perspective taking when interaction within a group (of three) and they found that children of four years of age are able to distinguish their own conceptual perspective from others to make non-egocentric plans. In fact they are able to interact non-egocentrically even when the perspectives are shared by at least three participants.

In addition, Nadig and Sedivy (2002) have recently conducted a production and comprehension study to test whether children use common ground at a later processing stage. In the first experiment, participants were involved in an elicited production task in which the child needs to describe a target object to an adult confederate. While in one condition all the objects could be seen by both the participant and the confederate in the other, one of the objects was in privileged ground condition. In addition they included a baseline condition in which the target word was paired with an unrelated object. They reported that more adjectives were used by the speaker in the common ground condition compared to the number used in the privilege condition. Therefore, these results suggest that speakers do take hearer's referents under consideration when describing a target object. Hence, five- to six-year old children can identify information that is part of the common ground. Furthermore, five- and six-year olds show consistent evidence of attending to common ground to shape and interpret their utterances in production and comprehension. In addition they showed that children do not use common ground information at a later stage but they do consider their hearer's needs to reduce their referential expressions.

Furthermore, O'Neill (1996) conducted a study to test whether two year olds take information of their parents into account when shaping their utterances when making requests. They reported that children gave more information regarding the location of the toy when their parent was not in the room. In a second experiment, children were expected to ask the parent for a sticker and they noticed that children provide more significant and unambiguous information when the parents were ignorant than when they were acknowledged. She concluded that children as early as two years of age are able to adapt their messages according to the situation of their interlocutors.

According to Tenbrink (2003) the bases of perspective-taking occur at the age of nine months when children become aware of the fact that their actions may trigger different emotions and expectations from their interlocutors. In addition, she notes that at around the first year of life, the child starts showing the first signs of cooperative traits such as coordination of turns. However, children do not seem to be aware that the coordination of the listener and the speaker and the shared roles performed between the two is essential for successful communication (Sonnenschein & Whitehurst

1984). In fact, it has been assumed that failures in children communication are rooted in lack of information regarding how communication works (Sonnenschein & Whitehurst 1984). N

Nevertheless, Wilcox and Webster (1980) reported that two-year olds show initial awareness of adequate conversational behaviour. In addition, Tenbrink (2003) claimed that it is not until the age of two when children begin to adapt their speech to different interlocutors. In fact, she suggested that children may not show perspective taking until three years of age because they tend to be engaged in simply providing facts and superficial information about events to their listeners, thus attending to common ground does not seem to be important in the successful production of this task, compared to when conveying experiential meaning.

These assumptions have been supported by the results reported by Brandt (1978) conducted an experiment to test role taking in children attending to age and assessing the explicitness of task instructions and the responses given by the child. Therefore, four-, six- and eight-year-olds were involved in a picture and story tasks and she found that it is not until four and six years of age when children show role-taking ability.

Hence, the claim that children do not show perspective taking until the age of seven made by Piaget and Inhelder (1956) seems to have been consistently rejected, since following studies have suggested that children at two or three years of age show initial signs of considering their interlocutor's knowledge into account for producing and interpreting the utterances when they are involved in a simpler task. In addition, it has been argued that children may fail in successful perspective taking because they are not acquainted with sufficient knowledge concerning the functioning of conversation. Moreover, recent studies have reported evidence suggesting that adults do not seem to show effective perspective taking from the very beginning. In fact, it has been argued that adult and children perspective taking may not be as different as has recently assumed (Epley et al. 2003)

DO ADULTS AND CHILDREN REALLY DIFFER IN EGOCENTRIC PERSPECTIVE TAKING?

Children before four or three years of age are believed to be egocentric communicators in the sense that they cannot understand that what they know may not correspond with what others believe and consequently, they are not concerned with providing enough information to the hearer to identify their referent in ambiguous communication. Moreover, recent studies concerned with the use that adults make of common ground information to design their utterances or decode the messages have suggested that adults may not be as *altruistic* as they were traditionally assumed. In addition, although little research has been centred on finding correlations between the egocentrism reported in adults compared to that adduced to children a few claims can be suggested.

Previous research in adult comprehension proved that adults seem to use the common knowledge to reduce the possibilities that an ambiguous expression may refer to. Nevertheless, recent studies claimed that adults appear to consider their own perspective first and then attend to shared information available to shape their interpretations. Moreover, it has been reported that adults tend to overestimate what others believe, as they also consider that what others know coincide with their own beliefs (Epley et al. 2003). In fact, they are said to base their interpretations in what they know and thus showing egocentric perspective taking. Nevertheless, both underestimating and overestimating what the interlocutor's know may lead to ineffective communication (Nickerson 1999).

In addition, Keysar, Barr, Balin and Brauner (2000) have recently conducted two eye-tracking experiments with adults to examine to what extent the comprehender makes use of common ground information to deal with ambiguity resolution. Participants were involved in a referential communication game in which they need to infer a target object. They reported fixations for objects which were in their privileged ground which were interpreted as evidence for egocentric perspective taking in adults, in the sense that they do not seem to consider common ground information to restrict their search of the referential object.

Furthermore, Epley et al. (2004) have recently conducted an eye tracking experiment in which both adults and children were involved in a referential communication task. They reported that children produced more descriptions using their own privileged ground than adults. Surprisingly, fixations to the egocentric object were obtained by both adults and children, meaning that adults also take their own perspective at least in initial stages of processing. Therefore, Epley et al. concluded that children and adults are equally egocentric when initially interpreting a direction. Nevertheless, while children seem to be incapable of suppressing this egocentrism when decoding a message but they only consider their own point of view, adults appear to be more successful in accommodating common information in the interpretation of the

referential expression. Hence these results argue against the claim that adults attend to common ground knowledge to restrict the ambiguous referential expressions.

THE NEED TO TAKE CHILDREN'S ABILITIES INTO ACCOUNT WHEN DESIGNING METHODOLOGIES AND PROCEDURES

Fortunately, the methodologies and procedures used in examining and analysing children skills in dialogue have changed completely from the early 1950s due to increasing research done in the area. In fact, it has been argued that such an egocentric attitudes reported in children seem to be rooted in increasing difficulty and demands of the tasks (e. g. Brandt 1978, Menig-Peterson 1975)

Hence, recent studies have reported that both adults and children offer more reliable results if they are engaged in a meaningful and contextualised tasks, with actual needs, and real interlocutors which can provide useful and authentic feedback rather than confederates (Lockridge & Brennan 2002). In other words, there is raising concern with the design of the experiments in order to parallel a real conversational situation as possible. Therefore, the methodologies that are used nowadays pursue to accommodate ecological validity in order to provide a real and natural picture of how interlocutors participate in a conversation.

Nevertheless, it is worth mentioning that especially when participants are children careful attention should be paid to the design of the procedures of the experiment to provide feasible results. It should be noted that children have different cognitive abilities than adults and therefore, the tasks need to adapt to consider these skills. Hence, it is important to provide them with a meaningful task with a clear aim so that they could engage in real conversation with actual needs.

With reference to early experiments centred on examining perspective taking in children, there was not still this concern with ecological validity and thus, they do not seem to show much adaptation to participants' cognitive abilities. For example, the experiment by Mossler, Marvin and Greenberg (1976) even if being conducted at home and with the participation of the children's mothers which provide the participants of an early age with a sense of confidence and familiarity, the questionnaire to which two and three year olds were required to answer seems to be quite cognitively demanding for children. Infants were expected to reflect on other people's knowledge by answering questions such as *Does your mommy know whose house the boy/girl was going into? How does your mommy know that?* In fact, as they reported no valid answers from two and three year olds, presumably due to the high demands of the questions or even misunderstanding, they interpreted these results as prove of no perspective taking at this early age.

In addition, in the well-known experiment conducted by Piaget and Inhelder (1956) children were involved in a perspective inferring task in which they need to discern the perspective of a mountain that a doll have according to changes in her position. Therefore, the children are involved in a task in which they need not only to complete the aims of the task which require linguistically demanding responses for four year olds, but also they need to infer the context of inferring the perspective of an inanimate doll. They do not seem to have a meaningful communicative aim (e. g. *what is the point of inferring the perspective of a doll?*) or a meaningful context. In addition, the tasks in which infants are engaged seem to be highly demanding for four year old participants. Therefore, that due to the complexity and demanding of the experiment the results may fail to show perspective taking in four year olds who presumably have not even understood what they are expected to do. In addition, as Sonnenschein and Whitehurst (1984) noted that in experiments in which children are required to assess the effectiveness of communication, children are being engaged in more abstract demands than when they are engaged in real conversations.

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