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**Language in pretense during the second year:
What it can tell us about “pretending” in pretense
and the “know-how” about the mind.**

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INTRODUCTION

Pretend play is a fascinatingly complex behavior from which psychologists have drawn information on a wide range of children's functionings and developments. Piaget considered it as an important window through which to glimpse the incipient representational capacities of the child. Indeed, in pretend play, the abridged and schematized enactment of activities (or events) outside of their habitual context consists in the *signifier*, the trace evoking the real activities, the *signified*. The playful attitude, the abridged actions, enacted sometimes in an exaggerated manner, the inanimate co-participants, the miniature objects, the repetition of actions lacking material results, the simulation of physical sensations in the absence of relevant physical stimuli, the displacement of the activity relative to its habitual setting, etc., are all indices that have been taken, separately or in combination, by authors trying to define and/or identify early manifestations of pretend in very young children (e.g. Piaget, 1945/1962; Inhelder, Lezine, Sinclair & Stambak, 1972; Nicolich, 1977; McCune Nicolich, 1981; Veneziano, 1981; Musatti, 1986; Lillard, 1993).

More recently, pretend play has attracted researchers' attention for the potential developmental links it may have with components of 'theory of mind'. Indeed, the representational aspect of pretend play implies children's ability to consider one object as simultaneously having the properties it has in 'real' life and those that it has by virtue of the meaning transformation it has undergone in pretend, and the ability to hold double representations about a single entity is necessary for a real theory of mind. Moreover, the enactment of certain pretend activities may require the child to take someone else's perspective in playing characters, in making inanimate behave as animate (Inhelder et al, 1972) with increasing animate attributes (Wolf, Rygh & Altshuler, 1984), sometimes requiring

alternation from one perspective to another. Such an ability is also a required component of theory of mind.

The developmental *décalage* between the time children engage in pretend play and that in which they start to provide first adequate responses to experimentally set theory-of-mind tasks (particularly those involving false belief) have placed pretend activity under close scrutiny. Thus, there is some debate as to the level of representation involved in pretending, whether implicit or, to the other extreme, self-declarative (e.g., Leslie, 1988), and questions have arisen as to the actual representational status of early pretense¹ (e.g. Perner, 1991; Lillard, 1993). All authors agree, however, that pretend play implies some displacement from the reality plane and thus meaning transformations relative to the meaning that the actions and the objects involved would have were they considered 'literally'. These basic characteristics may suffice to look for emerging components of a practical understanding of other people's mind if the representational aspect of pretend is considered within a communicative perspective. Indeed, given the subjective nature of pretend, the intended meanings of the child's play are not necessarily evident for a third party and sometimes only their verbalization may provide clarifying or even essential information to understand the child's pretend (Fenson, 1984; Musatti, 1986; Pellegrini, 1990; Stambak & Sinclair, 1990/1993; Verba, 1990; Veneziano, 1990; Musatti, Veneziano & Mayer, 1998).

In this paper we propose to study, from a developmental point of view, which aspects of pretend play children choose to verbalize. Do children verbalize, from early on, aspects that, for their symbolic transformation, would be difficult for a third party to understand, like the new functions attributed to objects in play? Or, would the verbalization of such aspects start out to be as probable as other less specifically informative verbalizations²? If developmental changes towards the verbalization of the more hidden meanings of pretend were observed, they could be

taken to manifest children's increasing feeling of a difference between his own state of knowledge about the pretend plot and that of a third party, and their grasp of language as a useful means to make these meanings available to an onlooker. Thus, the goal here is not to study the manifold functions that language may have in carrying out pretend play scenarios (for example, in creating the plot or in organizing its enactment) (e.g., Fein, 1981; Giffin, 1984; Garvey, 1990; Musatti et al., 1998), nor in determining the relative importance of gestural versus verbal expressions (see, for example, Fenson, 1984; Musatti, 1986), but to capture the communicative function of language by analyzing how children's verbal behavior *relates to* interested onlookers' points of view³. This doesn't mean that language is viewed as a parallel representational plane superposing itself onto the enactment of pretend scenarios. Pretend play is made up of the intertwining of nonverbal and verbal activities and language can thus be part and parcel of pretense (e.g. Harris and Kavanaugh, 1993; Musatti et al., 1998). However, given that verbalizations inherently and simultaneously have a communicative counterpart, even when they are an integral part of the pretend play plot, children's verbalizations may at the same time be other-oriented.

Reciprocally, developmental changes in the verbalization of aspects of naturally occurring pretend play might also help our understanding of the pretend status of the play activities for the child. For example, in the case of a baby doll placed in a plastic container, if the child chooses to say 'bath' instead of, for example, 'baby' or 'here', the child's verbalization makes explicit and brings into focus a particular aspect of her intended pretense activity, an aspect which, to be understood, requires that the other makes the same meaning transformation as the child has imagined. If, over the different pretend events, this kind of choice is made overall more often compared to that of the less informative verbalizations, then it may be inferred that the child considers the mentally constructed pretend meanings

of play more salient and less clear in themselves than those aspects of play whose meaning is stable and shared with other people. In the context of make believe (in the example, the absence of water and of any real outcome of the child's action), children's selective verbalizations would strengthen the interpretation that, even if the substitute object is only a functional substitute of the real one (Perner, 1991), rather than its *signifier*, it would not be a simple functional equivalent, whose meaning would be clear from the goal-oriented role provided by the result looked for (and probably obtained). Given that in pretense its use doesn't lead to any result, it would be a *make-believe* functional equivalent, that is, a functional equivalent for the imagined fiction and, as such, its meaning transformation deserves to be underscored: indeed, it is a crucial part of the total activity that helps identifying the episode as pretend and as a particular type of pretend event (in our example, as a pretend "bathing" event).⁴

If the developmental change discussed above was observed in pretend play, its interpretation in terms of an underlying informative thrust would be strengthened if it could be related to the emergence and early development of informative uses of language in other domains and communicative situations. To this effect, the developmental results relative to the occurrence of informative types of language in pretend play will be related to those concerning the appearance and early development of making reference to past events and providing simple explanations/justifications. Indeed, both of these uses are also of the 'informative' type. References to the past are temporally displaced relative to the situation in which they are uttered and thus aim to inform or to direct the partner's attention onto something which is not immediately perceptible; explanations/justifications are not given as such in the world, but are mental constructs implying a retroactive movement from what is to be explained, to the cause or reason that is temporally or

logically behind it (Piaget, 1923/1959; Grize, 1996; Schlesinger, Keren-Portnoy & Parush, in press).

METHOD

Subjects and method of data collection

The data come from the longitudinal study of four mother-child dyads audio- and video-recorded in their home environment for approximately one hour, at regular intervals (usually every two weeks), while interacting naturally in free-play and book-reading situations. The families lived in Geneva, Switzerland, and were all French-speaking. Their socio-educational background can be considered “middle-class.” At the beginning of the study the age of the children varied between 1;3 and 1;5; at the end, between 1;8 and 2;5, providing a total of 48 hours of video recordings for the four dyads⁵ (*see Table 1 specifying for each child the age range and the number of hours of video recording analyzed*).

— Insert Table 1 about here —

During the observational sessions, mother and child used their own toys and books or those brought by the observers; these include toy babies and cradles, dolls, plastic boxes, a truck, a wooden spin top, a mechanical frog, wooden blocks, cotton balls, tissue, plastic chips, some toy dinnerware, Fisher Price style family dolls and assorted beds, chairs and highchair, miniature food products, a cashier, toy plastic bottles in a container, a large-sized cartoon book depicting daily life events, etc. Mothers were told that our interest was in their child’s acquisition of language and that they should interact with him/her as normally as possible. The episodes of pretend play analyzed here occurred thus naturally.

Method of data analysis

Each dyad's entire corpus was examined for the occurrence of pretend play episodes, all of which were then closely analyzed. They were transcribed from the time children started preparing the objects used in the pretend activity till the end of the pretend activity (by completion of the activity or by a change in the child's attention), noting in detail the actions and the objects used, the verbalizations and the temporal relation existing between the two, as well as the direction of gaze while engaging in these activities. For more information as to criteria and related examples, see Veneziano (1990) and Musatti et al. (1998).

Verbalization categories

In order to evaluate the 'informative' potential of language used in pretend, we distinguished verbalizations according to their content, to the temporal relationship between the verbalizations and the occurrence of its referential meaning, and to the nature of the meanings expressed in language in relation to the activities and objects involved in pretend play. The categorization presented here elaborates an earlier proposal (Veneziano 1990) and it has been partly used in a larger study of the contributions of language to pretend play (Musatti et al., 1998).

Verbalizations are differentiated according to the extent to which they bring essential information on the specific nature of pretend. From this point of view four categories can be distinguished:

1. NON-PRETENSE verbalizations - these are verbalizations that refer to the 'literal aspects' of actions and objects involved in the pretense activity. For example, *là* 'there' said while placing a baby doll into a toy cradle; *bébé* 'baby' said while pretending to feed a baby doll; *gros là* 'big there' while placing the bigger of two dolls on a toy pillow.

In the three remaining categories, verbalizations refer to the pretend aspects of the play and may:

2. DUPLICATE pretend meanings - these verbalizations, though referring to aspects of pretense, add little to the pretend meanings already conveyed by the child's actions, gestures and/or objects used. For example, *dodo* 'night night' while placing a baby doll into a toy cradle; */bwa/ boit/boire* 'drink' while pretending to feed a baby doll with an empty toy bottle;
3. ENRICH/SPECIFY pretend meanings - these are verbalizations that contribute decisively to the meaning of the pretend play, and to making it clearly understandable. This is particularly the case when the object's usual function needs to be radically transformed into a nonobvious one (for example a toy wagon becoming a bed), or when objects don't have a specific use and can be taken as any other thing (for example, a block, or a plastic chip). For example, *dodo* 'night night' said while placing a baby doll into a toy wagon⁶; *biscuit* 'biscuit' while bringing a bit of paper to her mouth; *chocolat #⁷ ça* 'chocolate # this' said while offering the interior part of a match box to the observer; *salade* 'salad' said while pretending to feed a mechanical frog with a plastic chip; *shampoing* 'shampoo', lightly shaking a toy coke-bottle above the head of a doll;
4. CREATE pretend meanings - these verbalizations contribute to the meaning of the pretend play even more decisively since they refer to pretend aspects that are created by the mere fact of stating them. This is the case of verbalizations referring to emotional or internal states of the play characters: for example, */plœ/⁸ pleure* 'cries' referring to a baby doll lying in a box, followed by */dodo o'pa/ dodo ne veut pas*, 'night night doesn't want') serving as an explanation of the previously stated emotional state of the baby doll; */afwa/ a froid* 'is cold' said just before placing a toy quilt over the baby, where the statement of the internal state of the doll sets the stage for the child's action. This is also the case of verbalizations that create absent objects or entities (for

example, *goutte*, for nose drops, while the child touches with her index the face of a baby doll just placed in a toy crib), attribute properties to absent objects (for example, *chaud ça* ‘hot this’ referring to pretend water flowing from a toy bathtub tab), or create states of objects (for example, *plus* ‘no more’, meaning that there is no more to drink, looking at an empty toy bottle from which the child had pretended to drink previously). In other cases verbalizations are used to pretend exchanging greetings and salutations (*bonnes vacances* ‘good holidays’, *à bientôt* ‘see you later’) with fictitious interlocutors (a doll, a puppet or a stuffed animal).

These different kinds of verbalizations may refer to ongoing actions and activities, they may announce a pretend activity to come or yet refer to the pretend meaning of an activity already acted out.

We considered ‘informative’ all those verbalizations that enrich/specify and create pretend meanings (types 3 and 4 above), whether they accompany the play or recount it, as well as those verbalizations that announce pretend activities. Indeed, in all these cases their occurrence constitutes for the onlookers, or the potential participants, a determinant source of information about the pretend meaning(s) of the child’s play activities.

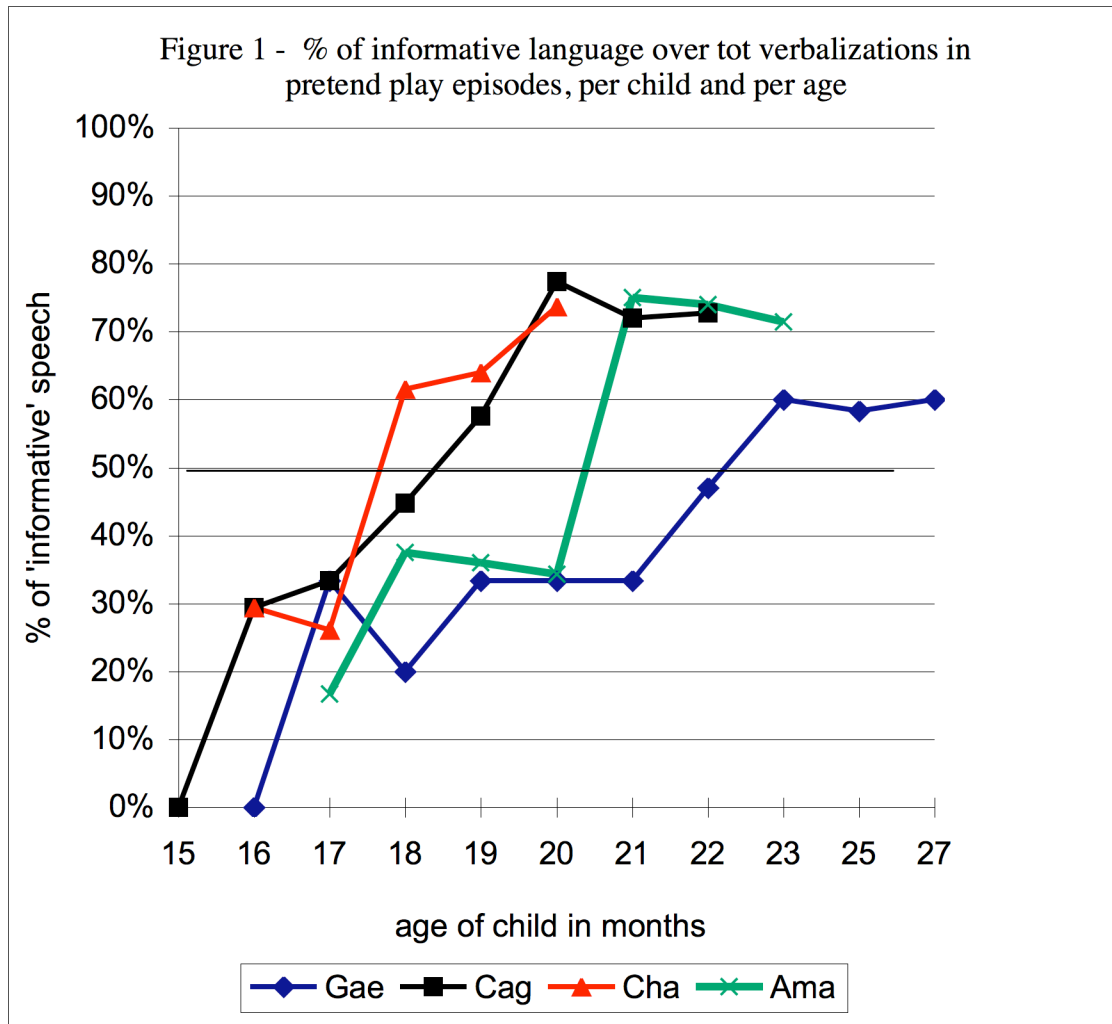
Verbalization counts

All distinct verbalizations were counted separately unless they referred to the same pretend meaning. For example, *bébé dodo* ‘baby night night’, said while placing a baby doll into a toy cradle, was counted as one verbalization and scored as category 2, the higher category of the two words. The child’s subsequent verbalization */opa/ veut pas* ‘doesn’t want’, said before removing the baby doll from the toy cradle, was counted separately as it referred to another piece of the larger pretend event.

RESULTS

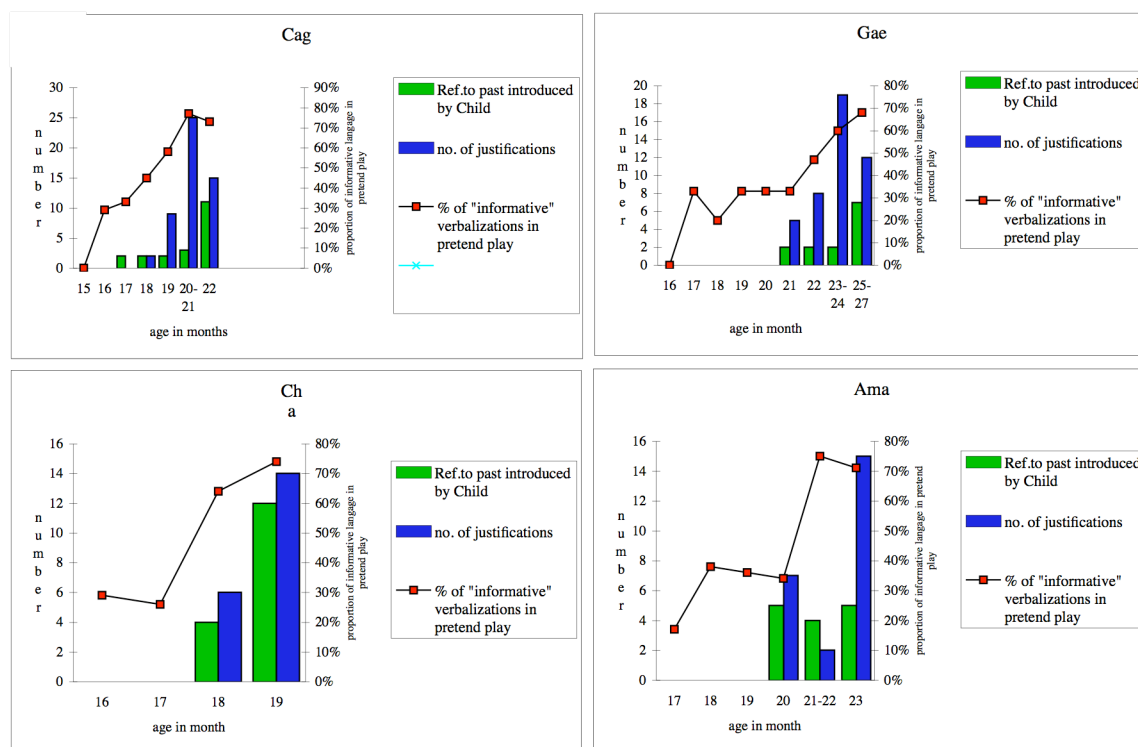
Figure 1 shows the proportion of informative verbalizations over all verbalizations used in pretend play episodes, for each of the four children.

For all the children we can observe the existence of two major periods: 1. a low-informative period, whose length varies between two to six months, depending on the child, during which more than 50% of the children's verbalizations refer either to nonpretense aspects or to pretend meanings that have a clear counterpart in the actions and/or objects acted upon (categories 1 and 2); 2. a high-informative period, starting between 18 and 23 months, depending on the child, during which more than 50% of the children's verbalizations are used to specify, enrich, create or announce pretend meanings, contributing decisively to make them understood.



How does this change in the choice of verbalizations in pretend play relate to the emergence and early development of references to past events and of explanatory behaviors? Figure 2 plots the proportion of informative language in pretend play against the number of spontaneous references to the past and of justifications, summed over the observations available for each month, for each of the children (Veneziano & Sinclair, 1995)..

Figure 2 Developmental relations among the emergence of references to past, explanatins/justifications and informative language language in pretend play, by child and by age



For all the four children the increase in informative language in pretend play co-occurs or closely follows the appearance of references to the past and of explanations/justifications, and occurs when these behaviors become more frequent. There is thus a close temporal relationship in the developmental course of informative uses of language in these different domains.

DISCUSSION

Our results show that while children use language in their pretend play from early on, the kinds of aspects of pretense that they verbalize change with development. Children tend to systematically choose verbalizations likely to be informative for a third party, a change that has to be considered as a specifically pragmatic acquisition, independent of children's advances in lexical or

morphosyntactic language knowledge. Indeed, the same lexical item may be used more or less informatively, and lexical items used informatively later on may have been part of the children's vocabularies from very early on (see the examples of *dodo* 'night night' in the data analysis section, and the commentary in footnote 7). What changes is the *relationship* that verbalizations have with the situation in which they are uttered.

How can we explain the occurrence of this developmental change?

We propose to understand it within a "*know-how about the mind*" model that envisages an intuitive understanding about representations and about the need to communicate them in order to share them with others.

By definition pretend meanings are mental representations that differ from the meanings of the activities and objects carried out or existing in the real world, and they are created individually by the author of the pretense scenario⁹ (e.g., Vygotsky, 1933/1967; Piaget, 1945/1962). Thus it can be supposed, at least at the developmental age related here, that the contents of both the reality and the imagined planes are well known to the child who conceives and gives existence to pretend play. The imagined, representational meanings, however, can be supposed to be unknown or difficult to find out for an onlooker. We think that the shift towards the systematic choice of informative type of language reflects children's increasing intuitive understanding that : 1. representations about pretense differ from representations about reality; 2. another person may not have access to the subjectively created pretense representations; and 3. language is a good means to let others know about these pretense representations.

The communicative goal of children's pretend verbalizations may appear clearly when children address to their mother and/or to the observer verbalizations that they had already produced while intent in the acting out of pretense, or that elaborate a piece of pretend. For example, the child says *pleure* 'cry(ies)' just after

leaving a baby-doll into a plastic box; then she turns towards her mother and, looking at her, says again *pleure* ‘cry(ies), and then confirms by nodding her mother’s request of confirmation *il pleure?* ‘he cries?’. Later, in similar circumstances but using the box as a bed and referring to another baby doll, she says *pleure* ‘cry(ies)’; then she goes to the place her mother was sitting and once there she says /o'pa/ *ne veut pas* ‘doesn’t want’ and continues immediately after by saying /odo o'pa/ *dodo ne veut pas* ‘night night doesn’t want’, providing the reason for the doll’s pretend crying.

Children's intuitive understanding of the double representation/reality (literal) aspects of pretend play are captured nicely by the following naturally-occurring example showing that children may bring their attention to, and underscore verbally, the double status of objects used in pretend play. The child says *glace* ‘ice cream’ just before bringing a block to her mouth and pretending to lick it. After confirming the mother’s confirmation request *c'est une glace?* ‘is that an ice cream?’, the child removes the block from her mouth and says *plot maman* ‘block mummy’; she then brings the block again to her mouth and pretends licking it as if it were an ice cream.

According to our interpretation, the change in the kinds of pretend meanings that are verbalized reflects both a greater understanding of the representational/real planes inherent in pretense and the beginnings of a practical, implicit, understanding that other people in their environment have mental states that may be different from their own. This interpretation finds support in the diversity of domains in which increased uses of informative language are observed. Indeed we have shown that the systematic change towards information-bearing verbalizations in pretend play closely follows developmental synchronies in the appearance of references to the past and of justifications, and co-occurs with their increased production. It is also consistent with findings of other research studies on

children's early communicative behavior showing children's adjustment to their interlocutor's state of knowledge, both in naturalistic (e.g. Bretherton, McNew & Beeghly-Smith, 1981; Dunn, Bretherton & Munn, 1987; Dunn, 1988, 1991; Golinkoff, 1993) and in experimental settings (e.g. O'Neill, 1996). The results obtained in the longitudinal studies of children's language in pretense point to capacities more complex than those implied by taking into account the partner's attention or his/her engagement in the situation at hand (O'Neill, 1996). In our pretend situations the adult partner was always present and had the same kind of objective information at his/her disposal as the child had; s/he did not, however, have access to the *mentally created* meanings attributed to it by the child.

We thus think that the developmental pattern observed strongly points towards the emergence of children's capacity to see their interactional partners as *other egos* having, like themselves, internal states — intentional, emotional and mental — that need to be taken into account when they want to share mental states (like the subjective interpretive properties of "objective" reality) or attain a particular goal.

As in the case of other fundamental notions of intelligence, at this level of development this attitude towards others should be viewed as a practical and intuitive understanding, a *know how about the mind*, rather than a theory of mind (e.g., Bretherton, McNew & Beeghly-Smith, 1981; Dunn, Bretherton & Munn, 1987; Dunn, 1988, 1991; Perner & Wilde-Astington, 1992; Golinkoff, 1993; Veneziano & Sinclair, 1995; Budwig, Stein, & O'Brien, 2001; Veneziano, 2001), manifesting itself with the support of contextual referent points, and while children carry out their own goals and projects. It is only a first implicit acquisition that is probably not yet available to consciousness, nor necessarily accessible when children are placed in situations requiring different kinds of distancing from the natural communicative context (for example, when they are spectator or when they

are asked reflective types of questions). Supposing this early differentiation between self and others on this practical level is consistent with the achievements of the sensorimotor period that ends with what Piaget calls a ‘Copernican revolution’ placing the child in a universe where “persons become other ‘egos’ at the same time as the ego itself is being constituted and becoming a person” (Piaget, 1945/1962, p. 207), achievements which, according to Piaget, serve as a basis for reconstructions at higher representational levels.

When the representational aspects of pretense are considered jointly with its communicative implications, as we have done here, pretend play turns out to be an even more powerful domain of inquiry for children’s *emerging know how about the mind* and for an understanding of the first developmental steps towards the later-to-come “theory of mind”, which itself should be considered as progressively evolving, in terms of the contents to which it can apply and the degree to which it can be explicitly accessed (Chandler, 2001).

REFERENCES

- Bretherton, I., McNew, S., & Beeghly-Smith, M. (1981). Early person knowledge as expressed in gestural and verbal communication: when do infants acquire a 'theory of mind'? In M.E. Lamb & L.R. Sherrod (Eds), *Infant social cognition* (pp. 333-373). Hillsdale, NJ: Erlbaum.
- Budwig, N, Stein, S. & O'Brien, C. (2001). Nonagent subjects in early child language. A crosslinguistic comparison. In K. E. Nelson, A. Aksu-koc, & C. E. Johnson (eds.), *Children's language: Interactional contributions to language development*. Vol. 11 (pp. 49-67). Mahwah, NJ: Erlbaum.
- Chandler, M. (2001). Perspective taking in the aftermath of theory-theory and the collapse of the social role-taking enterprise of the social role-taking literature. In A. Tryphon & J. Vonèche (Eds.) *Working with Piaget: In memoriam-Bärbel Inhelder*. (pp. 39-63). Hove, East Sussex: Psychology Press.
- Dunn, J. (1988). *The beginnings of social understanding*. Cambridge, Mass: Harvard University Press.
- Dunn, J. (1991). Understanding others: evidence from naturalistic studies of children. In A. Whiten (Ed), *Natural theories of mind* (pp. 51-61). Oxford: Blackwell.
- Dunn, J., Bretherton, I., & Munn, P. (1987). Conversation about feeling states between mothers and their young children. *Developmental Psychology*, **23**, 132-139.
- Fein, G. (1981). Pretend play in childhood: An integrative view. *Child development*, **52**, 1095-1118.
- Fenson, L. (1984). Developmental trends for action and speech in pretend play. In I. Bretherton (Ed.) *Symbolic Play: The development of social understanding* (pp. 249-270). London: Academic Press.
- Garvey, C. (1990). *Play*. Cambridge, MA: Harvard University Press.
- Giffin, H. (1984). The coordination of meaning in the creation of shared make-believe play. In I. Bretherton (ed.), *Symbolic play: The development of social understanding* (pp. 73-100). London: Academic Press.
- Golinkoff, R. (1993). When is communication 'a meeting of minds'? *Journal of Child Language*, **20**, 199-207.
- Grize, J.-B. (1996). *Logique naturelle et communications [Natural logic and communications]*. Paris: Presses Universitaires de France.
- Harris, P. L. & Kavanaugh, R. D. (1993). Young children's understanding of pretense. *Monographs of the Society for Research in Child Development*, Serial 231 (#58), 1-108.
- Inhelder, B., Lezine, I., Sinclair, H. & Stambak, M. (1972). Les débuts de la fonction symbolique [The beginnings of symbolic function]. *Archives de Psychologie*, **41**, 187-243.
- Leslie, A. M. (1988). Some implications of pretense for mechanisms underlying the child's theory of mind. In J. W. Astington, P. L. Harris & D. R. Olson (Eds.), *Developing theories of mind* (pp. 19-46). New York: Cambridge University Press.

- Lillard, A. S. (1993). Pretend play skills and the child's theory of mind. *Child Development*, **64**, 348-371.
- Lyons, J. (1977). *Semantics*. Vol. 1. Cambridge: C.U.P.
- McCune Nicolich, L. (1981). Toward symbolic functioning: Structure and early pretend games and potential parallels with language. *Child Development*, **52**, 785-797.
- Musatti, T. (1986). Representational and communicative abilities in early social play. *Human Development*, **29**, 49-60.
- Musatti, T., Veneziano, E. & Mayer, S. (1998). Contributions of language to early pretend play. *Cahiers de Psychologie Cognitive/Current Psychology of Cognition*, **17** (2), 155-181.
- Nicolich McCune, L. (1977). Beyond sensorimotor intelligence: assessment of symbolic maturity through analysis of pretend play. *Merrill-Palmer Quarterly*, **23**, 89-101.
- O'Neill, D. K. (1996). Two-year-old children's sensitivity to a parent's knowledge state when making requests. *Child Development*, **67**, 659-677.
- Pellegrini, A. D. (1990). Relations between preschool children's symbolic play and literate behavior. In L. Galda & A. D. Pellegrini (Eds.), *Play, language and stories: The development of children's literate behavior* (pp. 79-97). Norwood, N.J.: Ablex Publishing Corporation.
- Perner, J. (1991). *Understanding the representational mind*. Cambridge, MA: MIT Press.
- Perner, J. & Wilde-Astington, J. (1992). The child's understanding of mental representation. In H. Beilin & P.B. Pufall (eds.), *Piaget's theory* (pp. 141-160). Hillsdale, NJ: Lawrence Erlbaum Ass..
- Piaget, J. (1923). *Le langage et la pensée chez l'enfant*. Neuchâtel: Delachaux et Niestlé. (English translation: (1959). *The language and thought of the child*. London: Routledge & Kegan Paul).
- Piaget, J. (1945). *La formation du symbole chez l'enfant*. Neuchâtel: Delachaux et Niestlé. (English translation: (1962). *Play, dreams and imitation in childhood*. New York: Norton & Co.).
- Schlesinger, I. M., Keren-Portnoy, T. & Parush, T. (in press). *The structure of arguments..* Amsterdam: John Benjamins.
- Stambak, M. & Sinclair, H. (1990). *Introduction*. In M. Stambak & H. Sinclair (Eds.), *Les jeux de fiction entre enfants de 3 ans*. (pp.vii-xviii). Paris: P.U.F. (English translation: (1993). *Introduction. Pretend play among 3-year-olds*. Hillsdale, NJ: Lawrence Erlbaum Ass.).
- Veneziano, E. (1981). Early language and nonverbal representation: A reassessment. *Journal of Child Language*, **8**, 541-563.
- Veneziano, E. (1990). "Functional relationships between social pretend play and language use in young children". Poster presented at the *Fourth European Conference on Developmental Psychology*. Stirling, Scotland.
- Veneziano, E. (2001). Interactional processes in the origins of the explaining capacity. In K. Nelson, A. Aksu-Koc and C. Johnson (Eds.), *Children's Language: Developing Narrative and Discourse competence*. Vol. 10 (pp. 113-141). Mahwah, N.J.: L. Erlbaum.

- Veneziano, E. & Sinclair, H. (1995) Functional changes in early child language : the appearance of references to the past and of explanations. *Journal of Child Language*, **22**, 557-581.
- Veneziano, E., Sinclair, H. & Berthoud, I. (1990). From one word to two words: repetition patterns on the way to structured speech. *Journal of Child Language*, **17**, 633-650.
- Verba, M. (1990/1993). Construction et partage de significations dans les jeux de fiction entre enfants. In M. Stambak & H. Sinclair (Eds.), *Les jeux de fiction entre enfants de 3 ans*. (pp.1-29). Paris: P.U.F. (English translation: (1993). Construction and sharing of meanings in pretend play. *Pretend play among 3-year-olds*. Hillsdale, NJ: Lawrence Erlbaum Ass.).
- Vygotsky, L.S. (1933/1967). Play and its role in the mental development of the child. *Soviet Psychology*, **5**, 6-18.
- Wolf, D.P., Rygh, J., & Altshuler, J. (1984). Agency and experience: Action and states in play narratives. In I. Bretherton (Ed.) *Symbolic Play: The development of social understanding* (pp. 195-218). London: Academic Press.

NOTES

- ¹ Are the objects, gestures and actions ‘symbolic substitutions’ representing other (real) objects and activities or are they ‘hypothetical substitutions’ where the child is simply carrying out the activities using objects that can fulfill the function needed in the activity (see Perner, 1991)? Although this difference is theoretically important (see Lillard, 1993, for an extended discussion), once the activity is considered pretending, it might be difficult to find the behavioral correlates of ‘I’m using this chip as salad’ vs. ‘I make the chip stand for salad’. Lacking a real-life outcome, using the chip as salad and making the chip stand for salad are inherently linked in pretend. An intermediate and safe interpretation seems to me to consider the chip as a *make-believe* functional equivalent, given that its use doesn't lead to any result and that it is part of the total activity that helps identifying the episode as pretend salad-eating (see also footnote 4).
- ² The term ‘informative’ is used here in the general sense of making “the receiver aware of something he was not previously aware” (Lyons, 1977: 33).

- ³ In this study the child's mother and two observers were present in the situation and all were interested in the child's activities.
- ⁴ A *make-believe* functional substitute thus differs from a simple functional substitute because the latter is by definition result-oriented: Not having a spoon I use a knife to turn the best I can real coffee or to eat the best I can my yogurt. However it might not be a full representational signifier either because the child may not use the plastic box to signify the bathtub (to represent it) but simply as the best surrogate of a bathtub for the purpose of acting out as well as possible the intended or imagined activity or event (rather than evoking the real one).
- ⁵ The difference in age among the children reflects the fact that the study was originally designed to investigate the transition from single-to-multiword speech (Veneziano, Sinclair & Berthoud, 1990), and that the length of the study for each child was determined by language criteria which were attained at different ages by the children. At the beginning, all the children had only a few words in their lexical repertoire; at the end, all the children produced several multi-word combinations.
- ⁶ As can be seen from the two examples of *dodo* provided (one under 2) and one under 3), it is not the verbalization in itself that determines its information-bearing status but the *relationship* it holds with the pretend play scene.
- ⁷ The symbol # indicates that the following word is uttered after a pause of between .05 and 1 second.
- ⁸ When children's verbalizations differ from standard French they are provided in phonetic form before their corresponding interpretation..
- ⁹ In some cases it is the adult who proposes pretend meanings and the child may agree to carry them out. In this study, however, pretend meanings initiated by the adult's suggestion were not considered in the verbalization counts.