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INTERPLAY BETWEEN PRETEND AND MUSICAL PLAY

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ABSTRACT

This paper shows the results of the analysis of more than 60 hours of adult-infant (24-36-months-old) interaction, concerning presence, characterization and interplay of two varieties of play arising from interactive contexts: *Pretend Play* and *Musical Play*. It was observed that, in most of the cases, musical play takes place within contexts of pretend play. That means that infants can fluently participate in and leave the fictional context in order to share with the adult the attention towards a musical attribute. In the sequence pretend-musical-pretend play, the latter incorporates some structural attributes of the previous musical play. For example: a rhythmic pattern – thematically abstract- that was the focus of attention during the musical play is added to a fictional action, contributing to refine and elaborate the play in which the infant was previously engaged. We discuss the inherent time structure of musical play as framework for developing narrative-fictional sequences. It is also feasible that musical features of refined pretend play are essential components of the powerful intersubjective experience that usually accompanies it.

1. BACKGROUND

Pretend play was traditionally considered as a lonely activity often associated to the genesis of the symbolic capacity (Piaget 1946). However, more recent advances in the field of the preverbal-communication development have shown this genesis is linked to early communicational necessities (Rivière 2003). In turn, at the moment, there is certain agreement about the fact that *pretend play* in infancy is not a lonely activity but it takes place in interactive contexts, usually involving adult-infant *intersubjective* experiences.

The concept of intersubjectivity (Trevorthen 1998) has allowed a deeper knowledge of the infant's ways of understanding emotional and mental world of the others, and differentiating the other from himself. Beyond the multiple current approaches to this notion (Bråten 1998), two opposite general perspectives can be easily identified. One of them, usually named *one-way intersubjectivity*, establishes that one subjectivity takes another one as object when the subject is capable of formulating a theory about the mental world. This approach, which is part of a general developmental line of argument named "*Theory-theory*", assumes that knowing the other's mind is based on a sort of abstracted representation or meta-representation (Gopnik y Meltzoff, 1999). From the opposite perspective, the *two-way intersubjectivity* approach is focused on perception of feelings and emotions rather than on building theories. Most of the studies concerning symbolic and fictional capacity – which emerges about the end of the second year – come from the former field. The expressive-emotional approach has afforded its most powerful insights regarding earlier developmental periods – mainly on the early face-to-face

interactions in which primary intersubjectivity is unfolded, on the transition towards the secondary intersubjectivity (based on the infant-adult-object triangular interaction), and on genesis of protodeclarative gesturing. Concerning pretend play, this approach just pointed out its intersubjective nature (Gómez 1998). In spite of the fact that some research has been oriented to study the genetic link between the capacities described by both approaches, they have not been integrated yet.

According to Bråten (1998) intersubjective communion and comprehension is developed in stages or levels that follow one to another during the early years of the life. Operative features of each of these stages remains during the transit towards the higher levels both supporting and interacting with typical operations of these new stages. In that way, it is possible to expect that traits characterizing primary intersubjective experiences (those which happen during the firsts nine months) remain during higher levels of intersubjectivity in which genesis and development of symbolic communication and fictional capacity occur. Certainly, it is also assumed that those traits will be presented modified, with more sophisticated characteristics, according to the specialization that they had suffered throughout the development. Primary intersubjective experiences are not only privilege of the early infancy, but also they are found in adult activities in several domains, like music: Schögler (1999/2000) asserts that jazz musicians (improvisers), show clear features that are typical of the primary intersubjectivity stage, but highly developed by practice and specific knowledge.

In a previous study (Español *et al.*, 2003), we intended to find out what traits of early intersubjective experiences - Mutual Imitations, Emotional Expressions Exchanges, Turns Taking, *Rhythmicity* and *Melodicity*, Interactive Synchrony – remain, although modified, after the genesis of pretend play, during the third year. In the course of the complete data obtained from a longitudinal case study, we could identify - describing their changes - all of those traits except *Interactive Synchrony*. This feature seemed to be unrelated to pretend play, however, we could observe it as a component of other category of infant play: the *musical play*.

1.1. Interactive Synchrony

Researchers on intersubjectivity (Malatesta *et al.* Citado por Thompson 1998; Trevorthen 1999/2000) refer to *Affective Synchrony*, as the attribute of mother-infant of time adjustment of the dyad both in action sequences and emotional expressions. At first, it is the consequence of mother's permanent mapping of the baby's expressions of enjoyment and interest. In more general terms, it may be defined as the ability to act jointly following a shared program (Stern, 1985; Malloch 1999/2000). This ability is crucial in early interactions since it allows "to share time". Sharing not only allows infant shaping his experience temporally, but also is a sort of substratum on which the emotional and motivational

dyad's exchanges take place. "Adult and infant, attending closely to one another's visible and audible expressions, track and influence each others behavior, and achieve synchrony of both action and inaction at a variety of phases within the cycles of interaction." (Schögler 1999/2000; p77).

Typically, capacity of synchronization has been shown as anchored to a steady pulse to which actions are referred during the interaction. Although research on this topic has given descriptions of the timing of the dyad in mutual exchanges, in general it is not clear on what time scale these interactions take place. Albeit those studies often refer to *musical characteristics* of interactions, it is probable that – as is noticed by Merker (2002) – these early adjustments demand a lower level of time precision than musical synchrony - properly said – does.

Merker (2002) pointed out that early time adjustments, which happen during the primary intersubjective period (from birth to 9 months) are supported on interactive mechanisms based on time reaction and familiarization. The time adjustments that use predictive mechanisms base on an underlying pulse will appear later and they will be previously stimulated by certain precise time qualities of the *intuitive motherese* (Papoušek 1996) from the 9 months.

1.2. Pretend Play

Pretend play refers to a variety of play in which children simulate an action, or make-believe something. Its beginnings coincide, at the end of the first year, with the use of objects out of context (e.g. taking an empty spoon as if he was eating). Then, other capacities emerge. For example capacities for (i) substituting one object by another (e.g. to use a spoon as a comb), (ii) attributing imaginary features (e.g. to say that a doll is sleepy), and (iii) creating imaginary objects (e.g. to lull to sleep a wooden block or "nothing"). About the 3rd year, children achieve a clear assumption of a role (e.g. to act like a teacher). It is possible to assume that this chronological sequence of appearance is not indicating disappearance of the previous types of play.

In general, there are no agreement on the characterization of pretend play as regards further topics. From the vigostskian perspective, fiction and symbol are present only in the last stage of this evolution, the *role play*. In turn, the first stage is named *functional play* by some authors in order to differentiate it from the *symbolic play* properly said (Rivière, 2003, Mc Cune y Agayoff, 2002). Other times, the expression *pretend play* is used in a comprehensive way. Differences of cognitive capacities involved in these varieties of play are relevant (Español *in press*). However, there is no doubt that they are three different moments of a single type of play characterized by a thematic narrative attitude. All of them involve unfolding simulations –simple, sequential or complex - of everyday life actions. All of them may be seen as little narratives in action (Español *in press*). Given the preliminary nature of our study we shall make use of the term *pretend play* in a comprehensive way rather than to make differences between them. According to this, *pretend play* refers to scenarios where a sort of theme or narrative in action is profiled in a more or less definite way.

1.3. Musical Play

Musical Play is an explicitly musical type of playful interaction that involves interactive synchrony with a higher level of precision. It has been suggested that about the second year, infants develop a new mechanism of behavioral timing that is pulse-based and therefore especially oriented to music (Merker 2002). "What is unique and in a sense diagnostic for music in the time domain, rather, is its capacity to serve as a vehicle for the temporal synchronization of simultaneous and parallel behavior, whether of identical or different behavioral patterns, and this to extraordinary levels of temporal precision." (p150). This capacity for synchronizing is based on a predictive mechanisms, which is not approximated as the ones described above, but it is characterized by a high level of precision only limited by sensory-motor capacities. Neither other modes of plays nor other kinds of interactions require such a precision.

During musical play, adult-infant dyad adjusts its timing to a third member: metrical structure of songs and/or rhymes. The emergence of this type of play is coherent with the domain of secondary intersubjectivity, in which the dyad takes part of a *triangular communion* (subject-subject-object). Metrical structure may be thought as an abstracted object. Although musical play is often accompanied by non musical components (e.g. song text), joint attention, and therefore enjoyment and interest, is focused on clearly musical traits. Among them, the underlying isochronal pulse in the most typical one. Adults use rhymes and songs while playing with infants, and this contributes to bring together the unfolded actions during infantile plays. Although the adjustment to a *musical* underlying pulse is the most distinctive feature of *musical play*, other musical attributes – like a given collection of discrete pitches – can emerge when the dyad is intended to synchronize.

2. AIMS

As a preliminary study, in this paper we re-examine the filmed interactions of the piece of research early mentioned in order to: (1) identify scenes of musical play in contexts of playful interactions; (2) analyze their particular traits; and (3) study its interplay with pretend play.

3. METHOD

An observational-longitudinal study was run focused on one researcher-infant dyad in natural interactive situations. Fortnightly forty-five minute sessions were filmed in the child's home during an observational period between the age of 24 and 36 months. Although it is assumed that musical play is part of earlier interactions, observations started from 24 months in order to make possible the examination of its interplay with *pretend play*.

A qualitative analysis was run according to a series of observational categories after observational reports. Firstly, sessions were analyzed by two independent judges who isolated every scene where an intended aim of synchronization between the dyad's members were observed. Secondly, these scenes were analyzed in inter-judges sessions following a system of categories in order to estimate the level of synchrony achieve (according to criteria stated by Malbrán [2001]). Scenes categorized as

synchronic were identified as *Musical Play*. Thirdly, *Musical Play* scenes were further categorized as (i) “into *Pretend Play* context”; and (ii) “isolated.”

Finally, scenes of *Musical Play in Pretend Play context* were analyzed according to a category-system oriented to two basic aspects: (a) Characterization of *Musical Play*: bodily involvement of actions *in pulse*; other musical attributes involved; actions either reinforcing or accompanying the synchronic action (bodily contact, eyes contact, emotional expressions, etc.). (b) Characterization of the *Pretend Play* context: presence of the musical features observed during the musical play; differences between pretend play pre and post musical play (changes of the motor scheme, changes of duration, complexity, focus of attention, etc.).

4. RESULTS

From more than 60 hours of recorded sessions, 26 short scenes showed intention of synchronization. However, only 9 of them presented a high level of precision and maintenance of synchrony enough to be classified as *Musical Play*. As Merker (2002) pointed out it is observed a conflict between different timing formats, which is resolved favorably to the format of underlying pulse as the infant makes progresses in his development and the ability is improved by practice. Since we found a low number of cases no statistical analysis was possible. That follows is a description of the salient features of these cases.

Concerning the pace of play-type changes, we could observe that musical play can appear both isolated (3 cases) and sequentially with pretend play (six cases) in natural playful interactions. In the former cases, the infant is observed manipulating different objects, when a given action, related to those objects (e.g. to tap with the object on the floor) elicits a rhythmic pattern (sometimes accompanied by some melodic pattern), which is taken by the infant with a clear aim of *sharing* it with the adult. In the other cases, the musical pattern arises from a more complex scenario of *Pretend Play*. When pretend play is immediately followed by musical play a tendency to return to the first one was observed. That is to say, when both play types are combined they seem to respond to the sequence: pretend-musical-pretend play. Such cases could be observed only from 25 months. It seems that at this age, can fluently participate in and leave the fictional context by interpolating the musical play elicited by the *necessity* of synchronization his actions with the adult. In these cases, the object that elicits the musical play (a doll, a ball, a wooden block, etc.) loses the function exhibited during the previous *pretend play* and it goes to be only an agent of the musical play. In that sense, in spite of not to produce any sound, this object acts as a *musical instrument*.

In all cases the infant tried to synchronize (even though sometime he does not achieve this challenge), not only with the adult, but also with other action run by himself. For example, he hums and taps, sings and marches, hums and make precise movements of his limbs, etc. Furthermore, in most of cases, he promotes some bodily contact (using his face, arms, look) in order to encourage the adult to engage in the action and to monitor the time agreement. In some cases the infant uses a sort of stereotypical emotional expression as the element to be synchronized. For example, if at the end of a

phrase he bursts out laughing (or does an expression of amazement or a surprised “*Ohhhh!*”), then he will incorporate it in such a way that at the end of every phrase the laugh is performed simultaneously by both members of the dyad. Only in a few cases, the metrical - rhythmic structure is accompanied by other structural musical components. For example, some times a melody is clearly sung and both members of the dyad are trying to adjust to each other the used pitches; other times a given musical form emerges clearly, with an explicit structure of “period”, “phrase”, etc. In two cases it was possible to observe a clear use of dynamics (*forte* and *piano*) and changes of *tempi* (slow – fast), with expressive aims, in order guarantee both attention and enjoyment of the adult.

In the six cases of *Musical Play in a Pretend Play context*, it was possible to observe changes on the fictional scenario. Those changes consisted of: (i) addition of the rhythmic pattern of the musical play to the fictional context. For example while dialing a toy phone using a fixed rhythmic formulae (fig 1 displays a pattern used in this case). In these cases, attention is not focused on a musical element as in musical play, but the musical trait is serving to the current fictional scene. (ii) Expansion of motor scheme: tendency to enlarge and exaggerate gestures and to use more space. (iii) Enrichment of motor scheme: he adds a new component to the old movement scheme. For example, during the pre-musical-play pretend play the infant “filled” a cup leaning a bottle towards himself; after the musical play he besides squeezed it counting “1, 2 and 3” (in this case also according to the pattern of figure 1). This observations makes us to think that including particular attributes of the musical play generally contributes to refine the fictional quality of the play in which the infant was previously engaged.

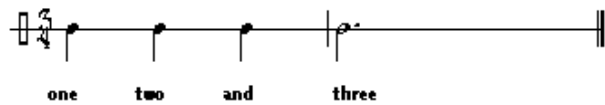


Figure 1. Example of rhythmic pattern used in *Musical Play* and in the subsequent *Pretend Play*.

Concerning the 17 sequences not considered as musical play due to their low level of precision and sustain of synchrony, it is appropriate to notice that all of them showed some musical feature as focus of joint attention. Therefore, a non temporal musical attribute (for example melodic contour) took the place of any other thematic content on the focus of the dyad’s joint attention.

5. CONCLUSIONS

We have presented some preliminary observations concerning the participation of musical components in the genesis of fictional capacity. 1.- We identified a ludic modality that (i) emerges from interactive contexts, (ii) is based on predictive time processes supported by an underlying pulse and (iii) aims synchronization between the interaction partners: *Musical Play*.; 2- We observed that musical play is an independent type of play that may be take place isolated, that is, without association to any thematic or narrative content; 3- We also found some occasions when *pretend*

play is refined by including some elements of the preceding *musical play*.

Although much more research on the topic is required, it is possible to think that musical play, semantically vague, leaves in the infant's mind a "floating meaning" that is added to the pretend play benefiting it. Likewise, the inherent time structure of musical play may serve as framework for developing narrative-fictional sequences. Possibly, musical structure is giving infants a sort of scaffolding to support, on one hand, their knowledge about time, and on the other hand the action sequences that are carried out during that known time. In different domains it was detected a pattern of development indicating that a combination of some abilities is firstly successive and then simultaneous. For this reason, it is possible to think that *pretend-musical play* - until this period only presented in a sequential order (*pretend play- musical play - pretend-musical play*) - may be presented latter directly as an unit.

Furthermore, it is also feasible that musical features of the refined pretend play are essential components of the powerful intersubjective experience that usually accompany it. As Merker (2002) affirms, musical play overtakes other categories of play by "facilitating the acquisition of expectancies by a regular, formal structure" (p.151). Such a structure would allow to organized – at least temporally, and also probably formally in a general sense – the other components that contribute to the development of the fictional capacity.

Genesis of pretend play has been explained, in developmental psychology, from the perspective of the development of some cognitive-representational capacities, which allow a sequential-narrative organization of actions. Our preliminary exploration suggests that analyze the relation between pretend play and musical play is an important step in the study of fictional capacities, since it brings out relevant information concerning the development of these capacities.

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