Communicative aspects of the dyadic musical interaction between mother and child

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Background. It is well known that music covers an essential role in the dyadic interaction of a child even in his first moments of life. It has been observed, particularly in the relationship between mother and son, that a musical stimulus, especially coming from a voice, is effective either from a communicative-affective (Stern, 2004) or from a communicative-attention point of view (Papousek, Papousek, Boestein, 1985). The characteristics of this interaction, like the presence of the repetition/variation mechanism (Imberty, 2005) and communicative symmetries (Fogel, 1977), are extremely important in order to create self-consciousness inside a child, either in a family or in a school context. The “communicative co-regulation” – Relational Coding System – (Fogel) is an implicit feature of the dyadic relationship, and its decoding process represents an important resource in order to investigate the construction mechanism of self-consciousness in a child throughout the family and scholastic routines (Addessi, 2008).

Aims. The aim is to observe and analyze a communicative aspect, with the implication of a musical element, of a dyadic interaction mother and son during the daily routine.

Main contribution. During a weekend period a mother with her three-year-old son was filmed in various moments such as routine, playing or relax time. A microanalysis with Relational Coding System was made upon a section (approximately 8 minutes long) in which mother and child were interacting with playing instruments-toys and voice. The categories (RCS) utilized to evaluate the results are: symmetrical communication, when there is a mutual engagement between the partners in participating in a communicative process; unsymmetrical communication, when the contribution in creating new features in communication is unsymmetrical between the two partners; one-sided communication, when one of the two partners regulates his own activity upon the other without any form of shared action; disruption when there is an attempt of mutual innovation that stops the action; not involved communication, when the partners are not co-regulated even with communication possibilities. The results show that there is no evidence of a “not involved” communication, while a substantial “co-regulation”, that is most of the time “unsymmetric”. The evidence of an unsymmetric communication appears closely connected to the introduction of new musical elements by the mother, while a total control of the musical production by the son seems to cause a symmetrical communication. This study employs the observation methodologies derived from the studies in developmental psychology intertwined with the musical dimension of the mother/child interaction in an interdisciplinary way.

The idea behind this study came from the observation of the particular relationship between a mother and her son. They were showing a very evident attachment, and feeling, and their communication form, often based on musical elements, fascinated me. In this work playing time moments were observed through the Relational Coding System theorized by Fogel (1977), in order to point out some communicative mechanisms regulated by common activities that involves musical elements.1 The present study is a part of an action research project, currently in progress at

1 First results of this research have been showned as a poster presentation at the European Network for Music Educators and Researchers of Young Children (EUNET MERCY) conference Nicosia (Cyprus), 26-28 June, 2007.
the Faculty of Education of the University of Bologna, that focalized various aspects of musical making during the daily routines with under-four years of age children (Addessi, 2008).

**Background**

It is well known that music covers an essential role in the dyadic interaction of a child even in his/her first moments of life. It has been observed, particularly in the relationship between mother and infant, that a musical stimulus, especially coming from a voice, is effective either from a communicative-affective (Stern, 1985; Imberty, 2005) or from a communicative-attention point of view (Papousek, 1994; Papousek, Papousek, 1982; Papousek, Papousek, Borstein, 1985). The dyadic relationship between mother and infant has this particular communicative feature, and the communication –in the verbal or in the not verbal form- in this context is considered as a dynamic social system. In the more common communication model there are a subject that transmits a message, and a subject who receives the message, and modifies his/her behaviour according to that message. The transmission is realized if all this process is available. This approach at the communication derives from the electronic and cybernetic studies, and was widespread particularly in the 70th (Smith, 1977). In the same years another, less famous, field of research about communication was born, that maintains that the subjects of the communication share in the process in a transactional way, with a co-regulation, rather than in a action-reaction way. This assumption derived from the observative research in anthropological and ethological fields of research (e.g. Birdwhistell, 1970). The communication theories of Alan Fogel follow this thought; he observed various dyads mother-child, to investigate the different hierarchies and coordinateness in many kinds of interaction. The “communicative co-regulation”, called “Relational Coding System” (Fogel, 2000) is an implicit feature of the dyadic relationship, and its decoding process represents an important resource in order to investigate the construction mechanism of self-consciousness in a child throughout a family or a scholastic circle. The Relational Coding System assumes that the co-regulated communication becomes a dynamic and continuous system, with creativeness and coordination and that linked and innovative actions will be made.

RCS consists in five categories:

1. Symmetrical, in which there is a mutual engagement between the partners in participating in a communicative process; both are involved in creating a “information”;
2. Unsymmetrical, in which the contribution in creating new features in communication is unsymmetrical between the two partners. There is a common focus in the action, but one of the partners proposes more innovations. As Fogel observes (1977), in the first infancy the mother has often this role, while in later periods the situation tends to overturn;
3. One-sided, in which one of the two partners regulates his own activity upon the other without any form of shared action, but the not-acting partner shows his interest and is helpful;
4. Disruption, in which there is an attempt of mutual innovation that stops the action; it’s a retire or rejection, in any case there is an incoherent innovation towards the shared action;
5. Not-involved, in which the partners are not co-regulated even if could be possible; there isn’t any communication will.

The focus of this exploratory study is the observation of the dyadic interaction mother-child during the free-play at home, to put in evidence where innovative, creative, co-ordinate actions take place in a routine playing time.

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2 Indicated with "RCS"
Method

Procedure: During a week-end period a mother with her nearly three year old son were filmed in various moments such as routine, playing or relax time. The shooting (in the whole approximately an hour) was made in a spontaneous context. The entire session was made with a held camera by a relative not participant; some of it is carried out with the presence of the researcher while in other moments mother and child are left alone with some short and rare interventions by the father. A micro-analysis with Relational coding system were made upon a selected sections covering their signification related to the RCS, in which the situation is normal, without a significant influence of external elements for mother and child, and the activities done are as usual as possible. The selected video fragments (approximately 8 minutes long of the total video-recorded) show mother and child interacting with playing instruments-toys and voice. A list of questions was eventually compiled by the mother, in which she answered to open questions about her musical biography, and about her habits in producing and listening to music, also in connection to her son and to the whole family.

Analysis and Results

The analysis were made with the five communication categories of the Relational Coding System:

1. Symmetrical: Mutual engagement between the partners. (Fig.1).

2. Unsymmetrical: The contribution in creating new features in communication is unsymmetrical between the two partners. (Fig.2)

3. One-sided: One of the two partners regulates his own activity upon the other without any form of shared action, but the not-acting partner shows his interest and is helpful (Fig.3)

4. Disruption: There is an attempt of mutual innovation that stops the action; it’s a retire or rejection. (Fig.4)

5. Not-involved: The partners are not co-regulated even if could be possible; there
isn’t any communication will.

It’s important to distinguish the three last categories, because they appear similar, but the fundamental difference is in the co-regulation. In the one-sided category, there is not really a shared action, like in the symmetrical and unsymmetrical categories, but the presence of the mother, concentrated in the playing of her son, offers an important support, maybe also a stimulus for the innovation in the action, notwithstanding the not-active sharing of the action of both, as Fogel observes (2000). In the disruption there is a change of the action; it could be considered as a moment in which the one of the two subjects needs to change radically the modality of interaction, rejecting the action; in any case both are involved. The category “not involved” is different, because there is only a co-presence in the same place, but there is not any kind of showed will in sharing an action.

In the session selected for this analysis there is not such situation.

The following graphic shows the categories in the fragments observed:

![RCS Categories Graphic]

**Conclusion**

Throughout observation, it results that musical playing is spontaneously divided into segments with turning actions made by mother and child: communication between mother and child was disturbed by the presence of other people but only from a “co-oriented” (glance, body position) point of view while no differences were visible in joint attention on playing sharing. There is no evidence of a “not involved” communication, while a substantial “co-regulation”, that is most of the time “unsymmetric”, can be found where the mother introduces new musical elements. In two moments (for approximately 2 minutes in the eights analyzed) a “symmetric communication” is available. In this case the child shows a particular interest in the musical experience and asks to repeat it, while in the “asymmetrical communication” he shows enjoyment, but causes “disruption” when his mother introduces features with too many differences for him, and with too many difficulties for his abilities; this is mostly evident when his mother doesn’t accept the innovation he proposes. The data suggest that the child causes a “disruption” when, by acting with his own musical and creative communication activities, he doesn’t have the possibility to coordinate himself with his mother. The whole video-recorded, the direct observation of the dyad and the answer of the questionnaire confirms these considerations; from the answers emerges also that the mother has a quite good background in singing and playing the piano, and from the observation it’s possible to put in evidence an habit to propose innovation in the action in a technical way, more than in a explorative sound way, that appears the cause of “disruption” by the child, from the observation.

This study presents, without any pretence of exhaustiveness a first experience of RCS observation, from this point, the next step of this research is to investigate other moments of mother/child musical interaction, also with further survey offered by this theory, in particular on “flow experience” (Csiksentmihalyi, 1990) and “affect attunement” (Stern, 1985).
References


