

# Chapter 5

## Toddlers' Participation in Joint Activities with Peers in *nido*



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**Abstract** Socialization with peers is one of the main goals of early childhood education and care outside of the family but the processes of young children's sociality in ECEC centres are still to be fully understood. This chapter presents an analysis of toddler's sociality with peers during their everyday life in an ECEC centre, based on ethnographic data (videos and written notes) collected during a whole morning within the toddler program of a municipal *nido* in Italy. It highlights that in a group situation children's attention is aroused by a multiplicity of social stimuli and that they often participate in joint activities with peers. The analysis of toddlers' participation shows that both social and cognitive processes converge in children's sociality with peers and contribute to make the ECEC experience an important step in the course of their life. Implications for educational practices in ECEC centres are also discussed.

### Social Processes Among a toddlers' Group During the Day in *nido*

In most European countries, families' demand for group day-care for infants and toddlers has increased dramatically. This demand results from many factors but it is unquestionable that it also comes out of parents' acknowledgement that the social experience of their children at home is mostly restricted to dyadic or triadic interactions with adults and many of them have only sporadic social contacts with their peers, mostly in playground or parks (Musatti 1996; Rullo and Musatti 2005; Vandebroek et al. 2009). Thus, many parents expect that ECEC will provide their

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children with the opportunity to be ‘socialised’ (Scopelliti and Musatti 2013). Even among professionals and experts there is general agreement that one of the main goals of ECEC is to give children the opportunity of social experiences outside of the family, with other adults and, in particular, with other children. However, the question raised by Hartup (2005) about by which processes and under which conditions, peer interactions have a beneficial effect on children’s behaviour and development remains unanswered also with regard to early childhood. Even if, in recent years, a growing concern about the quality of children’s experience appears in policy documents, as for example in recent documents of European Commission (2011, 2013), what exactly constitutes quality with regard to young children’s socialisation in ECEC is still to be made clear.

In ECEC centres young children have to cope with a complex social experience, as they meet a number of peers and adults for a significant part of their everyday life over a long period of time within an organised setting. In this situation, important social, emotional, and cognitive processes are activated in the children, as their different competences, wishes, and needs compete. As such, a better understanding of other persons’ behaviours, intentions, emotions, and moods is required, and new communicative and interactional modalities have to be developed. We argue that a good quality ECEC is one where young children: are supported in facing their first exposure to a social situation outside-the-home; can acquire a positive stance towards other people; enjoy the benefits of sharing knowledge and emotions; and experience participating in a community of practice at an early age (Lave and Wenger 1991).

The study of toddlers’ participation in activities with peers can open new perspectives on the processes of children’s sociality within an ECEC centre and contribute to our understanding of how and under which conditions children’s cognitive and communicative competences can support each other’s development and, consequently, give us suggestions for planning educational practices in ECEC centres. When educators propose or indirectly suggest an activity to a group of children at an early age, how could they sustain children’s interactions and sharing of meanings? Which challenges will each child cope with and how could that child be supported in interacting with peers?

## **Studying Toddlers’ Social Experience with Peers in ECEC**

While a considerable number of good practices have been realised in ECEC all over the world in order to provide children with a positive social experience, research on children’s peer sociality in ECEC centres has not been extensive. When researchers first met ECEC centres, they were mostly focused on the issue of whether children in their first years were able to acknowledge the presence of their peers and have any positive social contact with them or, *vice versa* whether the presence of many other children would prevent the young child from establishing a meaningful relationship with her/his caregiver. Over the years, a more positive view of young children’s

sociality with peers even in early life has emerged. Studies exploring interactions between infants and toddlers within a regularly-attended context, such as the Loczy orphanage, a playgroup, or an infant-toddler daycare centre, where children experience contact with peers within a framework of growing reciprocal familiarity, found that toddlers were keen and able to communicate and interact with their peers even at an early age (Vincze 1971; Mueller and Brenner 1977).

Stambak et al. (1983) analysed the relations between toddlers' activities when they explore objects and their physical or symbolic features within carefully arranged play settings and in a small group of 3–4 children. The organised framework supported children's reciprocal observation, promoted their joint attention around objects and phenomena, and at the same time allowed them to use peers' activity as a stimulus to transform their own (*organisational imitation*) or a suggestion for coordinating both activities (*cooperation*). This study made some important points. First, it showed that attention paid to objects by toddlers is not in conflict with their attention to their peer's activities as, rather, they reinforce and valorise each other. Second, it highlighted the relevant role the quality of the context, such as spatial arrangement, type of play materials, and size of children's group, in orienting children's activities as well as their coordination. Last but not least, in a further discussion of the study, Verba et al. (1982) pointed out that the relations found between the activities of two children are the same as those identified in the successive actions produced by a single child in her/his process of cognitive construction (Piaget 1937/1954; Sinclair et al. 1982/1989).

In the course of their everyday life in ECEC, children have to face many social situations with a variable number of participants, both adults and children, and in constant change. They are stimulated to pay attention to a variety of activities, must find their own way in relation to them, and, eventually, engage in a joint activity. Important cognitive processes are involved in toddlers' joint activities, also within such more complex social contexts. Musatti and Panni (1981) showed that children who meet and play together in ECEC centres in the second year of life can elaborate and share short play rituals and rehearse them over time. Brenner and Mueller (1982) hypothesised that the repetition of joint activities by toddlers come to constitute a set of shared meanings, *almost symbols in action* to which they are able to make reference in communicating with their peers (Musatti and Mueller 1986). Verba and Musatti (1989) observed that in ECEC centres toddlers' attention is constantly aroused by their peers' activities and claimed that processes of deferred imitation (Piaget 1946/1962) are at work also within a large group of children even when not clearly expressed. Musatti (1993) argued that all these studies suggest that sharing activities with peers can play a specific role in supporting children's cognitive development.

As Hännikäinen and Rutanen (2013) have pointed out, in recent research a new interest in early sociality in ECEC centres has emerged. Recent studies are characterised by their particular concern for educational implications (Rayna and Laevers 2011) and by a more holistic perspective on children's experience in ECEC. The important role played by educators' use of space, their location and spatial positioning in orienting children's engagement in social interactions and activities has now

been highlighted in several studies (Musatti and Mayer 2011; Rutanen 2007, 2012; Vuorisalo et al. 2015; White and Redder 2015).

In this chapter we present an analysis of toddlers' participation in joint activities with peers during their everyday life in an ECEC centre with a particular focus on the cognitive processes involved in them.

Erving Goffman's work is an important reference for the analysis of how persons participate in a social situation. He argued that the immediate reciprocal presence of two or more persons creates a sort of inter-dependence between their present or future actions, and that their sharing an attentional focus transforms the simple gathering into a participation unit (Goffman 1971). Moreover, he showed that persons can be involved in interaction within different roles, as direct or side participant, bystander, over-hearer, and carry out different activities even within the same participatory framework (Goffman 1981). With regard to toddlers' participation in joint activities these considerations raise the question of how co-presence in ECEC social situations turns into the sharing of attentional focus and involvement in joint activities with peers.

Clark (1996), who analysed interactive processes in conversation between adults, pointed out that only reference to a somehow shared knowledge, a *common ground*, makes possible the encounter of individual activities into a joint activity. During a developmental period such as toddlerhood children's communicative and cognitive competences may be particularly uneven and common ground may be loosely defined and mean something slightly differently to each child. Thus, a second major question is about how children's individual activities come to intermingle into a joint participatory activity and how their participation is affected by their different competences.

In previous studies (Picchio et al. 2014b; Picchio and Mayer 2015) we showed that participation of toddlers coming from another linguistic home context in joint activities with other children was favoured when the activities were inscribed within scripted formats that supported children's comprehension of the goals and content of the activity and, eventually, of their role in it. In the present study, we explore whether and how children's different comprehension of a common ground have any implication for their participation in a joint activity with peers, with regard to the degree of their involvement in it and the relations they establish between peers' actions and their own.

## The Observations

The analysis of toddlers' participation in joint activities with their peers presented in this chapter is based on observations of the social situation developing in an ECEC centre. The observations were collected using ethnographic procedures over the course of a morning within the toddler program that caters for two to three year-old children of a municipal *nido* in Italy.

The setting consisted of two big rooms, where a number of play corners (for reading, pretend play, constructions, etc.) and play materials (toys, puppets, blocks, etc.) were available to children, together with a large outdoor green area with many trees, shrubs, a sand pit, a wooden tunnel, some tricycles, buckets and spades, and so on.

Sixteen children (8 girls and 8 boys) aged between 29 and 40 months (at the end of the educational year some of the children had already turned 3 years) and three educators were present in the setting. Informed consent for participation in the study was obtained for all the children and educators as well.

The observations were recorded by two researchers who were present in the setting between 8.30 am to 12.30 pm. We chose to observe the entire morning from the time of the children's arrival to the end of their lunch as this period constitutes a well-defined temporal unit of toddlers' everyday life in *nido*. Two types of observations were made: video records and handwritten notes. The video records (4 h 10 min) of children's activities involved two or more participants. The records were filmed by two video cameras simultaneously and were transcribed in their entirety. On the basis of the transcription we could identify most of children's gatherings, that is any set of more than two children in immediate co-presence, and obtain a detailed description of the content, setting (location and play materials), development, and duration of children's activities, and the number and stance of all the children who were somehow involved in the activity. The handwritten notes were focused on the evolution of the social situation in all its detail: people present, activities, social behaviours, and locations of adults and children. The notes were subsequently elaborated into a written report (Picchio et al. 2014a), which allowed us to re-situate the analysis of children's activities in the evolution of the whole social situation and have a global view of it.

The educators of the programme participated in the analysis of the videos. Their situated perspective, as actors taking part in the everyday life of the *nido*, provided further elements for understanding the meaning of events and the children's behaviour.

In the following section we depict the general features of the social situation observed and describe some major processes of children's participation in joint activities. In the examples reported the children's names were modified.

## A Vibrant Social Situation

The picture that emerged from our observations was that of a vibrant social situation characterised by a serene social climate and few conflicts among children. As we collected our observations in late spring most of the children were familiar to each other as they had been attending the centre at least since the beginning of the educational year in the autumn. As a result, we were able to catch hints that closer relationships had been established between some of the children: a group of three older boys gathered together repeatedly, played, chatted, or had some brief conflicts, one

young girl was somehow protected and helped in social contacts by another girl, who, in turn, watched another older boy constantly and imitated him frequently. However, this kind of special relationships did not seem to keep any child from joining other peers disjointedly from their preferred companion.

All morning, the children appeared to pay continuous attention to the activities and events developing all around the setting and, even during the less scripted moments, when activities and roles were not determined by adults or ritualised as in the case of meals, most of the time children gathered together in more or less numerous groups and participated in joint activities. Occasionally, a particular child was isolated and played alone but she was soon joined by another child who was interested in her activity and, *vice versa*, even when some children were wandering around, they were keen to get involved in some activity initiated by another child or proposed by an educator. During the development of joint activities, the number and identities of participants would sometimes change as some of them would easily move apart and leave the group while other children might join in, or one of the children previously involved might rehearse the activity with other partners.

We identified the following morning schedule:

8.30–9.25 Welcome. As each child entered the centre, she and her parent were welcomed warmly by an educator at the door, upon which the child said goodbye to the parent and joined the other children. Meanwhile, another educator played or chatted with children already present. During our observation the educators proposed two activities to small groups of children: cutting out pictures from a magazine and reading a picture book. Other joint activities (some conversations and pretend play activities) were initiated by children and in most cases educators joined them as well. All gatherings occurred at locations spatially identified as around a table, or on a wide carpet.

9.25–10.00 Breaktime. Children took a seat at small tables in fixed places and ate some fruit for more than half an hour. While eating the children chatted with their peers about the fruit or they were encouraged by the educators to tell of their experiences out of the centre. A short imitative play was carried out between two children.

10.00–11.20 Outdoor play. It was a sunny and warm day in late Spring and children were happy to access the outdoor green area, where they scattered all around, gathered in small groups, and shared independent or adult-proposed play activities for more than 1 h. We identified three major types of joint activities. In the surroundings of a sand pit, which contained little sand and was also used as a container of tricycles and other plastic materials, we repeatedly observed small groups of 2–4 children getting involved in digging sand or dirt from the soil with spades or hands, pouring the sand/dirt into baskets or other containers, and/or pretending to prepare food. These activities involved an adult only episodically. The joint exploration of insects (bees, spiders, and ladybirds) was another activity that repeatedly interested small groups of children at different moments and in different locations. This was initiated by a girl and supported by two educators. The third main joint activity that attracted many children for a long time

(45 min) consisted of a pretend play, originated by a girl, who began to put leaves into a play cart, and expanded by an educator, who encouraged other children to join her.

11.20–11.40: Preparation for lunch. Children returned inside the building to their rooms, went to the toilet, washed their hands, and co-operated in setting the tables for lunch.

11.40–12.30: Lunchtime. Children took a seat at the tables and had a slow three-course lunch during which they chatted with their peers and the educators.

## Children's Participation in Joint Activities

The most striking feature of this hive of activity was the multifaceted and multi-layered quality of children's participation in joint activities with their peers. While almost all of the joint activities attracted the attention of the many children who were moved to join in, not all of them were fully involved. We often observed a number of children who remained nearby as bystanders, or just kept an eye out at a distance and eavesdropped on what was going on. Furthermore, even among the children participating in the joint activity, we were not always able to identify for sure whether they were addressing an action to a peer or just carrying out an action somehow related to the peer's, nor, in many cases, to differentiate the roles of addressee and side participant.

A related phenomenon is the fact that, within the framework of one joint activity, we often found other minor joint activities carried out by some side participants. They could be developed in parallel or even embedded in the main one. In the following short episode, in the framework of the activity "cutting out pictures from a magazine with scissors", a familiar one for the children, we observed the development of a number of other joint activities.

Example 1. Naming objects (Mauro, 39 months, Carlo, 40 months, Bastiano, 40 months, Camilla, 39 months, Maria, 33 months, Enza, 29 months) (5 min duration)

1. Five children, Mauro, Carlo, Bastiano, Camilla, and Maria, and an educator are sitting around a small table cutting pictures from a magazine and naming the objects in the pictures. Suddenly, Mauro and Carlo have a quarrel about the name of a toy motorbike which Carlo holds in his left hand and asserts is a pickup truck. Mauro is disturbed by Carlo's joke and protests that Carlo's object is a motorbike. The quarrel goes on and Camilla joins it and teases Mauro by adding a further absurd name for Carlo's object: "It's a laundry!". Carlo and Camilla burst into laughter while Mauro cries. The educator intervenes and stops the quarrel.
2. In the meantime, a younger girl, Enza, approaches the table, but she is rejected harshly by Maria, who tells her imperatively: "There is no place!". As a result, Enza sits on the carpet a short distance away and puts two Lego blocks together.



She then approaches and shows her construction to the educator, naming it: “Car!”, and, invited by the educator, repeats: “Car!”. Then, she approaches Maria and stretches her hand with the Lego construction towards Maria as if to offer or show the toy to her, but Maria takes no notice of her offer, despite Enza’s repeated attempts to get her attention. Eventually, Enza gives up.

This example shows the competence of Carlo and Camilla in playing with language while participating in the cutting activity all the while pursuing a secondary goal (teasing Mauro). On the other hand, Enza was able to join in the activity of naming at a less complex level, albeit one where she related it to the older children’s activity, as she assigned to her construction a meaning linked to the ones under discussion (pickup truck, motorbike... car). Also Enza had a secondary goal as she wanted to enter into Maria’s good graces and, thus, be allowed to participate in the joint activity around the table.

Sometime later, still during the Welcome period, we identified a similar phenomenon in the course of a longer joint activity. This was initiated by Carlo, a highly talkative and creative boy, who evoked an airplane flight recently taken with his parents by arranging a set of chairs and pretending to pilot an airplane. An educator was keen to support his initiative and gradually many children joined in the play. We identified three phases in the development of the activity.

Example 2. Air travel (Carlo, 40 months, Nora, 38 months, Adele, 34 months, Maria, 33 months, Alfio, 29 months) (15 min duration)

1. In the first 5 min, Carlo arranges the setting, aligns many chairs, sits on one of them and pretends to pilot an airplane, communicating further details about the aircraft (ignition button, toilet signals, fastening seat belts, speeding up) to the educator. Then, he shouts at the other children that they should join the plane. Maria approaches and Carlo orders her to fasten her seat belt, but she seems to find it difficult to place chairs in a location that will allow her to repeat exactly Carlo’s positioning and gestures. Nora comes to help her in setting the chairs correctly, while another girl Adele, invited by the educator, approaches and takes a seat. Carlo, who goes on pretending to fly the plane (continuously making sound effects and telling what he is doing), tells her to fasten her seat belt as well. Then, he jumps on his chair and again calls for other passengers. Five children and another educator approach.
2. Two parallel activities develop. On one side Maria, Alfio, and Nora are still busy setting the chairs up accurately in order to reproduce Carlo’s positioning exactly, then Maria imitates Carlo’s actions of pretend flying accurately. On the other side, Bastiano, Mauro, Anna, and Camilla seem to be more interested in the pretend play, as Bastiano proposes variations (travelling by train rather than flying) and then interacts in the role of passenger by asking Carlo: “When are we leaving?” and, then, talking to him about the use of the airplane toilet.
3. Carlo pretends that it is now lunchtime and distributes pizza to the passengers who pretend to receive it and eat obediently. Eventually Maria also interacts directly with Carlo at pretend level, as she takes the pizza he offers and imitates him in eating it and producing sound effects. Then, Bastiano gets close to Carlo



and imitates him by flying the plane and repeating what he says. Finally, it is break time and the educator asks the children to stop play.

This episode highlights quite clearly how children's participation in a joint activity can be achieved in actions which are more or less complex and are related to each other in particular ways. Again, children's different symbolic competences emerge: Carlo and Bastiano participated in the elaboration of the pretend plot, albeit in different roles (pilot and passenger), while Maria imitated Carlo's gestures of driving accurately without assuming the role expected of her by Carlo (passenger in the plane flown by Carlo). Only in phase 3 did she participate in the pretence, by which time the symbolic action was simpler (accepting imaginary pizza and eating it). All over the play episode the other children cooperated in even more peripheral ways (setting up chairs and just sitting on them) or took a bystander stance. Again, we can conclude that all the participants shared a very blurred common ground (travelling by airplane) but their actions referred to it at different degrees of complexity: some of them because they do not seem to be able to participate at a pretend level, others because they might not have experience of airplane travel.

In the preceding examples the setting in which the joint activities developed was somehow defined: in the first case the children's cutting activity was set up around a table, in the second the setting was an important part of the activity (and we saw children's engagement in its arrangement). In both cases, the continuous presence of an educator made the children's gathering more stable. In the following example, no adult intervened in the children's joint activity of picking up soil with tools or hands and pouring into a container. The activity, which was mostly realized at the pretend level as "preparing food" was rehearsed several times by a group of three little girls over the course of the outdoor play. We identified four phases in the development of the activity.

Example 3. Preparing food (Nora, 38 months, Leila, 39 months, Maria, 33 months, Anna, 32 months, Gianni, 32 months, Alfio, 29 months, Mauro, 39 months)

1. (6 min 5 s) (Nora, Leila, Maria, Anna, Gianni). Nora, who is sitting on the ground in the surroundings of the sand pit, is busy picking up soil with a plastic cup and pouring it in a bowl. Leila and Maria, who are tricycling around, approach her and Maria asks Nora what she is doing. As Nora answers: "I am doing food", they sit down near her and begin to pick up soil by hand to fill Nora's cup that she pours into her bowl. Nora announces again: "I am making food for Leila, Nora and Maria. Mummy will not eat it". Maria asks: "Why?", Nora: "Because she's sleepy." The three girls go on with their play for a moment. Anna approaches and stands nearby to observe their play. She looks shy though interested. Gianni approaches too, but he is rejected by Nora. Eventually, Anna approaches with her handful of dirt that she intends to pour into Nora's bowl; as she hesitates Maria invites her to sit down near her. Gianni also picks up some dirt and offers it to Nora saying: "Take the food". Nora stretches out her bowl towards him and says: "Ok, put here.", then she gets up and goes away to pick up more soil.

2. (2 min 30 s) (Nora, Leila, Maria, Anna, Gianni). While Nora is away Maria, Leila, and Anna, who are still sitting in circle begin to pick up soil and pour it on their legs. Anna transforms this activity into a sort of play ritual that she repeats several times with great enjoyment, while the other girls look at her, smiling. When Nora comes back, Anna leaves. The three girls and Gianni resume their previous play. Nora distributes her food to everybody but then she refuses more soil collected by her partners and looks for other ingredients. The activity falls apart and everyone goes their own way.
3. (5 min 5 s) (Nora, Leila, Maria, Alfio, Mauro). Some minutes later, we see Maria again at the same place pouring soil from a bucket into a container. She is disturbed by Alfio but she goes on with her play. Leila joins her and she too begins to pour soil. Eventually, Maria announces: "I have finished... I'm going to Nora" and goes away, calling to Nora, while Leila goes on pouring. Bastiano joins the place and begins to pour soil into a toy pickup truck. He starts to explain to Mauro that he is preparing food but he soon leaves, while Leila goes on pouring soil into the bowl.
4. (2 min 20 s) (Nora, Leila, Maria, Alfio). Leila and Alfio are still there pouring soil into the container. Nora comes back bringing a small cart and greets them, saying: "Good morning!". Leila overturns her container while pouring some soil and shows it to Nora: "I have done a big castle". Nora picks up a stick nearby, then sits down. Leila announces: "I am making food" and begins to stir the soil inside the container with Nora's stick. Maria joins them and begins to pour soil into another container. While pouring soil into the containers, the three girls name the pretend ingredients (sugar, salt, chicken, ice-cream). Leila turns her container full of soil out onto the ground, taps on it, and pronounces an unintelligible word many times (perhaps a magic formula). Then, Nora collects some small stone chips and put them in the container, while Leila collects leaves. Some minutes later, Nora and Maria get up and go to join another activity of leaf collection organised by an educator. Leila stays by herself and goes on filling the container, tapping on it until Nora is sent by the educators to tell her that it's time to go indoors. Leila gets up obediently and follows Nora, but after a few steps she stops, turns towards the container and bowl abandoned on the ground, and blows a kiss at it. Nora imitates her.

This example is representative of how toddlers' joint activity can develop when they can make reference to a well-known common ground and co-ordinate their actions effortlessly within a well-known format. We want to emphasise that only one of the children elaborated the pretence while the other participants, albeit very interested in her proposals, were just keen to help her to collect soil and accept her "food". The activity did not develop along a story line. Again, as in the other examples, one of the participants, who had not yet mastered speech very well, abandoned her bystander stance and assumed a central role by proposing a simpler play ritual in parallel to the main activity, in this case during the absence of the principal actor.

It is also noteworthy that other children joined the activity occasionally and not all the main participants were involved all the time but they came and went. It seems

evident that the children's joint activity found an important point of reference in the location of the activity, the surroundings of the big sand pit, and the material objects which they used which came together. Eventually, two of the main participants acknowledged the identity composed by location and objects explicitly when they addressed it with the final salute: the kiss.

## Discussion and Conclusions

Our analysis has highlighted that the impulse to have social contacts and share experiences with other children is a powerful driving force that organises the personal agenda of each child during everyday life in ECEC centres. Children are interested in other children, curious about their activities, and willing to do things together with them. Moreover, we have shown that complex cognitive, interactional and emotional processes converge in children's sociality with peers, contributing to make the ECEC experience an important step in the course of their lives. Because of the toddlers' unstable representational and communicative competences, as well as their fast-paced interactional positioning, these processes are particularly evident. However, we would not suggest that similar processes could not be identified in peer interactions in groups of earlier ages (Selby and Bradley 2003).

In a group situation, children's attention is aroused by a multiplicity of social stimuli but they are particularly attracted by activities shared by some of their peers and they get together around these activities. We observed that most of the children's gatherings evolved in their actual participation in joint activities. Yet, children participated in a joint activity with different degrees of involvement and by different processes. Children participated by taking different stances and different roles and these stances and roles might change in the course of the same activity. Their participatory activity might fluctuate, be somehow unclear, or be performed without any communicative expression directed to a partner and in ways that are not easily recognisable by adults. In many cases, a proposal made by a child in the course of an activity was not really addressed to a peer in particular, rather it was directed to an undefined audience and there was always a number of other participants ready to gather around and consider the proposal even if just as a side participant, bystander or eavesdropper. We have also shown that the roles of direct participant and side participant could often be unclear and/or interchangeable.

Most importantly, we found that children did not hesitate to re-interpret activities at simple cognitive levels or to act in a peripheral positioning with regard to the activity proposed by a peer. In our view, this peculiar readiness to join in peers' activities, which takes origin from children's deep-rooted feelings of curiosity for them, is also nourished by children's capacity to refer to a *common ground*. The latter is constituted by a shared albeit often blurred knowledge concerning objects and their use, relations between activities, and events, that children acquired during their common experience in the ECEC social situation. Participating in joint activities somehow actualises such a knowledge and makes it visible to each participant's

eyes. In Piagetian words, we would say that even if children's activities might not appear to be fully coordinated, in the course of a joint activity the meaningful, often weak, links between participants' individual activities become evident as an *object to think with* (Inhelder et al. 1992) for each of them.

Overall, these considerations suggest that more thorough analyses of children's social experience with peers in the course of everyday life in ECEC centres could lead to a better understanding of the implications for children's well-being, learning and social inclusion.

Some interesting educational implications also emerge. In a previous study (Musatti et al. 2013) we described how educators of another Italian *nido* pursued the emergence and reinforcement of a common ground among children as a major educational objective in order to support their reciprocal attention and participation in joint activities. The detailed analysis reported in the present study has highlighted that children's reference to a common ground can be multi-layered and their differential access to a joint activity can favour the meeting and reciprocal enrichment between young children's uneven and unsettled competences. This endorses the view that supporting children's participation in joint activities by multifaceted and unobtrusive educational practices can be really inclusive and allow each child to have a meaningful and fruitful social experience. The importance of the setting, in all its symbolic and material components, in promoting both children's gathering and their participation in joint activities, has also been confirmed.

In a more general perspective, we can conclude that it is a major challenge for early education professionals to understand under which conditions children's sociality will thrive and which anchorages should be provided to children's thrust to participate in joint activities with peers.

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## References

- Brenner, J., & Mueller, E. (1982). Shared meanings in boy toddlers' peer relations. *Child Development*, 53(2), 380–391.
- Clark, H. (1996). *Using language*. Cambridge: Cambridge University Press.
- European Commission. (2011). Early childhood education and care: Providing all our children with the best start for the world of tomorrow. *COM*, 2011, 66.
- European Commission. (2013). *Investing in children: Breaking the cycle of disadvantage*. Recommendation 2013/112/EU.
- Goffman, E. (1971). *Relations in public*. New York: Harper & Row.
- Goffman, E. (1981). *Forms of talk*. Philadelphia: University of Pennsylvania Press.
- Hännikäinen, M., & Rutanen, N. (2013). Important themes in research on and education of young children in day care centres: Finnish viewpoints. *Nordisk Barnehageforskning*, 6(26), 1–10.

- Hartup, W. H. (2005). Peer interaction: What causes what? *Journal of Abnormal Child Psychology*, 33(3), 387–394.
- Inhelder, B., Cellérier, G., Ackermann, E., Blanchet, A., Boder, A., Caprona, D., Ducret, J.-J., & Saada-Robert, M. (1992). *Le cheminement des découvertes de l'enfant*. Neuchâtel: Delachaux et Niestlé.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Mueller, E., & Brenner, J. (1977). The origins of social skills & interactions among play-group toddlers. *Child Development*, 48(3), 854–861.
- Musatti, T. (1993). Meaning between peers: The meaning of the peer. *Cognition and Instruction*, 11(3 & 4), 241–250.
- Musatti, T. (1996). Fruhkindliche Betreuung und Erziehung in der Familie. In W. Tietze (Ed.), *Fruherziehung* (pp. 158–168). Berlin: Luchterhand.
- Musatti, T., & Mayer, S. (2011). Sharing attention and activities among toddlers: The spatial dimension of the setting and the educator's role. *European Early Childhood Education Research Journal*, 19(2), 207–220.
- Musatti, T., & Mueller, E. (1986). Expressions of representational growth in toddlers' peer communication. *Social Cognition*, 3(4), 389–399.
- Musatti, T., & Panni, S. (1981). Social behavior and interaction among day-care center toddlers. *Early Child Development and Care*, 7(1), 5–27.
- Musatti, T., Giovannini, D., Mayer, S., & Group Nido Lagomago. (2013). How to construct a curriculum in an Italian nido. In L. Miller & C. Cameron (Eds.), *International perspectives in the early years* (pp. 85–110). London: Sage.
- Piaget, J. (1954). *The construction of reality in the child*. New York: Basic Books. (Original work published 1937).
- Piaget, J. (1962). *Play, dreams, and imitation*. New York: Norton. (Original work published 1946).
- Picchio, M., & Mayer, S. (2015, novembre). The socialization of children of migrant parents during their first year in crèche. *Petite enfance, socialisation et transitions. Colloque international Experice – CNAM*. Paris.
- Picchio, M., Di Giandomenico, I., & Musatti, T. (2014a). The use of documentation in a participatory system of evaluation. *Early Years: An International Research Journal*, 34(2), 133–145.
- Picchio, M., Mayer, S., & Pettenati, P. (2014b). Participer et communiquer: l'expérience de deux enfants de parents immigrants dans une crèche italienne. In S. Rayna et G. Brougère (Dir.), *Petites enfances, migrations et diversités* (pp. 123–135). Bruxelles: Peter Lang.
- Rayna, S., & Laevers, F. (2011). Understanding children from 0 to 3 years of age and its implication for education. What's new on the babies' side? Origins and evolutions. *European Early Childhood Education Research Journal*, 19(2), 161–172.
- Rullo, G., & Musatti, T. (2005). Mothering young children: Child care, stress and social life. *European Journal of Psychology of Education*, XX(2), 107–119.
- Rutanen, N. (2007). Two-year-old children as co-constructors of culture. *European Early Childhood Education Research Journal*, 15(1), 59–69.
- Rutanen, N. (2012). Socio-spatial practices in a Finnish daycare group for one- to three-year-olds. *Early Years*, 32(2), 201–214.
- Scopelliti, M., & Musatti, T. (2013). Parents' view of child care quality: Values, evaluations, and satisfaction. *Journal of Child and Family Studies*, 22(8), 1025–1038.
- Selby, J. M., & Bradley, B. S. (2003). Infants in groups: A paradigm for the study of early social experience. *Human Development*, 46(4), 197–221.
- Sinclair, H., Stambak, M., Lézine, I., Rayna, S., & Verba, M. (1989) *Infants and objects: The creativity of cognitive development*. San Diego: Academic Press. (Original published 1982).
- Stambak, M., Barrière, M., Bonica, L., Maisonet, R., Musatti, T., Rayna, S., & Verba, M. (1983). *Les bébés entre eux: Inventer, découvrir et jouer ensemble*. Paris: Presses Universitaires de France.

- Vandenbroeck, M., Boonaert, T., Van der Mespel, S., & De Brabandere, K. (2009). Dialogical spaces to reconceptualize parent support in the social investment state. *Contemporary Issues in Early Childhood, 10*(1), 66–77.
- Verba, M., & Musatti, T. (1989). Minor phenomena and major processes of interaction with objects and peers in day care center. *European Journal of Psychology of Education, 4*, 215–227.
- Verba, M., Stambak, M., & Sinclair, H. (1982). Physical knowledge and social interaction in children from 18 to 24 months of age. In G. Forman (Ed.), *Action and thought* (pp. 267–296). London/New York: Academic.
- Vincze, M. (1971). The social contacts of infants and young children reared together. *Early Child Development and Care, 1*(1), 99–109.
- Vuorisalo, M., Rutanen, N., & Raittila, R. (2015). Constructing relational space in early childhood education. *Early Years, 35*(1), 67–79.
- White, E. J., & Redder, B. (2015). Proximity with under two-year-olds in early childhood education: A silent pedagogical encounter. *Early Child Development and Care, 185*(11–12), 1783–1800.