1. Explanations: what are they?

Explanations occur frequently in every-day life. In spite of this, the concept of explanation is not easy to define. Within a given context, utterances or sequences of utterances can be intuitively recognized as explanations by people participating in or observing the interactional situation. There are explanations via examples (for example, 'This is a squirrel. Like the one you saw last week in the park'), explanations via definitions (for example, 'These are patches. Do you know what they are for? To mend holes in cloth'), or explanations by means of cause-effect relations (for example, 'Ice cream melts because of the heat'). Various and converging cues can contribute to this outcome: linguistic cues, such as certain connectives (because); paralinguistic cues such as intonation in spoken language and punctuation in written language (for example, "Mommy and daddy are shopping. They buy bread, meat and fruits: apples, apricots, plums, and bananas"); text coherence indicators (consider, for example the different causal emphasis of these two sentences: 'she had a child and got married' versus 'she got married and had a child'); and lastly, contextual indicators which can transform the act of showing into one of explaining (as happens when the speaker is more competent than the partner). In order to understand what all these phenomena have in common, we apply a pragmatic approach to the notion of explanation. Our approach focuses mainly on the interpersonal aspects and differs from the line of thought which interprets explanations as a mere search for causes. This latter line, which is best represented in developmental psychology by the work of Piaget (1923; 1924), studies explanations as a problem concerning psychology of reasoning.
Our line of research, instead, takes into account some basic features of the concept of explanation in natural interaction: 1. The interactive dimension, i.e. the fact that someone explains something to someone else; otherwise the distinction between explain and understand will be missed. 2. A difference of knowledge and authority between the one who offers and the one who receives the explanation. This lack of knowledge in the one who receives the explanation justifies the act of the speaker according to Grice's conversational maxims (1975) which request not to say too much nor too little. 3. The aim of restructuring the partner's organization of information.

These considerations allow us to try a definition of the *act of giving an explanation* on which we are focusing and to specify the conditions of its successful performance in conversation. We define giving an explanation as follows: it is an interactional move which takes place when one partner offers a piece of new information (explanans) which refers to an object of joint attention (explanandum). This new information makes clear what was previously obscure. The need for it may be directly expressed by the partner by verbal or non-verbal means, or it may be presupposed by the speaker for the sake of goals related to the ongoing interaction. This tentative definition allows us to include in the concept of explanation facts frequently taking place in interactional contexts which are intuitively recognized as explanations. For example, justifications, paraphrases of lexical meanings, definitions of objects and indications of functions.

Our line of research has been developed following authors working on ordinary explanations (von Wright 1971; Antaki & Fielding 1981) who have distinguished two forms of explanations: descriptive explanations, which explain something by giving it a name that the audience will understand; and causal explanations (or agency explanations when they refer to human actions), determining why something has happened (for an analogous distinction in cognitive psychology see also Castelfranchi & Parisi 1980).
Our work has both theoretical and empirical purposes. On the theoretical level, we intend to identify the conditions that need to be fulfilled when giving an explanation. On the empirical level, we have carried out a qualitative investigation studying the explanations given by three-year-old children in spontaneous interaction and exploring which behavioural cues could be taken into account to decide whether the subjects honour these conditions. Though we think that our model of explanation and the conditions we propose are generally valid, we chose three-year-olds because they are linguistically competent enough to be easily understood, while their early age allows us to investigate which are the most basic features of explanation in interaction.

2. Conditions defining the act of explaining

Following the line established by Searle's work on promises (1969) and influenced by the considerations of Sbisa' (1989) on everyday explanations, we here propose the set of conditions we think an utterance must fulfil in order to count as a satisfactory performance of an explaining act, distinguishing between preparatory, essential, sincerity and affiliative conditions.

Preparatory conditions lay the appropriate grounds for the speech act. Two types were distinguished:

1. The speaker should believe that the new information is necessary to the partner's knowledge or understanding. In other words, the speaker should believe that the partner does not know the explanans or that is not able to establish its relation with the explanandum by him/herself.

2. When explaining, the speaker must be sure that the explanandum is at the centre of the partner's attention.

As regards preparatory condition 1, the need for the explanation may be expressed either by a direct request from the partner, or by non verbal means, or by contextual cues indicating lack of understanding. If this type of preparatory condition is not honoured (neither the explanans nor its link with the explanandum
are new), then Grice's maxims forbidding redundancy in conversation is violated. In adult conversation, overexplaining may acquire the connotation of an insult, since it implies an assumption of the partner's difficulty in understanding.

If preparatory condition 2 is not fulfilled (partner's attention is missing), then communication fails. The partner will not understand the explanation, i.e. he/she will either not notice that an explanation has been given, or will not be sure about the entity referred by the explanans.

We have also distinguished two types of essential conditions:
1. The explanation must be constituted of both an explanandum and an explanans.
2. The speaker must show concern for the partner's inferential patterns.

It is important to distinguish essential condition 1 from preparatory condition 2, that is, from the requirement that the explanandum should be an object of joint attention. Essential condition 1 requires, instead, that the explanandum, in order to be considered as such, must be linked to an explanans. The relation between explanandum and explanans is recognized either by inference, or because it is explicitly expressed with a connective.

Essential condition 2 indicates the speaker's concern for the partner's way of reasoning. The speaker must build an explanation that will make sense to the partner. This type of condition is not fulfilled when partners do not share a common understanding of reality. If the speaker's assumptions are not shared by the partner, the explanation will be considered absurd, unreasonable or unacceptable.

Sincerity conditions refer to the fact that the speaker must consider him/herself competent to give an explanation on a certain matter. It is this subjectively felt authoritativeness which gives the power to become the explainer. This power may have different sources. It may derive from factors external to the interactional situation, as when the speaker is an expert on the topic being explained, or it may develop progressively within the interactional
situation, as when one of the partners turns out to be more competent in that field. If these conditions are not honoured, then the explanation is deprived of its value and may be even refused. It is to be noticed that this condition does not refer to the truth-value of the speaker's statements, but to his/her authority and competence as opposed to the partner's ignorance. In this situation the partner is given the "duty" of taking into account the new piece of information (Sbisà 1989). We may assume that this condition is honoured by both partners as far as the explanation is not challenged.

Meeting **affiliative conditions** means honouring the social relation between partners. These conditions refer to the symmetrical-asymmetrical axis of the relationship, derived from social roles. This conventionally attributed authoritativeness makes it more likely for one partner to become the explainer. In an asymmetrical relationship, such as that between child and adult, or between student and teacher, it is easier for the one who is in a "upper" position to give an explanation and for the one in an "lower" position to accept it as such. If the one in an "lower" position gives an explanation, he/she might even feel compelled to adapt his/her language to the situation by using, for instance, cautious expressions. In a symmetrical relationship, on the other hand, both partners have the same chances to act as explainers.

### 3. Empirical evidence

#### 3.1. Method

The subjects of our analysis were three Italian girls aged three years (Silvia, Carmela and Serena) attending a kindergarten near Reggio Emilia. We observed them in different situations: free play, playing with puzzles and looking at a picture book. Each of these situations was videotaped twice. A first time, for 20 minutes, with the teacher participating actively, and a second time, for 15 minutes, with the teacher playing a passive role. The videotapes, lasting in total 105 minutes, were transcribed attention having
been paid to non-verbal behaviour as well. The total corpus amounted to about 2,400 utterances differently distributed between adult and children depending on whether the adult was active or passive. In the adult-active situations, the adult produced about 1,200 utterances unevenly distributed between book reading (540), free play (320) and puzzles (360) respectively, while the three children all together produced about 670 utterances with no differences among the three situations. In the adult-passive situations children produced about 470 utterances equally distributed among the three situations; the adult, who was instructed to intervene as briefly as possible and only when addressed, produced only 65 utterances.

Though we think that the concept of explanation encompasses a wider range of phenomena besides explanations containing a causal predicate, we decided to analyze in this work only this last type because they can be selected with clear and independent criteria. In order to select explanation we applied a slightly adapted version of Hood and Bloom's method (1979: 4). We adopted either formal criteria, like explicit causal connectives, or semantic criteria, like an implicit reference to two events or states having a causal relation between them. Unlike them, we accepted that one part of the explanation (usually the explanandum) could be expressed by non-verbal means, or even be a significant contextual event. After this selection we carefully examined the interactional situation which preceded and followed each explanation, looking for cues which would indicate whether the conditions we set were honoured by both speaker and partner.

3.2. Criteria of analysis and examples

The honouring of these four conditions may be studied by examining the interactional context of the explanation. In some cases this test may be done in an easy and direct way, as when the existence of an object of joint attention is ascertained. At other times, the fact that certain conditions have been respected may only be inferred from the partner's behaviour. For instance, the
partner's acceptance of the explanation shows that it was necessary. On other cases, he/she may refuse the explanation, sometimes even indicating which of the conditions has been violated: a bored 'I already know' points out that the information is not new (failure of preparatory condition 1), whereas an annoyed 'Don't talk about things you don't know about' shows that sincerity conditions have not been fulfilled. We will now present the cues we relied on in order to determine whether, and how, all four conditions were observed by our subjects during interaction, illustrating them with some examples.

3.2.1. **Preparatory conditions**

**Preparatory condition 1** (the speaker should believe that the partner does not know the explanans or is not able to establish the relation between explanans and explanandum by him/herself).

The clearest possible cue is a request for an explanation. When this does not occur, we can rely on indicators that the speaker may have noticed, either non-verbal (i.e. the partner's puzzled expression) or verbal (repetitions, misunderstandings) which indicate that the partner has not understood something.

When none of these cases occur, however, we must consider what the explanation spontaneously offered is about. If the speaker's explanation refers to his/her own wishes, goals or intentions, then it is likely that he/she assumes that the partner does not know what he/she has in mind.

Lastly, an unexpected event which constitutes a cognitive problem also prepares the ground for an explanation, since the speaker may assume that it constitutes a cognitive problem for the partner too.

Our subjects do not recognize the situation which is apparently the most favourable: a request for an explanation. They did not answer any of the explicit requests made by the adult, nor those made by another child (except in one case which we will examine later).
(1) Free play in the kitchen. The teacher offers the children some real bread.

Serena: **Questo non si può mangiare**
'You can't eat this'
Teacher: **Questo sì. Perché?**
'Of course you can. Why not?'
Serena: ..... 
(does not answer)
Teacher: **Questo sì. si può mangiare**
'You can eat it.'

(2) The girls are doing jigsaw puzzles. A piece gets stuck and Silvia is not able to take it out.

Silvia: **Perché non si toglie questo qui?**
'Why doesn't this come out?'
Serena: ..... 
(does not answer)

Instead, all three girls seem capable of offering explanations spontaneously. The problem here is whether their explanations are simply a verbal expression of what they are thinking, or whether there is some concern for the partner's needs. The opportunity for an explanation may be grasped not only from a direct request, but also from partner's cues such as misunderstandings or repetitions which indicate she has not understood something.

(3) Free play in the kitchen.

Silvia: (to Serena) **Vuoi mangiare?**
'Do you want to eat?'
Serena: (to Silvia) Sono piena
'I'm full.'
Carmela: (to Silvia) Dà da mangiare a Serena
'Give Serena something to eat.'
Silvia: (to Carmela) Ma no/ che è piena!
'Oh, no! / She's full.' (*)

Carmela's insistence shows that she has ignored Serena's previous answer, motivating Silvia's refusal ('Oh, no!') with the explanans that justifies it ('She's full').

Most frequently the need for an explanation derives from the fact that the child is justifying his/her own needs, wishes, intentions or requests. In such cases the child's being explicit comes from presupposing that the partner is not capable of inferring it by him/herself.

(4) The girls are looking at a book.

Serena: (she pushes Silvia who is not letting her see the book) / Io non vedo, io non vedo. Ho detto non vedo!
/I can't see, I can't see. I said I can't see!' (She explains why she pushed Silvia).

In the following example Serena justifies her refusal to

(*) The bar (/) which appears in the examples always precedes the explanans.
immediately exchange puzzles by rendering explicit her intention to finish the on-going activity.

(5) Each girl is solving a puzzle. Silvia has finished hers and wants to exchange puzzles with Serena.

Silvia: *Facciamo cambio, Sere?*  
'Let's switch, Sere.'
Serena: *Aspetta che finisco*  
'Wait / I haven't finished.'

Finally, the need for an explanation may be created by an unexpected or problematic event in the context.

(6) This situation immediately follows example (2). Silvia has referred several times to her piece of puzzle being stuck. She asks the teacher for help, receiving as an answer the advice to try to do it by herself. She also asks Serena for help, who does not answer (see example (2)). Finally she bursts out:

Silvia: *Perché non si toglie questo qui?.../Ci vuole un martello!*  
'Why doesn't this come out? / We need a hammer.'

The explanans "we need an instrument to exercise force" is arrived at by the problem resulting from several unsuccessful efforts.

Here we present another example of an unexpected significant event.
(7) The girls are playing together. Carmela leaves annoyed after being pushed by one of her partners.

Serena: (to Silvia)/Le hai fatto male!  
'/ You hurt her!'  

Carmela's leaving is explained by Silvia being blamed for having hurt her.

Preparatory condition 2 (when explaining, the speaker must make sure that the explanandum is within the field of joint attention). There are two situations in which joint attention is already guaranteed: in the case of face to face interaction and in the case where one partner verbalizes the explanandum and the other one verbalizes the explanans. When joint attention is not already guaranteed, it is the speaker who must establish it. In order to open interaction and call for the partner's attention, the speaker may either verbalize the explanandum, ensure attention by non verbal means, or combine verbal and non-verbal means.

In the following two examples, joint attention is already established.

(8) Carmela has unsuccessfully asked Silvia for the book several times, by both verbal and non verbal-means: she then tries to pull the book away from Silvia, saying

Carmela (to Silvia) Me lo dai?  
'Can I have it?'  
Lasciami./ un po' io...  
'Gimme it. / It's my turn.'  

Silvia: (to Carmela, covering the book with her arm)  
Nooo...Lasciami una cosa /non ho finito di leggere.  
Nooo...Not now/ I'm reading.'
In this case, since they are both handling the book, joint attention is of course guaranteed. From another point of view, the example is interesting because Carmela’s explanation raises the level of the interaction: after Carmela’s explanation, Silvia feels compelled to explain her position too. During the previous interaction they had opposed each other with mere (unexplained) requests and refusals.

Another case in which joint attention is already established occurs when the explanandum is verbalized by one partner and the explanans by the other, as in the following example:

(9) Serena tries to put in a piece of puzzle.

Serena: (to the teacher) Non ci vuole entrare dentro
'It doesn't fit.'
Teacher: /Perchè lo sai che bisogna girarlo dall'altra parte, sembra uguale../
'Cause, you know, you have to turn it round. It looks the same...' 
Serena: (she tries and the piece fits; she smiles) C'è andato
'That's it.'

This is a very special example because here the partner is the adult. We did not find a similar example in child-child interaction, perhaps because of the early age of the participants.

Now we turn to a situation in which joint attention must be established. One means of achieving this is by verbalizing the explanandum.

(10) Free play in the kitchen. The girls keep certain distance from each other.
Silvia: (to Serena, while putting on an apron) Dopo ci mettiamo a posto il grembiule, / siamo le cuoche!

'an apron / We are cooks!'

Even if a shared game had been taking place, the act of putting on the apron would probably have not been enough to ensure the partner's attention, since she was not looking at Silvia. By verbalizing the explanandum this is achieved. From another point of view, this case is interesting also because it shows how giving explanations during play interaction helps the speaker to take the lead in the game. His/her proposals carry more weight and seem more sensible when justified.

The child may also combine verbal and non-verbal means in order to attract the partner's attention.

(11) Serena tries to open a tin. She does not succeed and approaches the teacher, showing her the tin.

Serena: (to the teacher) Me lo apri, che non ci riesco?

'You open it / I can't.'

Or the child may use non-verbal means only.

(12) Serena: (in another moment, showing the teacher a tin) Non ci riesco ad aprire

'/Can't open it.'
The gesture of showing the tin constitutes the explanandum, i.e. a non-verbal request for help. The explanans, on the other hand, is verbal and justifies the request by referring to her own helplessness.

We can infer from our data that preparatory conditions are usually fulfilled by children at this age, except in those cases where the need for the explanation is explicitly verbalized by the partner through a direct request. This corresponds with the development sequence proposed by Hood and Bloom (1979) according to which the child first makes causal statements, then answers to requests for explanations and finally makes requests for explanations. Hood & Bloom's account for these findings refers to the fact that answering a request for explanation requires that the child be able to encode causal relations with "a semantic intention that is influenced by the message of the other speaker" (Hood & Bloom 1979, 33), or, in our opinion, to adapt to the other speaker's viewpoint. In their longitudinal study of 8 children aged 2.6 to 4 years they found mainly causal statements with contents of denials, refusals, and directions, almost totally related to children's own needs and intentions. Though the linguistic devices for expressing causality in Italian are somehow different from English, since we use the same connective perché both for interrogative and declarative sentences, and the syntax for Italian interrogative sentences is much simpler than in English, we have found similar results. It seem to us that at three years language mainly functions to regulate joint activity and that explanations are likely to occur to direct a common course of action (justifications following requests, expressions of wishes, and intentions) or to avoid disruptions (explanations following misunderstandings, inadequate actions or undesired actions which could affect the speaker). Therefore, though most explanations are linked to a speaker's personal plan, in the interaction they turn out to be adequate and pertinent. As regards preparatory condition 2, the speaker always makes sure that the explanandum is within the field of joint attention by
various means, the most frequent of which is verbalizing the 
explanandum.

3.2.2. Essential conditions

Essential condition I (presence of an explanandum and an 
explanans). Here we checked the presence of both the explanandum 
and the explanans. In doing this we did not limit ourselves to verbal 
expressions, since sometimes part of the explanation (usually the 
explanandum) is constituted by a gesture or an action. We found 
that the explanandum may even be constituted by an event in the 
context. If this event calls for the partner's attention (preparatory 
condition 2), it becomes an explanandum in the case an explanans 
refers to it.

In our data, while the explanans is always verbalized, the 
explanandum is expressed in the various ways mentioned above. In 
most cases it is verbalized, sometimes it consists of a gesture or an 
action, and in a few cases it either consists of an event or it must be 
inferred from discourse. Here we will only exemplify the latter 
possibility. Illustrations of verbalized explanandum and explanans 
may be found in examples (3) and (5); example (4) illustrates an 
explanandum consisting in a gesture or an action; example (7) 
presents an explanandum consisting of an event.

(13) Free play in the kitchen. Serena offers a spoon to Silvia.

Serena: *Vuoi questo cucchiaio?*
   'Want this spoon?'
Silvia: *Ma /io ce l'ho gia*
   'But / I got one.'

In this example the explanandum is a tacit refusal, whose only 
linguistic cue is **but**, a word which indicates some sort of opposition. 
In the following example the explanandum is a completely 
tacit refusal which, however, can be inferred.
(14) Each girl is solving a puzzle.

Silvia: (to Serena) Facciamo cambio?
    'Wanna swap?'
Serena: /Faccio cambio con Carmela
    '/ I gonna swap with Carmela.'

The explanans is Serena's alternative plan, which explains why she does not want to exchange puzzles with Silvia.

**Essential condition 2** (the speaker must show concern about the partner's inferential patterns). In order to explore whether this condition is observed we may use only an indirect cue, i.e. evidence in further interaction that the partner has accepted the explanation (he/she does or says something that reveals that he/she has noticed the information which has been offered to him/her). This would indicate that the explanation seems sensible to the partner. A weaker cue consists in the fact that the partner does not refuse the explanation. The subjects studied in our research have similar inferential patterns since they are of the same age, share a similar cultural background, and have been attending the same creche for a long time. Thus, it was highly improbable that they would refuse each other's explanations. We could therefore infer concern about the partner's inferential patterns only from the indirect cue consisting of the partner's behaviour.

Let us consider some cases in which the explanation is successful. In some cases the partner accepts the explanation: i.e. she acts accordingly to the speaker's request or proposal, or accepts the given information (nodding, repeating, etc). In other occasions, the partner merely acknowledges the new information: that is, even if she does not agree with the explanation (she does not do what has been asked to or disagrees with the given explanation), her behaviour indicates that it has been taken into account.
In examples (11) and (12) the teacher satisfies the child's request and opens the tin. It is interesting to notice that the explanans that justifies the request does not have a merely polite purpose. Since this teacher usually encourages children to solve problems by themselves, Serena's explanans has the purpose of avoiding the teacher's refusal by rendering explicit in advance that she has already tried by herself.

We now turn to the analysis of two somewhat more complex examples.

(15) Each girl is doing a puzzle. Serena has just finished hers.

Serena: (to Carmela, who is still working on hers) *Facciamo cambio, Carme?*  
Wanna swap, Carme?

Carmela: ...  
(does not answer)

Silvia: (to Serena) *No/ faccio cambio con te*  
'No / I wanna swap with you.'

Serena: (to Silvia) *No / faccio cambio con lei. Dopo, dopo faccio cambio con te*  
'No / I'm gonna swap with her... Then you.'

Silvia: (to Serena) *Si, aspetta / che lei finisca, / vuoi che faccia un casino?*  
'O.K. Wait / she's still doing hers / You want her to make a mess of it?'

Serena: (approaches Carmela and helps her to finish. When a piece falls down, Serena picks it up).

A remarkable interlacing of explanations occurs during this sequence. First, Silvia refuses Serena's plan and justifies her refusal with her desire to exchange puzzles with Serena herself. But Serena in turn refuses Silvia's proposal and justifies this refusal by a
reaffirmation of her original plan. At this point Silvia accepts Serena's plan ('O.K.') but requires something ('wait'). She also justifies her request (Carmela has not finished yet) and she explains why it is necessary to wait for Carmela to finish (otherwise she will make a mess of it). In order to decide about Silvia's concern for Serena's inferential patterns we are interested in Serena's successive behaviour. She neither insists nor presses Carmela, but instead helps her to finish. In this way she shows that she has taken Silvia's explanation into account, which turns out to be successful.

(16) The girls are looking at a book. Carmela is slightly apart, while Serena complains to Silvia, who does not allow her to see the book because she is covering it with her arm. Serena first pushes Silvia saying

Serena (to Silvia) Non _vedo_ (Silvia does not move her arm).
'I can't see'
Non _vedo_!...Ti metto _un elastico_ , _veh! Ti metto un elastico qua._
'I can't see... I'll put a rubber band on you, ah! I'll put a rubber band here!'
Silvia: (ignores this)
Serena: _Io ti butto fuori dalla finestra_
'I'll throw you out the window.'
Silvia: _Ma c'è freddo.../Io non ci voglio andare. Apro la finestra e scappo dentro._
'But it is cold, / I don't want to go there. I'll open the window and run back inside.'
Serena: (pointing at Carmela) _Lei, lei..la buttiamo fuori dalla finestra_
'Let's throw her, her... out the window.'
In this example, Silvia's explanation (I don't want to go there because it's cold) is partially successful. It blocks Serena's plan (to throw Silvia out of the window) only concerning the object to which she tries to apply it. After Silvia's explanation, Serena tries to apply the same plan to a different partner, Carmela.

Another group of cases allows us to infer that the explanation has been accepted: when the partner imitates the behaviour of the speaker (17) or repeats the explanation, as a whole or in part (18) as a sign of agreement.

(17) Free play in the kitchen.

Silvia: (laughing, she cleans her hands on her apron) Adesso ci puliamo le mani /che sono così sporche

'Se now we are cleaning our hands / they are so dirty.'

Serena: (imitates Silvia, who looks at her).

(18) Serena and Carmela are sitting next to each other. The teacher places a puzzle on the table in front of Carmela. Carmela places it between herself and Serena, as a non-verbal suggestion to share the puzzle.

Serena: (to Carmela) No /questo è tuo

'No / this is yours.'

Carmela: Questo è mio. Ne vuoi un altro?

'This is mine. Do you want another one?'

Successful explanations, such as those illustrated by examples (15), (17) and (18) constitute the majority in our data.
A third way of inferring the success of an explanation is to see whether the same explanation is used by another partner in further interaction. Some such cases appear in our data, as when Carmela says to the teacher 'You open it/I can't', exactly reproducing Serena's explanation in example (11). These examples of "deferred imitation" are frequent in cases of explanations which regulate interaction, such as 'Wait/I haven't finished' or 'No (don't touch)/this is mine (yours)'.

It must be said that the evidence for checking whether or not essential condition 2 has been honoured is the weakest both in qualitative and quantitative terms. In about one third of the cases we are unable to decide whether this type of condition has been fulfilled, since these explanations are neither refused, nor questioned, nor accepted. It is therefore impossible to ascertain whether the given explanation seemed sensible to the partner.

Another means for ascertaining the explanatory success would be verifying whether the explanans refers to previously established rules and therefore to a shared conversational logic. From this point of view it is interesting to notice that the rules used in our subjects' explanations are frequently those characteristic of the kindergarten: sharing things, taking turns, etc.

3.2.3. Sincerity conditions

This condition states that the explainer must consider him/herself competent to give an explanation on a certain matter. We can explore how this condition is fulfilled in various ways, but mainly by analyzing what the explanation refers to. If it regards the speaker's own feelings, intentions, plans, capacities, and previous experience, then the speaker is obviously the most authoritative person on the matter. If, instead, the explanation regards other people or the physical world, then we can rely only on an indirect indicator: i.e. the fact that the partner accepts the speaker to give an explanation about a certain matter (a counterexample would be something like: 'Who do you think you are to speak about this?'). Almost all the explanations in our data refer to the speaker's intentions and plans. Only in two examples does the explanation
refer to external objects: in example (6) the speaker's authority derives from the fact that nobody else had wanted to take it (Silvia had asked the teacher and Serena for help several times, without receiving any); in example (15) the explanation refers to the partner's competence in accomplishing a certain task, and nobody questions the fact that the speaker gives an explanation about the matter. In the absence of formal criteria when we analyze explanations which do not refer to the speaker's own plans, intentions, and wishes the only possible cue is the fact that the authority of the speaker is not questioned.

In a certain way, our young subjects seem concerned about respecting sincerity conditions. In the following example Serena refuses to explain precisely because she is not able to honour such conditions:

(19) Serena and Silvia beat the table with their hands. Carmela imitates them.

Serena: (to Silvia) *Carmela vuole fare come noi*  
  'Carmela wants to do like us.'

Silvia: (to Serena) *Perchê?*  
  'Why?'

Serena: *Io non lo so*  
  'Don't know.'

Serena is explaining the meaning of Carmela's action, but she is not able to go further in the causal chain which would allow her to find a reason for this action. A descriptive explanation interprets the action by saying what the action means, but the explanation process stops at the first step because a reason for the action is not found.

From another point of view, the child seems to be aware in a certain way of the power derived from explaining. It is interesting to notice that, mainly during symbolic play, explanations acquire
the function of guiding partners' behaviour, and thus of contributing to accomplish or to maintain the speaker's leadership. In fact, the child who says 'we put on an apron/we are cooks' or 'now we'll make a pizza/let's get the salt' is guiding and organizing the game.

3.2.4. Affiliative conditions

This condition refers to the honouring of the social relation between speaker and listener. Here we observed whether the relation between partners was symmetrical (child-child) or not (child-adult). Then we evaluated the relative amount of explanations the child offered to each type of partner. We also explored whether the topic of these explanations varied according to the type of partner, in order to see whether, when addressing an adult (asymmetrical relationship), the child explained things about which she could consider herself particularly competent: situations in which the adult had not been present, on-going games or references to the speaker's own intentions and wishes. In our data, most of the explanations were addressed to other children, whereas only a few were addressed to the adult. When we analyzed the content of these latter explanations, we found that even this aspect is influenced by affiliative conditions. In fact, 7 out of 8 cases were justifications of requests for help deriving from the speaker's own wishes or difficulties. The other example was an explanation about a game situation in which the adult had not participated (example(17)). Therefore, we may say that not only did our subjects give few explanations to the adult, but they also limited such explanations to matters about which their "authority" was stronger than the adult's.

4. Conclusions

We interpret the act of explaining as a social act occurring in an interactional context. The conditions we described above constitute the set of rules governing its performance.
The qualitative analysis carried out, though based on a limited corpus of data, allows us to conclude that at three years children know how to explain (i.e. they master the conditions and ways required to give an explanation). We consider neoVygotskian frameworks to be the best tool for interpreting our results as a whole. NeoVygotskian theories stress the role of social interaction in the development of language and cognition (Bruner 1983), without denying, however, an active elaboration of the input from the environment on the part of the subject. Several considerations support this theoretical choice. The first one is that even very young children are able to give explanations in social interaction in a correct way. The second is the fact that our subjects use explanations mainly to justify speech acts of their own, such as requests and refusals. As a matter of fact, according to our data, children use explanations as instruments to influence and direct their partners' behaviour considerably more frequently than as a means to inquire about the world for the satisfaction of their own or others' cognitive requirements. Lastly, many of the explanations we analyzed regard the regulation of behaviour according to social rules, turns or the sharing of objects. If we accept the idea that the child explains what she knows best, what interests her most, and what serves her main goals, we may suppose that it is only later that explanations will become instruments for building up knowledge about the physical world. Therefore, we hypothesize that explanations are -in their origins- closely linked to human action, and to the intentions and plans of the individuals who are negotiating within interaction. As they grow older, children will be able to supply explanations about a wider range of objects and situations which will be increasingly farther away from the speaker's actions and viewpoints. The causal chain will become more complex and the capacity to take into account the partner's inferential patterns will sharpen. The skill in using verbal means will also progress.

The close bond between explanation and communication can help us understand why the pragmatic conditions of explaining are mastered so early. According to Hood and Bloom (1979) our subjects
were at the beginning of their explaining capacity. In our data, such requests for explanations were not often directed to children, and these requests that were made, were for the most part unanswered. Therefore, our interpretation relies mainly on the previous literature. Nevertheless, the children in this study were able to grasp the need for an explanation by using the very strong contextual cues which allowed them to give pertinent explanations. These contextual cues were not subtle signals of doubt but obvious mistakes, unpleasant actions that affected the speaker, and requests for help that involved the partner directly.

As a final discussion point, we want to consider the value we may attribute to each condition. Two of them, preparatory and essential conditions, are more important than the rest in making a given interactional move become an explanation. Preparatory and essential conditions are those more closely linked to the need for informative exchange (preparatory condition 1) and to its effectiveness (preparatory condition 2 and essential conditions 1 and 2). The fulfilment of sincerity and affiliative conditions, on the other hand, is not required in order to have an explanation. They are not binding conditions. However, they affect the partner’s judgement of the quality of the information being offered, and the politeness with which it is expressed. Nevertheless, all four conditions were taken into account, in different degrees, by the three-year old children we observed.
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