

## **MUTUAL UNDERSTANDING MECHANISM IN VERBAL EXCHANGES BETWEEN CARERS AND MULTIPLY-DISABLED YOUNG PEOPLE: AN INTERACTION STRUCTURE ANALYSIS**

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### **Abstract**

The present article describes a study in which conversation analysis was used to investigate the verbal interactions between carers and profoundly multiply disabled young people. We examine the cognitive processes that come into play in conversations, and describe and analyze the interactional effects of pathologies on the cognitive processes involved in comprehension. We identify the rationality and reasoning processes to which the disabled person is susceptible, that is to say, that person's cognitive efficiency, and the communication strategies employed by the "normal" interlocutor.

The corpus, which was gathered at a specialist institute in France, consists of video recordings of interactions between a multiply disabled young person and one or more carers. In total, thirteen conversations involving six different young people were recorded. Analysis of the characteristics of the conversational exchanges revealed that conversational exchanges are based on two very precise modes of interaction that foster the mutual understanding process.

Learning outcomes: These two modes of interaction represent exchange structures that favor the emergence of mutual understanding and that reveal the multiply disabled person's cognitive efficiency in the conversation. We highlight the role of repetition as a conversation repair and we discuss the relationship between the carer and the disabled person.

**Keywords:** Conversational pragmatic analysis; Disability; Mutual understanding; Intersubject dynamics; Repetition.

### **1. Introduction**

The pragmatic approach allows us to study the conditions under which language can be used; therefore, its field of application includes verbal interactions, which are generally observed in "natural" situations. A number of methodologies, some of which are based on the principles of ethnomethodology or, more specifically, on conversation analysis, have been developed for collecting and analyzing such conversations (Sachs 1966/1995; Edwards 1997). For example, Dowling (2007) shows how this type of analysis can be used in nursing research to provide a better understanding of the processes that come into play in conversations between a sick person and carers. Since Sacks, conversational analysis has been seen as a way of describing and analyzing verbal interactions based on transcription and a meticulous interpretation of utterances, silences and prosody. The method has been used to analyze conversations between nurses and parents of sick children, and between nurses and terminally ill people. Dowling (2007) stresses that these analyses reveal important information about the social relations that underlie

carer-disabled person interactions and about the representations that underlie these relations. She concludes that it is of prime importance for a methodology to take into account the fundamentally interactional aspect of a conversation.

The present article describes a study, based on the analysis of conversations, of the verbal interactions between carers and profoundly disabled young people. Our theoretical framework and our analysis technique differ from those used in the field of ethnomethodology, although we have retained certain principles of conversation analysis. We based our approach on the theory of speech acts (Searle 1969/1995; Searle & Vanderveken 1985; Vanderveken 2002), on a theory of articulation and discourse structure (Roulet et al. 1985) and on Interlocutory Logic (Trognon 2002) which takes into account the semantic properties of speech acts. The illocutionary and semantic properties of speech acts are strongly implicated in the ordinary sequential organization of conversation and contribute towards the conversational mechanism of mutual understanding. According to Trognon “the conversational mechanism of mutual understanding is made up of at least two speakers (L1 = first speaker and L2 = second speaker), and three speech turns: T1, T2 and T3” (2002: 128). The author considers that (T1, T2) forms an interpretation relationship in such a way that its second element, T2, enacts L2’s interpretation of the action performed by L1 in T1. He also considers that ((T1, T2), T3) forms an assessment relationship: As L2’s interpretation of T1 is available to L1 in T2, he can compare it with his own interpretation and enact a ratification, a reformulation, or another response.

The objectives of this research were also different to those of ethnomethodological studies in that our analysis of verbal interactions was not intended to reveal the social representations and significations shared by the speakers, but to investigate the cognitive processes that come into play in conversations, and more particularly, in the verbal interactions between a “normal” interlocutor and a person who is seen as suffering first and foremost from a language use pathology. We describe and analyze the interactional effects of these pathologies on the cognitive processes involved in comprehension, a term we use in the sense suggested by Sperber: “comprehension (or its pragmatic layer) is an inferential process, using as input the output of linguistic decoding and aiming at discovering the speaker’s meaning. Comprehension consists, therefore, in inferring a mental state (an intention of a specific kind) from behavior (an utterance)” (Sperber 2000: 129)

However, we believe that comprehension in verbal exchange is also strongly connected to the semantic properties of speech acts in conversation, most notably, the illocutionary point, preparatory conditions and sincerity conditions. Hence, inferring a mental state (an intention of a specific kind) from an utterance in conversation partially depends on mutual understanding, which partially depends on the accomplishment of the speech act’s properties. According to Searle and Vanderveken, “an illocutionary force can be divided into seven components: Namely an illocutionary point, a mode of achievement of this illocutionary point, the degree of strength of the illocutionary point, propositional content conditions, preparatory conditions, sincerity conditions, and the degree of strength of the sincerity conditions (1985: 36).

The analysis of this dynamic allows us to identify the rationality and reasoning processes to which the disabled person is susceptible, that is to say, the disabled person’s cognitive efficiency, and the communication strategies employed by the “normal” interlocutor when confronted with the need to rationalize the incongruities, inconsistencies and failures of the disabled person, in order to sustain the conversation

(see Musiol & Rebuschi (in press) for an analysis of verbal interactions with a schizophrenic person)

The pathological interactions examined during the present study were very specific in that all the participants had severe mental disabilities (they had a mental age of between 3 and 5 years), they all used wheelchairs and only two of them were capable of taking a few steps without a walking frame. In addition, they all had severe medical complications (epilepsy, severe headaches, heart failure). They showed varying degrees of verbal comprehension but all of them had great difficulty in expressing themselves, either verbally or non-verbally, because of their severe palsies. For these reasons, the young people's speech included a large number of indeterminate or ambiguous utterances. In addition, prosody could not be taken into account because, in most cases, the multiply disabled young people could not control their voices; their utterances were generally shouts. The interlocutor, in this case, the carer, had to employ communication strategies in order to, at the very least, maintain the relationship and, under certain conditions, to help the disabled person formulate, construct and sometimes even communicate his or her (possible) meaning. We wished to examine the rationality of this mutual understanding context by studying the organization of the conversational transactions between multiply disabled young people and their carers. We define mutual understanding as "the result of a negotiation process aimed at bringing the interlocutors to a joint and precise representation of their intentions of meaning and the interpretations they make of these intentions" (Musiol & Trognon 1999: 223)

After an initial global analysis of the corpus, we focus on the verbal interactions between one multiply disabled young person and her carers. The present study describes the structure of the exchanges and seeks to determine the type of dialogic configuration (taking into account components such as speech acts) that makes mutual understanding possible. We also show that two modes of interaction structure facilitate mutual understanding between interlocutors. One of these structures is based on a directive act initiated by the carer. This is by far the most common type of structure. The other, much rarer structure is based on an act initiated by the young person. The type of act is generally undetermined. The process of mutual understanding is furthered by the carer repeating the young person's ambiguous utterance. This repetition usually leads to the young person repeating the ambiguous utterance (and so on), until the carer initiates an inferential process that will finally allow mutual understanding. We show that the repetition of the ambiguous utterance by the carer signals to the young person that the initial utterance has not been understood but that the carer has recognized the young person's intention to communicate. This dialogue structure, based on successive repetitions of an ambiguous utterance, indicates a repetition-based repair strategy that has rarely been noted in the literature.

## **2. Presentation and analysis of the corpus**

The corpus was gathered at a specialist institute in France that cares for around 60 multiply disabled children and young people. The first stage in the research was a participatory observation period of several months, during which time it was noticed that only a minority of the young people were capable of communicating verbally. Similarly, we noted which situations were productive, that is to say, favorable to the development of verbal interaction. Six young people were seen to be capable of

accomplishing mutual understanding in a conversational exchange. Each of the chosen participants was recorded on video on several occasions when that person was interacting with one or more carers. The complete corpus contains thirteen conversations consisting of a total of 82 “transactions”, each of which was a more-or-less complex, organized and structured interchange based on congruent themes. All the transactions chosen for analysis included at least three speaking turns. The third speaking turn (and, in general, the subsequent speaking turns) was needed to determine or clarify the type of language act used to initiate the exchange. These transactions are sufficiently rich and developed to analyze the mutual understanding process. Following Clack (1996, 1999), they can be qualified “fully conversational” because they are like natural situations where language is used.

## ***2.1. Analysis of the structure of the exchanges in the global corpus***

Conversational configurations can be characterized according to which of the interlocutors was the initiator: Transactions initiated by the multiply disabled young person are termed self-initiated, those initiated by the carer are termed other-initiated. These configurations can also be classified in terms of the properties of the type of speech act employed, that is to say, assertive, directive, expressive, commissive or declarative (Searle & Vanderveken 1985). The five types of speech act reflect the relation the speaker establishes between the world and the propositional content of the utterance he or she produces. Only three types of speech act were used to initiate the transactions studied in the corpus: Assertive (the speaker describes the world), directive (the speaker asks the interlocutor to carry out a future action of any type) and expressive (the speaker expresses his or her psychological state(s))

### ***2.1.1. Transactions initiated by care staff***

Carers initiated 59 of the 82 transactions in our corpus (72%). Such a result for the carers’ behavior in conversational exchanges was expected. Although this exact subject has never been studied, our results can be compared with other studies of adult-child interactions. For example, the interlocutor behavior of adults confronted with children suffering from disorders has been studied, most notably by Pellegrini, Brody and Siegel (1985) who found that adults tend to talk more when they are addressing such children (compared with when they are addressing children who have developed “normally”), in the same way that adults talk more to very young children.

Of the 59 transactions initiated by the carers, 57 were initiated using a directive speech act, one by an assertive speech act and one by an expressive speech act. This result was more surprising but easy to interpret. According to Searle and Vanderveken (1985), directive speech acts aim to get other people to do things, whereas assertive speech acts say how things are. Furthermore, in conversation, a thought expressed via a directive speech act will most frequently be transparent because the speaker is attempting to persuade the hearer to carry out the course of action represented by the propositional content. Thus, it is almost enough to understand the syntactic-semantic signification of the utterance to understand the speaker’s intention. However, this is not the case for understanding an assertive illocutory speech act in conversation because,

most of the time, the propositional content of the utterance is distinct from the speaker's communicative intent. As a result, the hearer must make a much greater effort (in this case, cognitive) to understand the speaker's intent.

From the carers' point of view, transactions initiated by a directive act appear more likely to foster and stimulate an exchange. In addition, it is easy to verify whether or not the directive contained within such a speech act has been met: The speaker can check whether the interlocutor has carried out the request. The transactions are generally short: The person asks a question, the young person responds (or does not respond); the carer asks another question, etc. Transaction (1) is an example of this type of transaction during which the young person only needs to mobilize limited cognitive-linguistic resources.

(1): E is the multiply disabled young person, A is the carer

- A32 : *Et là c'week-end alors, qu'est-ce que tu vas faire?*  
'So, what are you going to do this weekend?'
- E33 : *J'ché pas*  
'Don't know'
- A34 : *T'as rien d'prévu ?*  
'Nothing planned?'
- E35 : *Non*  
'No'
- A36 : *Tu vas p'être aller t'prom'ner un p'tit peu ?*  
'Are you going to go for a bit of a walk?'
- E37 : *Non*  
'No'
- A38 : *Non*  
'No'
- E39 : *Non*  
'No'
- A40 : *Regarder la télé ?*  
'Watch TV?'
- E41 : *Oui*  
'Yes'

### 2.1.2. Transactions initiated by a multiply disabled young person

Of the 23 transactions initiated by the multiply disabled young people, 10 were initiated by a directive speech act (see Transaction (2)) and 13 by an assertive speech act (see Transaction (3)). It should be noted that, in most cases, the type of speech act can only be determined from a dialogic and cognitive-linguistic analysis (see paragraph 2.2.1).

(2): P is the multiply disabled young person, A is the carer

- P116 : *Fait quoi hie' ?*  
'What do yest?'
- A117 : *J'ai été cherché mon fils chez une copine*  
'I picked up my son from a friend's house'
- P118 : *[a] Comment s'appelle [a] copine ?*

- 'What [is the] friend called?'  
 A119 : *Elle s'appelle Monique*  
 'She's called Monique'  
 P120 : *Ahh ! (rire)*  
 'Ahh !' (laughter)  
 A121 : *Quoi, le copain, enfin la copine elle a pas l'droit d's'appeler Monique ?*  
 'What? His friend isn't allowed to be called Monique ?'  
 P122 : *Si*  
 'Yes'  
 A123 : *C'est l'fils qu'a pas l'droit d'avoir une copine ?*  
 'It's my son who shouldn't have a girlfriend?'  
 P124 : *[pi woi euh woi, ... woi fi, woi fi]*  
 '[pi woi euh woi, ... woi (girl), woi (girl)]'  
 A125 : *Une fille ? Oui, j'ai une fille, un garçon*  
 'A girl? Yes, I've got a girl and a boy'  
 P126 : *Oui*  
 'Yes'  
 A127 : *Tu sais comment elle s'appelle ?*  
 'Do you know what she is called?'  
 P128 : *Oui*  
 'Yes'  
 A129 : *Son nom*  
 'Her name'  
 P130 : *[incompréhensible]*  
 [incomprehensible]  
 A131a : *Voilà,*  
 'There,'  
 A131b : *et pis ?*  
 'and worse?'  
 P132 : *[Mac]*  
 '[Mac]'  
 A133 : *Ben voilà*  
 'There you are'  
 (...)

(3): I is the multiply disabled young person, A is the carer, P is the psychologist

- I59 : *[yé té kiné, kiné]*  
 '[yé té physio, physio]'  
 A60 : *Hier t'as été en kiné*  
 'Yesterday you had physio'  
 P61 : *T'es allée en kiné ?*  
 'Did you go to physio?'  
 A62 : *Qu'est-ce que t'as fait en kiné ?*  
 'What did you with the physio?'  
 I63 : *[gro tou, gro tou]*  
 '[lo wa, lo wa]'  
 A64 : *Un grand tour*  
 'A long walk'  
 I65 : *Oui*

- 'Yes'  
 P66 : *T'as fait un grand tour avec la kiné ?*  
 'You did a long walk with the physio?'  
 I67 : *Oui moi a [maché]*  
 'Yes me I [walk]'  
 A68 : *T'as marché, ah ! grand tour*  
 'You walked, oh! long walk'  
 I69 : *]grand tou'*  
 ']long wal'  
 A70 : *]un grand tour, t'as fait un grand tour*  
 ']a long walk; you did a long walk'  
 I71 : *Oui oui*  
 'Yes, yes'  
 (...)

### 2.1.3. First dialogic structure typical of exchanges between carers and multiply disabled young people

An analysis of the transactions according to whether they were self-initiated or other-initiated shows that most of the exchanges were initiated by the carers. An analysis of the type of speech act used to initiate the exchange (directive or assertive) highlights the fact that the young people's interlocutors generally used a directive type of speech act to initiate the transactions. However, when one of the multiply disabled young people initiated a transaction he or she was just as likely to use a directive speech act as an assertive speech act.

The first interactional structure used to foster the mutual understanding process is thus very simple: It consists of a directive type speech act on the part of the carer (see Transaction (1)). This type of dialogic situation seems to guarantee the carers the possibility of communicating with the young person. We can compare this result with Lacroix, Bernicot and Reilly's observations (2007) on the collaborative interactions between children suffering from Williams Syndrome and their mothers. They noted that the mothers produced directives that facilitated the carrying out of the act: Their illocutary form is unambiguous; therefore, the child had little "inferential work" to do in order to continue the exchange. In our corpus, the directive speech acts produced by the carers had the same characteristics.

However, a transaction that is other-initiated using a directive speech act requires less cognitive-conversational effort on the part of the multiply disabled person than a self-initiated transaction in which the disabled person, as the initiator of the exchange, is expected to regulate the transaction. The speaker must manage the hearer's interpretations of the speaker's intended meaning. In cognitive terms, this becomes even more costly when the speaker initiates the transaction by an assertive speech act. For these reasons, we paid particular attention to transactions initiated by the multiply disabled young people.

## **2.2. Analysis of self-initiated transactions**

Transactions initiated by the multiply disabled young people represent 28% of the whole corpus. These are the transactions that most commonly include ambiguities. The young person's interlocutor cannot always determine the signification of the speech act at the beginning of the exchange. Nevertheless, these are the transactions that interest us most, as the multiply disabled person is in a situation where he or she can control the flow of the transaction by making greater demands on his or her cognitive or cognitive-linguistic resources. Hence, it is assumed that the disabled person cognitively represents an intention to communicate when he or she initiates the exchange. But, the disabled person is also assumed to represent the hypothesis according to which the interlocutor attributes meaning to the intention to communicate in order to contribute to the flow of the conversational transaction. In the case of an other-initiated exchange, the interlocutor reacts to the contribution of the locutor using less costly or automatic resources. For these reasons, we centered our analysis on the exchanges initiated by the multiply disabled young people.

Only three of the six multiply disabled young people initiated transactions. We have chosen to present the case of Laure. She's 18 years old; Laure's diagnosis showed an encephalopathy due to prematurity. She uses a wheelchair, but she is capable of walking with a rollator. Her current mental age, evaluated using Terman-Merrill, is around three to three and a half. We are interested in Laure because when she initiates a transaction with one of her carers the signification of her utterances is highly indeterminate at the first speaking turn.

The illocution that structures the intervention initiative of a pathological verbal interaction may contain three types of indetermination: Indetermination of the illocutionary point, indetermination of the meaning intention and indetermination of the propositional content or of the logical form of the proposition. In certain cases, a single illocution can include all three types of indetermination.

In the interactions between Laure and her carers, the indetermination concerns the illocutionary point of her utterance, and as a result, her communicative intention. When Laure uses an ambiguous speech act to initiate a conversational transaction, her communicative intention may or may not be recognized by her interlocutor. The dialogic and cognitive-linguistic analysis shows the outcome of this communicative intention as the transaction proceeds. When the interlocutor recognizes Laure's objective, we can identify the structure and conversational dynamic that facilitate the emergence of the mutual understanding process. When the interlocutor does not recognize Laure's objective, we can only note the lack of success of the exchange and its corollary, the failure of the mutual understanding process.

### *2.2.1. Dialogic and cognitive-linguistic analysis of a transaction that fosters successful mutual understanding*

We used a dialogic and cognitive-conversational approach to carry out a detailed analysis of the mutual understanding mechanism that structures transaction (4). As in almost every case in the present study, Laure's gestures are random; therefore, they are of no help to the carer. Similarly, the mimics and looks emitted by Laure are not expressive enough to allow the interlocutor to interpret them.

(4): L is the multiply disabled young person, E is the carer

- L1 : *Vélo*  
       ‘Bicycle’  
 E2 : *Vélo*  
       ‘Bicycle’  
 L3 : *Vélo*  
       ‘Bicycle’  
 E4a : *Oui,*  
       ‘Yes,’  
 E4b : *alors*  
       ‘so’  
 E4c : *Tu crois que tu peux y aller dessus ?*  
       ‘Do you think you can get on it?’  
 L5 : *[a] dessus ?*  
       ‘[a] On?’  
 E6 : *Tu veux aller dessus ?*  
       ‘Do you want to get on it?’  
 L7 : *Ouais*  
       ‘Yeah’  
 E8a : *Oui,*  
       ‘Yes,’  
 E8b : *comment on va faire alors ?*  
       ‘how do you do it, then?’  
 (...)

The signification of the disabled person’s speech act in L1 is indeterminate. From an illocutory point of view, this act can consist a priori (and thus from the point of view of the carer) of either an assertion or a directive, that is to say, a request (indirect or otherwise). The illocutory and propositional aspects of the “assertive” and “directive” illocutionary points are both compatible with the logical form of the utterance produced in L1. Therefore, the utterance of the word “bicycle” can signify, at the very least, “I have ridden a bicycle” (assertion), or “I’d like to ride a bicycle” or “I am asking you to help me ride a bicycle” (more or less indirect request, hence a directive speech act).

The repetition of the illocution “bicycle” in E2 confirms L1 in the dialogue. From a meta-communicational point of view, the carer is informing Laure that she realizes that Laure wants to express something. However, by just repeating the illocution, the carer also shows Laure that her utterance was not informative enough to allow the carer to venture an intelligible hypothesis about Laure’s communicative intention. She indicates that she cannot understand the signification of the initial illocution.

The dialogue continues by reiteration (in L3) of the repetition accomplished at the previous speaking turn (E2). This dynamic allows the disabled person to make her allocutor understand that there was a precise meaning intention but that she is unable to express it explicitly or make it understandable without help.

From the carer’s point of view, we move from a world in which Laure may have the intention of signifying something to a world in which Laure expresses something (even if it remains indeterminate), which the carer signifies with the word yes in E4a.

The carer is now in a position to start the inferential process. In E4 and E6 she questions the contextual presuppositions that may justify the carer’s illocution. This

dialogic strategy involves venturing a hypothesis concerning the now plausible intended meaning underlying the illocution that the disabled person expressed in L1 and repeated in L3. These contextual presuppositions are expressed vaguely under the propositional form “do you think you can get on it” and “do you want to get on it” in E4 and E6. Thus, this dialogic strategy, which maintains a structurally simple form of exchange, consists of attributing the disabled person’s initial illocution with a directive type of illocutory strength. At this stage of the conversation, Laure is in a position, from a meta-communicational point of view, to produce the hypothesis that the carer attributes her with the intention of making a demand, in this case to help her get on a bicycle.

In fact, it appears that, in context, the carer’s intervention in E4 (and thus at the following speaking turn) satisfies interactional constraints of thematic, illocutory or another type that an intervention would *normally* satisfy in the progression and that, in this case, L3 or L1 imposes. The carer’s intervention also presupposes the preparatory conditions (in E4) and sincerity (in E6) of a potential speech act of directive type. In illocutory logic, the directive force contains the preparatory condition that the interlocutor is capable of accomplishing this action and the sincerity condition that the speaker desires or wishes the interlocutor to accomplish this action (Vanderveken 1988). The carer is led to ask two questions (in E4 and E6) that query the potentially directive rationality of L1 and L3.

The sincerity condition is satisfied directly. By accomplishing the illocution “do you want to get on it?”, in E6, the carer informs the disabled person that she believes the disabled person wants to get on the bicycle. The preparatory condition is realized indirectly, as, supposing one of the two communicators believes that the disabled person is incapable of getting on a bicycle unaided, the utterance in E4 presupposes that the allocutor is able to help (for example, physically) the disabled person overcome his or her handicap. It is notable that the E4 utterance retroactively attributes the young person with the belief that she is incapable of getting on the bicycle unaided. Moreover, the illocution in E4 is conversationally pertinent because it corresponds indirectly to a proposal of help (in line with the supposed wish of the young person).

In L7 Laure starts a reactive process of ratifying the hypotheses previously articulated by the carer. In other terms, she validates the general interpretative hypothesis of “directive” type that the carer proposes by confirmation (“yeah”), which, in addition, results in the definitive elimination of the “assertive” alternative.

We note that the mutual understanding process is accomplished progressively on the basis of the use of the logical properties of a directive type speech act and on the basis of the tacit negotiation of the signification of the contextual presuppositions that are associated with it in the progression of the conversational sequence. Laure is helped to make herself understood in an inter-subjective game where she circumvents her cognitive or speech handicap by drawing on her language skills (examined in our analysis in the light of the theory of illocutory acts (Searle, 1969/1972; Searle & Vanderveken, 1985) and its dialogical interpretation) and on her conversational skills.

Thus, the dialogic and cognitive-linguistic analysis removes the indetermination that characterizes the initiating act of the transaction. Furthermore, it reveals the central role played by the successive-repetition process in the dialogical accomplishment mechanism of mutual understanding, in particular those processes initiated by the interlocutor at the second speaking turn.

### 2.2.2. Second dialogic structure typical of exchanges between carers and multiply disabled young people: Successive repetitions as repair

Analysis of the other transactions initiated by Laure reveals the same characteristic structures. Transaction (5) is an example. This time, the initiating act is an assertive speech act, and the same process of repetition favors the emergence of mutual understanding between Laure and her interlocutor.

(5): L is the multiply disabled young person, I is the psychologist, X is the carer

- L18 : *Quick !*  
'Quick!'
- I19 : *Oui, Quick*  
'Yes, Quick'
- L20 : *Quick !*  
'Quick!'
- I21 : *Quick*  
'Quick'
- L22 : *Quick !*  
'Quick!'
- I23 : *T'as été au... [inaudible]*  
'You were... [inaudible]'
- L24 : *] Ballon ! Ballon ! (regarde en l'air)*  
'] Balloon! Balloon! (looking up)'
- I25 : *T'as eu des ballons ?*  
'You had balloons?'
- L26 : *Ballon ! (en criant) Hier*  
'Balloon! (shouting) Yesterday'
- X27 : *Ouais, elle a eu des ballons*  
'Yeah, she had balloons'
- I28 : *Elle a eu des ballons c'est ça ? (s'adressant à X)*  
'She had balloons, is that it? (talking to X)'
- X29 : *Oui elle a eu des ballons*  
'Yes, she had balloons'
- L30 : *Hier ballon ... hier... hier... Quick...*  
'Yesterday balloon... yesterday... yesterday... Quick...'
- (...)

Conversely, the analysis of transactions in which the act that initiated the exchange was not repeated does not in any way allow us to conclude the emergence of mutual understanding. Transaction (6) is an example.

(6): L is the multiply disabled young person, K is the physiotherapist, I is the trainee psychologist

- L73 : *Il est où l'ballon ? ... il est où l'ballon ? (en s'adressant à la kiné)*  
'Where is the balloon? ... where is the balloon? (talking to the physio)'
- K74 : *Allez, on va marcher un p'tit peu avec moi ?*  
'Come on, let's go for a little walk?'
- L75 : *Il est où l'ballon ? il est où l'ballon ?*  
'Where is the balloon? where is the balloon?'

- K76 : *Ben, j'sais pas où il est l'ballon moi !*  
 'Er, I don't know where the balloon is!'
- L77 : *Il est là*  
 'Its there'
- K78a : *Il est là,*  
 'Its there,'
- K78b : *t'as eu un ballon ?*  
 'did you have a balloon?'
- L79 : *Il est là l'ballon*  
 'The balloon's there'
- I80 : *Où ça ?*  
 'Where?'
- L81 : *Il est où l'ballon ?*  
 'Where's the balloon?'
- (...)

Hence, the corpus contains a second type of dialogic structure that favors the emergence of mutual understanding. This structure is composed of a speech act initiated by the multiply disabled young person, followed by a repetition of that utterance by the carer. In the examples given above, this repetition is also repeated during subsequent speaking turns.

### 3. Discussion

The analyses presented above show that conversational exchanges between multiply disabled young people and carers are based on two very precise modes of interaction. In the first case, the exchange is initiated by a member of the carer staff via the accomplishment of a directive speech act. This utterance, which is always clear and unequivocal, calls upon the young person's communicational resources and immediately places him or her in the position of interlocutor. The second model shows the accomplishment of an assertive or directive speech act initiated by the young person, and reiterated by the carer. An analysis of the literature allows us to affirm that these models are minimum models; other more complex interaction models (involving other types of speech acts and other communication strategies) can be established between multiply disabled young people and carers. Nevertheless, these two models, which are applied almost systematically by carers as a result of their "charitable" dialogic attitude, represent exchange structures that favor the emergence of mutual understanding and that reveal the multiply disabled person's cognitive efficiency in the conversation.

As well as observing interlocutory structures that facilitate mutual understanding between speakers, one of which has mental disabilities, the present study allowed us to investigate three themes: The dialogical relationship between carers and disabled people, the cognitive efficiency of disabled people, and the role of repetition in conversation repair.

Studies based on the analyses of corpora consisting of exchanges between carers and/or friends and relatives, and people suffering from communication and speech disorders show that disabled people are not always considered as active co-participants. Carers' representations of disabled people appear in the way they address disabled

interlocutors and how they manage the conversation. This can have consequences for the integrity of the disabled person.

In a study carried out by Antaki, Young and Finlay (2002), carers had to interview people with learning disabilities about their perception of service quality. The carers failed to respect the neutrality demanded by the completion of a standardized questionnaire in that they frequently adapted the content of the questions. As a result, the interviews were not valid: A consequence that is relatively trivial compared with the consequences of other types of behavior. For example, Jingree, Finlay & Antaki (2006) described the interactional dynamic implemented by carers during discussion groups with people with learning disabilities. This dynamic discouraged the subjects from expressing and describing the difficulties they had, and from coming up with a solution. This is contrary to the objective of encouraging residents to discuss and make decisions about their environment. In the same institutional setting, the authors described the guidance styles used by care staff, which consisted of bypassing the participants' contribution by reducing the number of possible alternatives, putting forward their own propositions for resolving problems and deciding which remedial actions to take (Antaki, Finlay, Sheridan, Jingree & Walton, 2006). During another discussion group involving the same participants, Antaki, Finlay & Walton (2007) revealed serious infractions of the participants' rights. Although the people with learning disabilities were supposed to talk about their relations with others, the conversation gradually changed from soliciting information to giving instructions. The care staff controlled the interactions and judged whether or not the speech acts were adequate, thereby showing that they did not feel the participants were capable of judging their own relationships. Nevertheless, the objective of this series of studies was not to criticize the interactional behavior of the care staff, but to show how the conflict between official policy and actual social practice can adversely affect a disabled person's identity.

In a series of studies of aphasic people, Goodwin (2003a) describes the repair strategies wives of aphasic people use to ensure their husbands retain their positions as conversation leaders. These strategies involve waiting until the husband asks for help finding the right word, proposing an option using a questioning tone, and the husband repeating the proposed word, thereby proving that he is capable of saying the right word. The wives also used numerous alternative guess sequences. On the other hand, Goodwin (2003a) cites a study by Perkins (1995) analyzing verbal interactions during which the interlocutors of people suffering from aphasia refuse to do the work needed to determine what the aphasic person wants to say. In this case, the abilities of the person suffering from the language disorder are not recognized.

In the present corpus, we saw that the carers used conversational structures that favor the multiply disabled young people's status as interlocutors. By initiating transactions with a directive act, the carers immediately position the young people in a communication space, and limit the cognitive effort needed to continue the exchange. When a young person initiates a transaction with an ambiguous speech act, the hearers implement a repair strategy that, in certain cases, leads to the removal of the ambiguity. This is what we call their "charitable" dialogic attitude.

The analyses presented here show that the young people wanted to make themselves understood, and that they were capable of using strategies to achieve this goal. This conclusion is supported by the fact that they sometimes initiated transactions, and that they participated (consciously or not) in removing any ambiguity in their initiating speech act. In fact, we observed that repetition of the ambiguous speech act by

the carer was followed by the repetition of that illocution by the young person. We could not determine whether this was repetition of the carer's speech act or self-repetition of the initial illocution. Whatever the case, the young person used this turn-taking repetition-of-repetition mechanism to participate in the building of mutual understanding. For example, Laure helped maintain the ambiguity, whereas, she could have responded with a "yes" or a "no" (see Transaction 3, I65), as would occur in the case of linguistic repair.

The literature provides other examples of how people suffering from communication disorders express their cognitive efficiency. In Goodwin's articles on an aphasic person called Chil (2003a, 2003b, 2004, 2006, and Goodwin, Goodwin & Olsher 2002), the author describes how Chil makes himself understood through a small number of words, gestures, mimes and prosody. Brinton and Fujiki (1996) described the way older people and young adults with mental retardation react to requests for clarification. All the participants showed a real capacity for responding to their interlocutor's requests for clarification and they were motivated to successfully provide this clarification. Similarly, Perkins (1998) cited cases of the speaker trying to be more explicit by including "more redundancy and repetition" when it is obvious that mutual understanding is not occurring, for example, when the interlocutor has a poor short-term memory or an inadequate "theory of mind". Multiply disabled young people do not have the luxury of being able to use such a wide variety of clues. However, despite the limitations of their oral language skills, they show they are still capable of communicating.

Conversation repairs are usually presented in terms of four possible ways of resolving ambiguity: Self- or other-initiated and self- or other-repair. Repetition as a conversation repair has been widely studied, especially self-repetition (Schegloff, Jefferson & Sachs 1977; Clark & Wasow 1998; Curl, Local & Walker 2006; Rieger 2003). The other forms of repetition have frequently been studied as part of research into language development (Chouinard & Clark 2003) or into verbal interactions between an adult and a child suffering from a disorder such as dysphasia (Vigil, Hodges & Kle 2005; Yont, Hewitt, & Micci 2002; Keith, Welsh, Camarata, Butkovsky & Camarata 1995).

In the present study, we describe a specific dialogic structure based on the repetition by a carer of an ambiguous utterance; in other words, a type of repetition that is other-initiated. The characterization of the type of repetition that we observed cannot be further defined using the classic descriptions found in the literature. In fact, it was neither self-repaired or other-repaired, as it was not the repetition of the speech act by the carer that removed the ambiguity, nor was it the second repetition by the multiply disabled young person.

However, we can relate this type of repetition to the pragmatic functions of repetition that were drawn up by Perrin, Deshaies and Paradis (2003) as discourse-structure markers (Roulet et al. 1985). The authors consider that local diaphonic repetitions have four possible functions: "taking into account" (shows that the interlocutor's speech act has been heard and interpreted: The interlocutor is encouraged to continue with his/her speaking turn); "confirmation request" (indicates a problem relating to what the interlocutor said and opens a subordinate exchange); "positive reply" (expresses agreement: By reproducing the utterance, the speaker notes his/her agreement; it contributes to closing the exchange by signaling the success of the negotiation); or "negative reply" (indicates disagreement: It postpones the closure of the

exchange, either by acknowledging it, by cutting it or by introducing an element of controversy). Analysis of corpora shows that a repetition cannot be identified as satisfactory if it only involves the “taking into account” function. This function must be associated with one of the other three functions. However, the type of repetition described in the present study does not correspond exactly to the basic “taking into account” function, or to any of the other three functions. In fact, the dialogic and cognitive-linguistic analysis showed that the repetition of the utterance by the carer signified to the young person that his/her utterance had been heard but not interpreted (unlike for the “taking into account” function). This repetition encouraged the young person to continue the exchange (as for the “taking into account” function) but the ambiguity had not been resolved. When the young person in turn repeated the ambiguous utterance, the carer behaved as if the young person was indicating that he/she was not able to carry out a self-repair and was leaving this task to the carer.

This type of conversation repair, observed in verbal interactions between a multiply disabled young person and his/her interlocutor, is different to the exchanges described in the literature. However, it cannot be considered a new function of repetition, rather it is a minimal function (falling short of the “taking into account” function) that facilitates the emergence of the mutual understanding process during conversations between carers and severely disabled young people. This minimal function creates an interlocutory repair structure dynamic that is more complex than classic repetition, thereby supporting Goodwin’s (2003a: 8) assertion that “repairs become much more elaborate when one participant suffers from language impairment”.

The clinical value of the present study is two-fold: Rather than emphasizing the problems and failures of multiply disabled young people, it shows their efficiency in certain cases of interaction and it provides a potential starting point for developing strategies for clinical care or for engaging with people with disabilities during conversations, taking into account their different pathologies.

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