

A SYSTEMIC FUNCTIONAL APPROACH TO MISUNDERSTANDINGS

Shoshana Dreyfus
University of Wollongong

Abstract

A great deal of theory and analysis of conversation has concerned itself with miscommunications and misunderstandings, due in part, perhaps, to linguists' excitement about ambiguity in language (see for example Schegloff, Jefferson et al. 1977; Schegloff 1992; Dascal 1999; Weigand 1999; Weizman 1999; Wong 2000; Hinnenkamp 2003). Apart from the community of Systemic Functional (SF) theorists who have a particular interest in language disorder/difference (for example Armstrong 1991; Togher, Hand et al. 1997a; Togher, Hand et al. 1997b; Ferguson 1998a; Togher 1998a; Ferguson 1998b; Togher 1998b; Ferguson 1998c; Togher, Hand et al. 1999a; Togher 2000; Armstrong 2001; Armstrong 2005), the field of SFL has not had a lot to say about misunderstandings. Reporting on a case study of the nonverbal multimodal communication of a child with a severe intellectual disability, this paper shows how the SF model can be used to explore and classify the misunderstandings that occurred between the child and his communication partners. While the child's communication differences are peculiar to him, it is argued that SF theory, in particular the notions of metafunction and move, can not only illuminate his particular problems but also provide another way of classifying misunderstandings in the wider population.

1 Introduction

I recently borrowed a friend's car and took the opportunity, while driving it, to listen to some of her CDs. When discussing music at some later date, I told her that I had found a particular CD boring, and we had what I thought was quite a rational discussion about what made music interesting to each of us. At another later date, during a discussion with other people, this same friend reported that I had said she had boring taste in music, which I do not recall saying at all. What started out in my mind as a discussion using the Appraisal resource of Appreciation, where both of us were evaluating music, had somehow, in her mind, turned into the evaluation of her, where she perceived me to be negatively appreciating her, and not the music. The possibility of using Systemic Functional theory to explore and classify misunderstandings has great potential. Had it not been for the theoretical framework of Appraisal, it would have been a less than straightforward process explaining the misunderstanding that occurred between us. In this paper, whilst not using the Appraisal system, I nevertheless use other facets of Systemic Functional theory to describe and classify a different range of misunderstandings.

The misunderstandings described in this paper come from the PhD study of a boy (my son) named Bodhi, who has a severe intellectual disability and severe communication impairment. Whilst he is basically nonverbal, he is nevertheless very communicative, using a range of modes of expression other than the verbal to communicate. What became evident during the study was that there is a high incidence of misunderstandings between Bodhi and his communication partners, particularly amongst those who do not know him well, but even among those who do know him well, such as his family. That is to say, it is the communication partners who misunderstand Bodhi, and not the reverse.

In much of the Augmentative and Alternative Communication (AAC)¹ and misunderstanding literature, misunderstandings come under the category of repair (see for example Schegloff, Jefferson et al. 1977; Paul and Cohen 1984; Brinton, Fujiki et al. 1986; Schegloff 1987a; Schegloff 1987b; Brady, McLean et al. 1995; Levy, Tennebaum et al. 2003). Repairing

¹ The field of Augmentative and Alternative Communication (AAC) is primarily made up of researchers and clinicians who both study and work with people with communication disorders.

communicative breakdowns is seen as a critical skill for people with severe intellectual disabilities because their communication is often highly ambiguous. This ambiguity can often lead to misunderstandings that can cause frustration and aggressive behaviour on the part of the people with disabilities (Carr and Durand 1985; Brady, McLean et al. 1995). Whilst repairing breakdowns may be critical, studies have also shown that people with intellectual disabilities repair less often than their non-disabled peers (Brinton, Fujiki et al. 1986; Brady, McLean et al. 1995). While both bodies of literature have had misunderstandings within their range of focus, neither provides a kind of classification system that is able to account adequately for the misunderstandings that occur with Bodhi. Classifications of misunderstandings in the literature were according to structural rather than content factors, such as whereabouts in the turn-taking the misunderstanding occurred (see for example Schegloff 1992; Wong 2000). However, there seem to be no classifications of the sorts of misunderstanding that can describe what is actually occurring within the misunderstood move, that is to say, in experiential or interpersonal terms. In order to assist Bodhi in successful communication, understanding exactly what kinds of misunderstandings were occurring with him, so that we could attempt to prevent their recurrence seemed to be of utmost importance.

In the field of Systemic Functional Linguistics there has been no work to date that systematically classifies misunderstandings from a SF point of view. However, within this study, it became evident that the SF perspective would be useful in the classification of the different kinds of misunderstandings that occurred with Bodhi. The aspects of SFL theory that were used to classify these misunderstandings were metafunction (from Halliday 1984; Halliday 1994; Halliday 1996 and elsewhere) and move, from exchange structure analysis (Coulthard and Brazil 1979; Coulthard and Montgomery 1981; Berry 1981a; Berry 1981b; Berry 1981c; Ventola 1987; Ventola 1988; Martin 1992).

Metafunction is a term coined by Halliday (1984; 1994; 1996 and elsewhere) to describe the three different but simultaneous ways that language makes meaning. Through the ideational metafunction we represent the world around us. Through the interpersonal metafunction we enact social and interactional roles. Through the textual metafunction we organize language into coherent texts. It is within the experiential and interpersonal metafunctions that misunderstandings that occur with Bodhi can be located.

If we examine conversational interactions above the level of the clause, one method of description is in terms of exchanges. Exchanges are constituted by a number of moves (for a full description of moves see Berry 1981a; Ventola 1987; Martin 1992; Dreyfus 2006). Moves correspond with speech function at the rank of clause. In Bodhi's case, each of his communicative turns consisted of only one move. As will be seen below, communication partners misunderstood the type of move Bodhi was making; that is to say, they misunderstood the speech function of the move.

2 Causes of misunderstandings of Bodhi's communication

Misunderstandings occur frequently with Bodhi for a number of reasons. These are outlined briefly and then in more detail below. Firstly, Bodhi's frequent use of the same modes of expression to mean different speech functions causes confusion. In other words, his communication is undifferentiated and therefore ambiguous – while *he* may mean different things, he expresses different meanings in similar ways. In addition to this, he has an idiosyncratic move combining two speech functions that is not recognized by uninformed communication partners. Thirdly, because he is nonverbal, and because he has a severe intellectual disability that prevents him from using more sophisticated communication devices, he has a paucity of ways of expressing his experiential meanings, and generally communicates only one experiential item per move. These will be dealt with in turn, following a brief introduction to the modes of expression that Bodhi does use to communicate.

Bodhi's modes of expression include vocalizations (mostly nonverbal sounds and a few word approximations); gestures (including deictic gestures such as pointing, and signs from Bodhi's

own version of sign language); materials (including actual objects, photos and picture symbols); actions (such as taking someone by the hand and leading them somewhere); and behaviours (such as lying on the floor kicking doors). Figure 1 represents Bodhi's modes of expression systemically:

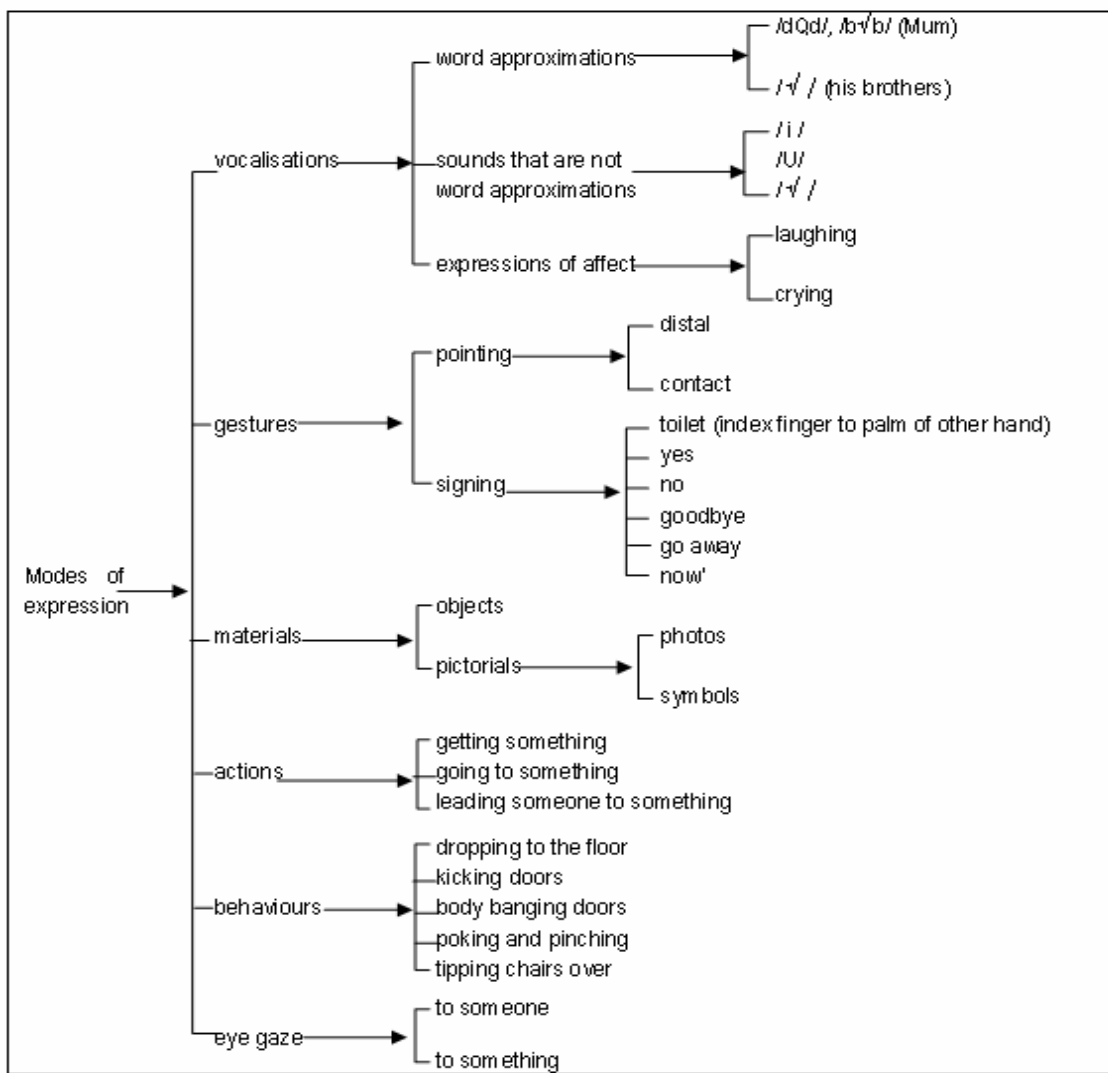


Figure 1: Bodhi's modes of expression

While I have separated the modes of expression in order to understand how Bodhi expresses his meanings, he invariably communicates using more than one mode at a time. This can be seen in the following example where Bodhi is asking his father Mark where they are going when they are in the car:

Example 1

Bodhi: /i / (grabs Mark's sleeve)

Mark: We're going to Wollongong, to the chemist shop, to get your medicine

In this example Bodhi uses the mode of vocalisation plus an action of grabbing the driver's sleeve to ask where they are going. The sound /i/ that is used by Bodhi in Example 1 is a sound that he uses much of the time, especially when he initiates an interaction.

In terms of speech function, Bodhi uses the same sound and tone to realise a number of different speech functions. However, before discussing this in detail, it is essential to explore Bodhi's idiosyncratic move which involves his combination of two speech functions. This is a move that causes confusion for communication partners, but it helps explain why Bodhi uses the same sound and tone to express a variety of speech functions.

Bodhi's idiosyncratic move occurs when he initiates an interaction to give information. That is to say, whilst giving information, Bodhi simultaneously demands the communication partner verbally articulate that information back to him. If the communication partner does not respond in this manner, Bodhi replays the move until they do. This can be seen in the following example where Bodhi is doing a jigsaw puzzle with his grandmother Dodo. In this exchange, Bodhi has picked up a piece of the puzzle and is pointing to the piece whilst saying /i/i/ with a rising tone (tone 2):

Example 2

Bodhi: /2 i /2 i / (holding and contact pointing² the blue truck piece of the puzzle)

Dodo: You show me where that one goes.

Bodhi: /2 i / (continues to hold and point)

Dodo: That's the blue truck

Bodhi: (puts piece in)

At the start of this exchange, Dodo does not understand that verbal articulation of Bodhi's multimodal move is required, and instead she issues a command for him to put the piece of the puzzle in its spot. However, Bodhi replays his move, signaling her misunderstanding. In her second turn, Dodo articulates his multimodal move. He shows his satisfaction with her response by moving on and placing the piece of the puzzle in its spot.

Bodhi's initiating move from Example 2 combines the two speech functions of giving information and demanding a service of articulation of that information. I have called this move the dual move (see Dreyfus 2006). The dual move causes confusion for uninformed communication partners who do not realise that Bodhi wants them to perform a service of articulation of the information he has multimodally given. In particular, it is the demand part of the move that causes the confusion, as every time Bodhi makes a demand move, regardless of whether it is a demand for information, ordinary goods-&-services, or the specialized linguistic service of articulation, he generally uses the same sound and tone - /i/ on a rising tone (either tone 2 or tone 5³). For example, to communicate *a desire* go somewhere, or to inform that he is *in the process of* going somewhere, and to ask whether he *can* go somewhere, Bodhi uses the same sound, tone and sign or picture. It is incumbent upon the communication partner to differentiate the kinds of move. As a result, there are misunderstandings of an interpersonal nature in communication with Bodhi. The example that best captures this is when a new carer came to take him out to do his favourite activity of riding up and down escalators. The carer reported that on the way to the escalators Bodhi pointed to the escalator picture numerous times whilst saying /i/i/. The carer interpreted this move as a demand for information or action and responded by telling him that they were going to the escalators. However, when they got there, Bodhi still pointed to the escalator picture. This caused confusion because the carer did not understand why he was still pointing to the picture (and saying /i/i/) when they were already there. The reason, of course, is that he was using the same modes of expression to ask for information (or confirmation) as he uses to give information.

The second reason for frequent misunderstandings with Bodhi is due to his expression of only one experiential item per move, which leaves the communication partner to work out the rest of the experiential meaning from the context. This can be seen in the example below where Bodhi and his father Mark are traveling in the car to the shops when Bodhi signs 'toilet', whilst saying /i/i/. 'Toilet' is the only experiential meaning Bodhi expresses, however being Bodhi's father, Mark is a most informed communication partner who knows Bodhi's likes and dislikes, and also understands that he is asking whether he can *flush* the toilet rather than *use* the toilet in the more conventional sense.

Example 3

Bodhi: /2 i /2 i / (signs toilet)

Mark: Toilet, um yeah, you can play, flush the toilet when you come home, when

² Contact pointing is pointing to something via touch. Distal pointing is pointing without touch.

³ For a full discussion of the different tones used in spoken English, see Halliday, M. A. K. (1994)

we go home. Not at the chemist shop. There's no toilet at the chemist shop.

Unlike Mark, however, other communication partners are not so well informed, and other situations are not so straightforward that one can easily work out the rest of the experiential meaning. Consequently, there are often misunderstandings of an experiential nature with Bodhi.

Even though he mostly expresses only one experiential meaning per move, Bodhi is very particular about exactly what the experiential meaning of the whole move is, and replays his move until the communication partner gets the experiential meaning right. This can be seen in the example below, where Bodhi is eating breakfast with his grandmother Dodo when he points to his bowl and says /i/, to tell her something about the bowl.

Example 4

Bodhi: /5 i/ (contact pointing the bowl)
Dodo: That's a lovely bowl, isn't it?
Bodhi: /2 i / (contact pointing the bowl)
Dodo: That's your bowl, yes.
Bodhi: /2 i hi-hi /2 i hi-hi /2 i hi /2 i / (contact pointing bowl)
Dodo: Yes. D'you like that bowl?
Bodhi: /√h-h√h/ (giggle)

In this example, Dodo has understood the demand for verbal articulation of Bodhi's multimodal move, however she has not understood exactly what the experiential meaning of that move is. As Bodhi has only communicated the one experiential item of the bowl, via contact pointing, Dodo must guess the rest of the meaning. However, in expressing one experiential meaning, even the exact nature of *that* experiential item is unclear. As Dodo initially guesses, Bodhi could be saying that it is a lovely bowl, making 'bowl' the Attribute in a relational type move; or he could be saying that it is *his* bowl, making 'bowl' the possessed Attribute in a possessive type move. However, as she guesses in her third go, he is telling her he *likes* the bowl, making 'bowl' the Phenomenon in a mental: emotion type move. In all cases, the only thing that is in any way clear is that Bodhi is expressing the ergative element of Range, which is the non-nuclear participant. In other words, Dodo knows he is trying to tell her something about the bowl, but she is unsure what that is.

The two categories of interpersonal and experiential meaning provide the basis for the classification of the misunderstandings in this data set. Each category has finer levels of delicacy which are discussed below, beginning with experiential meaning.

3 Experiential misunderstandings

Misunderstandings with Bodhi of an experiential nature are divided into complete and partial. Complete misunderstanding of experiential meaning is where the communication partner misunderstands all of the experiential content of Bodhi's move. This can be seen in the example below where Bodhi has been eating breakfast with his father, Mark, and brings his unfinished breakfast bowl to me in the kitchen:

Example 5

Bodhi: (puts bowl with half-eaten breakfast on the kitchen bench and then taps the chickens' bucket of scraps) /i /i /
Shooshi: (seeing an old piece of cake in the bucket) You can't eat that, it's in the chooks' bucket
Bodhi: (keeps tapping the chickens' bucket & starts to get upset) /Λh /Λh / (points to his bowl)
Shooshi: Do you want some more?
Bodhi: (shakes head and cries) /Λh /Λh /
Mark: He wants you to put it in the chooks' bucket
Shooshi: Oh, Bodhi, you want me to put it in the chooks' bucket
Bodhi: (chest tap = 'yes')
Shooshi: Ok then (tips it into the chooks bucket)

In Example 5, I have understood the interpersonal component of Bodhi's move, that is, the demand for some kind of service, but I have completely misunderstood what the nature of that service is. In other words, I have completely misunderstood the experiential meaning, which was to tip his unfinished breakfast into the bucket of scraps for the chickens, which is what his father had been doing in the recent past. This constitutes a complete misunderstanding of the experiential meaning of Bodhi's move.

Partial misunderstandings of Bodhi's moves are of two types: i) those that involve the process or ii) the circumstance. In a misunderstanding of the process, Bodhi has usually expressed one participant, such as in example 2 above (with his grandmother Dodo and his comment about the breakfast bowl). As discussed, in this example, Dodo has understood that Bodhi wants to tell her something about the bowl, but as he has not communicated the process part of the move, she does not know what he wants to say about the bowl. In fact, it is rare for Bodhi to express a process; he typically expresses one participant or a circumstance only. In some cases, due to our general understanding of the world and language, realized by the resources of collocation, one participant provides sufficient information for the communication partner to work out the rest of the move. For example, if Bodhi signs 'toilet', the (informed) communication partner knows that the accompanying process is *flush* and not *eat*. Conversely, if he points to a picture of Weetbix™ (a breakfast cereal), one can guess that the accompanying process is *eat*, and not *flush*. This is, in fact, quite useful and even expedient on Bodhi's part, for were he to express the process, for example by pointing to a picture of *eating*, the communication partner would then have to ask him *what* he wants to eat, and it would take longer to get what he wants. However, for more complex meanings, one participant is too ambiguous to guess the rest of the meaning.

The second type of partial misunderstanding of experiential meaning – that involving some circumstance, can be seen in the following example where Bodhi is having breakfast with his grandmother when he taps his bowl to tell her something about it:

Example 6

Bodhi: /2nn /2nn /2nn / (contact pointing bowl)
Dodo: you're eating your porridge, yes
Bodhi: /2i /2i /2i / (contact pointing the bowl)
Dodo: in your bowl
Bodhi: (giggles)

In this example, Bodhi is trying to tell Dodo he is eating porridge in *his* bowl, the same bowl that he expresses liking for in example 2. At this point in the conversation he has his mouth full of porridge and so Dodo presumes he is telling her that he is eating. Thus, she has misunderstood that his meaning refers to the circumstantial component of the move, which is the thing that he is eating out of – the bowl.

It is interesting to note that in the partial misunderstandings of experiential meaning, there is no misunderstanding of participant. This is because, as mentioned above, Bodhi mostly expresses one participant. But what of the other participant? In most cases, the first participant of Bodhi's move is actually Bodhi himself, and this is retrievable from the context. For example, if Bodhi points to a picture of a drink, we can easily and correctly guess that it is he, himself, who is asking for a drink. As Halliday (1994) notes, the item that most commonly occurs as the unmarked Theme (Subject/Theme) in casual conversation is the first person pronoun "I", for much of our conversation concerns ourselves and what we think and feel. As participants in casual conversation, communication partners seem to readily work this out.

The experiential branch of the network of misunderstandings of Bodhi is therefore as follows:

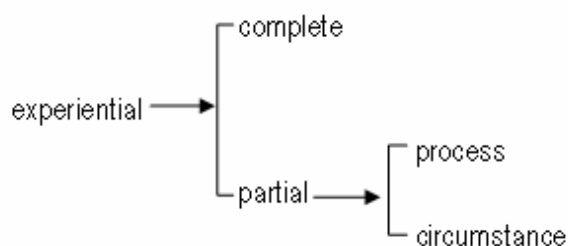


Figure 2: The experiential branch of the network of misunderstandings of Bodhi

4 Interpersonal misunderstandings

Interpersonal misunderstandings occur where Bodhi means a particular speech function, but the communication partner interprets and responds to it as a different one. There are four types of interpersonal misunderstanding with Bodhi and these can be clustered into two pairs. All of these misunderstandings are described in terms of move type.

The first of these misunderstandings is where Bodhi makes the dual move and the communication partner responds as if it were something else. Specifically, Bodhi gives information and simultaneously demands verbal articulation of that information, but the communication partner interprets this move as a demand for action. This can be seen in example 7. In this example, Bodhi and his schoolteacher are walking around the playground when he stops to tell her something about the toilet they are walking past:

Example 7

Bodhi: (stops walking and signs toilet) /i /i /
 Teacher: All right then. Off you go. Go to the toilet.
 Bodhi: (stamps foot, signs toilet) /i /i /
 Teacher: Well go on. Go to the toilet
 Bodhi: (stamps foot, signs toilet) /i /i /
 Teacher: (pause) Oh, you're telling me you can see there's someone in the toilet
 Bodhi: (smiles and resumes walking)

It eventually becomes clear to the teacher that Bodhi is telling her he can see someone in the toilet and that he wants verbal articulation, but as he has spent most of the year trying to flush every toilet in the school, her initial presumption is that he is asking if he can go and *flush* the toilet. In other words, he is making the dual move - giving the teacher information about the toilet and demanding she articulate it (which she does in her final move), whereas the teacher has misunderstood his move as a demand for action. This is called a misunderstanding of the dual move - type 1, where the communication partner misunderstands Bodhi's dual move, interpreting it as a demand for action.

The second of the interpersonal misunderstandings is also a misunderstanding of the dual move. However in this type, while the communication partner understands the experiential content of Bodhi's move, they do not understand that the move has two speech functions. In other words, while they understand he is giving information, they do not realise they are required to verbally articulate that information. This can be seen in example 8 where Bodhi is telling his grandmother, Dodo, that he is eating his porridge:

Example 8

Bodhi: /nn' / (contact pointing the bowl)
 Dodo: Yes
 Bodhi: /i /i / (contact pointing the bowl)
 Dodo: Yes, you eat some more porridge
 Bodhi: (eats his porridge)

Dodo initially provides the kind of response one would give to a speaker's comment. That is to say, if a speaker says "I'm eating", the respondent might reply "Yes" or "Yes, you are". However, this

kind of response is not enough for Bodhi, so he replays his move until Dodo tells him, albeit in the imperative Mood, that he is eating porridge. This kind of misunderstanding is called a misunderstanding of the dual move - type 2, where the communication partner misunderstands the move because they miss the demand for articulation.

The third kind of interpersonal misunderstanding is where Bodhi demands action but the communication partner misinterprets this as the dual move. This can be seen in example 9 where Bodhi and I are driving past the street where some friends live and Bodhi points to the street saying /i/i/.

Example 9

Bodhi: /i/i / (pointing to a street as we drive past it)
Shooshi: That's where Rhett and Ruth live
Bodhi: /i/i / (continues pointing to street)
Shooshi: Do you want to go and visit them?
Bodhi: (chest tap = 'yes')
Shooshi: ok. Let's go and see if they're home

In this example, whilst Bodhi is demanding action - asking to go and visit our friends - I interpret his move as the dual move and verbally articulate the information I think he is giving. However, he replays his move, indicating that I have misunderstood. I then reinterpret his move and respond to it as a demand for action, which he then confirms with his subsequent response. This kind of misunderstanding is called a misunderstanding of Secondary Actor⁴ move - type 1: as demand for action.

The fourth kind of interpersonal misunderstanding is where Bodhi demands an action but the communication partner interprets his move as a demand for information. This can be seen in example 10 where Bodhi and I are driving to pick up his brother from a friend's house, when he says /i/i/ and grabs my arm to ask where we are going.

Example 10

Bodhi: /i/i / (grabs my arm = "where are we going?")
Shooshi: We're going to pick up Davi at Chris' house
Bodhi: /i/i / (signs 'toilet')
Shooshi: Yes, they've got a toilet
Bodhi: /i/i / (signs 'toilet')
Shooshi: Yes, you can flush it
Bodhi: (smiles)

In Bodhi's second turn in Example 10, he has signed 'toilet' whilst saying /i/i/ in order to ask if he can flush the toilet at the friend's house. I, however, have interpreted this move as a demand for information. As Bodhi replays his move, I realise that my interpretation is wrong and respond with an action response. Bodhi's acceptance of this response shows I have got it right. This kind of misunderstanding is called a misunderstanding of the Secondary Actor move - type 2: as Secondary Knower⁵.

The full network of misunderstandings with Bodhi is therefore as follows:

⁴ Secondary Actor is the role in the exchange where the interactant is demanding goods-&-services.

⁵ Secondary Knower is the role in the exchange where the interactant is demanding information.

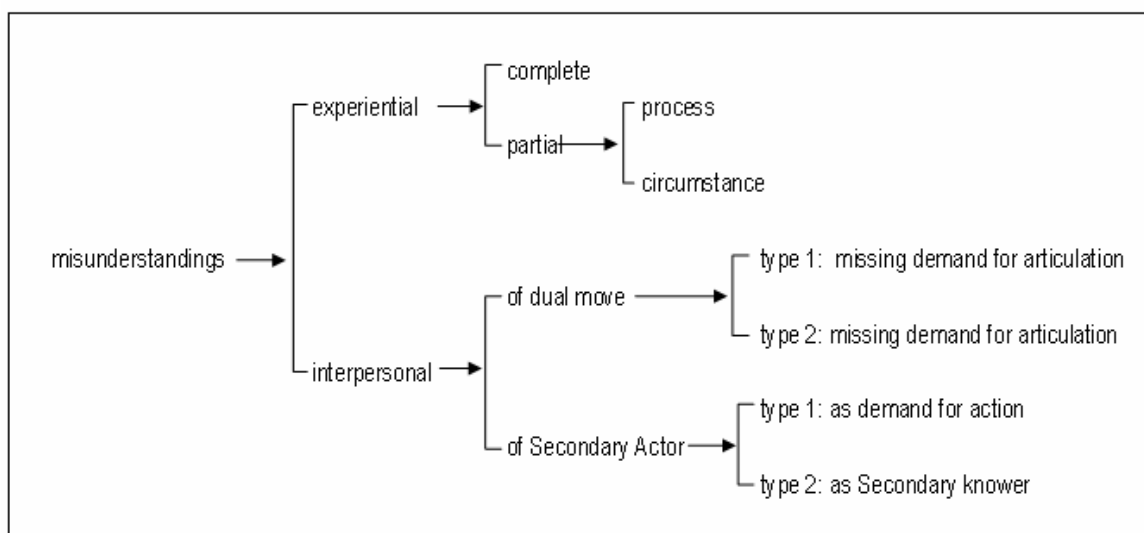


Figure 3: Misunderstandings of Bodhi’s communication

5 Discussion

The significance of classifying misunderstandings of Bodhi’s communication in this manner goes beyond theoretical concerns. It extends to the application to his life: that is, to how this information might assist communication partners to better understand him, and others like him. As training communication partners has been noted to be beneficial to the successful outcomes of communication with people with Aphasia (Kagan and Gailey 1993), the classification of Bodhi’s misunderstandings can be used as a guide for communication partners. Taking into account the fact that Bodhi’s communication partners are not linguists, the above network has been rewritten and adapted as shown in Figure 4, for communication partners to use as a preventative measure, or a navigational tool.

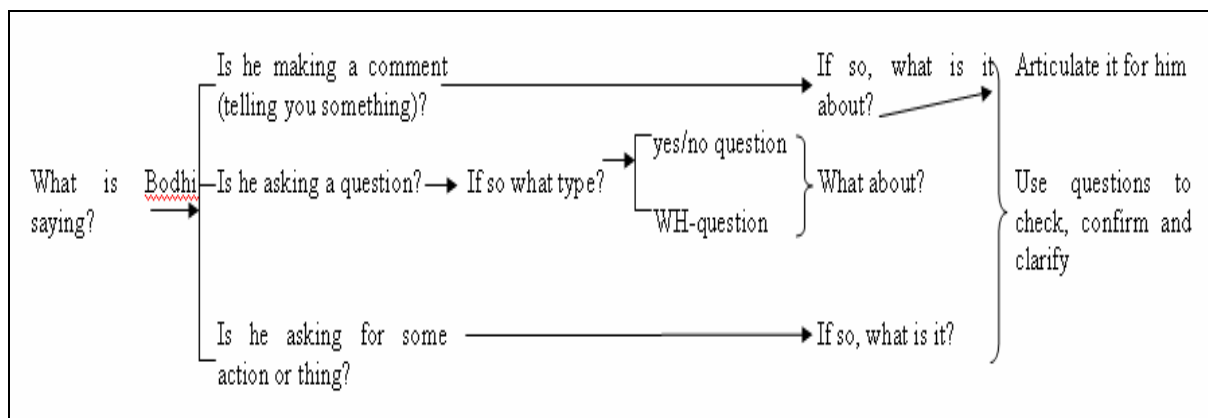


Figure 4: Guide for communication partners (Dreyfus 2006)

This guide helps communication partners prevent misunderstandings with multimodal communicators like Bodhi. It has been used informally with a number of Bodhi’s carers, who report that it has greatly helped them to understand the way he communicates. While Bodhi’s communication style is possibly or probably specific to him, the usefulness of this model could be investigated more formally with a larger group of people with intellectual disabilities and communication disorders.

The guide takes communication partners through the basics of speech function and experiential meaning. The first column asks them to think about what Bodhi (or someone like him) is saying. The second column encourages them to think about what kind of speech function he is

expressing. The third and fourth columns encourage them to distinguish between a WH- and a polar question, if he is asking a question. The fifth column asks them to think about the experiential meaning of the move, and the sixth and final column encourages them to respond in particular ways – either to verbally articulate the move if it is the dual move, or to use clarification and confirmation questions to check that they have understood correctly.

The use of questions by the communication partner to check whether they have correctly understood the multimodal communicator supports an active role in the communication process for the multimodal communicator. It sees the multimodal communicator as the key to the process of successful communication and encourages the communication partner to jointly negotiate meaning with the multimodal communicator.

The final example (11) shows Bodhi's father, Mark, jointly negotiating meaning with Bodhi by using a question to check whether he has correctly understood Bodhi's move:

Example 11

Bodhi: /5 i/ (grabs Mark's sleeve = 'where are we going?')
Mark: Yes. We're going to the chemist shop and the fish shop...
Is that what you wanna know?
Bodhi: (taps chest = 'yes')
Mark: Yes. Good. He's saying 'yes'.

6 Conclusion

In this paper I have shown how notions of metafunction and move were used to classify the misunderstandings occurring in communication with a boy with a severe intellectual disability and communication disorder. This work builds on other descriptions of misunderstandings, which, to date, have not been able to describe types of misunderstandings in the manner afforded by Systemic Functional theory. Classifying misunderstandings as either experiential or interpersonal meant that I was able to account for the type of misunderstanding in terms of content as well as speech function. As these are two parameters that are paramount to the success of any meaning-making endeavour, this kind of classification helps to unravel the details of the misunderstandings that occur with Bodhi. It is also possible that using SF theory may be useful in understanding the kinds of misunderstandings that occur in communication with other people with disabilities and communication disorders, and with the wider population.

References

- Armstrong, E. (1991). The potential of cohesion analysis in the analysis and treatment of aphasic discourse. *Clinical Linguistics and Phonetics* 5(1): 39-51.
- Armstrong, E. (2001). Connecting lexical patterns of verb usage with discourse meanings in aphasia. *Aphasiology* 15(10/11): 1029-1045.
- Armstrong, E. (2005). Language disorder: a functional linguistic perspective. *Clinical Linguistics and Phonetics* 19(3): 137-153.
- Berry, M. (1981a). Systemic linguistics and discourse analysis: a multi-layered approach to exchange structure. In M. Coulthard & M. Montgomery (eds) *Studies in Discourse Analysis*. London: Routledge & Kegan Paul.
- Berry, M. (1981b). Polarity, Ellipticity and Propositional Development, their relevance to the well-formedness of an exchange. *Nottingham Linguistic Circular* 10(1): 36-63.
- Berry, M. (1981c). Towards layers of exchange structures for directive exchanges. *Network* 2.

- Brady, N. C., J. E. McLean, et al. (1995). Initiation and repair of intentional communication acts by adults with severe to profound cognitive disabilities. *Journal of Speech and Hearing Research* 38: 1334-1348.
- Brinton, B., M. Fujiki, et al. (1986). Development of conversational repair strategies in response to requests for clarification. *Journal of Speech and Hearing Research* 29: 75-81.
- Carr, E. G. & V. M. Durand (1985). Reducing behavior problems through functional communication training. *Journal of Applied Behavior Analysis* 18(2): 111-126.
- Coulthard, M. & D. Brazil (1979). *Exchange Structure*. Birmingham: University of Birmingham.
- Coulthard, M. & M. Montgomery (1981). *Studies in discourse analysis*. London: Routledge & Kegan Paul.
- Dascal, M. (1999). Introduction: some questions about misunderstanding. *Journal of Pragmatics* 31(6): 753-762.
- Dreyfus, D. (2006). *When there is no speech: a case study of the nonverbal multimodal communication of a child with an intellectual disability*. Faculty of Education, University of Wollongong PhD thesis.
- Ferguson, A. (1998a). Analysis of learning interactions. Speech Pathology Australia National Conference Fremantle.
- Ferguson, A. (1998b). Analysis of interactions in aphasia assessment and treatment sessions. Aphasiology Symposium of Australia.
- Ferguson, A. (1998c). Conversational turn-taking and repair in fluent aphasia. *Aphasiology* 12(11): 1007-1031.
- Halliday, M. A. K. (1984). Language as code and language as behaviour: a systemic-functional interpretation of the nature and ontogenesis of dialogue. In R. Fawcett, Lamb, S., Halliday, M.A.K. & A Makkai (eds) *The semiotics of language and culture*. London: Frances Pinter.
- Halliday, M. A. K. (1994). *An Introduction to Functional Grammar* (2nd edition). London, Edward Arnold.
- Halliday, M. A. K. (1996). On Grammar and Grammaticals. In R. Hasan, C. Cloran and D. Butt (eds) *Functional Descriptions: Theory in Practice*. Amsterdam: John Benjamins. 121.
- Hinnenkamp, V. (2003). The notion of misunderstanding in intercultural communication. Retrieved 7/5/03.
- Kagan, A. and G. Gailey (1993). Functional is not enough: training conversation partners for aphasic adults. In A. Holland & M. Forbes (eds) *Aphasic treatment: world perspectives*. San Diego: Singular Press.
- Levy, Y., A. Tennebaum, et al. (2003). Repair behaviour in children with intellectual impairments: evidence for metalinguistic competence. *Journal of Speech, Language and Hearing Research* 46(2): 368-382.
- Martin, J. R. (1992). *English Text: System and Structure*. Amsterdam: John Benjamins.
- Paul, R. & D. J. Cohen (1984). Responses to contingent queries in adults with mental retardation and pervasive developmental disorders. *Applied Psycholinguistics* 5: 349-357.

- Schegloff, E. A. (1987a). Some sources of misunderstanding in talk-in-interaction. *Linguistics*: 201-218.
- Schegloff, E. A. (1987b). Recycled turn beginnings: A precise repair mechanism in conversation's turn-taking organisation. In G. Button & D. L. Lee. Clevedon (eds) *Talk and social organisation*. Multilingual matters.
- Schegloff, E. A. (1992). Repair after next turn: the last structurally provided defense of intersubjectivity in conversation. *American Journal of Sociology* 97(5): 1295-1345.
- Schegloff, E. A., G. Jefferson, et al. (1977). The preference for self-correction in the organization of repair in conversation. *Language* 53: 361-382.
- Togher, L. (1998a). *Interpersonal communication skills in the traumatic brain injury population : an analysis across situations*. School of Communication Sciences and Disorders, Faculty of Health Sciences Sydney, University of Sydney, PhD thesis.
- Togher, L. (1998b). *Interpersonal Analyses from Systemic Functional Linguistics: An introductory guide for speech pathologists*
- Togher, L. (2000). Giving information: the importance of context on communicative opportunity for people with traumatic brain injury. *Aphasiology* 14(4): 365-390.
- Togher, L., L. Hand, et al. (1997a). Analyzing discourse in the traumatic brain injury population: telephone interactions with different communication partners. *Brain Injury* 11(3): 169-189.
- Togher, L., L. Hand, et al. (1997b). Measuring service encounters in the traumatic brain injury population. *Aphasiology* 11(4/5): 491-504.
- Togher, L., L. Hand, et al. (1999a). Exchanges of information in the talk of people with traumatic brain injury. In S. McDonald, L. Togher & C. Code (eds) *Communication disorders following traumatic brain injury*. Sussex: Psychology Press Ltd.
- Ventola, E. (1987). *The Structure of Social Interaction: A Systemic Approach to the Semiotics of Service Encounters*. London, Frances Pinter.
- Ventola, E. (1988). The Logical Relations in Exchanges. In J. D. Benson & W. S. Greaves (eds) *Systemic Functional Approaches to Discourse: Selected Papers from the 12th International Systemic Workshop*. New Jersey: Ablex Publishing Company. XXVI: 51-72.
- Weigand, E. (1999). Misunderstanding: the standard case. *Journal of Pragmatics* 31(6): 763-785.
- Weizman, E. (1999). Building true understanding via apparent miscommunication: a case study. *Journal of Pragmatics* 31(6): 837-846.
- Wong, J. (2000). Delayed next turn repair initiation in native/non-native speaker English conversation. *Applied Linguistics* 21(1): 244-267.