Use of politeness markers with different communication partners: an investigation of five subjects with traumatic brain injury

# LEANNE TOGHER†‡§ and LINDA HAND†§

- †Brain Damage and Communication Research, The University of Sydney, Australia
- ‡Brain Injury Rehabilitation Unit, Liverpool Area Health Service, Sydney, Australia
- § School of Communication Sciences and Disorders, Faculty of Health Sciences, The University of Sydney, Australia

#### Abstract

Politeness is a complex interpersonal phenomenon which has received considerable attention by linguists over recent years. This paper presents preliminary work which examines some methodological and theoretical issues related to the concept of politeness using the systemic functional approach. Results are presented for five traumatically brain injured subjects and five matched controls during telephone interactions with four different interlocutors. The results indicate that TBI subjects are able to access a wide variety of politeness strategies; however, their ability to manipulate these across the four different tenor relationships is impaired when compared with control subjects. The richness of this approach in highlighting the unique features of communication disorders following traumatic brain injury and new ways to approach their management is discussed.

#### Introduction

Communication impairments following traumatic brain injury (TBI) have been described as a problem with the interactional nature of conversation (Hartley 1995). Interactional problems have been investigated using pragmatic profiles (e.g. turn taking) (Milton et al. 1984), social skills perspectives (e.g. asking questions) (Flanagan et al. 1995) and examination of the propositional content of interactions (Coelho et al. 1991, McDonald 1993, Mentis and Prutting 1991). It has been suggested that people with TBI may have problems with the conventions of social interaction as described by Grice's (1975) rules of cooperation and politeness (table 1). Using this framework McDonald (1993) and Snow et al. (1995) found that the majority of errors for TBI subjects fall within the categories of Quantity and Manner. These studies have described TBI subjects' difficulty with the propositional content of language; however, the expression of politeness within interactions remains to be explored. A notable exception to this was McDonald (1992) who asked two TBI subjects and two matched controls to formulate polite

Address correspondence to: Leanne Togher, Brain Damage and Communication Research, School of Communication Sciences and Disorders, Faculty of Health Sciences, The University of Sydney, PO Box 170, Lidcombe, NSW, Australia 2141.

Table 1. Grice's (1975) cooperative principle

Quantity	Make your contribution as informative as is required
,	Do not make your contribution more informative than required
Quality	Do not say what you believe to be false
,	Do not say that for which you lack evidence
Relation	Be relevant
Manner	Avoid obscurity of expression
	Avoid ambiguity
	Be brief
	Be orderly

requests (such as asking a stranger the time). Both subjects were able to complete these tasks with adaptive and effective responses. When the demands of the task were increased by insisting that requests were made in the form of hints, the TBI subjects were unable to comply. It was concluded that frontal lobe impairment, particularly loss of abstraction ability and disinhibition, disrupted the ability to communicate non-conventional indirect meaning.

Politeness has been described from a number of perspectives. Lakoff (1974) observed that sociocultural goals, broadly called politeness, led people to express opinions and preferences in widely varying linguistic forms. Early proponents of sociolinguistic approaches to language, such as Searle (1975) and Austin (1962), described a separation between the illocutionary force and the propositional content of an utterance. They cited indirect speech acts as examples of this separation. Brown and Levinson (1978, 1987) argue that the form taken by utterances during interactions can be seen as the linguistic means of satisfying the coexisting and often conflicting needs for negative face (the need to be let alone) and positive face (the need to be approved by others). As a result, people often prefer to express their opinions off the record—that is, indirectly. The underlying social need to establish and maintain 'face' depends on aspects of the context such as social distance and power. Other approaches dissociate particular features of language as being politeness markers (Stubbs 1983). Some of these markers include negative polarity, the use of the modal form of the verb and indirect forms.

Varying degrees of subtlety in expressing politeness might therefore be problematic for TBI subjects. However, analyses tend to treat politeness as an issue somehow separate from other aspects of language and there is a need for a more linguistically integrated and sophisticated way of analysing politeness in discourse. One system which does is that of systemic functional linguistics (SFL) (Halliday 1985, 1994) which views politeness as forming part of the interpersonal metafunction.

This paper examines the interpersonal construct of politeness from the SFL perspective. The interpersonal meanings made by speakers are dependent on the contextual features of the situation (e.g. familiarity, social status of participants) and are thus integral to that situation. SFL is a sociolinguistic theory which views language as a resource which varies according to the situation interactants find themselves in. Language use is seen to be performing three metafunctions—ideational (made up of logical and experiential metafunctions), interpersonal and textual (Halliday 1970, Halliday and Hasan 1985). These metafunctions express the meanings which arise from the contextual features of the situation in which the

language is used—the field (i.e. what is happening), tenor (i.e. who is taking part) and mode (i.e. the role language is playing) of the discourse.

SFL views politeness as forming part of the interpersonal metafunction. The interpersonal meanings made by speakers are dependent on the contextual features of the situation and are thus integral to that situation. While features of this metafunction can be analysed separately, it is recognized that all three meanings occur concurrently and form part of the rich texture of language.

When examining the contextual features of a situation (i.e. field, tenor and mode), it is the tenor which is of most interest in relation to the interpersonal metafunction. The tenor of discourse refers to the negotiation of social relationships among participants (Martin 1992). Features such as familiarity between participants, social status and roles determine the interpersonal meanings that will be made. The interpersonal metafunction establishes and maintains relations and expresses the social roles (Halliday and Hasan 1985). Tenor is realized through many levels of analysis. For example, there are phonological and lexicogrammatical systems at clause level (Tone and Mood and Modality (Halliday 1985)). The system of exchange structure (Berry 1981, Ventola 1987) realizes tenor at the level of discourse semantics. At the level of genre, tenor is realized through the generic structure potential (GSP) analysis.

Tenor is concerned with the semiotics of relationships. It mediates these relationships along three dimensions of status, contact and affect (Martin 1992). Status refers to the relative position of the interlocutors in a culture's social hierarchy, while contact refers to the degree of institutional involvement with each other. Affect covers what Halliday (1978, p. 33) refers to as the 'degree of emotional charge' in the relationship between participants. The basic opposition with status is between equal and unequal, depending on the social rankings of the participants. Contact can be broken down into involved and uninvolved, depending on the familiarity between participants. Contact is independent of status, as seeing someone often does not change their relative ranking. For example, a doctor and patient do not change rank because they see each other every day, but they do become more 'involved' with each other. Affect may or may not be manifested linguistically, depending on the status, contact or genre. This may be because participants barely know each other.

The key principle for status is reciprocity of choice. Equal status between participants is realized by them making the same kinds of choices, whereas unequal status is realized by them taking up different ones. In some cases certain kinds of selections are associated with speakers of higher status and other kinds of choices with speakers of lower status. That is, the realization of status tends to foreground grammatical options (Martin 1992, p. 528).

Poynton (1985) expands on the notion of choice. The systems of choice are not to be interpreted as meaning that the speakers are making a conscious and deliberate choice from a range of possibilities. These choices are usually made unconsciously. Therefore choice is a 'matter of the options that the language as a system makes available for realising meanings and, in the case of contextual variables, which the society makes available' (p. 78). The particular choices which will be examined in this paper are linguistic resources of MOOD and MODALITY. Both these analyses examine how direct we are in interactions. The analysis of mood can be used to examine the grammar choices made at clause level to establish the degree of certainty or directness being expressed. For example, statements are

direct (I am going today) whereas yes/no tag questions, wh-interrogatives and declarative statements with a rising intonation (You're going today?) are less direct and are therefore considered to be more polite. Modality refers to the area of meaning between yes and no. A direct statement is either positive or negative (e.g. I am going vs. I'm not going). Between these two areas of meaning we can indicate uncertainty or directness through the resources of modality. Some of these resources include modal verbs (such as might, must), modal adjuncts (such as possibly, just, probably) and comment adjuncts (such as I think). The greater the modality expressed, the less definite the speaker is (Halliday 1985). For example 'It's certainly terribly hot' is considered less definite than 'It's hot'.

Halliday's mood analysis has been used with aphasic discourse (Ferguson 1992). The question remains as to whether this analysis gives us new information about the communication disorder of TBI subjects. This study examines four types of telephone interactions using TBI subjects and matched controls. Telephone interactions provided a clinically practical and efficient avenue to collect data with a number of communication partners. This study asks the following questions:

(1) Do TBI subjects differ from control subjects with respect to their use of politeness markers in telephone interactions?

(2) Does the use of politeness markers differ across the four communication partners (i.e. bus timetable information vs. police vs. therapist vs. mother), when compared with each other (i.e. across interactions)?

(3) Do the four communication partners (i.e. bus timetable information vs. police vs. therapist vs. mother) vary their use of politeness markers with TBI subjects when compared to controls (i.e. within interactions)?

(4) Does the MOOD and MODALITY analysis provide information regarding TBI interactions which is not currently available from other analyses?

### Method

Subjects

Subjects were five traumatically brain-injured adults and five normal adults matched for age, sex and education. Four of the five control subjects were brothers of the brain-injured subjects. The fifth control subject was a volunteer worker who was matched for age and educational status to the head injury subject. Subject characteristics can be found in table 2. All subjects in the experimental group had sustained a very severe, blunt closed head injury (i.e. post-traumatic amnesia > 24 hours (Russell and Smith 1961) and/or loss of consciousness > 6 hours (Jennett et al. 1977)).

Subjects were selected on the basis of inappropriate pragmatic behaviours, as assessed on ratings by two independent speech-language pathologists (SLPs) on the pragmatic protocol (Prutting and Kirchner 1987), during a viewing of a videotaped conversation with the researcher (L.T.). The ratings on which both SLPs agreed were used for analysis. Table 3 displays the 10 behaviours most frequently judged inappropriate in rank order. Table 4 shows the number of inappropriate behaviours for each of the subjects. Subjects 4 and 5 were noted by judges to have the largest number of inappropriate behaviours, including difficulties with topic management and cohesion.

Table 2.	Demographic and	clinical	details	of '	TBI	subjects
----------	-----------------	----------	---------	------	-----	----------

Subj. No	Age	Pre-morbid occupation	Time since injury (years)	Period of PTA (months)	Period of LOC (weeks)	Nature of accident
S1	25	Carpenter	4.25	6	8	Driver in motor car accident
62	32	Motor mechanic	7.25	> 8	> 2	Fall from cliff
S2 S3	32	Student teacher	11	2–3	8	Pedestrian in motor car accident
S4	29	Apprentice fitter and turner	8	5	10	Motor bike accident
<b>S</b> 5	27	Plant mechanic	1.5	1–2	1	Driver in motor car accident

PTA, post-traumatic amnesia; LOC, loss of consciousness.

Table 3. Rank order of top 10 inappropriate pragmatic behaviours for TBI subjects on the Pragmatic Protocol (Prutting and Kirchner 1987)

Rank	Pragmatic behaviour	Number of TBI subjects
1	Prosody	5/5
2	Intelligibility	4/5
_	Topic change	4/5
3	Topic introduction	3/5
	Topic selection	3/5
	Quantity/conciseness	3/5
4	Topic maintenance	2/5
•	Vocal intensity	2/5
	Specificity/accuracy	2/5
	Facial expression	2/5

Table 4. Number of inappropriate behaviours on the Pragmatic Protocol for TBI subjects

Subject	Number of inappropriate behaviours
1	6
2	7
3	6
4	10
5	11

### Procedure

All subjects made four telephone calls. The calls were designed to be enquiries for specific information. Scenarios were set up prior to data collection. For example,

(1) the bus timetable condition required subjects to find out some details regarding a trip to Macquarie Shopping Centre by a particular time;

Politeness marker	Examples		
Finite modal verbs	Will, would, could, should, might, must		
Modal adjuncts	Probably, possibly, just		
Comment adjuncts	I think		
Yes/no tags	He's gone overseas, hasn't he?		
Incongruent realizations of the interrogative form	You don't know what time they go or anything?		

Table 5. Politeness markers from the systemic functional linguistic framework (Halliday 1985)

- (2) the **police condition** required them to find out about how to get their licenses back;
- (3) the **mother condition** required subjects to find out about their weekly programme;
- (4) the therapist condition required them to find out about their current goals.

The scenario and purpose of each call have been described in detail by Togher et al. (1997a). Conditions differed according to the tenor, or the characteristics of the participants. The bus timetable information interaction represented an interaction between equals, where neither party was in authority, whereas in the police condition, the police had some authority over the subjects. The mother and therapist conditions varied according to authority relationships although social distance was minimal in the mother condition.

## Data analysis

Transcripts were divided into clauses and analysed using Halliday's (1985) mood and modality analysis. The transcripts were scored according to the 'politeness markers' given in table 5.

The total number of politeness markers was divided by the total number of major clauses to give the frequency of politeness markers per clause for each interaction. TBI and control samples were compared across conditions. Communication partners were compared with each other across TBI vs. control subjects and within interactions. Inter-observer reliability for all analyses was completed between the researcher and a speech pathologist who had previous knowledge of systemic functional linguistic analyses. A training session of 1 hour was completed prior to the transcripts being rated independently. The materials used in this training session included a worked example of the analysis and key definitions of the politeness markers to be rated. Point to point inter-rater reliability was established on a random selection of 25% of the data from TBI and control transcripts and ranged from 91–100% with a mean of 97%.

#### Results

TBI and control subjects' use of politeness markers

Politeness markers per clause by TBI and control subjects (Appendix 1) were compared in each of the four conditions using the non-parametric Wilcoxon matched-pairs signed-ranks test. Non-parametric tests were used as a result of small

Table 6. Use of politeness n	markers per	clause
------------------------------	-------------	--------

	TBI vs. controls (Wilcoxon matched-pairs signed-ranks test)	Control vs. communication partner (Mann-Whitney $U$ test)	TBI vs. communication partner (Mann-Whitney U test)
Therapist	T = 0** (n = 5) (controls > TBI)	U = 13	U = 13
Bus	T = 0** (n = 5) (controls > TBI)	U = 3** (controls > bus)	U = 16
Police	T = 0** (n = 5) (controls > TBI)	U = 0*** (control > police)	$U = 2^{**} \text{ (TBI < police)}$
Mother	T = 0* (n = 4) (controls > TBI)	U = 9	U = 8

<sup>\*\*\*</sup> Significant at  $p \leq 0.01$ .

Table 7. Post hoc Wilcoxon matched-pairs signed-ranks test with control subjects across communication partners

Comparison	Test statistic	Direction of difference
Control (& B) vs. control (& M) Control (& B) vs. control (& T) Control (& B) vs. control (& P) Control (& M) vs. control (& T)	$T = 2 (n = 4)^{a}$ T = 0** (n = 5) T = 3 (n = 4) T = 3 (n = 4)	B > T
Control (& M) vs. control (& P) Control (& T) vs. control (& P) Control (& T) vs. control (& P)	T = 0* (n = 4) $T = 0* (n = 4)$	P > M P > T

<sup>\*\*</sup> Significant at  $p \leq 0.05$ .

sample sizes and because they make no assumptions about normality and homogeneity of the variance of the population sample. Control subjects used significantly more politeness markers per clause than the TBI subjects in the therapist  $(T = 0, p \le 0.05)$ , bus  $(T = 0, p \le 0.05)$  and police conditions  $(T = 0, p \le 0.05)$  $p \leq 0.05$ ) (table 6). Control subjects also used more politeness markers per clause with their mothers than TBI subjects although this only approached significance (T=0, p=0.06). To investigate whether there was a difference in the frequency of politeness marker use by control subjects across communication partners, a Friedman test was employed with a 0.05 level of significance. This indicated that there were significant differences in the way controls used politeness markers with different communication partners ( $\chi^2_r = 9.9$ , d.f. = 4, p < 0.02). To identify these differences, post hoc Wilcoxon matched-pairs signed-ranks tests were employed (table 7). Using a significance level of 0.05, control subjects used more politeness markers with the police and the bus timetable information service than with therapists or their mothers (table 7). However, with Bonferroni adjustment the level of significance was reduced to 0.0083. These results must be viewed as preliminary pilot data and while significance may not have been reached, the trends that the data suggest are important. The most commonly used politeness marker

<sup>\*\*</sup>  $\leq$  Significant at  $p \leq 0.05$ .

<sup>\*</sup> Approaching significance.

<sup>\*</sup> Approaching significance.

<sup>&</sup>lt;sup>a</sup> n varied according to tied ranks and two control transcripts were not available: mother and police. T, therapist; P, police; B, bus; M, mother.

was the modal verb, (such as should, would) which was followed by the modal adjunct (such as just, probably, possibly). The use of declaratives plus rising intonation to make requests was also prominent.

The TBI subjects' use of politeness markers was evaluated for variation across communication partners. The Friedman test revealed that they did not differ in the amount of politeness markers produced across the four conditions ( $\chi^2_r = 0.6$ , d.f. = 4). This lack of variability is the result of an overall fewer number of politeness markers and the use of statements characterized by positive and negative polarity as well as congruently expressed requests.

To demonstrate the differences in the way interactions unfolded, the following two transcripts provide examples of the way a TBI subject and his brother opened their telephone enquiry to the same police officer. The TBI subject sustained a severe traumatic brain injury as the result of a motor vehicle accident. This data was collected 18 months after his accident. The TBI subject was 27 years old at the time of data collection; his brother was 25. Prior to his injury the TBI subject was a plant mechanic and his brother was a butcher.

## Subject 5 (control)—police condition

P = policeman, C = control subject.

- 1. P: Good afternoon Flemington Police can I help you?
- 2. C: Um My name's B. B.
- 3. P: Yes
- 4. C: And I was just gonna ring up about me brother
- 5. C: because he's had a car accident
- 6. C: and um he's got slight brain damage?
- 7. P: Oh right
- 8. C: I was just gonna wonder how we'd go gettin' his license back
- 9. P: OK
- 10. C: After he's sort of recovered
- 11. P: No problem
- 12. P: I'll just explain this test for you here

# Subject 5 (TBI subject)—police condition

P = policeman, S = TBI subject.

- 1. P: Flemington Police
- 2. S: Hello Tom? (policeman's first name)
- 3. P: Yes
- 4. S: I was told to ring ya
- 5. P: Well what's your name?
- 6. S: James
- 7. P: James. How are you James?
- 8. S: Not bad how are you goin' Tom
- 9. P: Not too bad
- 10. I'm just ah doin' a bit of police work at the moment
- 11. S: Are ya doin' any good?
- 12. P: Oh yeah all the time [trying to do something

13. S: [Oh well there you go

14. P: (laughs)

15. Too many motor vehicle accidents and too many bloody

16. S: [yeah]

17. P: [little things like that you know

18. S: [Yeah I understand

24. S: Um what's the go 25. S: Am I in trouble?

This example shows how differently these brothers approached the task of requesting information from the police. They both had a name to contact in the police service, but they opened the call quite differently. The use of vocatives (i.e. names) is another indicator of politeness. Note here that the control subject introduces himself, but uses no vocatives with the police officer. The TBI subject calls the police officer by name, which precipitates the police officer to enquire after the subject's name, eliciting his first name. He then uses the first name throughout the call. Even though the TBI subject may have started inappropriately, his behaviour is reinforced as the police officer uses linguistic resources which seem to be an attempt to reduce the status difference. These include the modal adjunct 'just' and an expletive 'bloody'. Notice that the TBI subject does not make his enquiry clear from the outset, and indeed when he does make an enquiry it is devoid of politeness markers:

763

24. S: Um what's the go

25. S: Am I in trouble?

While the police officer used significantly more politeness markers than James, he still maintained control over the interaction. For example there were two occasions where James interrupted the police officer (which is usually the privilege of the dominant speaker):

56. P: Yeah well you go to the RTA office and [you

57. S: [need your green slip, how do I go about that?

58. P: you just take your motor bike

59. S: Yeah

60. P: to the RTA office

61. P: and um and get it registered down there

62. P: just take it down there

63. S: Oh good

64. P: And they'll [ah

65. S: [It's in good nick it still is now

66. P: What kind of bike is it?

67. S: Um it's a 250

68. P: Is it?

69. S: RZ[250 R

70. P: [It It goes alright?

71. S: It goes good

72. S: It's fun

73. P: Oh that's good [Yeah

- 74. S: [Yeah handles good too
- 75. P: All you gotta do is see one of the RTA officers down there,
- 76. and tell them that you want to get your motor vehicle registered
- 77. S: Yeah
- 78. P: And um or your motor bike
- 79. S: Yeah
- 80. P: And they'll do it for you
- 81. P: But the main thing is James is that it's just gotta go through the Commonwealth Rehab
- 82. S: Commonwealth Rehab
- 83. P: Yeah,
- 84. P: and ah you know they are, they [provide
- 85. S:

[I've got a lot of Aboriginal mates

- 86. P: Yeah
- 87. S: In the service
- 88. P: Yeah, oh yeah
- 89. S: Ah, they're older men
- 90. P: Yeah and just go to Cumberland College for the test
- 91. P: and [then you're right
- 92. S: [Cumberland College
- 93. P: Yep,
- 94. P: and then you're right
- 95. P: you will get a driver's license
- 96. P: It should be no problem
- 97. S: Yeah
- 98. P: As long as you pass the test
- 99. S: Yeah

Initially the police officer answers James' side enquiry (moves 58–64). However, a repeated interruption about James' motor bike (move 65) brings the policeman to the use of bald Wh-interrogative and yes-no questions to gain some control over the interaction ('What kind of bike is it? It goes alright? Is it?'). He returns to his explanation and uses the linguistic resources of the vocative ('But the main thing is James'), the modal adjunct 'just' and the early modal 'gotta'. Once again, however, he is interrupted by James with 'I've got a lot of Aboriginal mates' (move 85). The policeman does not get drawn into this topic at all, but reestablishes control by returning to his original explanation. This is modalized with the use of modal adjuncts, modal verbs ('will', 'should'), and brings the phone call to a close.

The control subject's enquiry is characterized by an incongruent request for information. It is a statement of action, but is also giving information 'I was just gonna ring up about me brother'. The modal adjunct 'just' and early modal 'gonna' soften the pre-enquiry information-giving utterance. This is then followed by the request for information which is 'I was just gonna wonder how we'd go gettin' his license back ... After he's sort of recovered'. This request is characterized by a number of the resources from the MOOD and MODALITY systems including the modal adjunct 'just', an early modal 'gonna', the modal verb 'would' and the use of a declarative with rising intonation. The control subject is therefore using a number of resources to modalize his request, which may be in response to the unequal power

was significantly different from TBI subjects and controls using the Mann-Whitney U test with a 0.05 level of significance (table 6). The key finding here was that police used significantly more politeness markers when communicating with TBI subjects  $(U=2,\ p\leqslant 0.05)$ , but in contrast, they used fewer politeness markers than the controls  $(U=0,\ p\leqslant 0.01)$ . Police used finite modal verbs, modal adjuncts and comment adjuncts during their information exchanges with TBI subjects. Finally, the bus timetable information service used significantly fewer politeness markers than the control subjects  $(U=3,\ p\leqslant 0.05)$ .

#### Discussion

This paper examined the way individuals with TBI and matched controls approached the task of requesting information from a range of interlocutors who varied according to power, status and contact. The frequency of politeness markers per clause was considered to be an index of the subjects' variation of linguistic resources according to variation of tenor.

Our findings indicated that TBI subjects used fewer politeness markers than matched controls when interacting with therapists, the bus timetable information service and, most notably, the police. This may be interpreted in two ways. First, it could be suggested that TBI subjects were insensitive to the contextual features of familiarity and social distance and therefore failed to vary their use of politeness markers across contexts. However, other analyses performed on these data (i.e. exchange structure analysis and generic structure potential analysis) suggest that on other levels, TBI subjects did vary their language use (Togher et al. 1997a, b). This may indicate that mood and modality analysis is more sensitive to the paucity of interpersonal resources at the clause level. These results are commensurate with the common observation that people with TBI express literal concepts and have difficulty with the expression and comprehension of the abstract or complex (McDonald 1992).

Secondly, the preponderance of frontal and prefrontal lobe pathology following TBI and its impact on language functioning may also provide some explanation (Alexander et al. 1989). All five TBI subjects evidenced some degree of frontal lobe damage with concomitant diffuse lesions, which may account for their inability to vary language resources with different communication partners. Impairments of performance monitoring, poor planning and impairments of social cognition and judgement may well have restricted the traumatic brain-injured person's ability to use politeness markers appropriately.

By using a higher frequency of politeness markers per clause with the police and bus timetable information service, control subjects were expressing awareness of power imbalance and also of the genre of the call. Police and bus timetable information interactions were service encounters, which involved the subjects enquiring about information from a stranger in a customer—vendor relationship. The use of appropriate requesting behaviour within this genre requires the use of politeness markers. In previous work which examined the generic structure potential (GSP) of these same interactions, it has been shown that the control subjects did not engage in inappropriate or incomplete requesting behaviour, whereas TBI subjects produced inappropriate and incomplete requests requiring repetition 30% of the time in the bus timetable condition and 9% in the police

condition (Togher et al. 1997b). Such a failure at the service request level of the GSP was in part due to a lack of politeness markers. This demonstrates that the use of politeness markers is explicitly linked to the genre (i.e. service encounter, casual conversation) and the tenor (i.e. participants).

We also examined whether communication partners differed from each other in their use of politeness markers. The interesting finding here was that therapists produced the fewest politeness markers with TBI subjects when compared to other communication partners. This result was surprising as it was expected that the therapist would be attempting to save face for the TBI subject.

The answer to this may be found from another level of analysis. Exchange structure analysis completed on these data suggested that therapists were more likely to give and request information of control subjects when compared with the TBI subjects (Togher et al. 1997a). Therapists rarely asked TBI subjects questions that they didn't know the answer to. As the use of politeness markers was frequently associated with asking questions, the reduced number of politeness markers used by therapists may be explained by this reduced number of questions.

Therapists may also have spoken bluntly to TBI subjects as a way of controlling the interaction. By asking few questions and giving the information that was requested therapists provided few opportunities for the TBI subjects to engage in an information-giving interaction. This was supported by exchange structure analysis which revealed that TBI subjects rarely gave information to therapists (Togher et al. 1997a). By being unable to assume an information-giving role the TBI subjects were limited to a question-asking role and were therefore unlikely to speak at length or go off the topic; characteristics that were noted on their pragmatic protocol ratings (table 3).

Control subjects used significantly more politeness markers than the police in their interactions. Controls' use of politeness markers may have been a way of maintaining the police officer's face by preserving his authority and dominance in the interaction. Ulichny and Watson-Gegeo (1989) described an interaction between school children and a teacher where students used politeness indicators even when the teacher was in error, indicating that they were the one who had made a mistake. In contrast, police used significantly more politeness markers with the TBI subjects than they did with the controls. This may have been to save face for the TBI subject. Police would have detected from the very beginning of the call that they were speaking to someone who was breaking some of the rules of telephone enquiries. The opening sequence of a telephone enquiry has a clear structure which was generally adhered to in the control interactions. Problems with the opening sequence and the use of personal address in TBI interactions may have led the police to defer to the TBI subjects while still controlling the interaction. Politeness markers may have been used to mask this process. Such masking was not necessary in control interactions as control subjects made modalized enquiries and allowed the police officer to give their reply.

Poynton (1985) describes the rights or privileges of those in power in an interaction. Some of these include the right to use name forms and to use expletives or slang. Those in power are also described as being more likely to use familiar vocatives, to use high modalization forms and to use congruent forms. Those in deference are described as being more likely to use respectful vocatives, to use low modalization forms and to use interpersonal metaphor. The TBI subjects did not use these linguistic resources and therefore the police changed the way they

communicated. However, while using these politeness forms, the police still had ultimate control over the interactions and, in some cases, they appeared to 'overplay' the politeness, possibly to the detriment of the person with the TBI.

Finally, the use of the SFL analyses of politeness with TBI subjects appears to be a useful way to describe some of the more subtle communication problems that have not emerged from other analyses. Current approaches to treatment of communication disorders following TBI range from a focus on specific language impairments relating to word-finding difficulties to a broad eclectic view of pragmatic deficits, which include areas such as topic management and turn taking. There has been a move over recent years to working on functional communication which encompasses areas such as being able to make telephone calls, to have adequate communication for shopping and to be able to make doctor's appointments. While these moves are welcome, the measurement of tasks has been limited to checklists of performance, with scant attention to the finer details of the interactions that occur. Communication skills are therefore trained with a combination of behavioural techniques (such as reinforcing topic maintenance), functional notions of doing practical communication activities and focusing on improved verbal explanation skills. The problems with these approaches are a lack of a cohesive theoretical background and inadequate measurement of change.

There has always been the problem of capturing the essence of exactly what constitutes communication problems following TBI. Tannen (1981) described the 'subtly calibrated monitoring devices which make conversation possible' as 'the sharing of conversational strategies that creates the feeling of satisfaction which accompanies and follows successful conversation: the sense of being understood, being on the same wavelength, belonging and therefore of sharing identity' (p. 222). She described the converse of this as 'not being understood, not belonging—therefore of not sharing identity' (p. 222). While Tannen was referring to ethnicity in this quote it holds equally well in describing communication problems following a TBI. The advantage of examining politeness markers is that we can tap into the subtlety of interaction and measure the use of these resources. Once we are able to measure them we should be able to help the person with TBI tune in to them once more and be aware of the effect of their communication on others as well as modify the way they communicate. From these results it would appear that work on initial requests and opening sequences could significantly assist a person with a TBI to 'get off on the right foot' so to speak. For example, if a patient is requesting information (which is in the category of SERVICE REQUEST in the generic structure potential analysis (Togher et al. 1997b)) by baldly asking for information without the use of politeness markers, therapy could focus on varying question types and wording used according to the patient's communication partner.

This study demonstrates that it can be quite fruitful to marry together the rich theory of SFL and the challenging field of neurorehabilitation. Whereas this is a preliminary study, it is hoped that these findings stimulate future investigations to validate these results and to study treatment strategies focused on mood and modality with TBI patients.

## Acknowledgements

The research described in this paper was funded through the Motor Accidents Research Scheme (MARS), which is an initiative of the Motor Accidents Authority of NSW. The authors would like to thank Chris Code, Alison Ferguson and the Speech–Language Pathologists at the Bankstown-Lidcombe Hospital, the subjects, their families, the staff of the Lidcombe Head Injury Unit (now the Liverpool Brain Injury Unit), the Adult Development Program, the NSW Police Service and the State Transit Sydney Buses Info Line.

## References

- ALEXANDER, M. P., BENSON, D. F. and Stuss, D. T. 1989, Frontal lobes and language. Brain and Language, 37, 656-691.
- Austin, J. L. 1962, How to Do Things with Words (Oxford: Clarendon Press).
- Berry, M. 1981, Systemic linguistics and discourse analysis: a multi-layered approached to exchange structure. In C. Coulthard and M. Montgomery (Eds) *Studies in Discourse Analysis* (London: RKP), pp. 120–145.
- Brown, P. and Levinson, S. C. 1978, Universals in language usage: politeness phenomena. In E. Goody (Ed.) *Questions and Politeness* (Cambridge: Cambridge University Press), pp. 56-310.
- Brown, P. and Levinson, S. C. 1987, Politeness: Some Universals in Language Usage (Cambridge: Cambridge University Press).
- Coelho, C. A., Liles, B. Z. and Duffy, R. J. 1991, Analysis of conversational discourse in head-injured clients. *Journal of Head Trauma Rehabilitation*, 6, 92–99.
- Ferguson, A. J. 1992, Interpersonal aspects of aphasic conversation. Journal of Neurolinguistics, 7, 277–294.
- FLANAGAN, S., McDonald, S. and Togher, L. 1995, Evaluating social skills following traumatic brain injury: the BRISS as a clinical tool. *Brain Injury*, 9, 321–338.
- GRICE, H. P. 1975, Logic and conversation. In P. Cole and J. L. Morgan (Eds) Syntax and Semantics, Vol. 3, Speech Acts (New York: Academic Press), pp. 41-58.
- HALLIDAY, M. A. K. 1970, Language structure and language function. In J. Lyons (Ed.) New Horizons in Linguistics. (Harmondsworth: Penguin), pp. 140-165.
- HALLIDAY, M. A. K. 1978, Language as a Social Semiotic: The Social Interpretation of Language and Meaning (London: Edward Arnold).
- HALLIDAY, M. A. K. 1985, An Introduction to Functional Grammar (London: Edward Arnold).
- HALLIDAY, M. A. K. 1994, An Introduction to Functional Grammar (2nd edn) (London: Edward Arnold).
- HALLIDAY, M. A. K. and HASAN, R. 1985, Language, Context, and Text: Aspects of Language in a Social-Semiotic Perspective (Victoria: Deakin University Press).
- HARTLEY, L. L. 1995, Cognitive-Communicative Abilities Following Brain Injury: A Functional Approach (San Diego, CA: Singular).
- JENNETT, B., TEASDALE, G., GALBRAITH, S., et al. 1977, Severe head injuries in three countries. Journal of Neurology, Neurosurgery and Psychiatry, 40, 291–298.
- Lakoff, R. 1974, What you can do with words: politeness, pragmatics and performatives. In Institute of Human Learning (Ed.) Berkeley Studies in Syntax and Semantics. Vol. 1: XVI. (Berkeley: University of California), pp. 1–55.
- MARTIN, J. R. 1992, English Text. System and Structure (Amsterdam: Benjamins).
- McDonald, S. 1992, Communication disorders following closed head injury: new approaches to assessment and rehabilitation. *Brain Injury*, 6, 283–292.
- McDonald, S. 1993, Pragmatic skills after closed head injury: Ability to meet the informational needs of the listener. *Brain and Language*, 44, 28-46.
- Mentis, M. and Prutting, C. A. 1991, Analysis of topic as illustrated in a head-injured and a normal adult. *Journal of Speech and Hearing Research*, 34, 583-595.
- MILTON, S. B., PRUTTING, C. A. and BINDER, G. M. 1984, Appraisal of communicative competence in head injured adults. In R. H. Brookshire (Ed.) Clinical Aphasiology Conference Proceedings (Minneapolis, MN: BRK), pp. 114–123.

- POYNTON, C. 1985, Language and gender: making the difference (Victoria: Deakin University Press).
- PRUTTING, C. A. and KIRCHNER, D. M. 1987, A clinical appraisal of the pragmatic aspects of language. *Journal of Speech and Hearing Disorders*, **52**, 105–119.
- Russell, W. R. and Smith, A. 1961, Post-traumatic amnesia in closed head injury. Archives of Neurology, 5, 4-17.
- SEARLE, J. 1975, Indirect speech acts. In P. Cole and J. L. Morgan (Eds) Syntax and Semantics, Vol III Speech Acts (New York: Academic Press), pp. 59-82.
- Snow, P., Douglas, J. and Ponsford, J. 1995, Discourse assessment following traumatic brain injury: a pilot study examining some demographic and methodological issues. *Aphasiology*, 9, 365–380.
- Stubbs, M. 1983, Discourse Analysis. The Sociolinguistic Analysis of Natural Language (Oxford: Blackwell).
- Tannen, D. 1981, Indirectness in discourse: ethnicity as conversational style. *Discourse Processes*, 4, 221–238.
- Togher, L., Hand, L. and Code, C. 1997a, Analysing discourse in the traumatic brain injury population: telephone interactions with different communication partners. *Brain Injury*, 11, 169–189.
- Togher, L., Hand, L. and Code, C. 1997b, Measuring service encounters in the traumatic brain injury population. *Aphasiology*, 11, 491–504.
- ULICHNY, P. and WATSON-GEGEO, K. A. 1989, Interactions and authority: the dominant interpretative framework in writing conferences. *Discourse Processes*, 12, 309-328.
- VENTOLA, E. 1987, The Structure of Social Interaction: A Systemic Approach to the Semiotics of Service Encounters (London: Pinter).

Appendix 1: Politeness markers per clause for TBI and control groups by condition

Subjects	Therapist	Bus	Police	Mother
TBI	n=5	n = 5 $Man = 0.42$	n = 5 $Mean = 0.43$	n = 5 $Mean = 0.49$
	Mean = 0.45 Range = 0.34-0.68 SD = 0.13	Mean = $0.42$ Range = $0.25-0.5$ SD = $0.10$	Mean = $0.43$ Range = $0.2-0.73$ SD = $0.25$	Range = $0.49$ Range = $0.17-0.88$ SD = $0.29$
Controls	n = 5 $Mean = 0.68$	n = 5 $Mean = 1.01$	n = 4 $Mean = 1.03$	n = 4 $Mean = 0.65$
	Range = $0.5-0.97$ SD = $0.18$	Range = $0.7-1.67$ SD = $0.42$	Range = $0.8-1.2$ SD = $0.17$	Range = $0.54-0.8$ SD = $0.11$

Appendix 2: Politeness markers per clause for partners by speaker group

	Therapist	Bus	Police	Mother
With TBI	n = 5	n = 5	n = 5	n = 5
	Mean = 0.47	Mean = 0.55	Mean = 0.79	Mean = 0.62
	Range = $0.23-0.68$	Range = $0.23-0.96$	Range = $0.65-0.94$	Range = $0.23-0.68$
	SD = 0.19	SD = 0.30	SD = 0.13	SD = 0.19
With	n = 5	n = 5	n = 4	n=4
controls	Mean = 0.64	Mean = 0.68	Mean = 0.70	Mean = 0.64
	Range = $0.45-0.79$ SD = $0.16$	Range = $0.4-1.0$ SD = $0.21$	Range = $0.49-0.82$ SD = $0.14$	Range = $0.38-1.0$ SD = $0.26$