# Discourse, Dialect and Aphasia in the Western Cape

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## ABSTRACT

This paper focuses on the effects of mild-moderate aphasia on discourse and dialect within a particular population, the so-called "Coloured" population residing in the Western Cape. This population, with its distinct dialectal variations of English and Afrikaans and its strong traditional roots in bilingualism, offers a unique and fruitful context in which to examine pathological language. In this study dialect was considered within discourse, which allowed for the robustness of dialect, ethnic and cultural forms to be revealed. A control group was selected with a view to differentiating aspects of discourse, which seemed linked to dialectal features and those which reflected the compensatory attempts of adults with aphasia in discourse. Various narrative tasks, each assessing different levels of language and cognitive complexity, were used to elicit discourse. The results of this study revealed that individuals with mild to moderate aphasia exhibited preserved dialectal features, albeit intermingled with aphasia associated difficulties. These findings suggest that well-developed sociolinguistic adaptation strategies of the Coloured speaker provides a useful foundation in the event of aphasia. Shifting and flexibility, which are the essence of the dialects studied, provide the individual with aphasia a range of mechanisms for compensating and communicating which may not be available to those from a more monolingual environment.

KEY WORDS: aphasia, discourse, dialect, discourse ethnic markers, adaptation strategies, compensatory mechanisms.

# INTRODUCTION

Research focusing on non-standard English and nonstandard Afrikaans dialects in South Africa is very much in its infancy. For one South African population group in particular, the so-called "Coloured" group, largely resident in the Cape Province, distinct dialectal versions of Afrikaans and English have developed. These dialectal versions of Afrikaans and English differ from Standard Afrikaans and English in a number of different ways. These have been highlighted by Van Rensburg (1997), McCormick (1989, 1993, 1995); Van der Reede (1983) and others, and include differences in phonology, lexicon, syntax and stylistic variables. Situational and conversational code-switching and code-mixing and linguistic convergence is clearly evident among these dialects and can be related to the social history and context in which English and Afrikaans have been in contact within this population group (McCormick, 1995).

To date, little research has been conducted on the breakdown in non-standard Afrikaans or non-standard English following neurological impairment. To the best of our knowledge, no previous research has examined the aphasic manifestations within the Afrikaans and English dialects used by the so-called Coloured population of the Cape Province. An examination of the interaction between dialect and aphasia is of great importance for the clinician when attempting to discern which linguistic and communicative processes are attributable to dialect, and which are attributable to pathological processes.

It is hypothesised that adults from a country with a strong bilingual tradition have linguistic flexibility as a resource, which can theoretically be brought into play after neurological insult. That persons with aphasia can adapt to their linguistic problems in discourse is already well established. The nature of this adaptation in bilingual individuals is, however, relatively unknown and can potentially shed light on bilingual mechanisms as well as on therapy approaches.

Even though McCormick (1995) asserts that because of its instability, Cape Coloured English is not yet a dialect, in this paper we refer to Cape Coloured English as an emerging dialect from the perspective that it is a relatively distinct well-documented form.

The aim of the present study was to characterise the discourse of a group of sixteen subjects with aphasia, from the Coloured population in the Western Cape, who come from a strong bilingual tradition. The results of the separate analyses have been described elsewhere (Von Bentheim, 2000; Venter, 2000; Penn, Venter & Ogilvy, 2000). The focus of the present paper is to highlight the effects of mildmoderate aphasia on the dialects using narrative discourse tasks. For this reason, a control group was selected with a view to differentiating aspects of discourse, which seemed linked to dialectal features and those which reflected the compensatory attempts of adults with aphasia in discourse.

These studies form part of a larger collaborative project examining the effects of aphasia on dialect in other population groups such as the African Americans and indeed may contribute towards a larger body of knowledge regarding the effects of aphasia on non-standard dialects (Ulatowska, Hill, Thompson, Parsons & Wertz, 1998; Ulatowska & Olness, 2000).

#### WHY DISCOURSE?

Consideration of dialect in discourse in persons with aphasia allows for the robustness of dialectal, ethnic and cultural forms used by persons with aphasia to be revealed in contextual use (Ulatowska & Olness, 2000). Furthermore, as noted by Ulatowska and Olness (2000), structural changes associated with aphasia, or more specifically, morphological changes, have been largely elicited in the past in the sentential context. However such "acontextual" elicitation procedures are artificial from a socio-pragmatic perspective and result in a disadvantage when one is interested in uncovering the interplay between aphasia and non-standard dialect forms, as these forms are reserved for more informal settings, personal topics and familiar interlocutors.

Furthermore the use of discourse within the clinical setting and for purposes of assessment of persons with aphasia, has recently been called for within the South African setting, considering that most standardised test batteries used in South African Speech Therapy clinics are based on American and British Standard English. Considering the multilingual and multicultural nature of the South African population, these tests are not appropriate. Ethically, all patients should be tested on culturally and linguistically appropriate standardised tests

(Wallace, 1998). In addition the use of standardised tests is questionable in that they only test language performance and do not focus on communication in the broader sense (Boles, 1998). Alternative methods of assessment are required. There is a need to move away from the fractional view of communicative competence provided by standardised tests and to focus on the holistic overview of multilingual patients' communicative competence (Grosjean, 1989 in Penn and Beecham, 1992). One direction in which to move away from standardised test batteries is towards that of discourse analysis.

Discourse analysis addresses the problems of social, psychological, and pragmatic aspects of communication, as well as its linguistic aspects (Ulatowska, North & Macaluso-Haynes, 1981). Discourse analysis has been shown to be particularly sensitive to the breakdown in persons with mild aphasia (Penn & Beecham, 1992; Chapman & Ulatowska, 1989). By employing discourse analysis, Speech-Language Pathologists take into account the limited knowledge concerning the different linguistic environments, the lack of culturally sensitive testing material and the multiple context of an individual's language use (Penn & Beecham, 1992).

Most of the research over the past few decades has focused on the discourse abilities of middle class Caucasians with neurogenic impairments, particularly aphasia (Ulatowska et al., 1998). Discourse studies on other cultural groups is lacking. Ulatowska et al. (1998) proceeded to compile a discourse battery comprising of various discourse tasks and study differences between cultural groups in

TABLE 1: Elicitation Techniques for the Discourse Test Battery (Ulatowska et al., 1998)

Test Stimuli	Description of Stimuli	Description of Task
Composite Pictures		
Easter Morning	This is a "Norman Rockwell" picture of a family going to church and the father is staying at home.	Required to generate a story and then to provide the main idea for the story.
Counting Money	This is a "Henry Roseland" picture of an elderly couple sitting and counting money at a table.	
Picture Sequence		
Apple Theft	This is a sequence of four pictures depicting two boys trying to steal apples from somebody's garden.	Required to generate a story and then to provide the main idea and lesson of that story.
Fable: Farmer and Sons	This is a fable about a farmer who dies and leaves his vineyard to his sons.	Required to retell the story and then to provide the main idea and lesson of that story.
Personal Experience		,
Frightening Experience	A self-generated narrative about a memorable experience.	Required to generate their own personal story.
Proverbs :	Five familiar proverbs were presented to the subjects.	Required to give spontaneous interpretations of them and to choose the best descriptions of them from multiple choice options.

terms of discourse features. They found that the discourse tasks were useful in highlighting dialectal and ethnic discourse features and that the test battery was appropriate for different cultures (Ulatowska et al., 1998).

#### THE STUDY

A group of sixteen subjects with fluent aphasia and sixteen matched controls were employed in this study. Eight of the subjects with aphasia were primarily Afrikaans speaking and eight were primarily English speaking. All subjects were from the Western Cape Coloured community and can be viewed as having a strong bilingual tradition. All subjects with aphasia presented with single left sided CVAs, were three months post onset of CVA, and presented with a mild-moderate degree of aphasia as determined on the Western Aphasia Battery (Kertesz, 1982). Subjects were required to have a minimum education level of Grade 7 and an age limit of 65 years. Control subjects were matched for age, sex and, where possible, levels of education and vocation.

An adapted version of Paradis' Bilingualism Questionnaire (Paradis, 1987) was administered to each subject to ensure first language status of this group and to document patterns of language exposure. The impression of the group as a whole reflected high language contact patterns. Thereafter the subjects were administered a discourse test battery devised by Ulatowska et al. (1998). As can be seen from Table 1, the narrative tasks were designed to elicit samples of discourse across various tasks. Each task focused on assessing different levels of language and cognitive complexity.

All discourse samples were videotaped and later transcribed to allow for the coding of critical non-verbal information such as gesture, which became important in the analysis of evaluation. The transcripts were analysed for productivity, quality of discourse, use of evaluation, dialectal features and discourse ethnic markers.

# RESULTS

## **QUALITY OF NARRATIVES**

The English and Afrikaans speaking control subjects performed slightly better than the subjects with aphasia in terms of the quality of their narratives. The features of global structure (narratives), temporal sequencing, completeness (fable), reference, suspense (narratives), accuracy (fable), coherence and clarity can be viewed as the underpinnings of quality in a narrative. Although the experimental group performed more poorly than the controls on all of these features, coherence and clarity were the features which best differentiated the two groups across narrative tasks. Coherence refers to the well-formedness of text and characterises the conceptual organisational aspects of discourse at a suprasentential level (Ulatowska et al., 1981; Glosser & Deser, 1990). A patient's ability to produce coherent text depends on that individual's ability to maintain thematic unity throughout the discourse (Ulatowska et al., 1981).

Clarity refers to the linguistic devices that produce coherence (Ulatowska et al., 1981). This feature significantly differentiated the control subjects from the subjects with aphasia across all narrative tasks. These findings support the findings of Ulatowska et al. (1981) and Ulatowska,

Freedman-Stern, Weiss Doyel & Macaluso-Haynes (1983) which reported similar results on tasks such as memorable experience, picture description, story retell and procedural discourse. The subjects with aphasia's narratives were characterised by word finding difficulties and phonological paraphasias. Attempts at correction as well as significantly more repetition of sounds, words and phrases and empty fillers all affected the ratings for clarity of their narratives.

In general, the subjects with aphasia preserved their referencing abilities but still performed slightly poorer than the controls. The subjects with aphasia in Chapman and Ulatowska's (1989) study had less difficulty in processing reference when the information was consistent with real world knowledge.

The remainder of the features analysed revealed that the experimental and control groups did not perform very differently. When considering global structure it became evident that the narrative suprastructure, i.e. the ability to create a setting, and to provide a complicating action etc., was preserved in the subjects with aphasia. This supports past research which has shown that despite deficits at the single word and sentence levels, persons with aphasia have been able to produce adequate discourse structures across narratives (Ulatowska et al., 1983; Ulatowska, Allard, Reyes, Ford & Chapman, 1992; Caplan, 1996). Temporal sequencing abilities, which reveal whether individuals can place events in the correct chronological order, were intact for both groups across the majority of the narrative tasks. These findings are similar to those of Ulatowska et al. (1981) and Ulatowska et al. (1998) in that the persons with aphasia in their studies also maintained proper chronological organisation in their personal narratives.

The final two features to consider are those of completeness and accuracy of information for the task of the "Fable" story retell. Story retelling is a common way to test recall of information from spoken discourse (Ernst-Baron, Brookshire & Nicholas, 1987). The subjects with aphasia performed slightly poorer than the controls. Similar findings were found in Ernest-Baron et al.'s (1987) study. Ulatowska et al. (1981) and Ernest-Baron et al. (1987) also reported that persons with mild to moderate aphasia produce retell narratives that are similar to controls but are shorter and simpler. Similar patterns are not observed in patients with more severe aphasia.

These findings highlight in general that the experimental group's global structure (narrative), temporal sequence, suspense, completeness and accuracy remains relatively intact in persons with mild to moderate aphasia. As Holland (1982) noted, aphasics demonstrate more communicative success than they do communicative failure.

#### ANALYSIS OF EVALUATION

The use of evaluation is imperative in any narrative and is what makes a story worth telling. Labov's (1977) analysis of evaluation proved to be a useful way to determine differences between persons with and without aphasia in their use of certain evaluative devices. Of all the evaluative categories encompassed by Labov's (1977) framework, i.e. intensifiers, comparators, correlatives and explicatives, intensifiers were used the most by both experimental and control groups. Overall the subjects with aphasia used fewer intensifiers than the controls. The subjects with aphasia used more ritual utterances and gesture than any other

intensifier, whereas the control subjects' use of evaluative elements were in the form of expressive phonology, lexical items as well as ritual utterances. The marked use of ritual utterances among both groups may suggest that this evaluative device is characteristic of natural conversation within the Afrikaans and English Cape Coloured vernaculars. Furthermore the greater use of ritual utterances by the subjects with aphasia may indeed reflect its function as a pragmatically appropriate adaptation feature.

Examples of ritual utterances used by subjects with aphasia and the control subjects were as follows:

#### English

"you know", "in that regard", "in accordance with it", I mean", "in that regard", "whatever whatever", "actually", "in connection with it", "like", "that's the thing", "in actual fact", "and all these things", "I suppose", "how can I say"

## Afrikaans

The ritual utterances were marked with code-switching at word and phrase level in the Afrikaans speaking aphasic and control groups. Examples of commonly occurring ritual utterances included:

"Ja" and "nee" at the beginning and end of sentences; "ny" instead of "nee", "regtig", "natuurlik", "werklik", "you know", "because why", "volgens my", "soos ek dit nou sien"

## PRESERVATION OF DIALECTAL FEATURES

The analysis revealed no clear differences either in range, quantity or type of dialectal features between the subjects with aphasia and the control subjects. All subjects showed the use of a range of features, which are documented below. Many of these features have previously been documented by authors such as McCormick (1995), Lass (1995), Malan (1995) and others.

The following morpho-syntactical features were produced by subjects with aphasia and the control subjects in the Cape Coloured English discourse samples. The presence of these dialectal features would indicate some preserved grammatical/micro-structural knowledge which enables them to apply the morphological rules of their vernacular. Furthermore the syntactic convergence that was noted in the data, provides evidence of some cross-linguistic equation of syntactic patterns. Some examples of grammatical dialectal features used by the subjects are outlined below:

## English

## Verb- related features:

 Deletion of contractible forms of "be", "have" and modal auxiliaries:

"I think they going to church"
"but why you talking me like that?"

# Number concord

- Was/were:
  - "they were people that was not used to..."
  - " ...and as they was doing that..."

• Is/are:

"the kids is busy..."

"the two of them is probably talking..."

Omission of final consonant /s/

"she take your feet and bring water"
"he just want to read his Argus"

Has/have:

"....and said to them he have treasure buried..."

## Tense, aspect and modal marking

· Deletion of past tense "-ed" markers in English

"we live very happily until such time that she had cancer"

"there was a boy that look for trouble"

- The past tense being indicated by using "did" unemphatically
  - "....don't know if he did chase them...."
  - " ...and he did put everything in to produce good grapes"
- Deletion of adverbial "-ly" suffix:

"I was driving too slow for his liking"

"I was feeling real scared"

• Penultimate placement of adverbials:

"there were other guys also fishing"

"and there 's a candle burning also"

"and I saw a house also"

## **Prepositions**

- Substitution of the prepositions "at, with on, in to" with "by"
- · Omission of prepositions

## **Afrikaans**

Morpho-syntactic features produced by the subjects with aphasia and the control subjects in their discourse samples are outlined below. Many of these features have been previously documented by authors such as Kotzé (1993), McCormick (1995) and others.

# Verb related features

 Regularising of the irregular past tense form: gehet, gehê, gewees:

"Ek het darem gelukkige jong dae gehet" (Cape Coloured Afrikaans)

"Ek het darem gelukkige jong dae gehad" (Standard Afrikaans)

 Another example of the regularising or generalising of the irregular past tense form of the verb, "om te wees" (to be) was noted. The past tense form of the verb "om te wees" is "was" in Standard Afrikaans. The subjects with aphasia and the control subjects often made use of the auxilary "het" instead of "was":

"ons het nie gewees soos vandag se kinders nie" (Cape Coloured Afrikaans)

"ons was nie gewees soos vandag se kinders nie" (Standard Afrikaans)

 Regularising the past tense forms of certain irregular Afrikaans verbs e.g probeer (try), agtervolg(follow), behandel (treat) were noted. Morphemes indicative of the past tense namely ge-were connected to the verb e.g geprobeer, geagtervolg, gebehandel etc: "hy het geprobeer" (Cape Coloured Afrikaans)
"hy het probeer" (Standard Afrikaans)

- Borrowed English verbs took Afrikaans morphemes and were paired with Afrikaans auxiliaries:
  - "hulle het gesafe"
- Both subject groups used the historical past tense during the narratives. Standard Afrikaans uses mainly the past tense.
- One of the most striking features produced by all the subjects, distinguishing it from Standard Afrikaans, is its optional verb placement rules with a concentration of verb components in the second position. This is illustrated in the example below:

"Ek wil gaan na haar toe" (Cape coloured Afrikaans) "Ek wil na haar toe gaan" (Standard Afrikaans)

 The change from SOV to SVO was often triggered by a specific type of main clause verb, namely "onoorganklike werkwoorde" used to reflect the perspective of the speaker.

"ek weet", "ek sien" and "ek dink"

"Ek sien daar twee bejaarde mense sit" (Cape Coloured Afrikaans)

"Ek sien twee bejaarde mense sit daar" (Standard Afrikaans)

- The shift from SVO to SOV further appeared to be triggered by the use of the copula "is" the verb in a subordinate clause (SVO):
  - "...dat hulle is te laat vir die winkel" (Cape Coloured Afrikaans)
  - "...dat hulle te laat vir die winkel is" (Standard Afrikaans)

The shift from SVO to SOV also occurred due to the topicalisation of clauses. Both subject groups presented with this feature. According to authors such as Kolk, Heling & Keyser (1990), topicalisation is a well-documented strategy used by aphasic individuals in order to avoid a change in word order (preventative adaptation), as well as to place important information first in case they cannot complete the sentence. Labov (1977) stated that topicalisation can also be used as an evaluative element in narratives.

# Doubling:

#### Prepositions

 Both the experimental and control subjects made use of double prepositions. Standard Afrikaans only uses one preposition whereas Cape Coloured Afrikaans is marked with the use of double prepositions, for example:

"n skat in die wingerd in"

## Conjunctions

 Double conjunctions were used as a rhetoric device by linking two statements - the second of which explains the first, with "because why" spoken in a rising intonation. Double conjunctions were used by both groups as an intensifier

"Hy moet maar die been afsit because why die been het al klaar genip."

# Lexical convergence

In this study much lexical borrowing from English into

the lexicon of Cape Coloured Afrikaans was noted for the subjects with aphasia and the control subjects. However, overall the experimental subjects tended to use more loan words than the control subjects. A possible explanation for this may be the word finding difficulties experienced by the subjects with aphasia in their primary language, Afrikaans.

Although loan words were borrowed mainly from open class words, there was evidence of borrowing from closed class words. As noted by McCormick (1995), this reflects the situation of intense linguistic exchange since it presupposes the cross-linguistic equation of syntactic patterns, whereas mere lexical borrowing from open classes would require only a minimum of bilingual speakers in the transmission process.

Examples of English loan words used by experimental and control Coloured Afrikaans speaking subjects included:

- Nouns: fence, curve, sixty, story, breakfast, bus, sixpence, pavement, overall, couch, pals, neighbours, pyjamas, yard
- Verbs: disturb, spying, visit, gepanic, opgesafe
- Adjectives ripe, cold terrible, tragic
- Adverbs: close
- Ritual utterances: because why, whatever, anyway, you know, okay, even, actually

Unlike the extensive borrowing of English words into the Cape Coloured Afrikaans lexicon, less borrowing of Afrikaans words into the Cape Coloured English lexicon was demonstrated by the subjects with aphasia and the control subjects. The majority of borrowed words were restricted to "fillers", slang expressions and appeared to function as evaluative devices.

"ag", "Ja", "tramp - kick", "klomp-whole lot of", "sukkel - struggle", "pikkies", "picannin", "ouens"

The findings in this study of extensive amounts of English loanwords in the Cape Coloured Afrikaans lexicon and the limited borrowing from Afrikaans into the Cape Coloured English lexicon supports the well-documented findings reported by McCormick (1995) of lexical convergence and code switching in Cape Coloured Afrikaans and English. McCormick (1995) notes that as Cape Coloured Afrikaans has been used for a long time, its grammatical structure is fairly stable although its lexicon is open to influence from English. Whereas the reverse is true for Cape Coloured English, with its lexicon absorbing little from Afrikaans and because it is in the process of becoming a first language, its grammatical structure is less stable.

#### **Code-switching**

Much code-switching was evident in the Cape Coloured Afrikaans discourse samples of both the subjects with aphasia and the control subjects. The type of code-switching which occurred in the data was conversational code-switching. This type of code-switching is largely unconscious although there are times when the code-switching is used to perform certain stylistic and pragmatic functions (McCormick, 1995). Code-switching to indicate a change in focus during a conversation with a clearly discernible rhetorical function was noted in the data from both groups. This involves the repetition of the meaning of the previous

word and is therefore used for the purpose of emphasis. In this case it is not used to fill a lexical gap. An example of this is in the use of direct quoting by both subject groups. The quotation is foregrounded by the language switch.

#### DISCUSSION

Although the subjects with aphasia performed more poorly in the overall quality of their narratives and demonstrated aphasic manifestations in terms of paraphasias and word finding difficulties, their use of dialectal features and discourse ethnic markers appear to be preserved. Furthermore, it may be argued that the dialectal features reflect the dialects used by the Cape Coloured population rather than errors. On the other hand, the dialectal forms and discourse characteristics of the Cape Coloured population may allow more easily for compensatory strategies employed by the persons with aphasia to be more readily accommodated.

As mentioned previously, the Cape Coloured Afrikaans dialect is marked with much code-switching between English and Afrikaans. Furthermore both Cape Coloured English and Afrikaans seemed to display frequent use of repetition, topicalisation, use of direct speech and fillers in the form of ritual utterances. These features used by the subjects with aphasia as well as the control subjects, suggests that these characteristics are still preserved after aphasia.

The Cape Coloured Afrikaans speaking cultural group, represents an example of a high involvement culture. This implies the value of fluency, listener participation, and a full verbal channel in narrative production. According to Ulatowska and Olness (2000) aphasia does not destroy the most fundamental thematic functions potentially filled by repetition in the case of milder degrees of severity. This finding of preservation in Afrikaans and English speaking individuals with aphasia, is even more significant considering the apparent high use of repetition as an evaluative device as part of their discourse style.

However, these characteristics have also been well documented as typical adaptation and compensation features found in aphasic language. Hence the overlap between what are typical characteristics of the Cape Afrikaans and Cape Coloured English and what might indeed be an aphasic adaptation feature is unclear. However, if the use of these features by the subjects with aphasia are adaptation features, then one would argue that the compensatory strategies have resulted in preserved pragmatics which are culturally and linguistically appropriate. The notion of adaptation is a core feature of pragmatic competence and several researchers have reported the preserved pragmatic competence of individuals with aphasia (Penn, 1999).

# CLINICAL USEFULNESS OF THE BATTERY

In this study, the Ulatowska Test Battery (1998) proved to be clinically useful. The battery is quick and easy to administer which makes it ideal for the assessment of aphasic patients' narrative discourse production.

The inclusion of various narrative tasks and stimuli place different structural, cognitive and linguistic demands on the subject. The self-generated stories (composite pictures and personal experience) place fewer demands on memory load but require the patient to generate story elements and

their own structure (Doyle, McNeil, Spencer, Jackson Goda, Cottrell & Lustig 1998; Ulatowska et al., 1998). Story retell (fable) however, demands that the patient retains various story elements in their temporal order and then he/she must be able to retrieve them and reformulate them linguistically (Doyle et al., 1998).

The inclusion of a personal narrative task was found to be most useful in terms of the elicitation of dialectal features, greater use of evaluative devices in the form of intensifiers and use of discourse ethnic markers. These findings support previous research which has noted the value of narratives of personal experience (Labov, 1977; Sinoff, 1993; Ulatowska and Olness, 2000). Furthermore, as noted by Ulatowska and Olness (2000) when researchers are interested in dialect and aphasia, the methodological approach is critical and language is probably best elicited in non-formal contexts (e.g. with personal narratives), which at the same time offers maximal potential for elicitation of morphology which is rich and highly characteristic of the dialect.

# **CONCLUSION**

When conducting research of this nature numerous methodological concerns are raised. Variables such as education, language history, age, gender, interlocutor effects and communicative context need to be seriously considered before definitive conclusions can be made. The difficulties in obtaining homogeneity across groups of subjects with and without aphasia is well acknowledged and it is therefore encouraged that research in this field continues to look at individual differences and to focus on the relationships between many of these above-mentioned variables and language and communication.

As was seen in this study, individuals with mild to moderate aphasia exhibited preserved dialectal features, albeit intermingled with aphasia-associated difficulties. Furthermore preserved pragmatic competence was revealed in terms of adopting culturally and linguistically appropriate adaptation strategies. Whether these features are preserved in persons with more moderate-severe aphasia still needs to be discerned.

As noted by Ulatowska and Olness (2000), the key question when attempting to examine the interaction between dialect and aphasia, is to determine which differences are attributable to the dialect and which are attributable to pathological processes. However, this question may only be fully answered when we have gained greater knowledge and a more thorough understanding of the ethnic dialects which an individual might be expected to use and in the context in which the language is being elicited. The need for continued research into a greater understanding of the dialects used by the Cape Coloured population is well recognised especially considering the marked political, educational and social changes experienced more recently in South Africa, which indeed may affect language contact. This is further emphasised in the Cape Coloured English dialect in which the grammar has been reported as not being currently stable (McCormick, 1995).

This study has demonstrated that South Africa is a fruitful context for the examination of pathological language. Its linguistic diversity poses a challenge not only to those interested in bilingualism but also to those interested in linguistic adaptation. The findings of this

study suggest that well-developed sociolinguistic adaptation strategies of the Coloured speaker will provide a solid and useful foundation in the event of aphasia. Shifting and flexibility which are the essence of the dialects studied, provide the individual with aphasia, a range of mechanisms for compensating and communicating which may not be available to those in a more monolingual environment.

The clinical implications arising from this research are numerous. Firstly, hopefully the results of this study have strengthened the case for the use of discourse as a culturally and linguistically appropriate assessment tool with persons with aphasia. Secondly to heighten clinicians' awareness of the need to tap communication in its more natural form revealing dialectal features, culturally rich discourse ethnic markers and discourse styles and natural communicative competence. Hopefully the clinical implications emerging from this research will not only have a future impact on forms of assessment but intervention as well, aiming for more culturally and linguistically appropriate intervention. The need for therapists to demonstrate sensitivity to and an understanding of ethnic dialects within the Coloured population when conducting assessments or therapy is long overdue.

Finally, the need for further research regarding Cape Coloured Afrikaans and English dialects as well as with persons with aphasia from this population group is clearly needed. Research examining the processes used by individuals with aphasia to compensate for their language impairment cross-linguistically (or across dialects) may help us to discern natural processes from pathological processes.

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