

**Pragmatic assessment of schizophrenic bilinguals' L1 and L2 use:
A comparison of three assessment tools**

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Declaration

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Abstract

The term "schizophrenia" refers to a psychiatric condition which affects an individual's thought and speech (Eaton and Chen 2006). The verbal expression of schizophrenics can therefore be used as a tool for insight into the nature of schizophrenia as well as the cognitive processes of schizophrenics (Wróbel 1990:1). This thesis reports on a comparative evaluation of three pragmatic assessment tools, namely the Pragmatic Protocol (Prutting and Kirchner 1987), the Profile of Communicative Appropriateness (Penn 1985), and the Framework for Assessing (Children's) Conversational Skills (Rumble 1988), in order to establish which of these tools is most suitable for assessing the first language (L1) and second language (L2) pragmatic abilities of late bilingual schizophrenics. Four late bilingual schizophrenic patients participated in this study. A thirty minute informal interview was conducted with each of the participants in both their L1 and L2 and the speech samples were transcribed and then analysed by means of each of the pragmatic assessment tools. A careful examination of the results yielded by the three assessment tools, showed, firstly, that when presenting the results of a pragmatic assessment of schizophrenic speech, it is crucial that both quantitative and qualitative information be included: if the latter is excluded, a significant amount of information is hidden from the clinicians and/or linguists doing the assessment, as well as the people to whom they report their findings. Secondly, with respect to the characteristics of schizophrenic speech, the three instruments used in this study show that whereas most of the aspects of schizophrenics' linguistic abilities seem intact, their pragmatic skills are definitely impaired. Thirdly, regarding differential symptomatology in bilingual schizophrenics, this study concludes that none of the three assessment tools contributes to a better understanding of this phenomenon, and that, in fact, it is highly unlikely that any pragmatic assessment tool would be able to capture this phenomenon. Finally, it is recommended that clinicians assess bilingual patients in both languages, whenever possible, in order to determine the full range of symptoms experienced by the patient, to gain a better indication of the severity of the illness and to track the progress of the illness.

Opsomming

Die term "skisofrenie" verwys na 'n psigiatriese toestand wat 'n individu se denkprosesse en spraak beïnvloed (Eaton en Chen 2006). Die verbale uitinge van skisofrene kan dus gebruik word om insig oor die aard van skisofrenie, sowel as die kognitiewe prosesse van skisofrene, te verkry (Wróbel 1990:1). Hierdie tesis lewer verslag oor 'n vergelykende evaluering van drie pragmatiese assesseringsinstrumente, naamlik die "Pragmatic Protocol" (Prutting en Kirchner 1987), die "Profile of Communicative Appropriateness" (Penn 1985), en die "Framework for Assessing (Children's) Conversational Skills" (Rumble 1988), om sodoende vas te stel watter een van hierdie drie die mees gepaste instrument is vir die assessering van tweetalige skisofrene se pragmatiese vaardighede in hul eerstetaal (T1) en tweedetaal (T2), spesifiek in gevalle waar die T2 later (d.w.s. nie binne die eerste sewe lewensjare nie) verwerf is. Vier sulke tweetalige skisofrene het deelgeneem aan die studie. Daar is met elkeen van die deelnemers 'n informele onderhoud gevoer vir 30 minute in hul T1, gevolg deur 30 minute in hul T2. Die onderhoude is getranskribeer en daarna geanaliseer deur middel van elk van die drie assesseringsinstrumente. 'n Noukeurige ondersoek en vergelyking van die resultate van die drie instrumente het eerstens getoon dat dit belangrik is om die resultate van 'n pragmatiese analise van skisofreniese spraak op beide 'n kwantitatiewe en kwalitatiewe wyse aan te bied: wanneer kwalitatiewe inligting weggelaat word, bly 'n betekenisvolle hoeveelheid van die informasie verborge vir die klinici en/of taalwetenskaplikes wat die assessering doen, asook die mense aan wie hulle hulle bevindinge rapporteer. Tweedens, met betrekking tot die eienskappe van skisofreniese spraak, wys die drie instrumente wat in hierdie studie gebruik is dat alhoewel meeste aspekte van skisofrene se taalvaardighede ongeskonde is, hulle pragmatiese vaardighede ooglopend aangetas is. Derdens, rakende differensiële simptomatologie in tweetalige skisofrene kom hierdie studie tot die gevolgtrekking dat geen van die drie instrumente bydra tot 'n beter begrip van hierdie verskynsel nie, en dat dit selfs hoogs onwaarskynlik is dat enige pragmatiese assesseringsinstrument hierdie verskynsel sou kon vaslê. Uiteindelik word daar aanbeveel dat klinici, wanneer dit ookal moontlik is, tweetalige pasiënte in beide tale behoort te assesser om sodoende die volledige reeks van simptome wat 'n pasiënt ervaar vas te stel, om 'n beter aanduiding te bekom oor die erns van die siekte, en om die progressie van die siekte te volg.

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List of Abbreviations

CFE	Cape Flats English
FACS	Framework for Assessing (children's) Conversational Skills
IA	Initiatory Act
L1	first language
L2	second language
OTA	Off Topic Act
PCA	Profile of Communicative Appropriateness
PP	Pragmatic Protocol
TRA	Topic Relevant Act
TRR	Topic Relevant Response
UG	Universal Grammar

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CHAPTER 1

INTRODUCTION

The term "schizophrenia" [Gr. *Schizein* 'to divide' and *phren* 'the mind'] refers to a psychiatric condition which affects an individual's thought and speech. The symptoms include delusions, auditory hallucinations and disorganized speech (Eaton and Chen 2006). The verbal expression of schizophrenics can be used as a tool for insight into the nature of schizophrenia as well as the cognitive processes of schizophrenics (Wróbel 1990:1).

According to Matulis (1977:9), "in diagnosing schizophrenia, more than in any other mental disorders, language should play the most significant part...", a statement that is supported by the past four decades' psychiatric research focusing on the central role that language¹ plays in schizophrenia (see Zulueta 1984). Zulueta (1984) investigates the effect of bilingualism on schizophrenia and shows that some late bilinguals - people who acquire a second language (L2) during or after puberty - present with different psychotic symptoms in their first language (L1) than in their L2 or even present with psychotic symptoms only in their L1, appearing less ill or not ill at all in their L2 (see, for example, Zulueta, Gene-Cos and Grachev 2001). In such cases, the language in which the patient is interviewed by the psychiatrist could determine whether or not the patient is perceived as mentally ill or in need of psychiatric attention. A better understanding of the language related symptoms of schizophrenia is therefore important to accurately diagnose this illness in bilingual patients. This is especially necessary in a multilingual country such as South Africa, because it often happens that the patient and the psychiatrist do not share the same L1, in which case the patient might be assessed in his/her L2 and possibly present with fewer or less severe symptoms.

Following grammatical assessments of schizophrenic speech, Cutting (1985:264-265) concluded that on a pragmatic level, schizophrenics cannot understand the semantic meaning of words in the context, fail to take their listener's needs into account, and

¹ The terms "language" and "speech" are used interchangeably throughout this thesis.

struggle to cohesively communicate their intended meaning to others due to irrelevant speech. With the grammatical assessments of the L1 and L2 speech of the patient, the most alarming deviations identified are pragmatic in nature and "[u]nlike aphasia where grammatical rules are disturbed... at phonetic level, schizophrenia expresses itself in language only at higher linguistic strata, principally on the semantic and pragmatic levels" (Wróbel 1990:3). It follows that there is a need for an instrument with which one can appropriately assess the (differing) L1 and L2 pragmatic skills of the specific population of late bilingual schizophrenic patients. Such an appropriate assessment would undoubtedly lead to a better understanding of the language-related symptoms of schizophrenia and ultimately enhance the accuracy of the diagnosis of this illness, since this disease affects the thought process. The analysis of schizophrenic language can thus be perceived as a window providing access to the effects, influence and consequences that this mental illness induces.

The research question of this study is as follows:

Which of the three instruments - The Pragmatic Protocol (PP) (Prutting and Kirchner 1987), the Profile of Communicative Appropriateness (PCA) (Penn 1985), and the Framework for assessing children's conversational skills (FACS) (Rumble 1988) - is the most appropriate in assessing the L1 and L2 pragmatic abilities of late bilingual schizophrenics?

The thesis is organised as follows: Chapter 2, the literature overview, contains discussions of schizophrenic language, bilingualism and schizophrenia, pragmatics as a component of linguistics, as well as the process of pragmatic assessment, providing definitions of the necessary concepts and also referring to previous studies in this field. Chapter 3 introduces and discusses the three pragmatic assessment tools employed to assess the pragmatic competence and deficits of the schizophrenic patients in this study, and chapter 4, the data and analysis section, contains the study itself – the participants, methodology and results. Chapter 5 provides (i) a discussion of the results of the previous chapter by means of a critical evaluation of the three assessment tools, (ii) a discussion of

the suitability of the assessment tools for analysing schizophrenic speech and assessing differential symptomatology in bilingual schizophrenics, and (iii) concluding remarks, as well as recommendations for future research.

CHAPTER 2

LITERATURE OVERVIEW

In this chapter, I will provide some background on schizophrenic language (section 2.1) and an overview of research on bilingualism and schizophrenia (section 2.2). Because I will be focusing on pragmatic aspects of schizophrenic language use, I will also provide a brief discussion of what the term "pragmatics" refers to (section 2.3) and what pragmatic assessment entails (section 2.4).

2.1 Schizophrenic language

Before focusing on the language use of schizophrenics, it is important to understand what the mental illness itself involves. From an etymological perspective, the word *insanity* is derived from the Latin *insanitas*, where the prefix *in-* means 'not', and the root *-sanus* carries the meaning of 'health'. The term "schizophrenia" was coined by Bleuler in 1911, as he regarded the common feature among the psychotic patients to be a split (*schism*) within the mind (*phrenos*) noticeable in "loosening of associations" and "disharmony among effects". Through this meaning, Bleuler referred to a "loss of balanced integration of disparate mental functions: cognition, emotion, and motivation." (Shean 1978:20) Kasanin (1944:1) identifies two "chief features", namely "[i]ntellectual impairment and a striking disturbance of emotional life".

What is generally agreed upon is the difficulty in any attempt to analyse the behavioural phenomena of schizophrenia since one tends to want to refer to its broad range of complex behaviours as though they were similar (Vetter 1969:141). Salzinger, Portnoy and Feldman (1995:36) agree by saying that following two decades dedicated to schizophrenic studies, it had become clear that schizophrenia as a diagnostic category is not reliable. Vetter (1969:144) further states that one must recognise that the term refers to "a group of disorders with some common features and some wide behavioural differences, rather than to a single disease entity with a well-defined series of symptoms". Shean (1978:32-34) articulates the difficulty of formulating a description of

schizophrenia. He focuses on the summary of the clinical criteria that is most widely used to arrive at a diagnosis of schizophrenia presented by Freeman (1969). Only the criteria regarding schizophrenic speech are discussed here.

Freeman (1969) firstly identifies *disturbances of speech*, under which he includes mutism, neologisms and jargon-like speech. He also lists *disorders of thinking*, including overinclusiveness and concreteness. He divides this second criterion into two categories. Firstly, syncretic thought, which he relates closely to personal needs, is determined by the individual's emotions and drives. Here the external reality is not differentiated in thought and a break-down of the self or self-autonomy is a characteristic which can be paired with confused speech including neologisms and fragmentation. Secondly, he identifies the existence of a pattern of thought disturbances that distorts and limits the capability of communicating logically and coherently (Shean 1978:34-35).

Salzinger et al. (1995:40-41) state that the importance of language behaviour derives from two sources, the first of which is its "regulatory function," where verbal behaviour is a direct representation of one's own behaviour, as in, for example, problem-solving or self-control. The second is the communicative function of language behaviour, which relates to a person essentially seeking to influence another through verbal behaviour. During recent decades, increasing attention has been given to the language of schizophrenic patients. Linguists and psychiatrists alike are interested in this language phenomenon since "[d]isorders of thought and speech are usually regarded as central to the concept and symptomatology of schizophrenia" (Morice and Ingram 1982:11). From a linguistic (psycholinguistic) perspective, researchers have recently begun trying to characterise and define the language one identifies with schizophrenia. Although Lorenz (1961:28) states that "while we recognize schizophrenic language when we see it, we can't define it," a few attempts to identify the features of schizophrenic language will be discussed below.

When Brown (1973:397) set out to analyse what he referred to as "schizophrenic speech", he concluded that "there is no such thing", although he "encountered plenty of

schizophrenic thought". For this reason, he emphasises the importance of distinguishing between the terms "schizophrenic speech", which could be interpreted as the way in which all schizophrenics typically utilize the different aspects of language (e.g. phonetics, syntax, morphology and semantics), and "schizophrenic thought". He notes that schizophrenics experience the world in a different way than normal² people. Since language is the "principle vehicle for making thought public" (Brown 1973:379), this experience and perception of the world is then reflected through their words. Thus, when looking at schizophrenic language, it is important to remember that it is not their linguistic competence that is impaired, but that their disorder of thought is reflected through their language behaviour, which results in an apparent speech disorder.

In contrast with the opinion of Brown, Chaika (1974) argues that the psychological or mental abnormalities associated with schizophrenia are paralleled by a disorder in the areas of the brain that are responsible for the production of linguistic elements and structures. Chaika (1974:257) concludes that this disturbance disables schizophrenics' ability to order linguistic elements into meaningful structures. She identified six definable characteristics of schizophrenic speech, including erratic disruption of the ability to successfully group semantic features with the matching applicable sound strings; the production of utterances that are influenced by previous utterances in the sense that words are chosen because of their similarity to the phonological and semantic features of previous utterances, rather than based on the theme of the conversation; trouble with applying the rules of syntax, and the inability to self monitor, e.g. the lack of self-correction (Chaika 1974:275).

Fromkin (1975) criticises Chaika's (1974) list of defining characteristics of schizophrenic speech, stating that all except the "disruption of the sequencing of ideas in discourse" are common in normal speech as well. The exceptional characteristic is the only one in which non-linguistic factors play a role, whereas the other characteristics relate to typical speech errors and "slips of the tongue" (Fromkin 1975:498). Fromkin (1975:501-502) maintains that since non-schizophrenics produce "anticipatory slips of the tongue, and false starts",

² The term "normal" is used here as a shorthand form of "typically functioning" and "non-psychotic".

as well as disruptions in the ability to apply rules of syntax, these phenomena should not be used as defining characteristics of schizophrenic speech.

In Morice and Ingram's (1982) study, language profiles were developed for schizophrenic, manic and non-psychotic control subjects. The free speech sample analysis employed syntactic variables reflecting the complexity, integrity and fluency of spoken language. In short, their results showed that the schizophrenics received a lower score on "variables which represent the complexity of speech" (Morice and Ingram 1982:15). An example given here is the number of embedded clauses per complex sentence. Since the schizophrenics received lower scores in this instance, the results indicate that schizophrenic speech is less complex than normal speech. Furthermore, the schizophrenics received better scores than the manics on the syntactic and semantic measures, as well as in the overall count of errors, while in comparison with the non-patients, the schizophrenics' speech was "either less complex in structure, or contained more errors, or both" (Morice and Ingram 1982:18). To conclude, Morice and Ingram found that the speech of the schizophrenics was less fluent, less complex, and contained considerably more semantic errors than the speech of the "normals".

From a linguistic perspective, Cohen (1978:1) is of the opinion that although the most convincing indications of schizophrenic psychosis involve disturbances in language, schizophrenic speech, as cryptic and jumbled as it may sound, hardly ever includes instances of agrammatism or word-finding deficits. Cutting (1985:255) concludes that on a phonemic level, no deviations are marked in schizophrenic speech, but that there are some prosodic deviations which could serve as evidence of a change in the perception of the prosody of phonemes. On a syntactic level, Cutting (1985:256) is confident that schizophrenics' ability is unimpaired, while on a semantic level schizophrenic language is "not obviously deranged in the large majority of patients" (Cutting 1985:259). On a pragmatic level, however, his results show that schizophrenics "fail to understand the meaning of words in context, cannot communicate their intended meaning to others, produce insufficient internal cohesion in their own speech, do not cater for the listener's needs and talk irrelevantly rather than incompetently" (Cutting 1985:264-265).

Wròbel (1990) focuses on the main linguistic categories with which schizophrenics struggle. In his opinion, while language disorders such as aphasia are characterised by disturbed grammatical rules as well as disorders starting at the phonetic level, schizophrenic language is commonly known for its impairment on levels including semantics and pragmatics (Wròbel 1990:3). Wròbel (1990:4) refers to Navratil's (1965) suggestion that schizophrenic language might represent "a manifestation of a different, particular value" and, as such, provide "evidence of a separate linguistic system".

Andreasen (1979) characterises 18 thought, language and communication disorders, as listed below (explained by Cutting (1985:249), cited in Wròbel (1990:6)).

- | | |
|---|---|
| 1. Speech poverty (as a result of poverty in thought) | There is a restraint in the amount of natural speech and spontaneity |
| 2. Existence of poverty of the content of speech, probably as a result of poverty of thought ("empty speech") | Speech is sufficient in quantity, but less so in quality |
| 3. Speech pressure | Leads to an increased amount of spontaneous speech |
| 4. Speech that is easily distracted | Subject often stops during speech in "response to a nearby stimulus" |
| 5. "Tangentiality" | Here the response of the subject is slanted and logically inappropriate |
| 6. Disruptment (sic) of ideas (ideas brought across are not ordered logically) | In spontaneous speech, ideas develop inappropriately by "slip[ping] off track" onto another closely related subject |
| 7. Speech that is incoherent ("word salad, schizophazia") | Unintelligible speech |
| 8. "Illogicality" | Ideas or conclusions that do not follow rationally on the previous ideas or discourse |

9. "Clanging"	Words are chosen here for their phonetic value rather than their semantic meaning
10. Neologisms	Creating new words
11. Approximation of words ("paraphasia, metonym")	Older words are used in an unconventional, renewed way
12. "Circumstantiality"	Here speech is indirect and extensive, often unsuccessful in reaching its goal
13. Loss of the target	Subjects fail to follow a train of thought in order to logically reach a conclusion
14. "Perseveration"	The constant repetition of words, specific thoughts, or topics
15. "Echolalia"	The case where the speaker merely echoes the interviewer's words
16. "Blocking"	When a train of speech is stopped or cut short
17. "Stilted" speech	Speech of subjects is noticeably too formal or pretentious given the context
18. Frequent reference to self	Continually shifting the topic in order to speak about oneself

A final pragmatic skill that will be discussed involves a theory of mind. This is the area of pragmatics in which 'real world' knowledge plays a role in inferring the message behind non-literal speech. Sperber and Wilson (1995) state that all linguistic communication involves firstly the interpreting or decoding of literal meanings, and secondly inference. This inference process is necessary to "fill in the literal outline or template" by allocating "reference to pronouns," specifying the exact message that is brought across, "elaborating" that message by means of "drawing out contextual messages" and creating "*ad hoc* concepts" (Langdon, Davies and Coltheart 2002:73). Langdon et al. (2002:73) elaborate on this by stating that in order to understand an utterance, one needs to make inferences about the "thought in the mind of the speaker", as well as the specific intentions the speaker has in making an utterance. In other words, in

the communication process, it can be assumed that the speaker has a specific message that he intends to bring across, i.e. the speaker has the intention of expressing a specific piece of information about the world to the listener, who also needs to have access to or knowledge of the subject matter, to be able to infer the message behind the utterance (Langdon et al. 2002:73).

According to Frith, Morton and Leslie (1991), in order to possess such a theory of mind, one needs to have the "capacity to *mentalise*" (Langdon et al. 2002:74). Sperber and Wilson's (1995) contribution emphasises the function which such "mind-reading abilities" has in everyday communication, since the interpretation of every utterance involves "an inference to a hypothesis about the speaker's intentions" (Langdon et al. 2002:74). Langdon et al. (2002:75) continue by saying that if people's mind-reading abilities are impaired, one can assume that their ability to "infer speakers' communicative intentions" will also be impaired. According to Langdon et al. (2002:77), the irregularities observed in the communication of schizophrenic patients can be categorised as aberrations of *content*, referring to "delusions and hallucinations", and aberrations of *form*, referring to "abnormal ways of organising and expressing ideas", also known as formal thought disorder. Some of the characteristics of formal thought disorder seem to demonstrate "pragmatic impairments in *expressive* communication" (Langdon et al. 2002:77).

According to Langdon et al. (2002:77), schizophrenic patients have difficulty in interpreting "metaphors and proverbs", and their "impaired interpretation of non-literal utterances" is also continually documented (see Langdon et al. 2002:77 for references to this research). Furthermore, researchers have also indicated that schizophrenic patients have difficulty deducing the intended meaning of indirect hints (Corcoran and Frith 1996). Langdon et al. (2002:78) mention that in recent years some schizophrenic patients have shown "late-onset impairments of pragmatics," as well as impairments of "general mind-reading" abilities.

To summarise, "[t]he pathological character of schizophrenics' verbal expression arises from [a] disturbed manner of thinking" (Wròbel 1990:5), but the difficulty that the schizophrenic has with thinking is not necessarily the same phenomenon as the difficulty the schizophrenic has with speaking (Chaika 1974:258). Although schizophrenic language shows a deviation in pragmatic abilities, like inferring the intended meaning of an utterance, the majority of other linguistic skills seem to be intact. Before discussing pragmatic skills (and their assessment) in more detail, I will provide an overview of research on the language use of schizophrenic bilinguals, given that the aim of this thesis is to investigate the L1 versus L2 pragmatic skills of schizophrenic bilinguals.

2.2 Bilingualism and schizophrenia

According to Richards and Schmidt (2002:52), bilingualism can be defined as "the use of at least two languages either by an individual or by a group of speakers." This definition implies that there is a degree of fluency in both languages, where one can effortlessly switch between two or more languages. Hughes (1981:25) distinguishes between four types of bilingualism. A balanced bilingual is a person who has native proficiency in both languages. In contrast, a dominant bilingual is more fluent in one language than the other. Hughes goes on to state that the "relationship of one language to another" can be explained on a theoretical level in two ways: independence or interdependence. Whereas in the former relationship, a coordinate bilingual has two languages which are organised as two separate systems, in the latter relationship, the compound bilingual uses a common system for both acquired languages (Hughes 1981:25). Zulueta et al. (2001:278) add that these psycholinguistic notions have thus far been based on the way bilinguals use their two languages, rather than on the "neuropsychological representation" of language in the brain.

Whitaker (1978:21) states that it seems as if in most cases, all of a person's languages are similarly represented in the brain. He states that the different components of language performance (including speaking, hearing, reading and writing), on the other hand, are not equally distributed through the brain, and to an extent suggesting modality. Whitaker

(1978:21) argues for the independence of what he calls "linguistic structures", being syntactic, semantic, grammatical and phonological features and formatives. In their functional magnetic resonance imaging (fMRI) study, Kim, Relkin, Lee and Hirsch (1997:171) concluded that when an L2 is acquired in childhood or early adolescence (early bilingual participants), the native and second languages tend to be represented in the common frontal cortical areas. When investigating individuals with an L2 acquired in adulthood (late bilingual participants), however, they found that the L2 is spatially separated from the speaker's native language.

According to Zulueta et al. (2001:278), it is now a certain fact that language is more bilaterally represented across the brain than it was originally believed. Albert and Obler (1978) propose that the right-hemispheric involvement in the language process is greater in bilingual individuals than in monolinguals. Their study also suggests that an "increasing lateralization to the left of both languages seems to occur with advancing age, as also happens with monolinguals" (Zulueta et al. 2001:279). The latter finding implies that if an infant acquires only one language during the critical period³, the lateralisation of language towards the left hemisphere will continue from there onwards (Zulueta et al. 2001:278). If one looks at the former finding in Albert and Obler's (1978) study, where there is evidence for greater right-hemispheric contribution in bilinguals versus monolinguals, it is possible to infer that by achieving bilingual or multilingual status during the early childhood years, the languages will not only be acquired to native speaker level, it will also ensure a more vast distribution of language functions in the speaker's brain.

³ The Critical Period hypothesis of L2 acquisition claims that there is a critical period (ending around puberty) after which it becomes very difficult or even impossible to acquire an L2 to the level of a native speaker (see, for example, Johnson and Newport 1991). The idea is that Universal Grammar (UG) (a mechanism which is believed to guide L1 acquisition) is no longer available as a whole after puberty, and that learners who start acquiring an L2 after puberty no longer have access to UG at all (Clahsen and Muysken 1986, 1989) or that they only have access to certain aspects of UG (Bialystok 1997; Hawkins and Chan 1997; Hawkins 2003). Although it is indisputable that there are clear differences between child L2 acquisition and adult L2 acquisition, the debate regarding the source of these differences is on-going (see, for example, Schwartz 2003; White 2003; Unsworth 2005; Hazdenar and Gavrusseva 2008).

As cited in Zulueta et al. (2001:279), Ojemann and Whitaker (1978) investigated whether the same areas in the brain were utilised for both of a bilingual's languages. Their results demonstrated that "sites in the centre of their patients' speech areas were involved in both their languages", but that "peripheral to this, in both the frontal and parietal cortex, were sites involved in only one of the languages." It was concluded that for each patient, each language made use of different areas in the brain (Ojemann 1983, 1991).

In short, schizophrenia is a mental illness known for "severe, chronic and disabling disturbance of brain function" (Paradis 2008:201). According to Bleuler, the symptoms can be divided into "fundamental (primary) and accessory (secondary) symptoms" (Kaplan and Sadock 1991:320). The central fundamental symptom is a thought disorder with features including the disturbance of association and predominantly "looseness", with secondary symptoms that include emotional disturbances, autism and ambivalence (Kaplan and Sadock 1991:320). Paradis (2008:201) adds that there is a link between language and schizophrenia, as symptoms also include linguistic and communicational disturbances, speech that is disorganised and disjointed, thoughts that are distorted, as well as occurrences of misperceptions, delusions and hallucinations. Because of this link between language and schizophrenia, a lot of research has also investigated bilingualism in schizophrenia.

In a study by Hemphill (1971), a group of 30 fluent bilingual schizophrenic patients were observed, some for up to a period of 2 years. It was found that some participants appeared to be "non-psychotic, logical and realistic", with "normal emotional rapport" and the ability to perform normally in environments varying from business and the home to teaching when speaking their non-native language, whereas in their native language they could likely be diagnosed as psychotic (Paradis 2008:201). This discovery holds diagnostic implications, since it is possible for such a patient to be diagnosed as psychotic when interviewed in one language, and as normal when interviewed in the other language. It is also noted (Paradis 2008:201) that all reported cases were "highly proficient, fluent bilinguals who used both languages every day" but the two languages of a fluent bilingual do not necessarily make the same cognitive demands on the individual.

In a review article on the implications of bilingualism in the study and treatment of psychiatric disorders, Zulueta (1984) found that certain psychotic fluent bilinguals, who had learnt their L2 during or after puberty (as late bilinguals), could present with different psychotic symptoms depending on which language they used. The majority of these patients were inclined to come across as more disturbed in their L1 than in their L2 (Zulueta et al. 2001:277). Furthermore, some patients presented with thought disorder in one language and less so (or not at all) in the other; some had delusions in one language and not in the other; and some experienced auditory hallucinations in one language but not the other. In some studies (see Heinemann and Assion 1996; Hughes 1981), it was even found that fluent bilinguals completely lost their linguistic competence in the L2, making them unable to communicate in this language during acute psychotic illness (Zulueta et al. 2001:277-278; Oquendo 1996).

A study which bears a special relationship to the one reported on in this thesis also investigated the phenomenon of differential symptomatology in schizophrenic bilinguals: Southwood, Schoeman and Emsley (2009) report on a case study of a bilingual Afrikaans-English patient who presented with more severe symptoms when he was interviewed by the psychiatrist in his L1 Afrikaans than in his L2 English. The spontaneous L1 and L2 samples collected during an informal interview with the patient referred to in Southwood et al. (2009) were also analysed as part of the study reported in chapters 4 and 5 of this thesis; specifically, the patient referred to by Southwood et al. (2009) as "Mr R" is the patient referred to in this thesis as "Mr R1" (see section 4.1). On the basis of a psychiatrist, Schoeman's, diagnosis of the patient, as well as a linguist, Southwood's, linguistic (grammatical as well as pragmatic) analysis of the patient's L1 and L2 use, Southwood et al. (2009:163, 170) conclude that "clinicians should assess bilingual psychotic patients in both languages in order to elicit the full spectrum of symptoms" and that "clinicians might ... consider adding pragmatic and other linguistic analyses to the assessment battery used with bilingual patients showing symptoms of schizophrenia". (I will return to Southwood et al.'s (2009) conclusions in section 5.3.)

In addition to this, and with respect to a prominent symptom in bilingual schizophrenics, namely auditory hallucinations, research has also provided different results as to which language dominates. Whereas Hemphill (1971) reported that auditory hallucinations only took place in the L1 of his participants, "irrespective of which language the patients preferred to speak or habitually used" (Paradis 2008:202), other researchers (Malo Ocejo, Medrano Albeniz and Uriarte Uriarte 1991) report that auditory hallucinations were only realised in their participants' L2. Moreover, yet another group of researchers (including Zulueta et al. 2001) found that their schizophrenic participants experienced this phenomenon in both languages. Zulueta et al. (2001:285) do, however, note that in one case it was "as if the two language systems and their accompanying psychotic phenomena were dissociated, one split from the other".

With regards to the nature of the contribution of the right hemisphere in the case of bilingualism and schizophrenia, it was generally believed during the 1970's that an L2 is to a large degree mostly situated in the right hemisphere of the brain. Together with this, the dysfunctionality of the left hemisphere is generally perceived to be a renowned consequence of schizophrenia (Paradis 2008:208). These two assumptions, together with the studies mentioned above that showed decreased psychotic symptoms when patients used their L2, subsequently led to a hypothesis that "activation of the right hemisphere would reduce the psychotic manifestations" (Paradis 2008:208). As a result, Matulis (1977) launched a study to see whether the use of an L2 would indeed improve the patient's state.

Matulis (1977) concluded that while there was a change in behaviour between the L1 and L2 of the participants after teaching them a new language (i.e. late L2 learning), the difference in organisation "does not stem from differential lateralization of the implicit linguistic competence of the two languages, but from the commonly observed and well-documented incomplete internalization of a later-learned language" (Paradis 2008:208). Here, the improvement in behaviour should not be attributed to a characteristic of "the right hemisphere's sustaining L2 implicit linguistic competence" but rather to "declarative

memory"⁴ (Paradis 2008:208). Communicating in a newly learnt language requires quite an effort since it is necessary to be aware of various foreign rules (on the levels of phonology, morphology, semantics and syntax). The fact that it is nearly impossible to acquire an L2 up to native speaker-level after puberty also contributes to the degree of difficulty attached to the communication process. For these reasons, it is not unlikely that the participants may be "disengaged from the affective focus of the message" they attempt to bring across in the L2 (Paradis 2008:208).

2.3 Pragmatics

According to Penn (1985:19), "a discussion of pragmatics... probably necessitates a consideration of its component parts." The reason for this, she suggests, is the lack of a "cohesive theory of pragmatics [that - JT] attempts to combine the study of language use into a unified whole." Richards and Schmidt (2002:412) define "pragmatics" as "the study of language in communication" with specific focus on the relationship between sentences or utterances and the contexts or situations in which they are utilised. It is important here to distinguish between the terms "language competence" and "language behaviour." The former represents the inherent system of rules which constitutes a person's knowledge of language (Richards and Schmidt 2002:94-95), whereas the latter can be described as the way in which that knowledge is used in producing and understanding sentences (Richards and Schmidt 2002:392). Furthermore, "[a] truly pragmatic consideration has to deal with the users in their *social context*" (Mey 2001:6). In the study of pragmatics on the whole then, the linguist is more interested in the investigation of language performance and so-called "extra-linguistic" factors than in language competence.

⁴ Declarative knowledge is defined as an individual's awareness or conscious understanding and knowledge of specific information. This includes factual and conceptual knowledge, for instance specific rules and regulations of a language. In contrast, procedural knowledge is the knowledge related to things that an individual unconsciously knows how to do. This type of knowledge is built up on a step by step basis and includes, for example, knowing how to drive a car or speak a language (Richards and Schmidt 2002:144).

Langdon et al. (2002:69) add to this by stating that pragmatics is not only the study of how language is used, but that pragmatic research is particularly aimed at the way in which utterances are interpreted. They suggest that the "theory of [language – JT] performance", together with inference, plays a primary part in the process of decoding and thus interpreting, a given utterance. Traditionally, language pathology has been concerned with the left-hemispherical linguistic competence which includes phonology, morphology, syntax and semantics. During the past decades, and especially by means of studies that, similarly to this one, focus on the language-related symptoms of psychotic deviations, it has become more apparent that linguistic (grammatical) competence is not sufficient for normal verbal communication and it has become clear that the right-hemisphere-based (pragmatic) competence is at least equally important.

Bachman (1990:89) stresses the importance of the duality of communicative language. Communicative language is dependent on the one hand on signs and referents (to persons, objects, ideas or feelings), and on the other hand, on the knowledge of language users and context of communication, also known as pragmatic competence, which is the main focus of pragmatics. The focus of communicative language and performance is mainly on the relationship between this language competence and pragmatic competence. Pragmatics is concerned with the relationship between utterances and the acts or functions that speakers intend to perform through those utterances (also called the "illocutionary force of utterances"), as well as the characteristics of the context in which language performance occurs, that will determine the appropriateness of an utterance (Bachman 1990:89-90). Bachman states that pragmatic competence consists of two aspects, namely illocutionary competence - knowledge of pragmatic principles for performing acceptable language functions - and sociolinguistic competence - knowledge of sociolinguistic principles for performing contextually acceptable language functions (Bachman 1990:90). In Bachman's opinion, while "illocutionary competence enables us to use language to express a wide range of functions, and to interpret the illocutionary force of utterances or discourse", the suitability of these functions and the way they are performed differs from one language use context to the next, according to a "myriad of sociocultural and discursal features". Sociolinguistic competence is "the sensitivity to,

or control of the conventions of language use that are determined by the features of the specific language use context" which "enables us to perform language functions in ways that are appropriate to context." (Bachman 1990:90, 94)

Thomas (1995:156) emphasizes the pragmatics/sociolinguistics divide, where sociolinguistics, focusing on all the possible linguistic forms which can be used to perform a speech act (see below for definition), only becomes pragmatics when the focus shifts to how a speaker strategically uses a particular form in a language in order to achieve a certain goal. Bachman (1990:95-98) lists various abilities that he categorises under sociolinguistic competence. In short, this list includes sensitivity towards differences in dialect, variety, register and naturalness. This further includes the capability to infer or understand cultural references as well as idiomatic language (Bachman 1990:95).

The theory of "speech acts" was first introduced by philosophers such as Austin (1962) and Searle (1969). A "speech act" can be defined as an utterance used as an entity with functional value in the communication process (Richards and Schmidt 2002:498). Bachman (1990:90) lists three types of speech acts. Firstly, an utterance act can be defined as the act of saying something or expressing a predication about something. Secondly, a propositional act entails the action of referring to something or expressing a predication about something. Thirdly, he introduces the term "illocutionary act". On this topic, Finegan and Besnier (1989:329) stipulate that every speech act consists of two principal components: the utterance itself and the intention of the speaker in making it. They call the sentence with a grammatical structure and meaning which represents the utterance the "locution", and they refer to the intention in making the utterance, or whatever the speaker intends to accomplish through the utterance, as the "illocution".

"Illocution" thus refers to the utilisation of language for other reasons than purely to make factual declarations. Utterances can, on an abstract level, thus function as assertions, warnings or requests, without the hearer necessarily immediately realising it on a semantic level. Bachman (1990:91) elaborates by saying that the less direct the

speaker is in signaling the illocutionary force he intends, "the more dependent its interpretation will be on the way it is said, and the context in which it is said." According to Austin (1962), an illocutionary act requires a person to firstly make sure the receiver realises that the act is performed (what Austin refers to as the "securing of uptake"), and secondly provide the performance with what Austin calls "conventional consequences" like obligations, commands or commitments. These conventional consequences are not always necessarily explicitly spelled out in a speech act, but can be implied.

Langdon et al. (2002:69) state that the use of language for communication does not merely imply the use of grammatical rules. It also draws on non-linguistic knowledge, which they refer to as "real world knowledge." This means that the parties involved during the interaction process use more than their language competence; they make use of their knowledge of what exists outside language in order to encode what is inferred through an utterance. This real world knowledge can subsequently enable a person to communicate something that goes beyond the literal meaning of an utterance. This includes metaphors and irony as well as any utterance in which a message that is being communicated is quite different from the meaning that is literally encoded (Langdon et al. 2002:69). For example, the utterance *There's someone at the door* could imply more than merely letting someone know that there is a person standing in front of the house; it could actually involve requesting the hearer to open the door for that person. Knowing that this simple statement can function as a request involves illocutionary competence (Bachman 1990:90).

Finegan and Besnier (1989:332) realise that despite misinterpretations in the communication process, people mostly understand utterances as they were intended. They believe that the reason for this is the fact that communicators trust that their interlocutors would not purposefully deceive them, lie to them, or insult them. They speak of an "unspoken pact" between speakers, the agreement to cooperate in the communication process, without which the communication process will be derailed. The philosopher Grice articulates his cooperative principle (as cited in Finegan and Besnier 1989:332) as follows: "Make your conversational contribution such as is required, at the

stage which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged." This "pact" of cooperation touches upon four areas of communication, which Grice identifies as the four maxims that govern language use. These four maxims are the maxims of quantity, relevance, manner and quality (Finegan and Besnier 1989:332-334).

According to the maxim of quantity, speakers are expected to provide as much information as is required for the hearer to understand their utterance. This principle demands cooperation by not giving too little or too much information. The second maxim, namely the maxim of relevance, expects speakers to arrange their utterances in such a manner that they are "relevant to the ongoing context" (Finegan and Besnier 1989:333). Here Finegan and Besnier (1989:333) identify schizophrenics as the "culprit[s] - JT" who chronically violate this maxim, since there is a major difference between a schizophrenic's sense of "context" and that of normal people⁵. The maxim of manner requires information to be "orderly and clear" (Finegan and Besnier 1989:333). This entails speakers and writers avoiding ambiguity and maintain a relevant order to their utterances and sequence of utterances. Lastly, the maxim of quality calls for truthfulness.

In addition to the four conversational maxims that regulate a conversation, to accomplish the work of the speech acts which conversations consist of (like greetings, inquiries, requests or promises), some organisation is necessary. Finegan and Besnier (1989:337) give examples of the organisation of speech in the form of taking turns when speaking, posing and answering questions, marking the beginning and end of a conversation, and making corrections where needed. They further state that the organisation of conversations usually takes place on a covert level and, equally importantly, that the organisational principles present what they call a "discreet interactional framework" (Finegan and Besnier 1989:338). Furthermore, this "covert architecture of conversation" needs to accomplish the following: organise turns that happen orderly to facilitate the

⁵ It should be noted, however, that "normal" speakers constantly violate these maxims in order to generate implicature, so that it is not the violation per se which is at issue here but rather the degree and nature of the violation.

chance for more than one person to speak; give the interlocutors a chance to anticipate what is going to happen next in the interaction process and, where a choice exists, how the selection is to be made; and provide a way to repair occurrences of anomalies and errors. Finegan and Besnier (338-348) qualify different strategies that aid the organisation of conversation. To name a few, they focus on turn-taking and pauses, signals of turn-taking, the use of questions and answers, opening and closing sequences, as well as repair.

Mey (2001:7) states that semantics is the "closest linguistic neighbour" to pragmatics, a statement that is elaborated on by Leech (1983:6) who suggests that "semantics and pragmatics are distinct, though complementary and interrelated fields of study". What is significant to this study is how speakers abide by or break different pragmatic rules during conversations and what the consequences of this are. As in any field, in pragmatics, different researchers focus on different aspects of pragmatic competence. Similarly, the three pragmatic assessment tools which were employed in the study reported in this thesis each highlight different aspects of pragmatic competence. To avoid repetition, the components of pragmatic competence that each pragmatic assessment tool focuses on are not discussed here but are dealt with in detail in the next chapter.

2.4 Pragmatic assessment

As explained above, it has become increasingly clear that pragmatic skills play an important part in effective communication. Since research has shown that schizophrenic language is mainly impaired on a pragmatic level (cf. section 2.1), the existence of an effective, appropriate pragmatic assessment instrument is essential. This section offers a brief overview of the development of pragmatic assessment, as well as problems that have been identified regarding pragmatic profiling.

Philosophers such as Wittgenstein (1958), Austin (1962) and Searle (1969), and later linguists including Bates (1976) and Levinson (1983), formed the core of the pragmatics debate (Penn 2000:108). The fundamental issues regarding this debate were: whether

pragmatics could be considered separately from the structural language components, and whether pragmatics could be classified as part of grammar; the exact role of "speech act theory" within pragmatics; the definition of context, where some used linguistic terms only to define it, whilst others incorporated extra-linguistic, or even social context aspects as well (Penn 2000:108).

During the last few decades, the focus of language assessment has shifted as the concepts of 'language' as well as 'language impairment' have been expanded. Wollner and Geller (1982:135) suggest that the emphasis used to be on observable aspects of the form of language, including "articulation, vocabulary and sentence structure" but that more recent models of language assessment do not only address form, but also "content and use, or semantics and pragmatics."

Regarding the pragmatics debate mentioned above, in 1987, Prutting and Kirchner concluded that among linguists, there was still no single agreed-upon paradigm of pragmatics. Furthermore, Prutting (1987:30) stated that not only did a change take place in the focus of assessment models, but recently proposed frameworks also applied more to the field of speech-language pathology than child language. Researchers were in a period of fact-gathering to determine exactly what pragmatic aspects of language entail and how these should be organised for clinical and research purposes (Penn 2000:108).

Penn (2000:108-110) notes that despite the lack of agreement on a single paradigm, certain "cornerstones" were evident. Firstly, there was an acknowledgement of a "synergistic perspective" of language behaviour, which Bates (1976) described as the enablement of a "holistic, synergistic view" of the entire language process that comes about through the merging of linguistic, cognitive and social aspects within the realm of pragmatics (Penn 2000:108-109). On this view, the phenomenon of language behaviour does not only include the linguistic aspects present in linguistic competence per se, but should rather be seen as a combination of linguistic competence and the act of putting it to use in the interaction process (linguistic behaviour).

Secondly, the significance of "multidimensional pragmatic assessment and profiling" was pointed out, where the focus of concern became "language beyond the sentence level," in other words, the level of "connected discourse." In this case, the importance of assessment in different contexts is highlighted, as it was seen as an essential component of any sufficient diagnosis (Penn 2000:109). Hand in hand with a synergistic perspective of language behaviour is the view that language assessment should go beyond sentences, which represent linguistic competence, and should include utterances and whatever pragmatic or social aspects accompany them.

The last undisputed cornerstone to the field of pragmatics was the importance of a "theory-driven" approach to clinical endeavours (Penn 2000:109). Here, the "pragmatic framework" aims to appropriately give an explanation for observed clinical behaviours. Prutting (1987) and Gallagher (1991) both viewed it as an alternative theoretical paradigm which explains the complexities of communication, as well as one that would provide competition to generative theories of language. Here, again, it is not necessarily the specific language a person uses, but the intention behind the language used which is under investigation (Penn 2000:109). Assessing language from a pragmatic point of view can therefore also be used in a clinical setting, as was done in the research for this thesis.

Since pragmatics tends to be more abstract than most of the other linguistic domains, it is not easy to assess. Penn (2000:107) identifies this as a potential hurdle, as many clinicians may be discouraged from seeking relevant routes of understanding a problem and thus choose a better known or standard approach to assessing or understanding the problem. Wollner and Geller (1982:136-137) identify two key questions regarding the task of assessment. According to them, the first question, "What should we assess?", is approached incorrectly, usually because the question is changed to "What can I assess with the tests available to me?". They conclude that approaching the assessment task from this point of view would result in a "somewhat skewed and limited picture" of the desired target. The second question, "How should I assess?" is also problematic. As mentioned earlier, the study of something less concrete, like pragmatics, is difficult, since a "particular pragmatic behaviour is not so clear-cut" and the accuracy of the assessment

mostly depends on the assessor or "the delicacy of the scoring mechanism" (Ball 2000:91). These two factors influence the functionality of the assessment instrument "as a diagnostic tool and a guide to intervention" (Ball 2000:91). Wollner and Geller (1982:137) articulate the issue regarding their second question as the difficulty to assess language in a way "that will give a true picture of the [subject's- JT] abilities and at the same time, assess language in a way that is feasible and practical."

Ball concludes that pragmatic profiling, particularly in terms of allocating scores, is "difficult and subjective" (2000:93). Keeping these problems with pragmatic profiling in mind, the next chapter provides a description of the three pragmatic assessment tools employed in the research reported in this thesis.

CHAPTER 3

PRAGMATIC ASSESSMENT TOOLS

In this chapter, I will describe the three pragmatic assessment tools which were employed to assess the pragmatic competence and deficits of the schizophrenic participants in this study: Prutting and Kirchner's (1987) Pragmatic Protocol (section 3.1), Penn's (1985) Profile of Communicative Appropriateness (section 3.2), and Rumble's (1988) Framework for assessing (children's) conversational skills (section 3.3). To avoid repetition, examples related to the measures of the assessment tools will not be provided in this chapter, as they will occur in section 4.3 (the discussion of the results).

3.1 The Pragmatic Protocol (Prutting and Kirchner 1987)

Prutting and Kirchner's (1987) Pragmatic Protocol (PP) is a descriptive taxonomy which includes 30 parameters organized into three categories, namely verbal, paralinguistic and non-verbal aspects. This tool provides the researcher with a profile of pragmatic skills and deficits across the 30 parameters. This instrument was chosen because it encompasses a wide range of pragmatic behaviour. Some of the verbal characteristics referred to in the parameters are based on the speech act theory set out by Austin (1962) and Searle (1969). The PP follows Levinson's (1983) argument that pragmatics covers a wide range of linguistic and structural aspects, as well as extra-linguistic aspects (e.g., eye gaze and body posture), and even aspects related to social context.

In addition to this, the PP can be used to compare different types of populations. The protocol was originally created in order to assess the conversational abilities of both children and adults with normal language abilities, language disorders, articulation disorders, and aphasia. In this study it is used to assess the conversational abilities and pragmatic behaviour of a specific population, namely bilingual schizophrenic patients. It is also convenient in the way it enables the researcher to document changes in pragmatic behaviour over time, since the same protocol can be used on the same subject numerous times.

In order to assess the pragmatic abilities and deficits of a participant, the researcher has to mark either "Appropriate" (✓) or "Inappropriate" (*) or "No opportunity to observe" (-) for each of the parameters, using a table such as the one below (Table 1). Because the participants' pragmatic abilities were assessed in their L1 (Afrikaans) and their L2 (English), the table contains two columns – one for each of these languages.

Table 1. The Pragmatic Protocol (Prutting and Kirchner 1987)

Communicative act	AFRIKAANS	ENGLISH
<i>Verbal aspects</i>		
A. Speech Acts		
1. Speech act pair analysis		
2. Variety of speech acts		
B. Topic		
3. Selection		
4. Introduction		
5. Maintenance		
6. Change		
C. Turn taking		
7. Initiation		
8. Response		
9. Repair/revision		
10. Pause time		
11. Interruption/overlap		
12. Feedback to speakers		
13. Adjacency		
14. Contingency		
15. Quantity/conciseness		

Communicative act	AFRIKAANS	ENGLISH
D. Lexical selection / use across speech acts		
16. Specificity/accuracy		
17. Cohesion		
E. Stylistic variations		
18. The varying of communicative style		
<i>Paralinguistic aspects</i>		
F. Intelligibility and prosodics		
19. Intelligibility		
20. Vocal intensity		
21. Vocal quality		
22. Prosody		
23. Fluency		
<i>Nonverbal aspects</i>		
G. Kinesics and proxemics		
24. Physical proximity		
25. Physical contacts		
26. Body posture		
27. Foot/leg and hand/arm movements		
28. Gestures		
29. Facial expression		
30. Eye gaze		

Each of the 30 parameters is described below. These descriptions are based on Prutting and Kirchner (1987:118-119). The names of the parameters are printed in italics and the numbers in brackets correspond to the parameter numbers in the table above.

The first parameter under Category A "Speech Acts" is *Speech act pair analysis* (1) and refers to the ability to take both the speaker and listener role appropriate to the context. Examples of appropriate behaviour include: the initiation of directives, queries and comments; responses to directives by complying; responses to queries; appropriate responses to requests; and acknowledgement of comments made by the speaker. Appropriate behaviour can further be verbal or non-verbal as, for example, when appropriate action is taken to a directive or request. Examples of inappropriate behaviour, on the other hand, include failure to initiate directives, queries and comments; not responding to directives, requests or queries made by the speaker; and not verbally or nonverbally acknowledging comments made by the speaker.

Prutting and Kirchner (1987:118) define the second parameter under "Speech Acts" - *Variety of speech acts* (2) - as "what one can do with language". This includes acts like commenting, asserting, requesting, promising and so forth. Examples of appropriate behaviour include the speaker showing both appropriate use of and diversity in the number of different speech acts he can accomplish. Inappropriate use of different speech acts involves instances in which the speaker shows inappropriate use of or a reduced range of different speech acts available to him.

Turning to Category B "Topic", the first parameter - *Selection* (3) - refers to the selection of topics appropriate to the multidimensional aspects of context. *Introduction* (4) involves the ability to introduce a new topic in the discourse. *Maintenance* (5) entails that a topic is coherently maintained throughout the discourse. *Change* (6) refers to changes of topic in the discourse. Prutting and Kirchner's (1987:118) examples of appropriate behaviour related to this category are when the speaker/listener is able to: make appropriate contributions to a topic; smoothly switch over from one topic to another at appropriate times in the discourse; select appropriate topics for discussion in light of the context as well as the participants; and end the discussion of a topic successfully and at an appropriate instance in the discourse. Inappropriate behaviour includes instances in which the speaker/listener: introduces too many topics within a specific period of time; fails to initiate new topics for discussion; cannot select appropriate topics for the discussion,

considering the context and the participants; and is not able to make relevant contributions to a topic. Note that when a speaker introduces too many new topics within a given time, both *Topic change* (6) and *Topic maintenance* (5) are affected, illustrating that more than one parameter can be affected by a single pragmatic "transgression". Also note that for all of the parameters mentioned above, appropriate and inappropriate behaviour is judged in relationship to both the speaker and the listener.

Category C is "Turn Taking" and the first parameter listed in this category is *Initiation* (7), which is judged as appropriate when the conversation is initiated by means of appropriate speech acts and as inappropriate when a partner is forced to move the conversation forward as a result of the other partner's failure to initiate speech acts. *Response* (8) involves the way in which the participant, as a listener, responds to speech acts. Responding to comments made by the speaker is an example of appropriate behaviour, whereas failing to do so is an example of inappropriate behaviour. *Repair/Revision* (9) refers to the ability to repair a conversation when a breakdown occurs, as well as the ability to ask for a repair when a misunderstanding or ambiguity has occurred. An example of appropriate behaviour is when the participant asks for clarification when a portion of the message is misunderstood or when he revises his own message to facilitate understanding on the listener's side. An example of inappropriate behaviour is when the participant makes no attempt to repair misunderstandings or clarify his message. *Pause time* (10) between words or sentences, or the time it takes the participant to respond to a question, can be appropriate or inappropriately long or short. Long and seemingly awkward pauses influence the fluency and general rhythm of the conversation and would therefore constitute inappropriate behaviour on this parameter. *Interruption/Overlap* (11), of course, refers to cases in which the listener interrupts the speaker, or in which people talk at the same time. Appropriate behaviour would involve avoiding interruption or talking before the partner is done speaking, whereas inappropriate behaviour would involve a pause time that is too short and results in interruption or overlap between the two speakers. *Feedback to listener* (12) can be given verbally with words such as *yeah* and *really* or nonverbally through nodding the head (in agreement or to indicate that the listener is following what the speaker is saying) or

shaking it from side to side (to express negative reactions, disagreement or disbelief). Giving feedback to one's partner as a means of moving the conversation forward is an example of appropriate behaviour; not giving such feedback constitutes inappropriate behaviour. On the *Adjacency* parameter (13), appropriate behaviour would be if the participant maintains the appropriate length of pauses in the conversation to support the timing relationships between adjacent turns in the conversation; inappropriate behaviour would be the lack of maintaining the appropriate pause length. Appropriate behaviour on the *Contingency* parameter (14) would be when the speaker produces utterances that share the same topic as a preceding utterance and that add information to the prior communicative act. The *Quantity/Conciseness* (15) parameter echoes Grice's (as cited in Finegan and Besnier 1989:332) maxim of quantity (cf. section 2.3) in requiring that a speaker's contribution should be as informative as required, not providing too much or too little information. Relevant and informative comments constitute appropriate behaviour, whereas the inability to comment in such a manner is regarded as inappropriate behaviour.

Category D "Lexical Selection / Use across Speech Acts" subsumes two parameters. The first of these - *Specificity/Accuracy* (16) - refers to the (in)ability to select lexical items of best fit. Examples of appropriate behaviour include the ability to be specific and make appropriate lexical choices in order to convey messages in the discourse as clearly as possible. Inappropriate behaviour includes the overuse of unspecified referents (such as *it, they, this*), as well as inappropriate choices of lexical items which subsequently leads to misinterpretation and/or ambiguity. Prutting and Kirchner (1987:119) identify the second parameter - *Cohesion* (17) - with the criterion of recognizable unity or connectedness of the text and name some aspects related to this parameter: (i) reference (one item referring back to another item mentioned previously); (ii) substitution (one item substituting another); (iii) ellipsis (omission of an item); (iv) conjunction (indicating relation between clauses); and (v) lexical cohesion (related to the selection of items from the lexicon). Appropriate behaviour involves the maintenance of relatedness and unity in the discourse and leads to a conversation that is easy to follow because ideas are

conveyed in a logical and sequential manner. Inappropriate behaviour on this parameter leads to a disjointed conversation, resulting in misinterpretation and ambiguity.

Category E "Stylistic Variances" contains a single parameter - *The varying of communicative style* (18). A speaker's language use is appropriate under this parameter if he uses different styles (involving differences in vocabulary, syntactic structure and vocal quality) appropriately throughout the discourse, depending on sociolinguistic factors such as context and the speaker's status relative to that of the listener. On the other hand, no variation in style or the use of an inappropriate style, would constitute inappropriate behaviour.

The next five parameters are categorised under F "Intelligibility and Prosodics": *Intelligibility* (19) (clarity of the message and how well it is understood); *Vocal intensity* (20) (loudness or softness of the message); *Vocal quality* (21) (resonance and/or laryngeal characteristics of the vocal tract); *Prosody* (22) (intonation, stress and pitch); and *Fluency* (23) (the smoothness, consistency and rate of the message). Inappropriate behaviour on these parameters would involve producing an utterance of which the meaning is unclear (19), which is spoken too softly or too loudly (20), which is spoken with resonance and/or laryngeal characteristics which do not match the speaker's gender or age (21), which lacks prosody to support the affective and linguistic aspects of the message (22), or which is not smooth and consistent (23).

The last seven parameters all involve nonverbal aspects and belong to Category G "Kenesics and Proxemics": *Physical proximity* (24) (distance between speaker and listener); *Physical contacts* (25) (between speaker and hearer – the frequency and nature thereof); *Body posture* (26); *Foot/leg and hand/arm movements* (27); *Gestures* (28) (movements that support, complement or replace verbal behaviour); *Facial expression* (29); and *Eye gaze* (30). With respect to Category G, appropriate behaviour supports the message being conveyed as well as the social relationship between speaker and hearer, whereas inappropriate behaviour interferes with the communication process or has a

negative effect on the social relationship between speaker and hearer (Prutting and Kirchner 1987:119).

Prutting and Kirchner (1987: 108-109) provide a detailed explanation of their rationale for using categorical appropriate/inappropriate judgements rather than a Likert scale (in which participants use a scale to indicate the degree to which they (dis)agree with the given statement). They claim that a 15-minute conversation should allow one to judge each of the parameters as either appropriate or inappropriate. A judgement of inappropriate is given to a parameter even if the participant only behaved inappropriately once with respect to the parameter; however, the context should be kept in mind throughout, and the participant's behaviour is only judged inappropriate when it actually has a negative effect on the conversation/communicative interaction.

3.2 The Profile of Communicative Appropriateness (Penn 1985)

The Profile of Communicative Appropriateness (PCA) is a clinical tool for the assessment of pragmatics, developed by Penn (1985:18) as an alternative to Prutting and Kirchner's PP. Although there are some differences between the two assessment tools, there is also considerable overlap in terms of what should be assessed during pragmatic assessment. Penn (1985:18) uses the words of Crystal (1982) to define a clinical linguistic profile such as hers as "a principled description of ... those features of a person's ... use of language which will enable him to be identified for a specific purpose." Like the PP, a wide variety of variables are listed as assessable parameters and divided into 6 categories. Under each category, there is a space where comments that fit under the category but are not directly related to one of the specific parameters, can be included. The six categories are: Response to Interlocutor; Control of Semantic Content; Fluency; Sociolinguistic Sensitivity; and Non-verbal Communication.

The parameters subsume linguistic and extralinguistic aspects, showing that Penn, just like Prutting and Kirchner, regards the study of pragmatics as a separate entity: she does not only acknowledge pragmatics to be independent of the structural aspects of language,

but also identifies the importance of non-linguistic factors and context in the assessment process.

Penn (1985:18) claims that the format of such a profile is a presentation of a wide range of variables with the aim of enabling the clinician to see at a glance what the communicative assets and deficits of a patient are. Just like the PP, the PCA can also be used for different types of participants, including clinical assessments of patients and the assessment of non-patients. In this regards, Penn (1985:23) mentions that the PCA has been applied to head injured patients (Irvine 1984) and hearing impaired children (Sacks 1984), as well as in a schizophrenic case study (Cohen 1984). Another similarity between Penn's PCA and Prutting and Kirchner's PP is that the PCA can also be used to document change in pragmatic behaviour over time.

One clear difference between these two profiles is that Penn's (1985) profile gives the option of qualifying the degree of appropriateness or inappropriateness. The options that Penn provides are (1) inappropriate; (2) mostly inappropriate; (3) somewhat appropriate; (4) mostly appropriate; and (5) appropriate. A hyphen (-) is used to indicate instances in which the data do not provide an opportunity to observe the aspect of language use related to a particular parameter. Penn's (1985) PCA, as it is used in this study, is presented in Table 2. In this version of the table, there are two columns in which the Afrikaans and English data, respectively, can be assessed on the basis of the five-point scale with respect to each parameter. Another difference between these two profiles is that Prutting and Kirchner assess each parameter on the basis of the conversation as a whole, whereas Penn divides the conversation into one-minute chunks and assesses the parameters of the PCA for each separate chunk. Because the aim of this research is to determine the usefulness of the PCA for assessing pragmatic skills in schizophrenic speech, the speech samples reported on in the next chapter were not divided into one-minute chunks, given that this would have yielded 60 judgements for each participant on each parameter. However, the data were divided into ten-minute chunks, so that there were three judgements for each parameter per participant per language. The six scores were entered into the table for each participant. "Afr 1" refers to minutes 0-10 of the

Afrikaans part of the interview, "Afr 2" refers to the second chunk (minutes 10-20 of the Afrikaans part of the interview), and "Afr 3" refers to the rest of the Afrikaans sample (usually minutes 20-30). The English part of each interview was similarly divided into "Eng 1", "Eng 2" and "Eng 3", in the same way.

Table 2. The Profile of Communicative Appropriateness (Penn 1985)

		Afrikaans			English		
		Afr 1	Afr 2	Afr 3	Eng 1	Eng 2	Eng 3
Response to interlocutor	Request						
	Reply						
	Clarification request						
	Acknowledgement						
	Teaching Probe						
	Others						
Control of Semantic Content	Topic initiation						
	Topic adherence						
	Topic Shift						
	Lexical choice						
	Idea completion						
	Idea sequencing						
	Others						
Cohesion	Ellipsis						
	Tense Use						
	Reference						
	Lexical Substitute forms						
	Relative clauses						
	Prenominal adjectives						
	Conjunctions						
	Others						

Fluency	Interjections						
	Repetitions						
	Incomplete phrases						
	False Starts						
	Pauses						
	Word finding difficulties						
	Others						
Sociolinguistic Sensitivity	Polite forms						
	Reference to interlocutor						
	Placeholders, fillers, stereotypes						
	Acknowledgements						
	Self correction						
	Comment clauses						
	Sarcasm/humour						
	Control of direct speech						
	Indirect speech acts						
	Others						
Non-Verbal communication	Vocal Aspects: Intensity						
	Pitch						
	Rate						
	Intonation						
	Quality						
	Non-Verbal aspects: Facial expression						
	Head movement						
	Body posture						
	Breathing						
	Social distance						
	Gesture and pantomime						
	Others						

Penn (1985:19-20) presents an outline of the main components of communicative competence, which she uses as the 6 categories of her pragmatic assessment instrument⁶. *Response to Interlocutor* (1) refers to whether or not the speaker can respond appropriately to the other speaker's utterances, which, in turn, depends on knowledge of discourse rules and knowing which speech act is appropriate in a given context, e.g. when to make a request, how to respond to a request, when to ask for clarification, and when to simply acknowledge that one is listening. Furthermore, appropriate responses depend on an understanding of the interlocutor's intended message.

Control of Semantic Content (2) echoes Prutting and Kirchner's Category B "Topic", relating to the speaker's control over the discourse topic, for example, being able to introduce a new topic, maintain the topic, complete an idea/sequence of ideas, change the topic, choose the appropriate words, and convey ideas appropriately and in a way which the interlocutor can easily follow.

Cohesion (3) refers to the way in which consecutive sentences are linked within discourse and is created by means of syntactic mechanisms and vocabulary items. Some components of cohesion are reference, substitution, ellipsis and conjunction (see discussion under Prutting and Kirchner's "Cohesion" parameter above). According to Penn (1985:19), categories 2 and 3 – *Control of Semantic Content* and *Cohesion* – together make up coherence, that property of discourse that makes conversation "flow" and that connects the different ideas expressed during the conversation so that they form a meaningful whole.

Penn (1985:19) notes that *Fluency* (4) "is considered as a sensitive indicator of the potency of the communicative system". Dalton and Hardcastle (1977, in Penn 1985:19) identify two possible ways to view fluency: firstly, with respect to the temporal and sequential aspects of speech (including the nature, placement and frequency of pauses and interruptions); and secondly, in relation to the "context of language usage, including adherence to the rules of language" (Penn 1985:19). This category involves judgement as

⁶ In all of the primary sources (Penn 1985, 1988, 1999, 2000) definitions are only provided for the six categories, and not for the measures under each category. Although most of the headings of the measures are self-explanatory, I feel that a published source of definitions of these measures is necessary.

to the (in)appropriate use of interjections, repetitions, incomplete phrases, false starts, pauses, and word-finding difficulties. Note that all of these properties do feature in the PP, as well, although they are distributed differently and not grouped together in this way; for example, word-finding problems would affect the PP's *Pause time* (under "C. Turn Taking"), *Specificity/accuracy* (under "D. Lexical Selection") and *Fluency* (under "F. Intelligibility and Prosodics").

The term "*Sociolinguistic Sensitivity*" (5) was coined by Bates and Johnson (1977, in Penn 1985:19), to refer to the speaker's awareness of and sensitivity to the specific sociolinguistic context of a conversation. Here the question is whether the speaker's linguistic behaviour indicates that he is aware of his status relative to the other speaker, the relationship between him/herself and the other speaker, their respective roles in the conversation, and the rules of polite linguistic behaviour (Penn 1985:20).

Finally, Penn (1985:20) notes that a communicatively competent speaker will also show "good control and understanding of *non-verbal transmission of messages*", hence the inclusion of the category *Non-verbal Communication* (6), which she divides into vocal aspects (intensity, pitch, rate, intonation and quality) (cf. the PP's "F. Intelligibility and Prosodics") and non-verbal aspects (facial expression, head movement, body posture, breathing, social distance, gesture and pantomime) (cf. the PP's "G. Nonverbal Aspects").

3.3 The Framework for Assessing (Children's) Conversational Skills (Rumble 1988)

Rumble (1988) wanted to study the development of the conversational skills of pre-school children, and developed a framework – the Framework for Assessing Children's Conversational Skills (FACS) - with this specific aim in mind. Her framework was compiled from information from other existing pragmatic profiles, as well as the developmental literature (Rumble and Malan 1990:21) and focuses on three areas, namely (A) Topic Control, (B) Repair of Conversational Breakdown, and (C) Linguistic Cohesion. Although the FACS was designed for assessing children's conversational

skills, it is appropriate for the assessment of adults' conversational skills, as well (Rumble p.c.). The FACS is presented in Table 3 and the measures that appear in the framework are described below. (In the descriptions, the numbers in brackets again refer to the numbers given to the measures in Table 3.)

Table 3. The Framework for Assessing (children's) Conversational Skills (Rumble 1988)

Category	Afrikaans	English
A. TOPIC CONTROL		
1. Initiatory Acts		
2. Topic Relevant Acts		
3. Topic Relevant Responses		
a) Verbal acknowledgements		
b) Verbal responses to interrogatives		
c) Non-verbal acknowledgements		
d) Non-verbal responses to interrogatives		
4. Off Topic Acts		
5. No response		
Mean number of utterances per turn		

Category	Afrikaans	English
B. REPAIR OF BREAKDOWN		
I <u>Clarification request used</u>		
1) Non specific request for repetition		
2) Specific request for repetition		
3) Specific request for confirmation		
4) Specific request for specification		
II <u>Types of repairs used</u>		
5) Repetition a) whole		
b) part		
6) Revision		
7) Addition		

8) Cue		
9) No response to clarification request		

Category	Afrikaans		English	
	Apprpr	Inapprpr	Apprpr	Inapprpr
C. LINGUISTIC COHESION				
1. Reference				
1.1. Anaphoric reference				
1.2. Demonstrative reference				
2. Substitution				
3. Ellipsis				
4. Conjunctions				
Additive conjunctions				
Causal conjunctions				
Temporal conjunctions				
Antithesis conjunctions				
Total (Conjunctions):				

The following discussion is based on Rumble's (1988, Appendix 1:1-15) research report. Regarding the first category, (A) Topic Control, Rumble (1988) states that three types of speech acts were investigated, namely acts used to initiate, maintain and terminate topics. Corsaro (1979) defines an *Initiatory Act* (1) (IA) as any kind of act that promotes focused interaction (which entails the co-operation of at least two participants concerning a specific subject matter or focus) when this kind of interaction has not yet been established. A *Topic Relevant Act* (2) (TRA) can be seen as a spontaneous utterance that adds new information to a previous utterance in the context of the subject at hand.

A TRA often follows immediately after a speaker's *Topic Relevant Response* (3) (TRR), where the speaker wishes to elaborate on the response provided initially. TRRs are utterances in response to an utterance presented by a previous speaker. This type of utterance may, for example, fill a gap that was formed by the IA that it follows (e.g. serve

as an answer if the IA was a question), or it could simply acknowledge the previous utterance.

Rumble distinguishes between different types of TRRs: verbal acknowledgements (a); verbal responses to interrogatives (b); non-verbal acknowledgements and (d) non-verbal responses to interrogatives (c).

Off-Topic Acts (4) (OTAs) are automatically counted as inappropriate responses (IR). As the term suggests, an utterance provided as a response is judged as an OTA if its semantic content does not coherently follow on that of the preceding utterance, or if it does not fit the focused interaction.

No response (5) is any instance where the speaker fails to respond to an utterance that requires a response.

In Category B, Repair of Breakdown, there are two sides to repairing communication breakdown, namely making a clarification request (I), and responding to a clarification request (II) (which involves repair). The former is divided into four possible speech acts. A *non-specific request for repetition* (1) is when the speaker making the request does not specifically indicate which part of the previous utterance should be repeated. A *specific request for repetition* (2), on the other hand, is when the speaker requests the repetition of a specific element or phrase in the previous utterance. When the speaker uses a *specific request for confirmation* (3), he asks for a specific part of the previous utterance, of which he is unsure, to be repeated or confirmed. Lastly, the *specific request for specification* (4) is used when the participant requests specific additional information that he needs in order to successfully interpret the other speaker's utterance.

Rumble provides 5 subcategories under (II) types of repair strategies: *Repetition* (1) requires the speaker to repeat the previous utterance. This can occur in the form of a whole repetition (a), where the entire utterance is repeated, or a part repetition (b), involving only the relevant fragment. This will logically follow a specific request for

repetition. Secondly, *revision* (2) occurs when an initial utterance is restated in different words, i.e. paraphrased. *Addition* (3) entails the addition of further information, whereas a *cue* (4) involves the provision of further information or definitions regarding a phrase or word that formed part of the previous utterance. Lastly, a speech act can be categorised under *no response to clarification request* (5), when the participant fails to provide any utterance in attempt to repair a communication breakdown.

The last category - (C) Linguistic Cohesion - consists of 4 subcategories, of which the first 3 can be coded as either appropriate or inappropriate. The first of these four is *Reference* (1), which, as explained in section 3.1, involves one item referring back to another item mentioned previously. *Reference* is further subdivided into anaphoric reference (1.1) and demonstrative reference (1.2). Anaphoric reference involves the use of personal pronouns which have to be interpreted by means of contextual cues, or on the basis of information mentioned earlier in the conversation. In the case of the lack of contextual cues or previous identification of the pronoun, the category for anaphoric reference is coded as inappropriate. Demonstrative reference or "verbal pointing" involves words like *this*, *that*, *these*, and *those*. This is a deictic category, which also means that if it is unclear, given the context, what a demonstrative reference is referring to, it will be coded as inappropriate.

Substitution (2) is similar to reference, as it also replaces elements that have been previously identified in the conversation. Nominal substitution is where one word substitutes a previously identified noun or noun phrase; verbal substitution is where a word substitutes a previously identified verb or verb phrase; and clausal substitution is where a word is used to substitute a previously identified clause. When these words are used to substitute something that has not yet been identified, this is coded as inappropriate usage.

Another aspect of Linguistic Cohesion is *Ellipsis* (3) which involves the removal of specific parts of utterances. In nominal ellipsis, a part of or the entire noun phrase is left out; in verbal ellipsis, a part of or the entire verb phrase is left out; and in clausal ellipsis,

more than one phrase is left out, usually both verb and noun phrases (Rumble 1988). Importantly, though, in an elliptical utterance, the phrase that is left out should be linguistically redundant; if it is not, the ellipsis is coded as inappropriate.

The last parameter listed under (C) Linguistic Cohesion, which cannot be marked appropriate/inappropriate, involves *Conjunctions* (4). The function of conjunctions is to link successive utterances to each other. Rumble distinguishes between 4 different types of conjunctions: additive conjunctions (i) (e.g. *and*), which have the function of linking two or more related utterances; causal conjunctions (ii) (e.g. *because*), which relate utterances by means of causality; temporal conjunctions (iii) (e.g. *when*), which relate utterances to each other according to their sequential relationship; and antithesis conjunctions (iv) (e.g. *but*), which connect contradictory clauses.

From the descriptions in this chapter, it should be clear that there is considerable overlap between the three assessment tools in terms of the aspects of communicative competence that they propose to be of interest in pragmatic assessment. The most significant differences between the three assessment tools are that (i) they organize the individual parameters/measures differently in terms of categories; (ii) the PP requires a categorical appropriate/inappropriate judgement for each parameter, while the PCA requires a judgement on a 5-point scale, and the FACS, calls for more refined counts; and (iii) in the PP and the FACS each parameter is judged on the basis of the conversation as a whole, whereas in the PCA, each parameter is judged on the basis of chunks of conversation (one-minute chunks in Penn 1985 and ten-minute chunks in the study reported here). I will return to the advantages and disadvantages of using each of these assessment tools in chapter 5, but first turn to a detailed discussion of the study in which the three assessment tools were utilised, in chapter 4.

CHAPTER 4

DATA ANALYSIS

In this chapter, I will report on the research conducted for the purposes of this thesis. I will firstly describe the participants (section 4.1) and very briefly the methodology (section 4.2) (since the three assessment tools were discussed in detail in the previous chapter) and then turn to the results of the analyses conducted with each of the pragmatic assessment tools (sections 4.3.1 to 4.3.3).

4.1 Participants

The four participants in this study were all L1 speakers of Afrikaans with L2 English (late bilinguals), who had been identified as schizophrenic and were being treated (as either in-patients or out-patients) at Stikland Hospital near Cape Town. Regarding their language skills, they are all late bilinguals, presenting with different (degrees of) symptoms of schizophrenia in their two languages according to the Structured Clinical Interview - Positive and Negative Syndrome Scale (SCI-PANSS) (Kay, Lewis and Fiszbein 1994). (I will return to the nature of the SCI-PANSS in section 5.2.2.) The information regarding their bilingual background was acquired through the use of a questionnaire developed by Fernandez (2003).⁷

Below I will refer to the four participants as Mr C, Mr R1, Mr E and Mr R2, respectively.⁸ Mr C is a 23-year-old caucasian male who grew up in Mooresburg and matriculated in Stellenbosch. Mr C's L1 is Afrikaans and he was first exposed to English at high school at age 15. Mr C completed grade 12 and also attended a tertiary institution. According to the background questionnaire (Fernandez 2003), both Mr C's active and passive language use throughout his childhood and teenage years predominantly involved his L1. In fact, the only instances in which he indicated that he used his L2 more than his

⁷ The SCI-PANSS interview and Fernandez's questionnaire were both administered by a registered psychiatrist. The spontaneous language data referred to below were collected by a psychiatrist (for Mr R1) and a linguist (for the other three patients), respectively. Most of the data were transcribed by myself.

⁸ I will also make use of these pseudonyms wherever the patients' names occurred in transcripts.

L1 (instead of "always L1"), was at high school when he communicated with teachers. It is during his years at college, as well as his current active and passive use of language, specifically to colleagues as well as in other social contexts (with family and friends), that he judged himself to be using predominantly his L2.

The second participant, Mr R1, is a 27-year-old coloured male from the Cape Town area, who grew up in Mitchell's Plain. His L1 is a non-standard variety of Afrikaans, referred to as Kaaps, and he is an L2 speaker of a non-standard variety of English, referred to as Cape Flats English (CFE), to which he was first exposed at the age of 12.⁹ He completed grade 10. According to the background questionnaire, his active and passive use of language throughout his childhood and teenage years, as well as his current language use, predominantly involves the use of his L1.

Mr E is a 25-year-old coloured male who spent his early years in Bonteheuwel and then moved to Blue Downs (both in the Cape Town area) where he attended school up to grade 7, after which he studied at a college for two years. His parents are devout Christians and in his interview he talks about an experience where people attempted to execute an exorcism on him because he was believed to be possessed by a demon. Mr E is also an L1 speaker of Kaaps and an L2 speaker of CFE. His first exposure to L2 English was at age 10. According to the background questionnaire, while he only made use of his L1 when speaking to family members throughout his childhood and teenage years, he started using his L2 (although still not as much as his L1) during his teenage years while speaking to friends, teachers and colleagues. Mr E does state, however, that he currently uses his L2 more than his L1 in social contexts at home, with friends and at work.

Lastly, Mr R2 is a coloured 22-year-old male who grew up in Cape Town and matriculated there. His L1 is Kaaps and he is an L2 speaker of CFE. According to the background questionnaire, Mr R2's first exposure to English was at the age of 9. Another

⁹ Both of these non-standard varieties are predominantly spoken by coloured people in the Cape Town area - see McCormick (1989, 1993) and Stone (1995) regarding the geographical distribution and linguistic features of these two dialects.

interesting observation here is that Mr R2 indicates that whilst he hardly ever used his L2 throughout his childhood and teenage years, his current active use of language almost always involves his L2. In fact, when a first interview was conducted with Mr R2, he could not use his L1 Afrikaans at all and could only speak his L2 English; after being on medication for an additional week, another interview (the one referred to in this study) was conducted, during which he managed to easily use Afrikaans and English.

4.2 Methodology

Spontaneous language samples of each participant's L1 and L2 use (30 minutes per language) were collected by means of informal interviews, conducted with each of the participants individually. (The participants consented to the video recording of these interviews.) During the interviews, participants were asked to talk informally about their families, childhood, school years, friends, and interests, as well as more general topics like religion and politics - in short, whatever got the participant talking. Each entire interview was orthographically transcribed shortly after its collection (by myself, following training for transcription). The patient was not known to the transcriber, who therefore was blind as to his language skills and preferences.

After the data had been transcribed, the three pragmatic assessment tools discussed in chapter 3 - Prutting and Kirchner's (1987) Pragmatic Protocol (PP); Penn's (1985) Profile of Communicative Appropriateness (PCA); and Rumble's (1988) Framework for Assessing (Children's) Communicative Skills (FACS) - were used to analyse the pragmatic abilities of each of the four subjects. The results of these analyses are presented in section 4.3 below.

4.3 Results

In each of the subsections (4.3.1 to 4.3.3) below, I will present the results for each participant first in a table and then by means of a more detailed discussion, including illustrative examples from the participant's Afrikaans and English samples.

4.3.1 The Pragmatic Protocol (PP) (Prutting and Kirchner 1987)

In Table 4 below, it is indicated for each parameter whether Mr C's language use in Afrikaans and English, respectively, was appropriate (√) or inappropriate (*) (recall that "-" indicates that the data did not provide an opportunity to judge the participant's pragmatic skills with respect to the given parameter).

Table 4. Results of the PP: Mr C

Communicative act	AFRIKAANS	ENGLISH
<i>Verbal aspects</i>		
A. Speech Acts		
1. Speech act pair analysis	√	√
2. Variety of speech acts	-	-
B. Topic		
3. Selection	-	-
4. Introduction	-	-
5. Maintenance	*	*
6. Change	-	-
C. Turn taking		
7. Initiation	-	-
8. Response	√	√
9. Repair/revision	-	-
10. Pause time	*	*
11. Interruption/overlap	√	√
12. Feedback to speakers	√	√
13. Adjacency	√	√
14. Contingency	√	√
15. Quantity/conciseness	*	*

Communicative act	AFRIKAANS	ENGLISH
D. Lexical selection / use across speech acts		
16. Specificity/accuracy	*	*
17. Cohesion	*	*
E. Stylistic variations		
18. The varying of communicative style	*	-
<i>Paralinguistic aspects</i>		
F. Intelligibility and prosodies		
19. Intelligibility	√	√
20. Vocal intensity	√	√
21. Vocal quality	√	√
22. Prosody	*	*
23. Fluency	*	*
<i>Nonverbal aspects</i>		
G. Kinesics and proxemics		
24. Physical proximity	-	-
25. Physical contacts	-	-
26. Body posture	√	√
27. Foot/leg and hand/arm movements	√	√
28. Gestures	√	√
29. Facial expression	*	*
30. Eye gaze	√	√

As can be seen in this table, the following aspects of Mr C's language use were appropriate in both Afrikaans and English: speech act pair analysis (1); related to turn taking: response (8), interruption/overlap (11), feedback to speakers (12), adjacency (13) and contingency (14); intelligibility (19), vocal intensity (20) and vocal quality (21); and

body posture (26), foot/leg and hand/arm movements (27), gestures (28) and eye gaze (30).

With respect to kenesics and proxemics, it might be noted that Mr C sat unusually still throughout the interview, rarely shifting or moving his arms or legs. He also very rarely used gestures to complement what he was saying but when he did make use of gestures, these were appropriate and appropriately placed. Only one such gesture occurred in the Afrikaans sample, while four occurred in the English sample.

The following aspects of Mr C's language use were judged inappropriate in both Afrikaans and English: (5) topic maintenance; (10) pause time and (15) quantity/conciseness; related to lexical selection: (16) specificity/accuracy and (17) cohesion; (22) prosody and (23) fluency; and (29) facial expression. The reasons for judging Mr C's language use as inappropriate for each of these parameters are discussed in some detail below.

With respect to topic maintenance (5), in both samples, Mr C had trouble sticking to the specific topic at hand and his responses to the interviewer's questions often did not respond to the relevant question in a clear or direct way.¹⁰ The examples in (1) and (2) are taken from the Afrikaans and English sections, respectively, of Mr C's interview.¹¹ In each case, Mr C's response to the interviewer's question illustrates his problem with topic maintenance.

(1)

Interviewer: Waarvoor was jy in die rehabilitasie sentrum gewees?

For what reason were you in the rehabilitation centre?

¹⁰ Although this seemed to be more of a problem in the Afrikaans sample than in the English sample, the PP cannot capture this – recall that a single instance of failing to maintain the topic leads to the judgement of "inappropriate" in the PP.

¹¹ Three notes with respect to the examples: Firstly, the brackets after each example indicate in which part of the transcript the excerpt occurred, so that, for example, "Afr61-85" refers to lines 61 to 85 of the Afrikaans transcript and "Eng123-143" refers to lines 123 to 143 of the English transcript. Secondly, a loose English translation (excluding fillers) is also provided in italics after each Afrikaans excerpt. Finally, "xxx" denotes unintelligible parts of the utterances.

Mr C: Ek het uh ek het vir twee jaar vir my ouers gewerk en op, terwyl ek vir my ouers gewerk het het ek gevoel het uh ek, ek het uh ek het 'n bietjie, ek het nie goeie kommunikasie met hulle gehad nie ek het gevoel ek het *inferior* gevoel teenoor my ouers dat ek werk vir hulle en ek is uh ek het kom sopas vanuit my studies van my werk uh opset af wat ek vroeër gedoen het as 'n ... en ek was in ek was 'n editor gewees uh ek het ons het uh dwelms gebruik en um films geproduseer onder die invloed van dwelms en um daarvandaan het ek besluit uh ek het dwelms gelos en die enigste toevlug wat ek gehad het was na my ouers se huis toe en toe ek na my ouers se huis toe gaan toe het ek uh dit was nie wat ek gedink het ek sou daar vind nie ek het gedink ek kon um 'n 'n 'n nuwe lewe op die plaas hê en 'n nuwe werk hê en uh en maar ek was nie opgelei in daardie area nie ek ek uh het gestudeer as 'n film student vir twee jaar lank um so um ek het nie enige opleiding gehad in in boerdery nie en um ek het dit moeilik gevind om saam met die werknemers te werk en so toe't ek maar maar net gedink dat as ek na 'n rehabilitasie sentrum toe gaan dat dit my sou help um toe't ek my toestemming gegee vir my ouers uh om my na 'n rehabilitasie sentrum toe te neem en rehabilitasie sentrum uh voltooi die eerste kursus en uh die tweede kursus het ek uh nie voltooi nie uh alhoewel ek het nie uh ek het nie toestemming gegee nie uh ek sou die tweede kursus nie heeltemal klaar maak nie en daar toe't ek daarvanaf het ek die terrein verlaat. (Afr61-85)

I worked for my parents for two years and while I was working for my parents I felt, I didn't have good communication with them. I felt inferior towards them, that I work for them and I had just come from my studies, from my work set-up, what I had done previously as a ... and I think I was in... I was an editor I, we used drugs and produced films under the influence of drugs and from there on I decided I stopped using drugs and the only refuge that I had was to my parents' house and when I went to my parents' house I, it wasn't what I'd thought I would find there. I thought

that I could have a new life on the farm and a new job and I wasn't trained in that area. I studied as a film student for two years, so I didn't have any training in farming and I found it difficult to work with the employees and so then I just thought that if I went to the rehabilitation that it would help me. Then I gave my parents permission to take me to the rehabilitation centre and rehabilitation centre complete the first course and the second course I didn't complete although I didn't give permission. I wouldn't finish the second course completely and there then from there I left the terrain.

(2)

Interviewer: What do you mean you filmed art? Like pictures you filmed or people or...?

Mr C: Ja um very much, ja. Uh we filmed a a story line which uh um based un un people's lives and how they uh act with each other and uh so xxx in a very artistic uh visual way. And which uh are very pleasing to uh the viewer uh very cinematic form um to xxx we shoot xxx uh a medium xxx thirty five mill negative film and it gives a very uh cinematic effect uh xxx I was I was feeling very in a high on the stage what I was doing and I was abusing drugs um xxx working uh in such a environment uh it uh influenced my brain. Uh I got sick um from all, from abusing uh the drugs. Uh well I've uh luckily I've escaped that world and uh I was working uh on my f-father's farm and he give me a lot of um freedom and working uh with my hands again and uh nature and um xxx being under the uh guidance of my parents and uh the the the caring of my parents and um w-working for my father is not that I wasn't uh um *ek was nie opge*- I wasn't um I haven't studied in that line to become a farmer um but uh I felt very much uh careful when I worked on the farm. Uh well it was hard work um but it it fixed my mind off drugs and uh and uh witchcraft and um ... (Eng123-143)

With respect to pause time (10) and fluency (23), Mr C's speech is rather dysfluent and halting in both languages and contains many instances of (i) uncomfortable pauses, (ii)

repeated multiple words or pause fillers, and (iii) false starts, revisions and abandoned sentence fragments. Uncomfortable pauses are long and awkward, most of them occurring in unusual positions in the utterance, for example, within phrases (cf. the examples in (3) and (4)) and even within single words (cf. the examples in (5) to (11), which, interestingly, all come from the Afrikaans sample).

- (3) ... gelukkig ... het ek uh PAUSE uitgehou totdat die polisie gekom het (Afr43)
 ... luckily ... I PAUSE held out? until the police came
- (4) ... it's nothing ... really uh PAUSE out of the extraordinary (Eng152)
- (5) stres-PAUSE-vol (Afr21)
stressful
- (6) afge-PAUSE-teken (Afr31)
signed off
- (7) af-PAUSE-ge-PAUSE-laai (Afr 47)
dropped off
- (8) ver-PAUSE-gewe (Afr51)
forgive
- (9) sielkundige-PAUSE-s (Afr56)
psychologists
- (10) werk-PAUSE-s-PAUSE-opset (Afr66)
work set-up
- (11) werk-PAUSE-nemers (Afr78)
employees

Most of the uncomfortable pauses seem to be related to Mr C's word-finding problems, which are quite severe. He indicated his awareness of this problem in both language samples, saying, for example, *jammer kan ek net uh kan ek net gou oor-paragrafeer*¹² *wat ek gesê het?* 'sorry can I quickly rephrase what I said?' (Afr6); *ek probeer net die regte woord kry* 'I'm just trying to find the right word' (Afr127); *I just want to find a word* (Eng49); and *I can't remember the name of the ...* (Eng194).

¹² See example (16).

The excerpts in examples (1) and (2) are representative in containing quite a number of repeated sounds, syllables and words, as well as pause fillers such as *uh*, *um*, *wel* (in Afrikaans) and *well* (in English). Likewise, false starts, revisions (cf. examples (12) and (13)) and abandoned sentence fragments (cf. examples (14) and (15)) occurred frequently in both samples.

- (12) um ek het in in die laaste um tyd het ek by 'n rehabilitasiesentrum bygewoon (Afr3)

direct gloss: um I have in in the last um time have I at a rehabilitation centre attended

- (13) um and uh so I was I over-reasoning in a sense uh (Eng36)

- (14) en uh ek ek's toe daarso uh klaar ge-

en toe't ek gegaan na um van daarvan af (Afr4-5)

*direct gloss: and uh I I was then there uh finished PAST TENSE MORPHEME
and then have I gone to um from there*

- (15) um uh and we would also um from that events um
we were not really um into the money (Eng177-178)

With respect to quantity/conciseness (15), in both language samples, Mr C would often respond to the interviewer's questions in a round-about manner, using a string of utterances to respond to a simple question, with the first couple of utterances not being related in any clear way to the interviewer's question. Mr C sometimes provided too much information and sometimes too little. Furthermore, in both samples, there is a lot of repetition of information and in general Mr C's responses to questions are vague and do not have a lot of substance (i.e. he says a lot without really saying very much). This is also clearly illustrated by the excerpts in (1) and (2) above.

With respect to specificity/accuracy (16) and cohesion (17), Mr C makes a number of inaccurate lexical selections in both language samples, sometimes using the incorrect word (e.g. the incorrect preposition) and sometimes using an existing word in an

unconventional way. There are 25 such instances in the Afrikaans data (cf. examples (16) to (18) below) and 27 such instances in the English data (cf. examples (19) to (21) below). The relevant lexical item in each utterance is printed in bold and followed in square brackets by what would be a more appropriate lexical item, given the context of the utterance.

- (16) jammer kan ek net uh kan ek net gou **oor-paragrafeer [parafraseer]** wat ek gesê het? (Afr6)

sorry can I just over-paragraph [paraphrase] what I said?

- (17) en en daar was 'n **ongeval [voorval]** gewees (Afr9)

and there was a casualty [incident]

- (18) ek het gedink ek is gesond, maar dit was net 'n **prosedure [?]** wat die rehabilitasiesentrum bied uh om deur uh om die eerste kursus te voltooi (Afr94-95)

I thought I was healthy but it was just a procedure [?] that the rehabilitation centre offered by completing the first course

- (19) they were merely trying to help me, and uh so I could have a better **outcome [future?]** (Eng39-40)

- (20) I was telling the boss of the rehabilitation centrum that uh I'm com- I will be uh I will **confine in [not complete]** the the second course (Eng50)

- (21) and uh I was w-waiting for uh the police to arrive on the **scenery [scene]** so they could help me and... (Eng62)

A final observation in relation to the accuracy parameter, is that there were some inconsistencies between the facts that were presented in Afrikaans versus English by Mr C. The most prominent inconsistencies were the following three. Firstly, in the Afrikaans sample Mr C says that the reason that he is in the hospital (Stikland) is that he had a fight with his cousins (Afr3-17, 61-85, 89-98, 132-133) and that he has no idea why he is still in hospital after two months (Afr117-118, 121-123). In the English sample, however, Mr C says that he has been hospitalised because he has been diagnosed with first episode psychosis (Eng19-30). He also refers to his drug abuse (Eng93-97 and 130-133), as well

as his obsession with the Bible (Eng17-25). Secondly, in the Afrikaans sample, Mr C states that he has never had any problems with thinking or reasoning (Afr130-131), whereas in the English sample he claims that, before the medication and therapy, he had serious problems with thinking and reasoning, which he believes stemmed from his obsession with the Bible (Eng17-37). Finally, in the Afrikaans sample, when Mr C is asked what effect the drugs that he used to abuse had on him, he replies that they did nothing to him (Afr101-102), whereas in the English sample he says that he got sick from abusing drugs and that he eventually had to leave the world of the satanic occult and the drug abuse that went along with it (Eng119-121, 130-133 and 142-143).

The three inconsistencies mentioned above give the impression that Mr C had more insight in his L2 (English) than in his L1 (Afrikaans) on the subjects of his illness, its symptoms, some of the possible causes thereof (for instance his drug abuse, his obsession with the Bible, and his involvement in witchcraft) and the effect of medication and therapy in the process of treating his illness. Even though Mr C mentions in Afrikaans that he had been diagnosed with first episode psychosis (where he also mentions schizophrenia), he seems dismissive of the diagnosis and unconvinced of its validity. In the Afrikaans sample, he does not admit to being ill, and never refers to the negative effects of his drug abuse or his obsession with the Bible. In the Afrikaans sample, Mr C also does not. In contrast to this, in the English sample he not only mentions that he had been diagnosed with first episode psychosis, he seems to be certain of the accuracy of this diagnosis. He further acknowledges some of the symptoms of his illness and considers the effect that his drug abuse, as well as his obsession with the Bible, could have had in triggering his illness. He also seems convinced that the treatment he is receiving for his illness is improving his behaviour, decreasing his symptoms and making him feel better. The fact that there is a discrepancy between the facts presented in Mr C's L1 versus his L2, is even more significant if one considers that the two language samples were collected one after the other, within a single hour. In chapter 5, I will return to these factual discrepancies between the L1 and L2 samples and argue that not one of the three pragmatic assessment tools - the PP, PCA or FACS - has a way of capturing such inconsistencies.

The prosody (22) of Mr C's speech in both languages is affected negatively by the relatively large number of uncomfortable pauses within utterances and within words, as well as the relatively large number of pause fillers, false starts, revisions and abandoned sentence fragments. Mr C also emphasises words within utterances and sounds within words in a rather random, unconventional way, sometimes also producing a vowel sound with exaggerated rounding or a whole word through clenched teeth.

Mr C's facial expression (29) very rarely changed from neutral to either positive or negative. He showed almost no emotion and seemed detached even when he was talking about his illness, being part of a satanic occult or being assaulted by his cousins. Mr C also laughed inappropriately a couple of times (three times in the Afrikaans sample and once in the English sample), something which was especially noticeable because Mr C would sit very still, suddenly laugh quite loudly for one or two seconds (sometimes throwing his head back) and then return very abruptly to his still position and neutral facial expression. Mr C also exhibited a seemingly involuntary raising and lowering of his eyebrows throughout the interview, something which was more pronounced and occurred more frequently in the Afrikaans sample than in the English sample, making Mr C seem slightly more comfortable (or at least less uncomfortable) during the English part of the interview.

The only parameter which was judged differently for Mr C's Afrikaans than for his English involved varying communicative style (18). Whereas there was no opportunity to judge this parameter as either appropriate or inappropriate on the basis of the English sample, it was judged as inappropriate on the basis of the Afrikaans sample because Mr C sometimes used words that were more formal than was required by the situation and thus did not fit into the informal style of the rest of the utterance, and this occurred only in the Afrikaans sample. Examples of such instances are given in (22) to (24) below, where the relevant lexical item in each utterance is printed in bold and followed in square brackets by what would be a more appropriate lexical item, given the context and style of the utterance(s).

- (22) en toe't ek vanuit xxx op pad uh um met uh met my pa en my twee neefs **tegemoet gekom [raakgeloop]** (Afr8)
and then I came to meet [met] my dad and two cousins when I was on my way from xxx
- (23) en toe't my pa die polisie **geskakel [gebel]** (Afr10)
and then my dad telephonically contacted [called/phoned] the police
- (24) en toe ek weer sien toe het my pa **weer gearriveer met my twee nefies op die toneel [weer daar aangekom/opgedaag]** (Afr40)
and when I saw again, my dad had arrived on the scene [showed up] with my two cousins again

Turning to Mr R1, the results of the PP analysis of his Afrikaans and English language use are presented in Table 5 below.

Table 5. Results of the PP: Mr R1

Communicative act	AFRIKAANS	ENGLISH
<i>Verbal aspects</i>		
A. Speech Acts		
1. Speech act pair analysis	√	√
2. Variety of speech acts	-	-
B. Topic		
3. Selection	√	*
4. Introduction	√	√
5. Maintenance	√	*
6. Change	√	√
C. Turn taking	√	√
7. Initiation	-	-
8. Response	√	√
9. Repair/revision	√	√
10. Pause time	√	*
11. Interruption/overlap	√	√

Communicative act	AFRIKAANS	ENGLISH
12. Feedback to speakers	√	√
13. Adjacency	√	√
14. Contingency	√	√
15. Quantity/conciseness	*	*
D. Lexical selection / use across speech acts		
16. Specificity/accuracy	√	*
17. Cohesion	√	√
E. Stylistic variations		
18. The varying of communicative style	√	√
<i>Paralinguistic aspects</i>		
F. Intelligibility and prosodics		
19. Intelligibility	√	√
20. Vocal intensity	√	√
21. Vocal quality	√	√
22. Prosody	√	√
23. Fluency	√	√
<i>Nonverbal aspects</i>		
G. Kinesics and proxemics		
24. Physical proximity	-	-
25. Physical contacts	-	-
26. Body posture	√	√
27. Foot/leg and hand/arm movements	√	√
28. Gestures	√	√
29. Facial expression	√	√
30. Eye gaze	*	*

As can be seen in the table above, the following verbal aspects were judged as appropriate for both language samples: (1) speech act pair analysis; related to topic: (4)

topic introduction and (5) topic change; related to turn taking: (8) response, (9) repair/revision, (11) interruption/overlap, (12) feedback to speakers, (13) adjacency and (14) contingency; (17) cohesion; (18) the varying of communicative style; related to paralinguistic aspects, (19) intelligibility, (20) vocal intensity, (21) vocal quality, (22) prosody and (23) fluency; and regarding non-verbal aspects: (26) body posture, (27) foot/leg and hand/arm movements, (28) gestures and (29) facial expression.

Quantity and conciseness (15) and eye gaze (30) are the only two parameters that were judged as inappropriate in both Mr R1's Afrikaans and English language samples. Quantity and conciseness were judged as inappropriate because at times too little information would be given and at other times Mr R1 would be more informative than appropriate. It is important to add, however, that when Mr R1 provides too much information, not all of it is relevant or factually correct. For instance, in the English sample, when he speaks about a relationship he had *about three four year five years ago* (Eng132) with an older woman (Eng132-159), he referred to himself as being 27 years old at that time (Eng153-154), whereas he was 27 years old at the time of the interview. An example from the Afrikaans part of the interview is Mr R1's response to the question of where he was born and where he grew up - his reply (Afr1-11) provides much more information than is necessary.

Eye gaze (30) was judged as inappropriate for both language samples because Mr R1 hardly ever looked up at the interviewer or into the camera, his gaze being fixed on the ground in front of him. He seemed to make eye contact more frequently during the Afrikaans part of the interview than during the English part; however, as was explained in footnote 14 above, the PP cannot capture such a distinction because it does not take frequency of appropriate or inappropriate occurrences into account.

Whereas not one of the parameters was judged to be inappropriate only in the Afrikaans sample, the following parameters were judged as inappropriate only in the English sample: (3) topic selection; (5) topic maintenance; (10) pause time; and (16)

specificity/accuracy. Each of these parameters is discussed in some detail below with reference to examples from Mr R1's data.

Regarding topic selection (3), in the English sample, the patient was given one opportunity to select a topic for discussion and he responded with *I don't know, but I got the feeling I was in jail. I'm good at reading faces* (Eng 370-371). Not only are these consecutive utterances irrelevant towards each other, but this topic does not relate at all to the previous topics of the conversation.

Regarding (5) topic maintenance, in the English sample, Mr R1 had trouble staying on a topic and his responses often did not directly answer the question asked by the interviewer. The example mentioned directly above - Eng 370-371 - demonstrates that the patient did not maintain topics well when speaking English. What he said after mentioning that he could "read faces" is given in (25) below. Not only do these utterances not follow logically on each other, they also make no sense when considered separately. Another example of poor topic maintenance occurred when Mr R1 was asked to discuss the paranoia which he had mentioned earlier. This example is given in (26) below. In this example, it is also clear that Mr R1 struggles to maintain a topic, jumping around between topics and ending this conversational turn with two vague statements, one being *That was my life my aim*.

(25) The way people are watching me my skin colour. My face is green. I don't know, some people tell my mind that they will make my face green. Allah is my witness there. Ja and he is the only one who who help me too you know. (Eng372-377)

(26)

Interviewer: Have you ever experienced that maybe someone puts thoughts in your head that is not your own thoughts?

Mr R1: Ja exactly ma'am. Ja I went through that ja and, feeling tastes around my nose, getting some jis something like that that stuff ma'am in my mind and because I thought yo I' going to do that because that person is doing it. So

it don't work on me like um put a Volkswagen carburettor in a Toyota. So it's not working at the moment like that you know what I'm saying. So I was confuse. What feelings is this. How come is that like that and. So man I I was so neat ma'am. So I used drugs. And so they used they they lost respect lots of respect for me. So I felt no man this guy is more like that and that guy was like that. Watte. So I just *moered* them something like that. And they struggled xxx struggled to take my bags and walk *sommer* to Montague Gardens take a truck maybe living there somewhere else. That was my life my aim. (Eng289-307)

With respect to (10) pause time, at times, the patient left long (and seemingly uncomfortable) pauses between utterances. During these pauses, he would sit very still and stare at the ground. Often eye contact would not be resumed when being addressed by the interviewer.

Regarding (16) specificity and accuracy of lexical selection, Mr R1, just like Mr C, makes a number of inaccurate lexical selections; however, unlike for Mr C, these incorrect lexical items only occur in his L2 (English), and not at all in his L1 (Afrikaans). At times, existing terms or phrases were used in an unconventional manner - see examples (27) to (30). Again, the relevant lexical item in each utterance is printed in bold and followed in square brackets by what would be a more appropriate lexical item, given the context.

- (27) I were in Namibia, **concluding** [doing/making] something there for myself (Eng4)
- (28) And he was always **occupied** [fussing] (Eng142)
- (29) It was my head was **off its court** [off course – not functioning as it should have] (Eng185)
- (30) So I slept outside **in the Allah** [with Allah?] (Eng339)

Furthermore, Mr R1 also used a number of neologisms as shown in examples (31) to (33):

- (31) Sleeping in how can I say **inhosted [tightly covered]** (Eng348)
- (32) I was **light-minded [?]** ma'am (Eng236)
- (33) And I **make do out with my hand like this [do this/go like this]** (Eng275)

Lastly, only in the English sample did Mr R1 make nonsensical statements such as *General in a person that only a general is a person that only a general can operate with human beings* (Eng364).

In Table 6 below, it is indicated for each parameter whether Mr E's language use in Afrikaans and English, respectively, was appropriate or inappropriate.

Table 6. Results of the PP: Mr E

Communicative act	AFRIKAANS	ENGLISH
<i>Verbal aspects</i>		
A. Speech Acts		
1. Speech act pair analysis	√	√
2. Variety of speech acts	-	-
B. Topic		
3. Selection	-	-
4. Introduction	-	-
5. Maintenance	√	√
6. Change	-	-
C. Turn taking		
7. Initiation	-	-
8. Response	√	√
9. Repair/revision	√	√
10. Pause time	√	√
11. Interruption/overlap	√	√

Communicative act	AFRIKAANS	ENGLISH
12. Feedback to speakers	√	√
13. Adjacency	√	√
14. Contingency	√	√
15. Quantity/conciseness	*	*
D. Lexical selection / use across speech acts		
16. Specificity/accuracy	*	√
17. Cohesion	*	*
E. Stylistic variations		
18. The varying of communicative style	-	-
<i>Paralinguistic aspects</i>		
F. Intelligibility and prosodics		
19. Intelligibility	√	√
20. Vocal intensity	*	*
21. Vocal quality	√	√
22. Prosody	√	√
23. Fluency	*	*
<i>Nonverbal aspects</i>		
G. Kinesics and proxemics		
24. Physical proximity	√	√
25. Physical contacts	-	-
26. Body posture	√	√
27. Foot/leg and hand/arm movements	√	√
28. Gestures	√	√
29. Facial expression	√	√
30. Eye gaze	√	√

As can be seen in this table, the following aspects of Mr E's language use were judged as appropriate in both Afrikaans and English: (1) speech act pair analysis; (5) topic

maintenance; related to turn taking: (8) response, (9) repair/revision, (11) interruption/overlap, (12) feedback to speakers, (13) adjacency and (14) contingency; (19) intelligibility, (21) vocal quality and (22) prosody. All of the parameters under "G. Kenesics and Proxemics" are also judged as appropriate for both language samples. Mr E behaves a lot more "natural" than Mr C: although Mr E also sits quite still, he moves a lot more than Mr C does (e.g. shifting his weight in the way that one would when sitting in the same position for an hour; something which Mr C did not seem to do at all). He seemed a lot less absent and weary than Mr C, because he smiled and nodded frequently. Mr E also used a wider range of facial expressions than Mr C and Mr R1, and frequently used gestures to complement his verbal behaviour (all of these gestures being appropriate to the context).

The following aspects of Mr E's language use were judged as inappropriate in both Afrikaans and English: (15) quantity/conciseness; (17) cohesion; (20) vocal intensity; and (23) fluency.

The (15) quantity/conciseness parameter is marked "inappropriate" for both language samples because Mr E often provides too little information. It is apparent when looking at the interview footage that it was difficult to get Mr E to produce more than two utterances at a time. He would answer many of the questions with one or two very short utterances, then smile and nod to hand the floor back to the interviewer. Many of what were supposed to be open-ended questions were in this way treated by Mr E as yes/no-questions with very little elaboration on his side. There were fortunately some questions in both samples that evoked a more substantial response. In contradiction to this, Mr E would at other times supply too much information or express himself in a repetitive manner - see examples (34) and (35) below.

(34)

Interviewer: So when you study when you've study studied business management in what kind of company would you like to work or would you like to have your own company?

Mr E: no no I'd like to work in a company
I would like to work in a in a a shop like or Edgars and um Woolworths
or Foschini. Ja and I'll even go into the bank as well. Ja ja like like like
doing the sales um doing the sales things. Um maybe work on a computer
the till um... Like I was thinking like working up to manager, ja as a floor
manager maybe or as a manager, just to see how things are going in the
shop. (Eng90-96)

(35)

Interviewer: Did you have one? (referring to a hamster)

Mr E: No a friend of mine had one already and I say him... How he look, he
look so beautiful. But ja with his body xxx. It's so soft and his his hair
that's so soft, and he just playing around. (Eng143-150)

The (17) cohesion parameter is marked "inappropriate" for both languages due to the inconsistencies within each of Mr E's language samples. The inconsistency that was found between the two language samples of Mr C was not found to the same extent between the two language samples of Mr E. One exception is the fact that in the Afrikaans sample (Afr140, 145, 147-148), Mr E makes it clear a number of times that he would like to become a sports manager. When this topic is introduced again by die interviewer in the English part of the interview, Mr E is quite adamant that he does not want to become a sports manager, but rather a business manager (Eng78-79).

An example of inconsistency within a single language sample (here Afrikaans) is given in (36) below, which shows that throughout the interview Mr E is very clearly confused about how he feels about religion. He seems unsure about whether or not he wants to believe in and serve Jesus. Additionally, he contemplates whether he should do things for his own sake or for the sake of his father, i.e. if he really believes in Jesus or is merely obligated to try and believe in Jesus, for his father's sake.

(36)

Interviewer: En, sê vir my, jy't nou gesê dat jou pa en jou ma was ook baie in die kerk gewees. Het jy 'n sterk geloof? Of hoe, hoe voel jy?

And, tell me, you just said that your dad and your mom were very involved in the church. Do you have a strong faith? Or how do you feel?

Mr E: Nee ek is net 'n persoon wat lief is om rondom mense te wees, ja en whatever hulle ge- dink ek.

No I'm just a person who loves being around people, yes, and whatever they I think.

Interviewer: Okay, so glo jy nie eintlik vas en kom by die kerk en sulke goed nie?

Okay, so you don't really believe strongly and go to church and stuff like that?

Mr E: Janee ek glo nie eintlik vastig daarin nie, maar ek in Jesus sal ek glo as dit my pa se wil wee- wil wees dat ek in Jesus moet glo of en of dat ek Hom moet dien dan sal ek, ek sal werk daaraan. Ek sal dit die- ek sal God dien.

Yes I don't really believe strongly in it but in Jesus I will believe if it is my dad's will that I should believe in Jesus or that I should serve Him then I will work at it. I will serve it God.

Interviewer: So dit is nie iets wat jy self voel nie, dit is iets wat jy vir jou pa sal doen?

So it isn't something that you feel yourself, it is something that you would do for your dad?

Mr E: Nee dit is iets wat ek vir myself sal doen sal wil doen. (Afr220-225)

No, it is something that I would do, would like to do for myself.

Another example of such an inconsistency in the Afrikaans sample, again related to religion, is when Mr E talks about the experience he had when his family and church members tried to perform an exorcism on him - see Mr E's contradictory claims in (37) and (38) below regarding how he felt during the "exorcism".

(37) En ek was net kalm (Afr290)

And I was just calm

(38) O ek was baie bang gewees, ek was bang (Afr295-296)

Oh I was very scared, I was scared

These inconsistencies seem to occur more frequently in the English sample than in the Afrikaans sample – compare examples (39) and (40), and see also example (41).

(39) I was a healthy child. My brother he was a healthy child as well. Ja just some things that he um, how can I say, some things that that the emotional not the emotional, but I think ja maybe he was afraid about something (Eng208-213)

(40)

Interviewer: Did he, did you think he had a lot of fears and the stuff that you felt as well, all those emotions?

Mr E: no he's more...

Interviewer: Was he a different kind of kid?

Mr E: Ja he was a he's more different than me ja

(41) With other guys no, I never had lots of fight. I always kept fighting, I always kept fighting ja. Ja ja when conflict comes my way and people are rude and when I see something then I will just, I won't really. But I would think before I do something again, ja.

Sometimes Mr E's body language also seems to be inconsistent with the verbal response he gives – at one stage in the English part of the interview, he seems to want to disagree with the interviewer, to give a "no" in response to the question posed (shaking his head), but when he struggles to get his thoughts together, he gives up and answers "yes" instead.

(20) Vocal intensity is marked inappropriate for both language samples because Mr E often let an utterance trail off so that the last few words of the utterance were almost completely inaudible during the actual interview and could only be transcribed after replaying them a couple of times through headphones.

Regarding fluency (23), Mr E comes across as much more fluent than Mr C because relatively few of Mr E's utterances contain two or more pause fillers, whereas many of Mr C's utterances involve three or more pause fillers. Nevertheless, Mr E's speech in both language samples is also judged as dysfluent, and therefore inappropriate, because of the unusually frequent occurrence of pauses, pause fillers, false starts, revisions, abandoned utterances and repeated sounds, words and phrases - see example (42) below. Just like Mr C, Mr E acknowledges his word-finding problems in both language samples, saying things like *hoe kan ek sê* "how can I say" (Afr40, 54, 95, 105, 130) and *how can I say* (Eng24, 211).

(42)

Interviewer: So watse werk het jou ma en jou pa gedoen?

So what jobs did your mom and your dad have?

Mr E: O my ma ge- my ma't gewerk in 'n fabriek, en my pa het ek dink daai jare was my pa... my pa het 'n kantoor gehad en... Ek kan nie nou meer... Ek dink hy het ook gewerk in... Maar hy was 'n voorman. Ek weet hy was 'n voorman.

Oh my mom worked in a factory, and my dada I think in those years my dada... my dada had an office and ... Now I can't anymore ... I think he also worked in... But he was a foreman. I know he was a foreman.

Interviewer: As jy kon kies watse werk jy kan doen, watse werk sou jy wou doen as jy van hier af gaan?

If you could choose what job to do what job would you do when you leave here?

Mr E: Ek sal ek sal *like* om verder te gaan in in *sport management* en in besigheid te-. Ek sal *like* om te te werk op 'n komper. Ja ek sal dit ... Op 'n rekenaar. (Afr133-143)

I would like to go further in sports management and in business... I would like to work on a computer. Yes I would... On a computer.

Regarding (16) specificity/accuracy, this parameter is marked inappropriate for Afrikaans only because of Mr E's inappropriate lexical selections in this language. Just like Mr C does in both languages and Mr R1 does in English, Mr E uses existing words in an unconventional way - see examples (43) and (44) – and he also uses neologisms – see example (45).

(43) mense wat ek altyd **ballingskap [vriendskap]** gehad het en gekommunikeer het (Afr90)

(people) that I always had exile/banishment [friendship] (with) and communicated (with)

(44) I'm starting to **develop myself into** the into the church [**settle into**] (Eng257)

(45) Janee ek glo nie eintlik **vastig [vas]** daarin nie (Afr222)

Yes I don't really believe in it "vastig"[strongly] (where "vastig" is not an existing Afrikaans word)

Table 7 below presents the results of the PP analysis of Mr R 2's language use in Afrikaans and English.

Table 7. Results of the PP: Mr R2

Communicative act	Afrikaans	English
<i>Verbal aspects</i>		
A. Speech Acts		
1. Speech act pair analysis	√	√
2. Variety of speech acts	-	-
B. Topic		
3. Selection	-	-
4. Introduction	-	-
5. Maintenance	*	*
6. Change	-	-
C. Turn taking		
7. Initiation	-	-
8. Response	√	√

Communicative act	Afrikaans	English
9. Repair/revision	-	-
10. Pause time	√	√
11. Interruption/overlap	√	√
12. Feedback to speakers	√	√
13. Adjacency	√	√
14. Contingency	√	√
15. Quantity/conciseness	*	*
D. Lexical selection / use across speech acts		
16. Specificity/accuracy	*	*
17. Cohesion	*	*
E. Stylistic variations		
18. The varying of communicative style	*	√
<i>Paralinguistic aspects</i>		
F. Intelligibility and prosodics		
19. Intelligibility	√	√
20. Vocal intensity	√	√
21. Vocal quality	√	√
22. Prosody	√	√
23. Fluency	√	√
<i>Nonverbal aspects</i>		
G. Kinesics and proxemics		
24. Physical proximity	-	-
25. Physical contacts	-	-
26. Body posture	√	√
27. Foot/leg and hand/arm movements	√	√
28. Gestures	-	√
29. Facial expression	-	-
30. Eye gaze	√	√

As can be seen in this table, the following aspects of Mr R2's language use were judged as appropriate for both Afrikaans and English: (1) speech act pair analysis; related to turn taking; (8) response, (10) pause time, (11) interruption/overlap, (12) feedback to speakers, (13) adjacency and (14) contingency and (19) intelligibility, (20) vocal intensity and (21) vocal quality, (22) prosody and (23) fluency.

All of the parameters related to "G. Kinesics and Proxemics" were judged as either "appropriate" or "no opportunity to observe" for both language samples. Regarding body posture, Mr R2 sits quite still and, like Mr C, does not even shift his weight during the hour long interview. As for the use of gestures, Mr R2 does not use any gestures or hand movements in the Afrikaans part of the interview, sitting with his hands folded in his lap the entire time. In the English speech sample, on the other hand, he behaves more naturally and uses gestures, such as snapping his fingers appropriately to complement his verbal utterances.¹³ Mr R2's facial expression seems to remain neutral but this is difficult to judge because the video recording of his interview is of a lower quality than those of the other three participants - he was sitting in front of a window, and the lighting made it difficult to judge his facial expression.

The following aspects of Mr R2's language use were judged as inappropriate in both Afrikaans and English: (5) topic maintenance; (15) quantity/ conciseness; (16) specificity/accuracy; and (17) cohesion.

Regarding topic maintenance (5) and quantity / conciseness (15), Mr R2 had trouble sticking to a topic in both languages. His responses to the interviewer's questions were

¹³ Note that this could be due to (i) Mr R2 being more comfortable in his L2 English than in his L1 Afrikaans but that it could also be due to (ii) Mr R2 becoming more relaxed as the interview progresses, getting more comfortable with the camera and the interviewer. All four patients were interviewed in their L1 for the first 30 minutes and in their L2 for the last 30 minutes, so that it is not possible to completely dismiss the possibility that the order in which the languages were used (first L1 and then L2) might actually have affected how the patients behaved in the respective languages. To determine what the effect is of timing within the interview, one would need a larger number of participants, which one could divide into two groups – Group 1 speaking first in their L1 and then in their L2, and Group 2 speaking first in their L2 and then in their L1.

very rarely directly relevant; he often strayed from the topic and spoke in a vague manner about things which were not related to the topic/question at hand in any clear manner and which often did not make sense. This is illustrated by the examples in (46) to (48) below.

(46)

Interviewer: So wie is die swartskaap in die familie?

So who is the black sheep in the family?

Mr R2: Uhm dalk die probleem xxx waarheen ons uh deurmaak elke dag, want ek geniet elke st elk-ee, elke stap xxx, ek waardeer dit. (Afr45-47)

Maybe the problem towards which we make through each day, because I enjoy each ... each step xxx, I appreciate it.

(47)

Interviewer: Okay. Is dit nie 'n gevaarlike werk nie?

Okay. Isn't that a dangerous job?

Mr R2: xxx Dit is nooit die ingexxx –geval xxx jy uhm bymekaarkom nie, maar dis waarmee jy te werk gegaan. Daai tel elke dag waarmee jy werk toe gaan.

It is never the in xxx case you don't come together, but it is (that) with which you go to work. That counts every day, with which you go to work.

Interviewer: Jy het nooit seer gekry met die masjiene wat julle gebruik het om die hout te xxx nie.

You never got hurt with the machines that you used to xxx the wood.

Mr R2: Dit was te xxx Die dae wat ek gehet het, was baie eensaam. (Afr133-137)

It was too xxx. The days that I had were very lonely.

(48)

Interviewer: Ja, and then, have you ever been uh somewhere where you could see wild animals?

Mr R2: Uhm Ja. There xxx places, where everything I had, and everything I could have in life xxx because I xxx with you by my side. Thank you for

everything. I didn't mess it up, I hope so. I love you. I'm gonna be xxx
someday xxx (Eng419-426)

Regarding (16) specificity/accuracy and (17) cohesion, Mr R2 makes various inaccurate lexical selections in both language samples. He sometimes uses the incorrect word (e.g. an incorrect preposition) and, like all of the other participants, uses existing words in unconventional ways. Examples from the Afrikaans data are given in (49) and (50) below, and examples from the English data are given in (51) and (52) below.

- (49) Is behels die Westelike **afdeling** [**provinsie**] (Afr3)
Is involves the Western section [*province*]
- (50) Maar **die vernaamste** [**my gunsteling**] ene was uhm Rekeningkunde (Afr114)
(talking about school subjects) But the most renowned [*my favourite*] one was
Accounting
- (51) They **ever** [**always**] stayed with me (Eng182)
- (52) I think I must take a good rest, and **see outings** [**go on outings**], go in Cape Town
(Eng43)

Furthermore, Mr R2 also produced neologisms in both languages – see the Afrikaans examples in (53) and (54) and the English examples in (55) and (56).

- (53) Kyk. Uhm. 'n Goeie mm **raadvis** [**advies/raad**] xxx van my kant af, uhm waar
ons kom met geloof... (Afr254)
Look, a good "raadvis" [advice] xxx from my side, where we come with faith...
(where "raadvis" is not an existing Afrikaans word and seems to be a blend
between two existing words, "raad" and "advies", both meaning "advice")
- (54) Baie **weldadig** [**goedgesind**], liefdevol, **liefbaar** [**aangenaam**] (Afr55)
Very "weldadig" [kind], loving, "liefbaar" [pleasant] (where neither "weldadig"
nor "liefbaar" are existing words, though each of them seems to be related to
existing Afrikaans word – "weldadig" to "goeie daad" (good deeds) and "liefbaar"
basically meaning "able to be loved")

- (55) But I always wanted to be a **graphist** [**graphic artist**] (Eng368)
- (56) That **laughingness** [**cheerfulness**], that greatness, that well doing xxx all that I see today (Eng36)

Another aspect regarding specificity and accuracy is Mr R2's use of utterances that make no sense whatsoever. In these utterances, it is hardly possible to determine what the message or idea is that Mr R2 is attempting to convey – see examples (57) to (59) below.

- (57) I think the problem is, uhm, I'm not in a good division of prime but I'm in a good division of seeing (Eng47-48)
- (58) Sy's altyd 'n moeder wat uh sê nooit te laat wat te veel van alles (Afr21)
She's always a mother who says never too late who too much of everything
- (59) maar met alle sterkte behels dit jou by help teenwoordighede (Afr24)
but with all strength it involves you with help presences

A final observation regarding the accuracy parameter is that there were some inconsistencies between the Afrikaans and the English presentations of facts by Mr R2. When he is asked about possible future studies in Afrikaans, he is adamant that he would like to have a career in mathematics or accounting (Afr114-121). When asked about the same thing in English, however, he talks about becoming a doctor, a lawyer or a "graphist" (graphic artist) (Eng354-368), without once mentioning his "favourite subject", accounting. Another prominent example of Mr R2's inconsistencies is when he speaks of the love he received from his family. In Afrikaans, when Mr R2 is asked if he always felt loved at home, he answers "yes" (Afr150). When asked in English whether he felt loved when he was a young child, he answers "no, not really" (Eng304).

These inconsistencies did not only occur between the two language samples - Mr R2 would also often contradict himself within one language, even within two consecutive utterances. Directly after he said that he did "not really" (Eng304) feel loved as a child, he stated that he was "blessed with love" (Eng305). After saying that both his parents are "the best" (Eng320-324, 193-194), he says that he would not raise his children the way

his parents raised him (Eng325-330), implying that his parents are, in fact, not "the best", since he did not approve of the way that he was brought up by them. Another example is when he states that he is going to be himself from now onwards (Eng234) and follows this utterance with "But not totally, not totally" (Eng243). When talking about his studies in the Afrikaans sample, Mr R2 says that he worked hard (Afr107-108) but immediately contradicts himself, saying in the very next utterance that he did not work hard (Afr109).

The only parameter which was judged as inappropriate only for Mr R2's Afrikaans is the parameter relating to varying of communicative style (18), since Mr R2 sometimes used words that were more formal than required by the situation and thus did not fit into the informal style of the conversation but, just as in Mr C's case, this only occurred in Mr R2's Afrikaans sample. Examples of such instances are given in (60) to (62) below.

(60) Kyk as ek, as ek gekom het by die een **woning [huis]** dan was daar altyd iets op die tafel vir my (Afr11)

*Look, when I came to the one **residence [house]**, then there was always something on the table for me*

(61) Dan *sort* ons dit sommer gou-gou uit in die xxx wat sonder dat uh xxx behels dat hulle my **in kennis stel [sê/laat weet]** hulle sal my net so kyk xxx (Afr39)

*Then we sort it out quickly in the xxx which without that xxx involves that they **inform me [tell me]** they will just look at me like that*

(62) ek sal vir hom **aandui [sê]** uhm die xxx is, uh uh is is verby, (Afr180)

*I will **indicate to him [tell him]** the xxx is over*

4.3.2 The Profile of Communicative Appropriateness (PCA) (Penn 1985)

Each of the 30 minute speech samples were divided into three 10-minute chunks that were then separately analysed by means of the PCA. For each of these chunks, every parameter on the PCA was judged as (1) inappropriate; (2) mostly inappropriate; (3) somewhat appropriate; (4) mostly appropriate; or (5) appropriate. Hereafter, the

judgements were divided into two categories: (i) more *inappropriate* than appropriate (ratings 1 and 2) (henceforth simply referred to as "inappropriate") and (ii) more *appropriate* than inappropriate (ratings 3-5) (henceforth simply referred to as "appropriate"). For each participant, the results of the PCA analysis are first presented in a table, after which parameters which were judged as inappropriate for at least one of the three chunks of a language sample (i.e. one or more Afrikaans chunks and/or one or more English chunks) are discussed in more detail.¹⁴

The results of the PCA analysis of Mr C's language use in Afrikaans and English are presented in Table 8 below. (As was the case for the PP tables, "-" indicates that the data did not provide an opportunity to observe a participant's language use with respect to the given parameter).

Table 8. Results of the PCA: Mr C

		Afrikaans			English		
		Afr 1	Afr 2	Afr 3	Eng 1	Eng 2	Eng 3
Response to interlocutor	Request	-	-	-	-	-	-
	Reply	5	5	4	4	4	5
	Clarification request	-	-	5	5	-	-
	Acknowledgement	-	-	5	4	-	-
	Teaching Probe	-	-	-	-	-	-
	Others						

¹⁴ Although I would like to delay a detailed discussion of my experience of the PCA as an assessment tool until section 5.1.2 of the next chapter, I feel that it is necessary to point out that I am uncertain regarding the accuracy of the analyses reported in this section, due to the nature of the assessments required for these analyses: this analysis requires one to assess six separate ten-minute chunks per participant in terms of 44 separate parameters. This task requires a degree of concentration and focus that, in my opinion, eventually inevitably detracts from the accuracy and consistency of the rater's judgements. However, a discussion of the results of the PCA analyses remains valuable and necessary if one is to determine the suitability of this tool for assessing pragmatic skills and deficits. As mentioned above, I will return to a critical evaluation of this assessment tool in section 5.1.2.

Control of Semantic Content	Topic initiation	-	-	-	-	-	-
	Topic adherence	2	2	4	4	4	4
	Topic Shift	4	4	4	4	4	4
	Lexical choice	2	3	2	3	3	3
	Idea completion	2	2	3	4	4	4
	Idea sequencing	3	3	3	3	4	4
	Others						
Cohesion	Ellipsis	4	3	4	4	3	4
	Tense Use	5	5	5	5	4	4
	Reference	5	4	5	5	5	5
	Lexical Substitute forms	5	5	5	5	5	5
	Relative clauses	4	4	5	5	4	5
	Prenominal adjectives	5	5	5	5	5	5
	Conjunctions	5	5	5	5	5	5
	Others						
Fuency	Interjections	3	3	4	4	4	4
	Repetitions	3	3	4	4	4	4
	Incomplete phrases	2	1	2	3	2	2
	False Starts	1	2	2	3	2	3
	Pauses	1	1	1	2	2	2
	Word finding difficulties	1	2	2	2	3	3
	Others						
Sociolinguistic Sensitivity	Polite forms	3	-	-	-	-	-
	Reference to interlocutor	-	-	-	-	-	-
	Placeholders, fillers, stereotypes	3	4	4	4	4	4
	Acknowledgements	-	-	4	4	4	4
	Self correction	4	4	4	-	4	4
	Comment clauses	4	3	4	3	4	4
	Sarcasm/humour	-	-	3	4	2	-
	Control of direct speech	3	3	3	3	4	4
	Indirect speech acts	-	-	-	-	-	-
	Others						

Non-Verbal communication	Vocal Aspects: Intensity	3	3	4	3	3	3
	Pitch	3	3	3	3	3	3
	Rate	2	2	2	2	3	3
	Intonation	2	3	3	3	3	3
	Quality	3	3	3	3	3	3
	Non-Verbal aspects: Facial expression	3	3	3	4	3	3
	Head movement	3	3	4	4	4	4
	Body posture	4	4	5	5	5	5
	Breathing	4	4	4	4	4	4
	Social distance	-	-	-	-	-	-
	Gesture and pantomime	-	-	4	4	-	4
	Others						

The following parameters were judged inappropriate in one or more chunks of both the Afrikaans and the English samples: regarding Fluency: incomplete phrases, false starts, pauses and word-finding difficulties; and regarding Vocal Aspects of Communication: rate.

With respect to inappropriateness on the measures of Fluency, this parameter overlaps with the Fluency parameter discussed in the PP. See (1) and (2) for examples of his dysfluent speech, (3) to (11) for uncomfortable pauses, (12) to (15) for false starts, revisions, and abandoned phrases, and the discussions around these examples, in section 4.3.1 above.

Regarding the rate of communication, this was judged inappropriate because Mr C spoke extremely haltingly in both Afrikaans and English, so much so that the linguist who had interviewed him remarked that she had found the conversation with Mr C awkward and uncomfortable (cf., for instance, the discussion about uncomfortable pauses in section 4.3.1).

The following measures were judged inappropriate in one or more chunks of the Afrikaans sample only: regarding Control of Semantic Content: topic adherence, lexical choice, and idea completion; and regarding Vocal Aspects of Communication: intonation. To avoid repetition, and because the PCA's Control of Semantic Content is closely related to the PP's topic maintenance, specificity/accuracy and cohesion, the reader is referred to the examples and discussion of Mr C's pragmatic deficits in these areas, in section 4.3.1 above. In the same way, the PCA's intonation is closely related to the PP's prosody (see discussion of Mr C's problems regarding prosody in 4.3.1).

One measure was judged inappropriate in one chunk of the English sample only: regarding Sociolinguistic Sensitivity: sarcasm/humour. This judgement is based on the fact that Mr C laughed at inappropriate times in this chunk of the conversation. The specific instance that led to this judgement is when Mr C threw his head back and laughed on the topic of his art and being in a satanic occult. See example (63) below:

(63)

Mr C: Cause we were p- producing illegal in or um PAUSE psychologically uh illegal art. Uh I xxx it's... How can I express it? Um...

Interviewer: Why do you say "psychologically illegal"?

Mr C: (*Laughs, throws head back*)

Um, well it was uh. I've been involved in a satanic occult and uh they master uh witchcraft. (Eng109-116)

Before turning to the next participant, it is important to note that there are discrepancies between the results of the PP analysis and the PCA analysis for Mr C (and this is not restricted to Mr C's analyses, as will become apparent from the discussions which follow here). Specifically, some parameters which occur in both the PP and the PCA are judged as inappropriate in both languages according to the PP and as inappropriate only in one of the languages according to the PCA, and vice versa. For now, the reader is referred back to footnote 14) for a possible explanation for such discrepancies.

Table 9 below presents the results of the PCA analysis of Mr R1's L1 and L2 use.

Table 9. Results of the PCA: Mr R1

		Afrikaans			English		
		Afr 1	Afr 2	Afr 3	Eng 1	Eng 2	Eng 3
Response to interlocutor	Request	-	-	-	-	4	-
	Reply	5	5	5	5	5	4
	Clarification request	-	-	-	5	-	-
	Acknowledgement	4	4	4	4	4	4
	Teaching Probe	-	-	-	-	-	-
	Others						
Control of Semantic Content	Topic initiation	-	-	-	-	-	
	Topic adherence	5	5	4	2	1	1
	Topic Shift	4	4	4	3	2	3
	Lexical choice	2	2	3	2	2	2
	Idea completion	4	4	4	2	3	2
	Idea sequencing	4	4	4	3	3	2
	Others						
Cohesion	Ellipsis	5	5	5	3	4	4
	Tense Use	5	5	4	4	3	3
	Reference	2	2	4	4	2	2
	Lexical Substitute forms	2	4	5	4	2	2
	Relative clauses	4	4	4	4	4	4
	Prenominal adjectives	4	5	5	4	4	4
	Conjunctions	5	5	5	5	5	5
	Others						
Fluency	Interjections	4	4	4	4	3	3
	Repetitions	3	4	4	4	3	3
	Incomplete phrases	4	4	3	3	3	2
	False Starts	4	4	4	2	3	3
	Pauses	3	3	4	2	2	2

	Word finding difficulties	3	4	4	3	2	2
	Others						
Sociolinguistic Sensitivity	Polite forms	5	5	5	5	5	5
	Reference to interlocutor	5	5	5	5	4	4
	Placeholders, fillers, stereotypes	3	4	4	4	3	2
	Acknowledgements	-	5	4	-	-	4
	Self correction	-	-	-	-	-	-
	Comment clauses	3	4	4	4	3	4
	Sarcasm/humour	-	-	-	5	-	-
	Control of direct speech	4	4	4	4	4	4
	Indirect speech acts	-	-	-	-	-	-
	Others						
Non-Verbal communication	Vocal Aspects: Intensity	5	5	5	5	5	5
	Pitch	4	4	4	4	4	4
	Rate	4	4	5	3	3	3
	Intonation	4	4	4	4	4	4
	Quality	5	5	5	4	4	4
	Non-Verbal aspects: Facial Expression	4	4	4	4	4	4
	Head movement	4	4	4	4	4	4
	Body posture	5	5	5	4	4	4
	Breathing	4	4	4	4	4	4
	Social distance	-	-	4	-	-	-
	Gesture and Pantomime	4	4	4	4	4	4
	Others						

The following parameters were judged inappropriate for one or more of the ten-minute chunks of both the Afrikaans and English samples: regarding Control of Semantic Content: lexical choice; and regarding Cohesion: reference and lexical substitute forms – see the PP discussion of (16) specificity/accuracy for Mr R1. Here Mr R1 also makes inaccurate lexical selections. See examples (27) to (30) for instances where Mr R1 uses

existing words in unconventional ways, as well as examples (30) to (33) for neologisms used by Mr R1.

The first two chunks of the Afrikaans language sample were judged as mostly inappropriate for the parameter of lexical choice. These inaccurate lexical decisions occur much less often in the Afrikaans sample than the English. Examples follow in (64) and (65) below, with the inappropriate lexical item in bold followed by an example of a better lexical choice in square brackets:

- (64) Nooit 'n plek gehet 'n **vastige** [vaste] plek gehet nie mevrou (Afr19)
Never had a place a "vastige"[secure] (where "vastig" is not an existing Afrikaans word)
- (65) But ek het nie die volle. Hoe kan ek sê. Die volle **volkome** [?] gehet om, om te gegaan het solo nie Mevrou (Afr 129)
*But I never had the full. How can I say. Had the full **entire** [?] to, to go solo Ma'am.*

No parameter was judged inappropriate for Mr R1's Afrikaans only, but the following parameters were judged inappropriate for Mr R1's English only: Regarding Control of Semantic Content: topic adherence; topic shift; idea completion; and idea sequencing, and regarding Fluency: incomplete phrases, false starts, pauses, word finding difficulties; and under Sociolinguistic sensitivity, Placeholders, fillers, stereotypes.

With respect to Control of Semantic Content, the reader is referred back to the PP discussions (under Topic (Section B) of topic selection (3) and topic maintenance (5), which are also judged inappropriate in English). As stated in topic maintenance (3) of the PP discussion, the participant was given one opportunity to select a topic for discussion, which he executed quite inappropriately with regards to topic selection. In this same example, he failed to appropriately maintain the topic he chose himself (see example 25). For another example of poor topic maintenance, see example (26).

Examples of inappropriate idea completion can be seen in example (66) below, where one gets the idea that Mr R1 does not complete the sentence or idea that he has started, in a sense abandoning phrases and starting with something new, which could be related to what he intended to say initially.

(66) Because I once take my life almost... Put a chain around... Busted cars windows... And mirrors, Side mirrors. (Eng127-131)

With respect to Fluency, incomplete phrases can also be seen in example (66) given above, which is closely related to false starts as well. Examples (67) and (68) below are examples of utterances containing false starts. Example (68) is also an example of the repetition of similar sounds. This example resonates what Chaika (1974:275) identifies as a definable characteristic of schizophrenic speech. She specifically states that schizophrenics group semantic features with matching applicable sound strings, and that utterances are influenced by previous utterances in the sense that words are chosen because of their similarity to the phonological (in the case of example (68) below) features rather than the theme of the conversation.

(67) Uh I saw um I saw that few guys there, me and that lady walk. Around the corner. And these guys are looking out you can see the faces of them are not quite um. Not quite um, how can I say established like you know. (Eng114-116)

(68) So I went on with my life and... So I did... So I would like to see her one day (Eng 35-37)

As for his word finding difficulties, Mr R1 mostly acknowledges that he is searching for the correct lexical item (see "*uhm how can I say*" in example (67) above for instance). Regarding his usage of placeholders, fillers and stereotypes, Mr R1 often makes use of the phrases (*you know what I'm saying*, (Eng138; 145; 188; 240; 268; 365 and 369) or *you know* (Eng9; 70; 97; 101; 121; 143; 148; 164; 228; 245; 263 272; 273; 281; 296; 314; 363; 371 and 377) during his English speech sample.

Note that despite small discrepancies between the PP- and PCA-results, these two analyses both indicate that Mr R1 has greater pragmatic deficits in his L2 English than in his L1 Afrikaans, which, interestingly, closely corresponds to the results of the PP analysis of Mr R1's L1 and L2 use conducted by Southwood et al. (2009:168) (despite the fact that the PP analysis reported here was conducted independently from the one conducted by Southwood et al.).

Table 10 below presents the results of the PCA analysis of Mr E's L1 and L2 use.

Table 10. Results of the PCA: Mr E

		Afrikaans			English		
		Afr 1	Afr 2	Afr 3	Eng 1	Eng 2	Eng 3
Response to interlocutor	Request	-	3	-	4	4	4
	Reply	5	5	5	5	5	5
	Clarification request	-	4	-	4	5	5
	Acknowledgement	5	-	-	-	-	-
	Teaching Probe	-	-	-	-	-	-
	Others						
Control of Semantic Content	Topic initiation	-	-	-	-	-	-
	Topic adherence	5	4	5	5	5	5
	Topic Shift	4	4	4	4	4	4
	Lexical choice	2	2	4	4	4	5
	Idea completion	4	2	4	4	4	5
	Idea sequencing	3	2	4	4	4	5
	Others						
Cohesion	Ellipsis	5	5	5	5	5	5
	Tense Use	5	5	5	4	4	5
	Reference	5	5	5	5	3	2
	Lexical Substitute forms	5	5	5	4	3	2
	Relative clauses	5	4	5	5	4	4
	Prenominal adjectives	5	5	5	5	5	5

	Conjunctions	5	5	5	5	5	5
	Others						
Fluency	Interjections	4	4	4	4	4	4
	Repetitions	4	3	4	4	3	4
	Incomplete phrases	2	3	4	2	2	4
	False Starts	2	2	2	2	3	4
	Pauses	3	3	3	3	3	3
	Word finding difficulties	3	2	3	3	2	4
	Others						
Sociolinguistic Sensitivity	Polite forms	5	-	-	-	-	-
	Reference to interlocutor	-	-	-	-	-	-
	Placeholders, fillers, stereotypes	4	-	4	4	4	3
	Acknowledgements	4	3	-	-	-	4
	Self correction	3	4	4	3	-	-
	Comment clauses	4	4	4	3	4	4
	Sarcasm/humour	4	5	4	-	5	5
	Control of direct speech	3	4	4	4	4	4
	Indirect speech acts	-	-	-	-	-	-
	Others						
Non-Verbal communication	Vocal Aspects: Intensity	3	2	2	2	3	3
	Pitch	5	5	5	5	5	5
	Rate	4	4	4	4	4	4
	Intonation	4	3	2	4	4	4
	Quality	3	3	3	3	4	4
	Non-Verbal aspects: Facial Expression	4	5	4	4	5	5
	Head movement	5	5	5	5	5	5
	Body posture	5	5	5	5	5	5
	Breathing	4	5	4	5	5	5
	Social distance	-	-	-	-	-	-
	Gesture and Pantomime	5	5	5	5	5	5
	Others						

The following parameters were judged inappropriate for one or more of the ten-minute chunks of both the Afrikaans and the English samples: regarding Fluency: incomplete phrases, false starts and word finding difficulties and regarding Vocal Aspects of Communication: intensity.

Regarding Fluency, it has already been said in the PP discussion that although Mr E comes across as dysfluent, he can still be considered as more fluent than Mr C, for example. There are frequent occurrences of incomplete phrases (see examples (69) to (71)) and false starts (see examples (72) and (73)). Mr E also has difficulties finding the specific word he is looking for, which he also acknowledges in the form of *hoe kan ek sê* "how can I say" (Afr40, 54, 95, 105, 130) and *how can I say* (Eng24, 211).

(69) En um PAUSE ek het toe uh ge- ek het onttrek van M Primêr [a pseudonym –JT]
(Afr5)

And um PAUSE then I had – I withdraw from M Primary

(70) Maar daar's, nou en dan sal ons mekaar va- raakloop, en dan sal ons nou, met sy vriende sal ek hom nou raakloop. (Afr172-175)

But now there's, now and then we will in- walk into each other, and then we will, with his friends I will walk into him.

(71) uh uh ja I was it was like my the youth of the choir my father was in, a few a few of them were friends (Eng 117-118)

(72) Ek kan nie nou meer... ek dink hy het ook gewerk in... maar hy was 'n voorman (Afr136-138)

I can't... I think he also worked in... but he was 'n foreman

(73) and we all just connected brother and sist- brother and sister- brothers with everyone, we connected in the community, we were just friends (Eng226-227)

Regarding intensity, as subcategory of Aspects of Communication, as discussed in the PP discussions of vocal intensity, many of Mr E's utterances were not completely audible to the interviewer.

The following aspects were judged inappropriate for the Afrikaans sample only: regarding Control of Semantic Content: lexical choice, idea completion and idea sequencing and regarding Vocal Aspects of Communication: intonation.

With regards to the Control of Semantic Content, the PP discussions of quantity/conciseness (15) and cohesion (17) and the accompanying examples, especially (36) to (38), provide sufficient examples for idea sequencing and topic maintenance. For occurrences of inappropriate idea completion, see (74) below, and as for the inappropriate choice of lexical item, see examples (43) to (45) in the PP discussion.

(74) Uh PAUSE um ek vind dit dit dit is PAUSE nie gemaklik vir my, omdat ek nie in die familie... Um ek het mos baie probleme gehad in die familie en so. So ek weet nie eintlik hoe ek voel om as 'n g- 'n ouer broer, hoe um in daai posisie te wees as 'n ouer broer te wees (Afr18-22)

Uh PAUSE um I find that it it it is PAUSE not comfortable for me, because I don't... in the family. Um I had a lot of problems in the family and so on. So I don't actually know how I feel to g- as an older brother, how um to be in that position as being an older brother.

Finally, the following aspects were judged inappropriate for the English sample only: regarding Cohesion: reference and lexical substitute forms. Regarding reference, Mr E made a few inappropriate references during his English data sample. In the following section, 4.3.3, where the FACS is applied to the different language samples, the area of reference will be covered in more detail. Given below in example (75), is an example of an inappropriate usage of anaphoric reference; the next example (76), is the instance where Mr E used a lexical substitute form inappropriately. In each example, the inappropriate substituted reference-word is printed in bold.

(75) I played with them, I feed them, I just playing around **there**, just playing with the dogs. Ja and lying with the dogs, and the dog will just come over me, and I would

just like just playing with them, just enjoy **his** feeling as well how **he** feels ja.
(Eng162-169)

(76) no I don't listen to the radio and I don't watch television that much. I'm a bit afraid of- because **it's** live on television, ja and I'm afraid to connec (connect) as well.
(Eng69-73)

Table 11 below presents the results of the PCA analysis of Mr R2's L1 and L2 use.

Table 11. Results of the PCA: Mr R2

		Afrikaans			English		
		Afr 1	Afr 2	Afr 3	Eng 1	Eng 2	Eng 3
Response to interlocutor	Request	-	-	-	4	-	-
	Reply	5	5	4	5	5	5
	Clarification request	4	-	-	5	-	-
	Acknowledgement	5	5	-	-	5	-
	Teaching Probe	-	-	-	-	-	-
	Others						
Control of Semantic Content	Topic initiation	-	-	-	-	-	-
	Topic adherence	2	3	2	4	3	2
	Topic Shift	2	3	2	2	3	2
	Lexical choice	1	1	1	3	2	4
	Idea completion	3	3	3	3	2	4
	Idea sequencing	2	3	2	4	2	3
	Others						
Cohesion	Ellipsis	4	5	4	5	5	5
	Tense Use	5	5	5	5	5	5
	Reference	3	4	2	4	2	5
	Lexical Substitute forms	3	4	2	4	5	2
	Relative clauses	5	4	5	5	5	5
	Prenominal adjectives	5	5	5	4	4	4

	Conjunctions	3	4	4	4	5	5
	Others						
Fluency	Interjections	4	4	4	4	4	4
	Repetitions	2	2	1	4	2	2
	Incomplete phrases	4	4	4	4	2	3
	False Starts	4	4	4	4	3	2
	Pauses	3	2	2	4	4	4
	Word finding difficulties	4	4	4	4	4	4
	Others						
Sociolinguistic Sensitivity	Polite forms	4	-	-	-	3	-
	Reference to interlocutor	4	-	-	-	4	3
	Placeholders, fillers, stereotypes	4	4	3	4	3	3
	Acknowledgements	5	4	4	4	4	4
	Self correction	-	4	-	4	-	4
	Comment clauses	5	5	5	4	5	5
	Sarcasm/humour	4	4	4	-	5	4
	Control of direct speech	4	4	4	4	4	4
	Indirect speech acts	-	-	-	-	-	-
Others							
Non-Verbal communication	Vocal Aspects: Intensity	4	4	4	4	5	4
	Pitch	4	4	4	4	4	4
	Rate	4	4	4	5	5	5
	Intonation	4	4	4	4	4	4
	Quality	4	4	4	4	4	4
	Non-Verbal aspects: Facial expression	4	4	4	4	4	5
	Head movement	4	5	4	4	5	5
	Body posture	4	4	4	4	4	4
	Breathing	4	4	4	4	4	4
	Social distance	-	-	-	-	-	-
	Gesture and pantomime	-	-	-	-	-	-
	Others						

The following parameters were judged inappropriate for both the Afrikaans and the English samples: regarding Control of Semantic Content: topic adherence, topic shift, lexical choice and idea sequencing; regarding Cohesion: reference and lexical substitute forms; and regarding Fluency: repetitions.

With respect to the Control of Semantic Content, Mr R2 struggles to keep to the given topic of conversation, straying from it, or replying in a vague manner. The PP discussion of topic maintenance (5) and quantity/conciseness (15) provides three examples of inappropriate topic adherence, topic shift and idea sequencing (see examples (46) to (48)). For examples of inappropriate lexical choices, which occurred in both samples, see category (16), specificity/accuracy in the PP discussion. Mr R2 also uses existing words in incorrect ways (see examples (49)-(52)) and produces neologisms in both language samples (see examples (53) to (56)).

The parameters marked inappropriate under the Cohesion category are reference and lexical substitute forms. Here follows examples of inappropriate reference usage in Afrikaans (77) and English (78), as well as inappropriately used lexical substitute forms in Afrikaans (79) and English (80), with the specific inappropriately used lexical item in bold:

(77)

Interviewer: En dan wat doen hy? Ek verstaan nou niks van die, van die sagery en die als nie.

And then what does he do? I don't understand anything of the, of the sawing-business.

Mr R2: Hy hy maak **hom** xxx op die einde van die dag. Als wat jy insit kry jy uit op die einde van die dag. (Afr144-145)

*He makes **him** xxx at the end of the day. Everything you put in, you get out at the end of the day.*

(78)

Interviewer: Hmm. If you don't have that support

Mr R2: Ja, **they** don't have that support. (Eng198)

(79)

Interviewer: Hmm en as jy dink aan die verskillende vakke wat jy gehad het soos die tale en wiskunde en die wetenskappe en daai goed, wat? Waarvan het jy gehou?

Hmm and when you think about the different subjects you had like the languages and maths and science etc., what? Which one did you like?

Mr R2: Kyk **daai** kom alles te xxx by Aardrykskunde. (Afr111)

See that comes all xxx with Geography.

(80)

Interviewer: Oh okay. When you were growing up, did you a-also feel that you wanted to be a doctor or a lawyer or did you have other dreams then?

Mr R2: I always wanted **it**... but I always wanted **it**, to be a graphist. (Eng367-368)

The following aspects were judged inappropriate for the Afrikaans sample only: regarding Fluency: pauses. In the Afrikaans sample, Mr R2 frequently made use of interjections and pause fillers like *uh*; an example of his pauses is found in (81) below:

(81) Ons is vyf in die, uh ses in die woning. Uh... totaal van 'n syfer. (Afr123-125)

We are five in the, uh six in the house. Uh... a total of a number.

The following aspects were judged inappropriate for the English sample only: regarding Control of Semantic Content: idea completion and regarding Fluency: incomplete phrases and false starts.

With regards to the control of semantic content, idea completion has been marked inappropriate. Examples (47) and (48) of the PP discussion clearly shows that Mr R2 has

trouble finishing one idea before moving on to the next one. As for fluency, Mr R2 struggled to appropriately complete his phrases, as well as frequently produced false starts (see examples (82) and (83) respectively).

(82) Because, uhm a drug user xxx doesn't put a point where there is xxx place where the drugs selling is. (Eng 262)

(83) Uh If you talk about a pet, it sounds something that is always there where you, uhm if you make (snap fingers), then it then it is there. (Eng386)

4.3.3 The Framework for Assessing (children's) Conversational Skills (FACS) (Rumble 1988)

This section reports on the results of the FACS analyses of the participants' L1 and L2 use, again presenting the results for each participant first in a table and then by means of a more detailed discussion. Note that, in contrast to the PP- and PCA-tables, the FACS tables in this section do not refer to judgements and instead contain refined counts for very specific linguistic elements and phenomena (as outlined in section 3.3 of the previous chapter).¹⁵ The numbers reported for each of the linguistic elements/phenomena are actual numbers (not means or percentages, except when noted explicitly) but the comparison between the numbers for the Afrikaans sample and the numbers for the English sample is a valid one, since the samples were equal in length (approximately 30 minutes each). For each of the sub-categories under conjunctions (C.4), percentages were, however, calculated, for ease of comparison. Each percentage in brackets under this category was calculated by dividing the number of instances of the specific type of conjunction by the total number of utterances in the relevant language sample. Keeping these things in mind, I turn to the results of the FACS analyses of Mr C's L1 and L2 samples, as presented in Table 12 below.

¹⁵ It should be noted that the counts reported in Tables 12 to 15 were performed by a qualified speech-language therapist, specifically Rumble herself, i.e. the researcher who designed the FACS. For this reason, I am very confident about the way in which the analyses were conducted and about the accuracy of the counts. I am also grateful to Ms Rumble for undertaking this extremely time-consuming task. Although I did discuss my interpretation of the results of the FACS analyses with Ms Rumble (p.c.), the interpretations presented here are still my own.

Table 12. Results of the FACS: Mr C

Category	Afrikaans	English
A. TOPIC CONTROL		
1. Initiatory Acts	0	0
2. Topic Relevant Acts	19	20
3. Topic Relevant Responses		
a) Verbal acknowledgements	2	1
b) Verbal responses to interrogatives	21	18
c) Non-verbal acknowledgements	0	0
d) Non-verbal responses to interrogatives	0	0
4. Off Topic Acts	0	0
5. No response	1	2
Mean number of utterances per turn	(143/25) 5.72	(201/22) 9.13

Category	Afrikaans	English
B. REPAIR OF BREAKDOWN		
I <u>Clarification request used</u>		
1) Non specific request for repetition	0	0
2) Specific request for repetition	0	0
3) Specific request for confirmation	0	0
4) Specific request for specification	0	0
II <u>Types of repairs used</u>		
5) Repetition a) whole	0	1
b) part	0	0
6) Revision	0	0
7) Addition	0	0
8) Cue	1	0
9) No response to clarification request	0	0

Category	Afrikaans		English	
	Apprpr	Inapprpr	Apprpr	Inapprpr
C. LINGUISTIC COHESION				
1. Reference				
1.1. Anaphoric reference	15	0	26	0
1.2. Demonstrative reference	6	1	8	0
2. Substitution	7	0	25	0
3. Ellipsis	10	1	7	1
4. Conjunctions				
Additive conjunctions	46 (32.2%)		78 (38.8%)	
Causal conjunctions	3 (2.1%)		10 (4.98%)	
Temporal conjunctions	20 (14%)		9 (4.5%)	
Antithesis conjunctions	6 (4.2%)		4 (2%)	
Total (Conjunctions):	75 (52.4%)		101 (50.2%)	

Firstly, consider the mean number of utterances per turn, which is determined by dividing the total number of utterances (in the specific language sample, i.e. L1 or L2) by the total number of turns, where "turn" refers to a sequence of utterances related to one topic. For Mr C, the mean number of utterances per turn is 5.72 for his L1 Afrikaans and 9.13 for his L2 English. This could be an indication that Mr C is more comfortable and talkative in his L2, since his turns are longer in the L2 (though see footnote 13 regarding the possible effect of order of languages in the interview). Focusing further on section A, Topic Control, recall from section 3.3 that any instances of the measures Off-Topic Acts and No Response constitute inappropriate behaviour. Although Mr C produced no Off-Topic Acts, in both his L1 and L2 there are instances where he does not respond to a question directed at him by the interviewer. This 'No Response' occurs once in Afrikaans and twice in English (see examples (84) to (86))

(84)

Interviewer: Maar watse effek het jy gekry?

But what effect did you get (from the drugs)?

Mr C: Okay... (Afr104)

(85)

Interviewer: Why do you think they raped you?

Mr C: uhm... (Eng63)

(86)

Interviewer: Can you tell me what do you understand um under the term "rape"?

Mr C: Um well... (Eng76)

Regarding section B, the Repair of Communication Breakdown, Mr C did not once request repetition, clarification or specification of any kind. When asked by the interlocutor to clarify, he replied with a cue in Afrikaans (see example (87)), and with a whole repetition in English (see example (88)):

(87)

Interviewer: Wat bedoel jy "as jy diep afgaan in die mediese lyne"?

What do you mean "if you go deep down into the medical lines"?

Mr C: Uh wel as ek meen ek uh as ek nie in die siektetoestand geval het onder 'n kategorie uh van pigose [psigose] nie... (Afr125)

Uh well if, I mean if I didn't fall into the sick condition / medical condition under the category of psychosis...

(88)

Interviewer: They raped you?

Mr C: Rape me (Eng60)

As for section C, Linguistic Cohesion, Mr C used one inappropriate demonstrative reference, in Afrikaans (see example (89)).

(89) Ek het gedink ek kon um 'n 'n 'n nuwe lewe op die plaas hê en 'n nuwe werk hê en uh en, maar ek was nie opgelei in **daardie** area nie. (Afr74-75)

*I thought that I could have a new life on the farm and have a new work but I wasn't trained in **that** area.*

In this example, when Mr C uses the word *daardie*, he is probably referring to the fact that he is not familiar with the type of life one leads on a farm. Since he uses a demonstrative referent, classified as a deictic phrase, without clarifying what it is referring to in the context, it was coded as inappropriate. As for ellipses, there are two occasions where Mr C uses ellipsis inappropriately, one in each language sample:

(90) Ek het gedink ek is gesond, maar dit was net 'n prosedure wat die rehabilitasiesentrum bied uh om deur uh om die eerste kursus te voltooi. **En ook die...** so ek dink uh die rehabilitasiesentrum was nie vir my nie. (Afr95-97)

*I thought that I was healthy but that was just a procedure that the rehabilitation centre offers to through to complete the first course. **And also the...** so I think the rehabilitation centre wasn't for me.*

(91)

Interviewer: What do you mean you filmed art? Like pictures you filmed or people or...?

Mr C: Ja. Um very much, ja... (Eng123)

Lastly, looking at the number of conjunctions in the two language samples, the total for Afrikaans is 75, compared to 101 in English. At first sight, it might seem as if Mr C made use of conjunctions more frequently in English than in Afrikaans, but this is simply due to the fact that there were more utterances in the English sample than in the Afrikaans sample. If one converts these counts into percentages, then 52.4% of the Afrikaans utterances (75/143) contained conjunctions, while 50.2% of the English utterances (101/201) contained conjunctions, two almost identical percentages. Interestingly, although the percentages of utterances containing additive conjunctions in the two

language samples are also very close (32.2% for Afrikaans and 38.8% for English), Mr C did make use of temporal conjunctions and antithesis conjunctions more frequently in the Afrikaans than in the English sample (temporal conjunctions occurring in 14% of the Afrikaans utterances and only 4.5% of the English utterances, and antithesis conjunctions occurring in 4.2% of the Afrikaans utterances and only 2% of the English utterances). However, regarding causal conjunctions, Mr C used these more frequently in English than in Afrikaans (cf. 4.98% for English and 2.1% for Afrikaans). It is important to realise that, although conjunctions are discourse markers, one cannot consider the percentages relating to conjunctions on their own as an indication of cohesion and coherence, since the counts and percentages reported under category C in the FACS do not take semantic content or cohesion into account. Therefore, although Mr C frequently used conjunctions in both language samples, this does not mean that his speech was cohesive and easy to follow; in fact, recall the discussions of Mr C's problems with cohesion in sections 4.3.1 and 4.3.2.

Table 13 below presents the results of the FACS analyses of Mr R1's L1 and L2 samples.

Table 13. Results of the FACS: Mr R1

Category	Afrikaans	English
A. TOPIC CONTROL		
1. Initiatory Acts	0	0
2. Topic Relevant Acts	33	28
3. Topic Relevant Responses		
e) Verbal acknowledgements	0	0
f) Verbal responses to interrogatives	41	59
g) Non-verbal acknowledgements	0	0
h) Non-verbal responses to interrogatives	1	0
4. Off Topic Acts	0	0
5. No response	0	0
Mean number of utterances per turn	(406/53) 7.66	(390/62) 6.29

Category	Afrikaans	English
B. REPAIR OF BREAKDOWN		
I <u>Clarification request used</u>		
1) Non specific request for repetition	0	0
2) Specific request for repetition	0	0
3) Specific request for confirmation	0	0
4) Specific request for specification	0	1
II <u>Types of repairs used</u>		
5) Repetition a) whole	1	0
b) part	1	0
6) Revision	0	0
7) Addition	1	0
8) Cue	1	1
9) No response to clarification request	0	0

Category	Afrikaans		English	
	Apprpr	Inapprpr	Apprpr	Inapprpr
C. LINGUISTIC COHESION				
1. Reference				
1.1. Anaphoric reference	117	8	65	9
1.2. Demonstrative reference	10	0	6	1
2. Substitution	13	3	13	8
3. Ellipsis	21	0	23	0
4. Conjunctions				
Additive conjunctions	33 (8.12%)		34 (8.71%)	
Causal conjunctions	38 (9.35%)		36 (9.23%)	
Temporal conjunctions	71 (17.48%)		28 (7.17%)	
Antithesis conjunctions	18 (4.43%)		7 (1.79%)	
Total (Conjunctions):	160 (39.4%)		105 (26.92%)	

With regards to Section A, Topic Control, the two language samples (Afrikaans and English) seem highly comparable in terms of the total number of utterances, mean number of utterances per turn, number of TRAs and number of verbal responses to interrogatives. Again, though, these counts on their own do not indicate the fluency or coherence of speech, which might actually differ for the two languages.

With regards to Section B, Repair of Communication Breakdown, there is one instance, in the English sample, where Mr R1 specifically requests for specification of what the interlocutor said (see example (92) below).

(92)

Interviewer: Your brothers and sisters? You have no nieces?

Mr R1: Me? (Eng49)

The occurrence of a response to a clarification request, where a whole phrase was repeated, can be seen in (93), whereas the repetition of part of a phrase as clarification can be seen in (94).

(93)

Mr R1: Ek jak sommer in die huis in, Mevrou (Afr164)

I just "jak" (neologism) into the house, Ma'am

Interviewer: Jy wat in die huis in?

You what into the house?

Mr R1: Ek sê ek jak sommer in die huis (Afr165)

I say I just "jak" in the house

(94)

Mr R1: Ek het nog altyd tjappetjie op my (Afr229)

I still have "tjappetjie" on me

Note: the word *tjappie* is sometimes used in colloquial Afrikaans to refer to a type of stamp one receives on the back of one's hand or on the inside

of one's wrist upon entering a night club but can also be used to refer to a tattoo (usually associated with prison gangs).

Interviewer: Wat het jy nog op jou?

What do you still have on you?

Mr R1: 'n Tjap (Afr230)

A "tjap"

An example of addition as part of repairing a communication breakdown can be seen in the example below where Mr R1 adds information in order to clarify exactly where his car was stolen.

(95)

Mr R1: Toe steel hulle die kar by die hof (Afr174)

Then they stole the car at the court

Interviewer: By die hof?

At the court?

Mr R1: In Bellville in. Ja Mevrou [pause] in Bellville. (Afr75-77)

In Bellville. Yes Ma'am... in Bellville.

In the Afrikaans sample (see example (96)), as well as the English sample (see example (97)), Mr R1 responds to a clarification request that acts as a cue. Note that although some of Mr R1's attempts at clarification are still incoherent, what is relevant to the FACS is that he appropriately replies to such requests by attempting to clarify his utterances.

(96)

Interviewer: Wat is dit?

What is that?

Mr R1: trek vir my nca aan in die huis in voor my ma-hulle (Afr 166)

Direct gloss: pull for me "nca" (smart/well/fine) on in the house in before my mom and them

Meaning: dress myself in smart clothing in the house before my mom and them

(97)

Mr R1: I must have a point of you there

Interviewer: Huh?

Mr R1: So that I can study it, you see. (Eng 244-245)

In Section C, Linguistic Cohesion, the occurrence of appropriate versus inappropriate language usage can be compared in the L1 and the L2. Altogether, Mr R1 makes 8 inappropriate anaphoric references in Afrikaans and 9 in English, as well as 1 inappropriate demonstrative reference in English. He also makes use of 3 inappropriate substitutions in Afrikaans, versus 8 in English. In examples (98) and (99) below, Mr R1 uses the anaphoric referent *hulle* ("them") without it being clear who the word could be referring to. In colloquial Afrikaans, however, when referring to a general group of people (for example a group of builders, the government or burglars), it is acceptable to say *hulle gaan dit bou* "they are going to build it", *hulle stel nuwe wette in* "they are implementing new laws" or *hulle het my selfoon gesteel* "they stole my cellphone" without first specifying the referent. This could be the case in examples (98) and (99), but more so in the latter than in the former.

(98) En so't ek hoor **hulle** bly nou in die woning in Mevrou (Afr32)

*And so I heard **they** are staying in the residence now Ma'am*

(99) **Hulle** was net van plan om dit te bou (Afr241)

***They** were just planning to build it*

In the English example (100) below, Mr R1 uses the word *they* to refer to a specific group of people. Unlike (99) above, (100) cannot possibly involve Mr R1 not knowing exactly who the people are that the group (referred to as *hulle* ("*they*")) consists of. By examining the context, it is clear that he is talking about a specific group of people, and that he is simply not making it clear who they are.

(100) My friend is a a a is a policeman. He didn't want me to come in that that day. Because there was a few obligations, and that he he found me out that I used tik. So **they** changed their mind over me, lose respect, because **they** had *die hel* in respect for me first. (Eng355-361)

Below are two examples of Mr R1's inappropriate use of substitutions in Afrikaans (101) and English (102), respectively. The words that are printed in bold involve inappropriate substitution since they do not substitute something that has been previously identified. In (102) it is even unclear whether or not the three *it*'s are referring to the same thing.

(101) Ek sien sommer nou fout in **daai**. Nou was ek nie *gedrug* nie dan sien ek fout in **daai** of iets fout in **die**. (Afr67-68)

*I just see a problem with **that**. Now I wasn't drugged, then I see a problem with **that** or something wrong with **this**.*

(102) I study my own mind. My my mind was consume ma'am, it was my head was off his court. I saw these things myself and so I try everytime just to to help **it** again just pulling **it** back again, you know what I'm saying. I went through it, so I can explain to you what kind of feeling **it** is. (Eng184-190)

Finally, looking at the percentages of utterances containing each of the types of conjunctions under Category C in Table 13, Mr R1 used a total of 160 conjunctions in Afrikaans, compared to 105 in English. If one looks at the mean number of utterances per language (7.66 in Afrikaans versus 6.29 in English), and convert these amounts into percentages, then the 39.4% of Afrikaans utterances containing conjunctions (160/406) is a lot more than the 26.92% in English (105/390). Despite the big difference between the total usage of conjunctions, the percentages of utterances containing additive and causal conjunctions are very close (8.12% in Afrikaans versus 8.71% in English, and 9.35% in Afrikaans versus 9.23% in English, respectively). Mr R1 made use of temporal conjunctions and antithesis conjunctions more frequently in Afrikaans than in the English sample (temporal conjunctions occurring in 17.48% of the Afrikaans utterances and only

7.17% of the English utterances, and antithesis conjunctions occurring in 4.43% of the Afrikaans utterances and only 1.79% of the English utterances). Again, it is important to realise that these discourse markers do not necessarily reflect the (in)appropriate maintenance of cohesion and coherence, since the FACS does not take semantic content or cohesion into account. However, when comparing these results to specifically the results of the PCA found in section 4.3.2 - which show that Mr R1's control of semantic content (in the categories topic adherence, topic shift, idea completion and idea sequencing) is judged as appropriate in Afrikaans and mostly inappropriate in English – the FACS results support the findings in 4.3.2.

Turning to Mr E, Table 14 below presents the results of the FACS analyses of his L1 and L2 samples.

Table 14. Results of the FACS: Mr E

Category	Afrikaans	English
A. TOPIC CONTROL		
1. Initiatory Acts	0	0
2. Topic Relevant Acts	51	41
3. Topic Relevant Responses		
i) Verbal acknowledgements	0	0
j) Verbal responses to interrogatives	97	107
k) Non-verbal acknowledgements	1	0
l) Non-verbal responses to interrogatives	0	0
4. Off Topic Acts	0	0
5. No response	0	1
Mean number of utterances per turn	(329/103) 3.19	(282/117) 2.41

Category	Afrikaans	English
B. REPAIR OF BREAKDOWN		
I <u>Clarification request used</u>		
1) Non specific request for repetition	0	3
2) Specific request for repetition	1	0

3) Specific request for confirmation	1	2
4) Specific request for specification	1	2
II <u>Types of repairs used</u>		
5) Repetition a) whole	0	0
b) part	0	0
6) Revision	0	0
7) Addition	0	0
8) Cue	0	0
9) No response to clarification request	0	0

Category	Afrikaans		English	
	Apprpr	Inapprpr	Apprpr	Inapprpr
C. LINGUISTIC COHESION				
1. Reference				
1.1. Anaphoric reference	94	0	105	2
1.2. Demonstrative reference	11	0	24	3
2. Substitution	25	0	17	2
3. Ellipsis	43	0	34	0
4. Conjunctions				
Additive conjunctions	52 (15.8%)		62 (21.98%)	
Causal conjunctions	8 (2.43%)		4 (1.41%)	
Temporal conjunctions	23 (6.99%)		16 (5.67%)	
Antithesis conjunctions	22 (6.68%)		15 (5.31%)	
Total (Conjunctions):	105 (31.91%)		97 (34.39%)	

With regards to section A, Topic Control, Mr E's counts pattern in a way similar to those of Mr R1: he produced more utterances in his L1 than in his L2 and also produced more utterances per turn in his L1 than in his L2. To determine the significance of such L1/L2 differences, though, one would need to compare them to the L1/L2 differences found on such counts for normal, participants. The same caveat holds for L1/L2 differences in terms of TRAs and TRRs (TRRs).

One non-verbal acknowledgement occurs in Mr E's interview - see example (103) below, which involves an appropriate verbal acknowledgement, followed by an appropriate non-verbal acknowledgement.

(103)

Interviewer: Sê net vir my, kan jy net vir ons toestemming gee om die opname te maak? Is jy gelukkig daarmee? (**IA**)

Just tell me, can you just give us permission to make the recording? Are you happy with this?

Mr E: Ja (smiles) (**TRR**- verbal response to interrogative)

Yes

Interviewer: En jy kan vergeet van die kamera, hoor.

And you can forget about the camera, hear.

Mr E: (smiles and nods) (**TRR**- non-verbal acknowledgement)

There is also only one occurrence of the inappropriate "No Response", found in his English sample (see example (104)).

(104)

Interviewer: Do you see them often?

Mr E: no I don't see them often (Eng111)

Interviewer: Would you like to?

Mr E: PAUSE

Interviewer: Not really?

In section B, Repair of Communication Breakdown, non-specific requests for clarification only occurred in the English sample. Twice, Mr E leans forward during the interview, using *sorry?* (Eng29 and 177) as a request for clarification. In the other instance, he explicitly asks if the interviewer can explain what she meant (Eng220). The only specific request for repetition occurred in Afrikaans (example (105)), where Mr E

requests that a specific element of the previous utterance be clarified. The examples of specific requests for confirmation are found in Afrikaans (example (106)), and English (example (107)), and, lastly, examples (108) and (109) provide examples of a specific request for specification in Afrikaans and English, respectively.

(105)

Interviewer: En waar sien jy, wat sal hierdie job nou behels as jy sport management doen?

And where do you see, what will this job involve if you do sport management?

Mr E: Wat sal die...? (Afr146)

What will the...?

(106)

Interviewer: Is dit iets wat jy voorheen nie eintlik gedoen het nie? Om te lees?

Is it something that you didn't really do previously? Read?

Mr E: Om te lees? (Afr213)

Read?

(107)

Interviewer: Okay, so would you like to get together with her again when you feel better, when you leave Stikland?

Mr E: When I leave Stikland? (Eng260)

(108)

Interviewer: En dan, was julle ooit met vakansie gewees toe julle klein was, dat julle êrens heen gegaan het of so?

And then, were you ever on vacation when you were small, that you went somewhere, or so?

Mr E: O op vakansietye? (Afr183)

Oh during the holidays?

(109)

Interviewer: Do you like animals in general? Like is there any specific animal that you really like or that you'd like to have?

Mr E: Oh a pecific (mispronouncing "specific" as "pecific") animal? (Eng140)

When examining the results found for section C, Linguistic Cohesion, the only inappropriate utterances occurred in the English sample. Example (110) below involves inappropriate demonstrative reference (*there*), as well as two inappropriate anaphoric references (*his* and *he*). Example (111) is an instance in which Mr E uses a substitution (*it* or *its*) inappropriately.

(110) I played with them, I feed them, I just playing around **there**, just playing with the dogs. Ja and lying with the dogs, and the dog will just come over me, and I would just like just playing with them, just enjoy **his** feeling as well how **he** feels ja. (Eng162-169)

(111) no I don't listen to the radio and I don't watch television that much. I'm a bit afraid of- because **it's** live on television, ja and I'm afraid to connect as well. (Eng69-73)

Finally, looking at the percentages of utterances containing each of the types of conjunctions under Category C in Table 14, Mr E used 105 conjunctions in the Afrikaans sample, versus 97 in the English. With a difference of 8 conjunctions between the two languages, it is necessary to look at the mean number of utterances per language (3.19 in Afrikaans and 2.41 in English) and convert these numbers to percentages to simplify the comparison. Where Mr E had an average of 31.91% (105/329) utterances containing conjunctions in Afrikaans, and 34.39% (97/282) utterances containing conjunctions in the English data sample, one can conclude that the amount of conjunctions used between his L1 and L2 were quite consistent. As for the difference in usage of the different types of conjunctions, Mr E mostly remained consistent. Where the average causal conjunctions (2.43% in Afrikaans and 1.41% in English), temporal conjunctions (6.99% in Afrikaans and 5.67% in English), and antithesis conjunctions (6.68% in Afrikaans and 5.67% in

English) differed minimally, the biggest difference in percentage was between the 15.8% of additive conjunctions in Afrikaans versus 21.98% percentage thereof in English. Overall the usages of these discourse markers in Mr E's L1 and L2 were similar.

The results of the FACS analyses of the final participant, Mr R2's, L1 and L2 samples are presented in Table 15 below.

Table 15. Results of the FACS: Mr R2

Category	Afrikaans	English
A. TOPIC CONTROL		
1. Initiatory Acts	0	3
2. Topic Relevant Acts	37	53
3. Topic Relevant Responses		
m) Verbal acknowledgements	3	3
n) Verbal responses to interrogatives	133	159
o) Non-verbal acknowledgements	0	1
p) Non-verbal responses to interrogatives	0	0
4. Off Topic Acts	4	6
5. No response	1	0
Mean number of utterances per turn	(249/160) 1.55	(400/243) 1.64

Category	Afrikaans	English
B. REPAIR OF BREAKDOWN		
I <u>Clarification request used</u>		
1) Non specific request for repetition	0	0
2) Specific request for repetition	0	0
3) Specific request for confirmation	0	1
4) Specific request for specification	0	0
II <u>Types of repairs used</u>		
5) Repetition a) whole	0	0
b) part	0	0

6) Revision	0	1
7) Addition	1	1
8) Cue	0	0
9) No response to clarification request	0	0

Category	Afrikaans		English	
	Apprpr	Inapprpr	Apprpr	Inapprpr
C. LINGUISTIC COHESION				
1. Reference				
1.1. Anaphoric reference	42	10	88	5
1.2. Demonstrative reference	2	4	6	3
2. Substitution	32	4	56	3
3. Ellipsis	55	0	83	0
4. Conjunctions				
Additive conjunctions	14 (5.62%)		27 (6.75%)	
Causal conjunctions	13 (5.22%)		33 (8.25%)	
Temporal conjunctions	16 (6.42%)		10 (2.5%)	
Antithesis conjunctions	15 (6.02%)		29 (7.25%)	
Total (Conjunctions):	58 (23.29%)		99 (24.75%)	

Looking at the counts for Section A, Topic Control, Mr R2 differs from Mr R1 and Mr E and instead patterns together with Mr C: he produces substantially more utterances in his L2 than in his L1 but producing a comparable number of utterances per turn in the two languages, as evidenced by the mean number of turns per utterance.

Most of the verbal acknowledgements as TRRs are in the form of *ja* (for example, Afr17, 18 and Eng56) or *okay* (for example, Eng35). Interestingly, Mr R2 is the participant who produces off topic acts; these occur 4 times in Afrikaans (see examples (112) and (113)) and 6 times in English (see examples (114) and (115)).

(112)

Interviewer: So as jy sê "rondgebaljaar", wat het jy gedoen?

So when you say "frolicked around", what did you do?

Mr R2: Kyk, daar was tog maar lekker tye ook wat 'n mens gehet het. (Mr R2+Interviewer27-29)

Look, there were (of course) also good times that one had.

(113)

Interviewer: So wie is die swartskaap in die familie?

So who is the black sheep in the family?

Mr R2: Um dalk die probleem xxx waarheen, waarheen ons uh deurmaak elke dag, want ek geniet elke st- elk-ee, elke stap xxx. Ek waardeer dit. (Afr45-47)

Maybe the problem towards which we make through each day, because I enjoy each ... each step xxx, I appreciate it.

(114)

Interviewer: So what must you take?

Mr R2: Yes. (Eng41)

(115)

Interviewer: Oh what pets did you have when you were growing up?

Mr R2: Uh if you talk about a pet, it sounds something that is always there where you, uhm if you make (snap fingers), then it, then it is there. You know what I mean? (Eng308-309)

There is also one instance of "No Response" in Mr R2's Afrikaans: when the interviewer asks him how he came to the hospital, he replies with the filler, *uhh* (Afr266).

In section B, Repair of Communication Breakdown, there is one instance in the English sample where Mr R2 specifically requests confirmation of something that the interviewer has said (see example (116)).

(116)

Interviewer: ... and uhm, has Renata spoken to you about schizophrenia?

Mr R2: Schizophrendia? (sic) (Eng122)

Interviewer: Ja.

As for his responses to clarification requests of the interviewer, in the Afrikaans sample there is one instance where Mr R2 adds information about his mother, in the form of a clarification, after the interviewer has asked *Wat beteken dit?* "What does that mean?". Here, Mr R2 answers her question appropriately, but what the FACS does not indicate is the inappropriate semantic content with which he clarifies the request (see example (117) below).

(117) Uhm Ek is nie altyd daar by jou nie, maar met alles xxx behels dit jou xxx help teenwoordighede (Afr23-24)

I am not always there with you, but with everything xxx it involves you xxx helps presences

When, following this utterance, it is clear that the interviewer still does not understand what Mr R2 means, Mr R2 does not attempt to clarify his utterance any further.

One of Mr R2's English utterances is coded as a revision - *Uhm sometimes yes, voices when I'm sleepy* (Eng155). This is simply because Mr R2's previous utterance was unintelligible to the interviewer and she, therefore, requests a repetition by saying *sorry?*

According to the counts for Section C, Linguistic Cohesion, Mr R2 produces a relatively large number of instances of inappropriate reference and substitution in both languages

(see example (118) from the Afrikaans sample, and example (119) from the English sample):

(118)

Interviewer: Het jou ma-hulle jou gebring?

Did you parents bring you here?

Mr R2: Kyk uhm, ek was 'n huis waarmee **ons** onbekend was, maar **ons** het tot hier gekom. Dit was nie baie ver nie, dit was ook nie baie ver nie, maar ons het hier xxx. (Afr267-270).

*Look, uhm. I was a house with which **we** were unfamiliar, but **we** came here. It was not far, It was not very far either, but we came here.*

(119)

Interviewer: Would you ever go away from South Africa?

Mr R2: Uhm No I don't think so, but time will tell when **we** going down **there** or down the road. (Eng247-248) (AR and DR)

Finally, looking at the percentages of utterances containing each of the types of conjunctions under Category C in Table 15, Mr R2 used 58 conjunctions in Afrikaans, compared to 99 the English sample. At first sight, it seems as if Mr C made use of conjunctions more frequently in English than in Afrikaans, but this is simply due to the fact that there were more utterances in the English sample than in the Afrikaans sample. If one converts these counts into percentages, then 23.39% of the Afrikaans utterances (59/249) contained conjunctions, while 24.75% of the English utterances (99/400) contained conjunctions, two very similar percentages. Although the percentages of utterances containing additive conjunctions as well as antithesis conjunctions in the two language samples are also very close (5.62% for Afrikaans and 6.75% for English and 6.02% for Afrikaans and 7.25% for English, respectively), Mr R2 made use of causal conjunctions more frequently in English (8.25%) than in Afrikaans (5.22%) and temporal conjunctions more frequently in Afrikaans (6.42%) than in English (2.5%). Although these interesting contradictions show us the exact number and percentage of different

conjunctions that Mr R2 used during his interview, it still does not give the reader an indication whether or not his speech was cohesive from a semantic perspective. Although Mr R2 had the lowest percentage of utterances containing conjunctions of the four participants, this does not automatically mean that his speech was the most cohesive - see for example sections 4.3.1 and 4.3.2 with regards to his cohesion, specificity and accuracy and conciseness that supports this.

In the next chapter, I will discuss the results presented in sections 4.3.1 to 4.3.3 above, and ask what these results can tell us about (i) the nature of schizophrenic speech in general, and (ii) the phenomenon of differential symptomatology in schizophrenic bilinguals. I will also provide a critical evaluation of the three assessment tools on the basis of my experience of them in the research conducted for this thesis.

CHAPTER 5

DISCUSSION AND CONCLUSION

In this chapter, I will discuss the implications of the results reported in the previous chapter by returning to the research question mentioned in chapter 1, namely whether any one of the three assessment tools which were employed in this study – the PP, PCA and FACS – is suitable for the assessment of the L1 and L2 pragmatic abilities and deficits of late bilingual schizophrenics. Before turning to this question in section 5.2, I will critically evaluate each assessment tool on the basis of my experience with it during the research conducted for this thesis (5.1). Finally, I will provide a brief conclusion and some suggestions for future research in section 5.3.

5.1 Critical evaluation of assessment tools

Ball, Davies, Duckworth and Middlehurst (1991:369) note that pragmatic assessment is "a much less concrete activity" than, for example, syntactic assessment. In syntactic assessment, there is usually very little debate regarding whether or not an utterance is grammatical in a particular variety of a language. In contrast, deciding whether an utterance is pragmatically appropriate or inappropriate (and if it is inappropriate, which aspects of pragmatics are involved) is a difficult task and inevitably involves a lower level of objectivity than, for example, syntactic assessment. Ball (2000:90) also discusses the question of whether pragmatic assessment models such as Prutting and Kirchner's (1987) PP and Penn's (1988) PCA are genuinely pragmatic profiles, or whether they take on too broad or too narrow a definition of the conceptual theory of pragmatics.

Because the judgements required from the rater by pragmatic assessment tools inevitably involve a level of subjectivity, the issue of inter-rater reliability is also quite important to mention. When a relatively large number of utterances need to be judged as appropriate and inappropriate, different raters will most probably come to different conclusions as to the overall pragmatic skills and deficits of an individual (Ball 2000:92). Furthermore, the higher the number of pragmatic aspects (parameters) to be judged, the lower the

probability that different raters will reach similar conclusions regarding the precise nature of the pragmatic deficits of an individual.

On a more technical level, it is important for the interviewer to know what types of utterances or speech acts are required for pragmatic assessment by the chosen assessment tool. In each of the three assessment tools that were employed in this study, there are specific types of utterances that need to be judged, and some of these utterance types and speech acts might not necessarily be prevalent in spontaneous speech, so that some elicitation techniques might actually be required. For this reason, it is recommended that the right "type" of interview be conducted and that the interviewer be equipped to conduct the specific type of interview. This was not taken into account when the data analysed for this thesis were collected, since the data were collected before the current thesis research was envisaged. Informal, unstructured interviews were thus conducted, leading to conversations which mainly involved the interviewer asking an open-ended question and the participant responding to the question. Consequently, the participants did not really have the chance to initiate topics and this, in turn, led to a decrease in the number of different speech acts found in the data. Although it was evident that the participants had the ability to take on both the speaker and the listener role appropriately to the context, one does not get an idea as to whether or not the participant is comfortable with a variety of speech acts.

Examples of speech acts that formed part of the assessment tools but that were absent from the interviews and could thus not be judged, are: in Prutting and Kirchner's (1987) PP, Variety of speech acts, Topic selection, Topic introduction, Topic change, Physical proximity and Physical contacts; in Penn's (1985) PCA, Topic initiation, Social distance and, in some cases, Acknowledgement and Reference to the interlocutor; and in Rumble's (1988) FACS, verbal- and non-verbal acknowledgements or responses to interrogatives, as well as the request for or an attempt at repairing communication breakdowns.¹⁶

¹⁶ In conducting research with the FACS, Rumble and Malan (1990) specifically initiated communication breakdowns instead of waiting to see whether an informal conversation with the children would automatically include sufficient instances of breakdown, requests for repair, and repair itself.

Prutting and Kirchner (1983:44) state that since most of the behaviours that need to be judged for the completion of their PP are present during any normal conversation, the specific judgements can be made in a reasonably short time, and on the basis of a relatively small speech sample. A difficulty that presents itself in the current study, is the context in which the interviews took place. During each of the interviews, the interviewer and participant were seated at two opposite ends of a room, in a quite formal environment (primarily because the participant had to be facing the video camera). The participant had nothing around him but the chair on which he was sitting, about two meters away from the interviewer, which contributed to the formal and slightly unnatural atmosphere during the interview. This could influence the participant's level of self-consciousness and awareness of his linguistic behaviour, resulting in a less spontaneous speech sample.

It should be kept in mind that the four participants in this study were at different stages in their illness/recovery at the time of the interview, simply because it is impossible to ensure that all of the participants in such a study are at the same stage in their illness/recovery. This observation is important, because how long the participant has been receiving medication and psychiatric treatment affects the severity of the symptoms with which he presents. It might be proposed that it is ideal to interview such participants immediately after diagnosis, when the symptoms are still severe and thus apparent; however, this is usually not possible due to the fact that patients will often refuse to consent to a video recorded interview at this stage because paranoia is a prominent symptom of schizophrenia.

It is also worth noting that it is a shortcoming of the pragmatic assessment reported in this thesis, but probably of pragmatic assessment in general, that it fails to take into account the fact that a person's pragmatic competence is embedded within a particular sociocultural and linguistic context. Consider, for example, the fact that in the research reported here the interviewer and transcriber/rater were of a different racial, cultural and socio-economic background to at least three of the participants and of a different gender to all four of them. Pragmatic competence can mean different things in different cultures and there might well be differences between pragmatic competence in Standard

Afrikaans and pragmatic competence in Kaaps, for example. Ideally the participant, interviewer and rater should be of the same gender, social class, race and cultural background, although this might not always be possible, for practical reasons. What is easier to achieve in practice, in order to control for the effect of sociocultural and linguistic background on pragmatic competence, is to compare the pragmatic competence of schizophrenic individuals to a group of normal individuals with the same gender, social class, age, race and cultural background. This step is necessary before results of the kind reported here are translated into assessment practice.

Finally, pragmatic assessment tools seem to have a slightly prescriptive slant in that pragmatic behaviour which would be judged as appropriate in the informal speech of normal individuals might be judged as inappropriate according to the measurements of pragmatic assessment instruments such as those discussed in this thesis. In some cases, this relates to performance errors which occur frequently in normal individuals' speech and, in other cases, it relates to the rather formal set-up in which the interviews were conducted. I return to this point in section 5.1.3.

Keeping these general problems in mind, we now turn to the three individual assessment tools.

5.1.1 The Pragmatic Protocol (PP) (Prutting and Kirchner 1987)

Firstly, it is important to define and describe exactly what is meant to be judged for each parameter; however, descriptions of specific parameters are sometimes vague. Since this is the basis on which the speech samples of the participants will be judged, it is crucial that it is clear to the rater exactly what is expected for each given parameter. I would suggest that more examples of appropriate and inappropriate behaviour be provided when describing the different parameters.

In Prutting and Kirchner's (1987:118-119) definitions of their PP parameters, they define Intelligibility (parameter 19) as "The extent to which the message is understood."

Although they probably aimed to keep the definitions concise and brief, it is not clear exactly what is meant: Which message is to be understood and by whom? On the basis of the definition, it is unclear whether it is the extent to which the participant understands the questions posed by the interviewer, or the extent to which the participant's utterances are interpretable for the interviewer or listener. Furthermore, by using the word *extent*, they imply that there would be means for indicating the degree to which the message is understood, which is undermined by the fact that the rater only has two options for each parameter, namely "appropriate" and "inappropriate". One can thus not, contrary to what is implied by the definition of this parameter, qualify how appropriate or how inappropriate the response or interpretation is.

Another issue that Ball (2000:104) raises is related to the weighting of the different parameters found in profiles such as the PP and PCA. He asks which of the parameters are more and less important in comparison with each other; whether it is, for example, more important to score better in topic maintenance, or in the repair of communication breakdowns. Here Ball questions the usefulness of the sections/categories in such profiles, and states that if some are more important than others, this should be noted and taken into consideration in the overall assessment of the pragmatic competence of an individual.

5.1.2 The Profile of Communicative Appropriateness (PCA) (Penn 1985)

Whereas the PP makes use of a 2-point scale (appropriate or inappropriate), Penn (1985) introduces a 5-point scale. At first glance, the option of qualifying the degree of appropriateness or inappropriateness of the utterances seems to count in favour of the PCA, since whereas the 2-point scale seems to force the rater to make a decision between appropriate and inappropriate, the 5-point scale not only enables one to choose a neutral option, but provides a "more sensitive set of figures", which is especially helpful for documenting a patient's development or progress (Ball 2000:100).

However, in my experience with using this instrument, the 5 options seemed to be too broad and too restrictive at the same time. On the one hand, the assessment of the participants' speech by means of the PCA was extremely time-consuming and laborious to the point of impracticality: not only are each of the eight language samples (2 language samples for each of the four participants) divided into 3 ten-minute chunks (yielding 24 ten-minute chunks), but there are 44 parameters to assess for every single chunk, and this assessment for each parameter in each chunk did not just involve a choice between appropriate and inappropriate, but a choice between five different options, namely (1) inappropriate, (2) mostly inappropriate, (3) somewhat appropriate, (4) mostly appropriate and (5) appropriate.¹⁷ On the other hand, in some cases these 5 options did not seem sufficient - for instance, when a small number of inappropriate instances of a pragmatic property occurred in only one of the ten-minute chunks of a language sample. In such cases, I did not want to judge the relevant parameter as "(2) mostly inappropriate", since this is not accurate, given that there were only a few inappropriate occurrences in one third of the speech sample. Neither did I want to categorise this parameter as "(3) somewhat appropriate", since the instances that did occur were less than "somewhat" appropriate. This dilemma occurred quite often, especially given the substantial difference, in my opinion, between "(3) somewhat appropriate" and "(2) mostly inappropriate". I often wanted to judge a parameter as "somewhat inappropriate" but this is not one of the 5 options.

Ball et al. (1991) investigated the inter-rater reliability of the PP and the PCA by asking a speech pathologist and a linguist to each assess two aphasic patients' language use. The overall percentage agreement between the two raters for the PP was 70%. For the PCA, the overall percentage agreement between the two raters was 31.1% when the five options were taken into account and 64.4% when the five options were collapsed into two options (in the same way as they were for this thesis, i.e. ratings (1) and (2) being labeled "inappropriate" and ratings (3), (4) and (5) being labeled "appropriate" (see Ball et al. 1991:371-372 and Ball 2000:98-99). The extremely low inter-rater reliability yielded by

¹⁷ Recall that Penn (1988) actually calls for dividing speech samples into one-minute, rather than ten-minute, chunks, which, for the current corpus, would have yielded 240 chunks (60 chunks for each of 4 participants) to be assessed on the basis of 44 parameters each!

the PCA's 5-point scale indicates that allowing for a more nuanced judgement by including more judgement options does not necessarily lead to a more accurate or a clearer assessment of a participant's pragmatic skills. Ball (2000:101) concludes that the improved sensitivity found in the PCA's scoring system did not provide clearer results for the purposes of diagnosing subjects in his study. Ball et al. (1991) and Ball (2000) conclude that the 5-point scale adds to the already existing difficulty of inter-rater reliability. What is interesting though, is the fact that the assessors who participated in Ball et al.'s study both preferred the 5-point scale over the 2-point scale (see Ball et al. 1991: 373-374 and Ball 2000:100). In conducting the research for this thesis, I first completed the PP-analyses and was of the opinion that the PP, with its 2-point scale, did not allow for sufficient distinctions between different degrees of appropriateness. This is also the conclusion reached by Southwood et al. (2009) after employing the PP (cf. section 2.2). However, after completing the PCA analyses, I came to prefer the 2-point scale, since I found it difficult to maintain consistency throughout the PCA assessment process in terms of choosing between the 5 options, something which could only become more problematic if more than one rater is involved. A mid-way approach might be more useful: assessing each of a limited number of parameters (closer to 30 than to 44) on the basis of a count of instances of inappropriateness across the speech sample as a whole (i.e. without dividing the sample into chunks).

5.1.3 The Framework for Assessing (Children's) Conversational Skills (FACS) (Rumble 1988)

The most significant difference between the previous two assessment instruments and the FACS is that Rumble makes use of frequency counts, which immediately provides one with a concrete number to work with. However, such frequency counts do not always indicate the pragmatic abilities and deficits of the participant. For example, Mr R1's mean number of utterances per turn is 7.66 for Afrikaans and 6.29 for English, which seem highly comparable. What these means do not indicate, however, is the fluency of Mr R1's speech, which could have differed for the two languages. That the FACS provides concrete numbers to work with is thus an advantage because it should lead to higher

inter-rater reliability; however, there is also a disadvantage to using frequency counts, namely that such counts might hide features of the participant's speech that are actually of importance in an assessment of pragmatic skills and deficits. In Mr R1's Afrikaans and English samples, for example, he responds to one clarification request in the form of a cue. Although his reply is judged appropriate by the FACS because he appropriately replies to the interviewer's clarification request by attempting to clarify his previous utterance, his attempt at clarification yields a semantically incoherent utterance (see example (96) repeated here as (120)), something which is not captured by the FACS.

(97)

Mr R1: I must have a point of you there

Interviewer: Huh?

Mr R1: So that I can study it you see. (Eng244-245)

Recall that it was mentioned above that pragmatic assessment tools sometimes lead to judging pragmatic behaviour as inappropriate in cases where this behaviour would be regarded as appropriate in the informal speech of normal individuals. One case that stands out in this regard involves the interviewer asking Mr C why he thinks that he was raped (see example (85)). Mr C's hesitation following the interviewer's question was judged as an instance of "No Response" and hence as an instance of pragmatically inappropriate behaviour. However, Mr C's hesitation is actually a perfectly normal response, when one considers that he is being asked a very personal question on a sensitive topic, while being video-recorded. This provides further support for the recommendation that the pragmatic behaviour of schizophrenic participants be compared to that of normal participants in order to determine to what extent the pragmatic "deficits" identified are the result of shortcomings of the assessment tool and to what extent they are due to the participant's illness (i.e. schizophrenia).

5.2 Insights provided by the three assessment tools

What is clear from the presentations of the results in chapter 4 and the evaluations of the pragmatic assessment tools in section 5.1 above, is that the assessment of the pragmatic skills and deficits of (at least) schizophrenics **must** include a qualitative component. If the results of the PP-, PCA- and FACS analyses were presented in a quantitative way only - for example, if chapter 4 had consisted only of Tables 4 to 15 - a vast amount of significant information would have been hidden from the clinicians or linguists conducting the assessment, as well as the people to whom they report their findings. It is only through a detailed description of what was observed for each of the parameters in each of the assessment tools, accompanied by illustrative examples, that a clearer picture emerges of the pragmatic skills and deficits of the four participants. Given the detailed discussions and examples provided in chapter 4, the two questions which arise are: (i) what can the results of these analyses tell us about the characteristics of schizophrenic speech? and (ii) what can the results of these analyses tell us about the differential symptomatology exhibited by certain schizophrenic bilinguals? I will respond to these two questions in sections 5.2.1 and 5.2.2, respectively.

5.2.1 Characteristics of schizophrenic speech

As was mentioned in section 2.1, when Brown (1973:397) set out to analyse what he referred to as "schizophrenic speech", he concluded that it does not exist. What he did come across though, was a lot of evidence for what he calls "schizophrenic thought". For this reason, he emphasises the importance of distinguishing between the terms "schizophrenic speech", which could be interpreted as the way in which all schizophrenics typically utilise the different aspects of language (e.g. phonetics, syntax, morphology and semantics), and "schizophrenic thought". He notes that schizophrenics experience the world in a different way than normal people. Since language is the fundamental medium for making thoughts known (Brown 1973:379), this experience and perception of the world is then reflected through their words. Thus, when looking at schizophrenic language, it is important to remember that it is not their linguistic

competence that is impaired, but that their disorder of thought is brought across through their language behaviour, which results in an apparent speech disorder.

After analysing the different speech samples, I agree with Brown that the grammatical competence of the four participants seems normal, and that their L2 use includes typical L2 learner errors while their L1 use includes typical performance errors (similar to those found in the spontaneous speech of normal native speakers). However, the results of Smit's (2009) study deserve to be mentioned at this point. Smit conducted a careful grammatical analysis (on the basis of Morice and Ingram's (1982) grammatical assessment tool) of the L2 speech of the four participants referred to in this thesis and compared their phonological, morphological, lexical, semantic and syntactic errors to those of four normal L2 speakers (matched to the schizophrenics in terms of age, gender, educational background, L1 variety and L2 variety). She found that the only statistically significant difference between the two groups involved semantic errors – the semantic errors of the two groups differed significantly both quantitatively (i.e. in terms of frequency of occurrence) and qualitatively (in terms of the types of errors that they made). A next step would be to compare the L1 speech of schizophrenics with the L1 speech of normals by means of the same (or a similar) error analysis, to see whether schizophrenic L1 speech also only differs significantly from normal L1 speech in terms of semantic errors.

At first glance, when the results of the three pragmatic analyses conducted for the four participants are taken together, it seems impossible to make any generalisations about schizophrenic speech: in some cases the results of the PP analysis of one participant's speech seem to contradict the results of the PCA analysis of the participant's speech; furthermore within the results of a single analysis, (for example, the PP analysis) there was substantial variation between participants in terms of which parameters seemed to be affected most severely by schizophrenia.¹⁸ What all of the results taken together do show,

¹⁸ It is very unlikely that the discrepancies and variation which resulted from the analyses are due only to (i) problems with the assessment tools and/or (ii) the small sample size. Recall Vetter's (1969:144) remark (section 2.1) that the term "schizophrenia" refers to "a group of disorders with some common features and some wide behavioural differences, rather than to a single disease entity with a well-defined series of

however, is that the pragmatic skills of schizophrenics are definitely impaired. One might be better able to determine which specific aspects of pragmatic competence are impaired on the basis of a larger sample size and with a new pragmatic assessment tool which captures the advantages offered by (i) the FACS's frequency counts, (ii) the PP and PCA's parameters (maybe synthesising the parameters and ideally restricting the number of parameters to about 30), (iii) the PCA's nuanced judgement options (including a "somewhat inappropriate" option, though), and (iv) the FACS and PP's focus on the speech sample as a whole (rather than chunks). Despite the problems with the assessment tools utilised in the research conducted for this thesis, I believe that each of the assessment tools contributes towards a better understanding of the specific pragmatic impairments of schizophrenics.

5.2.2 Differential symptomatology in bilingual schizophrenics

The next question is whether the assessment tools also provide insight into the phenomenon of differential symptomatology exhibited by certain schizophrenic bilinguals, including the four participants in this study. Unfortunately, I believe that none of the three assessment tools contributes to our understanding of this phenomenon. Although each assessment tool provided evidence of pragmatic deficits in the schizophrenics' speech, these deficits seemed to occur to roughly the same extent and for the same aspects of pragmatics in both the L1 and the L2 speech of each of the schizophrenic bilinguals. I believe it is even safe to say that no linguistic (grammatical or pragmatic) assessment tool is likely to be able to capture this phenomenon of differential symptomatology. I base this conclusion on the discrepancies that were found between the L1 and L2 speech samples of individual participants, which conveyed completely different, and sometimes contradictory, perceptions of "the facts / reality", as conveyed through their two languages.

symptoms". Given the nature of schizophrenia, it is thus unsurprising that there is so much variation between the four participants in this study.

As explained in section 4.3.1, for example, Mr C conveyed contradictory factual information in his two languages. Recall that when asked in his L1 why he was in the hospital, he provided the fight he had had with his cousins as a reason and said that he did not know why he was still in the hospital after two months. When asked the same question in his L2, less than 30 minutes later, Mr C acknowledged that he had been hospitalised because he had been diagnosed with first episode psychosis. In his L2, he also talked about his drug abuse, obsession with the Bible, and participation in a satanic occult, which reportedly influenced him negatively. Another example of such L1-L2 inconsistencies is that in his L1, although he mentions that he has been diagnosed with first episode psychosis, he seems dismissive of this diagnosis, claiming that he does not feel ill, and that he does not understand why he is in the hospital. In his L2, on the other hand, he seems convinced that this diagnosis is accurate, acknowledging symptoms of the illness and even considering the effects that his previous lifestyle could have had on his mental state. These examples illustrate that Mr C generally had more insight in his L2 than in his L1.

These inconsistencies are very obvious from one short interview; however, such factual inconsistencies cannot be captured by any linguistic assessment tool, not even a pragmatic assessment tool. The reason for this is that both Mr C's L1 response and his L2 response to the question of why he was in hospital are pragmatically appropriate – they both respond to the question at hand and elaborate appropriately on the topic introduced by the interviewer, and they are both semantically coherent. One cannot even say that Grice's maxim of quality (cf. section 2.3) is violated here, because Mr C clearly believed what he was saying in both speech samples; he simply seemed unaware of the fact that his L2 response was contradicting something he had said in his L1 earlier in the interview. In short, the factual inconsistencies observed seem to be due to characteristics of schizophrenic thought rather than characteristics of schizophrenic language; the fact that Mr C has more insight into his illness and a more accurate perception of reality when

speaking in his L2 than when speaking in his L1 cannot be captured by linguistic analyses of his speech.¹⁹

5.3 Conclusion

To conclude, I agree with Southwood et al. (2009:163) that "clinicians should assess bilingual psychotic patients in both languages to elicit the full spectrum of symptoms", that this practice will lead to more accurate diagnoses of the nature and extent of certain psychotic individuals' illness, and that it should also be considered to provide psychiatric treatment in both of a bilinguals' languages, especially where the patient seems to exhibit more insight in one language than in the other. This thesis followed up on Southwood et al.'s (2009:170) and Smit's (2009) call for investigations into the insights that pragmatic assessment might provide regarding schizophrenic speech. On the basis of the analysis of four schizophrenics' spontaneous L1 and L2 use by means of three different pragmatic assessment tools, it was concluded that (i) pragmatic assessment does indeed provide insights into schizophrenic speech, (ii) pragmatic assessment does not provide insight into the differential symptomatology exhibited by certain schizophrenic bilinguals, and (iii) contra Southwood et al.'s (2009:170) suggestion, it is not worth the clinician's while to include pragmatic assessment (in its current form(s)) as part of the psychiatric assessment battery, given that the insight it is likely to provide does not justify the time and expertise needed to conduct such pragmatic assessment.

¹⁹ Recall that the participants in this study were included because of the fact that they exhibited differential symptomatology in their two languages. So, why did these differences show up in (i) the scores that the participants received following the structured clinical interview (SCI-PANSS) conducted with them in their L1 and L2 but not in (ii) the results of the analyses of their L1 and L2 speech? Precisely because (i) the SCI-PANSS focuses on symptoms of the illness reported by the patient in his L1 versus L2 speech, whereas (ii) the linguistic analysis focuses on linguistic characteristics of the patient's L1 versus L2 speech. And better insight into one's illness and a more accurate perception of reality are things which would be captured by (i) but not by (ii).

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APPENDIX

LANGUAGE BACKGROUND QUESTIONNAIRE (FERNANDEZ 2003)

A. General use of language (1: always L1; 2: L1>L2; 3: L1=L2; 4: L2>L1; 5: always L2)	
L1	
L2	
First exposure to L2	
Other languages	
Educational background	
Elementary school	
High-School	
College	
Childhood active language use	
At home, parents	
At home, brothers/sisters	
At home, grandparents	
At home, other relatives	
To friends	
Other social contexts	
Childhood passive language use	
Parents	
Brothers/sisters	
Grandparents	
Other relatives	
Friends	
Other people	
Teenager active language use	
At home, parents	
At home, brothers/sisters	
At home, grandparents	
At home, other relatives	
To friends	
To teachers	
Other social contexts	
Teenager passive language use	
At home, parents	
At home, brothers/sisters	
At home, grandparents	
At home, other relatives	
To friends	
To teachers	
Other social contexts	
Current active use of language	
At home, relatives	

To friends		
To colleagues		
Other social contexts		
Current passive use of language		
At home, relatives		
To friends		
To colleagues		
Other social contexts		
B. Self rating on a 5 point-scale (1: very good; 5: very poor)	L1	L2
Speaking		
Reading		
Writing		
Comprehension		