

**Aphasia in a linguistically diverse population:
resources for turn construction and
interactional adaptations of Malaysian adults**

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Submitted for the degree of Doctor of Philosophy

April 2015

I, Leela Koran, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

A handwritten signature in cursive script, appearing to read "Leela".

Abstract

The central aim of this thesis is to explore resources for turn construction and interactional adaptations in the conversation of adults with aphasia (a language difficulty acquired most commonly after stroke) in the linguistically diverse Malaysian population. Malaysia has a long history of societal multilingualism, necessitating individual bi/multilingualism; the thesis investigates for the first time the impact of aphasia on conversational interactions in this population. As a result, the thesis applies Conversation Analysis (CA), with an emphasis on localised investigation of participants' turns within particular sequences.

The data are from two sources: video recorded natural conversations in the homes of three participants with aphasia and their regular conversation partners, and conversations outside the home with a friend, where languages other than the home language were reportedly used. The data driven procedures of CA reveal turn construction resources of topic-comment structure, co-construction and repetition are deployed by PWAs in conversation with regular and less familiar conversation partners and these resources cross the linguistic boundaries of the languages in their repertoire. These resources also occur in the non-aphasic conversation partners' turns and exhibit similarities to those documented in studies of the conversations of monolingual English speakers with aphasia. Given that two or more sets of linguistic resources are available for each partnership, code-switching is found to be a compensatory resource for dealing with word finding difficulties as well as a resource for claiming or ascribing identity. A comparison of conversations with a friend indicates that a partnership's familiarity influences interactional outcomes. However, the relationship between familiarity and interactional success is a complex one which appears to vary for each partnership.

The findings of this thesis have theoretical and clinical implications for planning support services for aphasia in societies where bi/multilingualism is the norm. The significance of this contribution becomes evident when global trends in linguistic diversity are taken into consideration.

Acknowledgements

This page documents the many blessings that I have had in bringing together the work that is presented in this thesis. Firstly, I am grateful for the enthusiastic participation of Zin, Mus and Tana, the bilinguals with aphasia; their families and friends in this study. The support of the administrators at the two National Stroke Association of Malaysia (NASAM) centres who were instrumental in the recruitment of these participants is also greatly appreciated. Rogayah Abdul Razak's contribution in the validation process of Malay translations in the transcripts is also acknowledged here.

I am greatly indebted to my supervisors, Suzanne Beeke and Jane Maxim for their guidance and support in every stage of the research. Suzanne's meticulous scrutiny of the analysis and her comments on the earlier drafts of the chapters has helped to shape this work and my own research skills. Jane's long standing involvement in the development of Speech and language therapy training programmes and Clinical linguistics as a discipline in Malaysia has been an invaluable asset. I acknowledge Ray Wilkinson for supervising the initial stages of this research. The fund providers for my studies and the research i.e., the Malaysian Ministry of Higher Education, University of Malaya and University of London Central Research Fund are also acknowledged here.

My friends and family have remained my constant inspiration throughout this journey. Thanks to Nesamani, Sakinah, Mohana, Ngat Har, Vani, Asiah, Neha and many others, I am often reminded me of what lies beyond this. My sons deserve a special mention here for readily embarking on the adventures that my academic pursuits have taken us on thus far. My personal tech support, Kishen and Shreyas, the stress buster- I could never have done this without the two of you. Sugu, this also became possible because of your unwavering support in maintaining a stable home during the most challenging phase in our lives. All of it came into perspective as I dealt with losing my own mother during the final stages of writing this thesis. As I am merely living my late parents' dream, this thesis is dedicated to my *Amma and Acha*, with the hope that I never lose sight of their aspirations for me.

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1 Background to the Study

1.0 INTRODUCTION

This thesis uses Conversation Analysis (CA) to gain a better understanding of aphasia in the linguistically diverse Malaysian population. Aphasia is a language difficulty resulting from damage in the left hemisphere of the brain, commonly caused by stroke. Various classification systems exist, and the distinction between fluent and non-fluent aphasia is one such classification that proves useful. Non-fluent aphasia is commonly characterised by agrammatic speech, which exhibits similar features across languages: the production of simple syntactic structures; omission of functors such as auxiliaries, prepositions, personal pronouns and articles; production of verbs in the most common forms and the use of formulas or zero syntax, while comprehension of spoken language is often relatively unimpaired (Menn, O'Connor, Obler & Holland, 1995). Fluent aphasia is often characterised by complex syntax, but Edwards (2005) illustrates that, in comparison with non-aphasic individuals, those with fluent aphasia use a smaller number of well-formed and complex sentences. From a clinical perspective, classification of aphasia into types and subtypes has a limited prescriptive value due to individual differences among clients (Marshall, 2010). Individual variations among bilinguals add to the complexity of research on bilinguals with aphasia. Thus, single case studies appear to be useful for initial explorations into such a phenomenon.

The present study is the first attempt to investigate manifestations of aphasia in the linguistically diverse society in Malaysia where societal norms make individual bilingualism a necessity. It is an explorative study that uses single cases to gain insights into aphasia in a language and a language variety that have not been studied before; Malay and Malaysian English. It does so by investigating the

interactions of individual persons with aphasia (PWAs, henceforth) to begin to understand the reality of bilingual aphasia in the Malaysian population.

This chapter begins with an introduction to the Malaysian context, which is the background to the study. This is followed by sections on the rationale and the scope of the present study; the research questions; and the organisation of the thesis, highlighting important aspects of the chapters that follow.

1.1 THE MALAYSIAN CONTEXT

This section will present background information on the Malaysian context. It includes a description of linguistic diversity in the population, linguistic features of the languages spoken, and research on aphasia in Malaysia.

1.1.1 Linguistic Diversity in the Malaysian population

For the year 2010, official data show a total population of 28.3 million in fourteen states spread across Peninsular Malaysia and East Malaysia or Malaysian Borneo (Department of Statistics Malaysia, 2010)¹. Ethnic composition includes 67.4% Bumiputera (Malays and other indigenous people), 24.6% Chinese, and 7.3% Indian. The remaining 0.7% are classified as 'others'. In Peninsular Malaysia, Malays are in the majority, while in East Malaysia it is indigenous Iban and Kadazan/Dusun people. The languages of these ethnic groups constitute the linguistic repertoire of the society, with Malay, Chinese and Indian languages spoken the most. The ethnic communities themselves are far from homogenous in terms of languages spoken. Indians in Malaysia speak Tamil, Telugu, Malayalam, Punjabi, Gujarati, Hindi, and other Indian languages, depending on their place of origin on the Indian sub-continent. The Chinese people of Malaysia speak

¹ Department of Statistics Malaysia updates the population census data every five years.

Cantonese, Hokkien, Hakka, Teochew or Mandarin, depending on their geographical location. In East Malaysia, around 50 different languages are estimated to be in use (Asmah Omar, 1985). While these figures give some idea of the diversity in societal repertoire, they also highlight the necessity for most individual Malaysians to have more than one language in their personal repertoire.

Linguistic diversity in Malaysia is not a recent phenomenon. Historical records from the 13th century indicate that different languages were in currency in Malacca, which was then a thriving trade post in the west of the Peninsular. Malay, the language of the local people, was known to be used as the lingua franca for communication between merchants from China, India and even Middle Eastern countries (Asmah Omar, 1985). Although the early traders were believed to have adopted the local culture as they set up homes in Malaysia, the influence of their native languages produced different varieties of Malay. Colonisation of the country by the Portuguese, Dutch, English and Japanese extended this diversity further. To date, there is still a small Portuguese community in Malaysia, but it is the English language that has retained an influential position, despite not being a native language of any particular ethnic group.

The enduring legacy of the English language can be traced to the elitist status that it attained in Malaysia during British rule (1786-1957). The multicultural make-up of the population itself can be attributed to a large scale population movement from China and India during that period (Schneider, 2007). As the country emerged as an independent nation in 1957, the constitution stipulated the role of Malay as the language for unifying the ethnically diverse people of Malaysia. English was retained as a second official language, only to be gradually removed in the following ten years. The implementation of the National Language Act 1976 was a definitive move towards raising the status of the Malay language, and removing the use of the second official language. However, the Education Act of 1996 initiated a return of the bilingual education policy, with English as the language of instruction for mathematics and science. Prior to this, in 1991, Vision 2020, the blueprint for

the plan to achieve the status of developed nation by the year 2020, was launched. This clearly states the importance of mastery of the English language for the average Malaysian.

The policy of teaching mathematics and science in English has since been abandoned, but Malay and English continue to be the common combination of languages of typical Malaysian bilinguals. Communication among people of different ethnicities is often carried out in Malay or English. While the Malays tend to be bilingual, the Malaysian Chinese and Indians tend to be multilingual. The latter ethnic groups are inclined to retain one of their ethnic languages either for maintaining identity or for intergenerational communication. It is also the case that English is acquired as a first language in some Malaysian Chinese and Indian families, especially in urban areas. However, this form of English is a non-native variety that has undergone indigenisation. See Schneider (2007) and Lowenberg (1986) for a comprehensive discussion of the evolution of English in Malaysia.

The English language spoken in the Malaysian society is adapted to and by the local population in similar ways to its adaptation by other societies that use it as a lingua franca; where both interacting partners are non-native speakers. Malaysian English, as it has come to be known, is not a homogenous entity. Baskaran (1987;1994; 2004) identifies a lectal cline from acrolect (used for official and educational purposes) to mesolect (used in semiformal and casual situations) and basilect (used informally and colloquially). In the workplace, the basilect variety is often associated with blue-collar workers (Morais, 1998). Nair-Venugopal (2000) asserts that contrary to the general perception that the Malaysian workplace is a specialised context where the prestigious high or standard variety of Malaysian English is the norm, localised ethnic speech is often used even in business settings. It is important to note that the average Malaysian bilingual may have different levels of proficiency in each of his/ her languages, depending on language acquisition history and workplace experience.

The next section provides an overview of salient features of the two languages common to bilinguals in Malaysia, Malay and Malaysian English.

1.1.2 Linguistic features of Malay and Malaysian English

This section brings together information on Malay from both formal documentation as well as a native speaker's perspective. There is a paucity of research on languages as they are used in conversation in Malaysia. Most of the publications on Malay, the national language, are pedagogically driven and therefore have an emphasis on standard forms. The information below represents a brief overview. The reader is referred to Asmah Omar (1993) for a definitive guide on Malay grammar.

1.1.2.1 Malay

The canonical structure of Malay is subject-verb-object (SVO) (Asmah Omar , 1993, Koh, 1990, Windstedt, 1913) or following categorisation according to word classes, it would be an N1V (N2); a sequence of nominals (N1) followed by verbals (V), or a sequence of two nominals, as in N1n (Asmah Omar , 1968). Nominals include nouns, pronouns and numerals, and verbals include verbs, adjectives, aspect verbs and modal verbs. There is no inflectional morphology in Malay, but there is a rich derivational morphology (Goddard, 2002). Nouns often take affixes such as 'pe', 'pe...an', 'per...an', 'ke...an' and 'an'. These can sometimes denote a change of syntactic category, for example from a verb to a noun, as in the word 'tulis' (write) to 'penulis' (writer). Verbs are not marked for tense. The prefix 'men-' (and its allomorphic variations 'me', 'meng' and 'mem') marks active transitive verbs. Active intransitive verbs are marked with the prefix 'ber', which denotes habituality, reciprocity and reflexivity. The prefix 'ter' signals nonvolitional, unintentional or completed action. The passive form is marked with 'di' in initial position and also sometimes with 'kan' or 'i' as a suffix. Imperative verbs take suffixes 'kan' or 'i' and the prefixes 'ber' or 'per'. Aspect and modality is

indicated with a group of words that although they do not share the morphological features of verbs, can occupy the position V in the N1V (N2) structure. Examples of these include 'akan' (will), sudah (already), masih (still), 'boleh' (can) and 'mesti' (must).

Other interesting aspects of Malay grammar include the class of pronouns and function words. Personal pronouns can be divided according to first, second and third person, and are marked for number. The two demonstrative pronouns, 'ini' (this) and 'itu' (that), do not have plural forms. Despite its extensive system of pronominals, the Malay language exhibits the feature of pro-drop, i.e. the dropping of pronouns where a referent is identifiable from the context (Mashudi Kader, 2003). Interrogative pronouns include 'apa' (what), 'siapa' (who) and 'mana' (where). There are three other interrogatives, 'bila' (when), 'bagaimana' (how), 'kenapa/mengapa' (why), which are not classified as pronouns because they do not function as nominals and cannot be substituted by nominals. These make up the function word category that also includes particles such as 'tidak/tak' (no), 'jangan' (don't), 'ya' (yes), 'bukan/kan' (no). The last two particles can function as positive and negative tags in yes-no questions, i.e., (is it) and (isn't it). The emphatic particle 'lah' can be attached to different word classes. The word 'adalah', made up of 'ada' (have/there is) and the 'lah' particle is believed to be a recent addition to the Malay language motivated by efforts to translate the copula verb from Dutch and English (Asmah Omar, 1993, p.213). Therefore, 'adalah' is non-obligatory in Malay.

The linguistic features discussed thus far represent the educated variety of the language known as Standard Malay (SM). There is another variety referred to as Colloquial Malay (CM) that is relegated to use in informal conversations. Due to its status, this variety is far less well documented (Koh, 1990). CM is distinct from SM in terms of grammar and lexical forms. Clauses in CM are constructed with SVO structure but S is often realised as the topic. Thus, in this variety topic-comment structure is a regular feature. Lexical items are phonologically reduced so 'tahu'

(know) is realised as 'tau' and 'kerja' (work) as 'keja'. The demonstratives 'ini' and 'itu' also appear in reduced form in noun phrases, as 'ni' and 'tu' respectively. Extensive use of particles such as 'ke' to mark interrogatives or to provide alternatives is evident. Terms of address that emphasise kinship relations are a regular feature, as are pronouns that indicate different degrees of intimacy. In terms of morphology, affixation that is well documented in SM, such as 'men', and 'ber', does not occur often in CM. The function of passive marking by the prefix 'di' in SM is often carried out by the full verb 'kena' (be affected by) in CM. For combining clauses, 'bila' (when), 'lepas' (after) and 'kalau' (if) are typically used. The reader is referred to Koh (1990) for a detailed comparison between CM and SM, and Goddard (2002), for a discussion of semantic universals in Malay.

One other variety used in this society is the Bazaar Malay. This pidginised form of Malay is used for interethnic conversations. Documentation on this variety is even more limited. In general, studies that focus on any form of conversational Malay are scarce - Zuraidah (1996) represents the first CA study of Malay. The author uses data from radio broadcast interviews, among other sources, to show how distinctive patterns in turn-taking and conversation organisation are achieved through deployment of prosodic resources. This paper will be reviewed in Chapter 3, Section 3.3.2, along with related studies of prosody in Malay conversations.

1.1.2.2 Malaysian English

The non-native variety of English spoken in Malaysia, Malaysian English (ME), shows a systematic variation from British English (BE), the native speaker variety that it is believed to have evolved from. Differences in pronunciation, lexical items, grammatical construction and intonation patterns have been documented, as well as certain discourse features. In terms of pronunciation, reduction in the number of phonemes is regularly heard in ME conversations (Baskaran, 2005), for example, consonant clusters realised as single consonants, or diphthongs produced as monophthongs. Also slight differences can be identified in the length of vowels

produced by speakers of ME when compared to speakers of BE (Pillai, Zuraidah, Knowles and Tang, 2010). Another regularly cited feature is phoneme substitution, for example the BE sound /θ/ is replaced with /t/ in ME.

Indigenisation of lexical items is evident in borrowing from the different languages that exist in the repertoire of the society, often to deal with lexical gaps. In some cases this process also involves expansion or restriction of meanings of borrowed lexical items compared with their use in the native language. Nouns in ME are distinctive in terms of plural marking. Some BE non-count nouns take the –s ending to mark plurality in ME, for example ‘furniture’ is produced as ‘furnitures’. In noun phrases, article ellipsis can occur in various syntactic positions including subject, object, complement and prepositional object position. The pronoun antecedent agreement rule adhered to in BE is often violated in ME. The singular form ‘it’ is often used anaphorically as a generic form.

Tense marking of verbs in ME shows significant simplification from the system adopted in BE. See Baskaran (1987; 2005) for a detailed description and illustration of the tense system in ME. However, it needs to be highlighted that the apparent lack of marking for regular past tense forms may be due to phonological simplification, i.e. a reduction of consonant clusters. The most prominent difference is the missing copula ‘be’ in ME. This feature appears to cut across the different varieties of English spoken as a lingua franca (Kirkpatrick, 2011).

As there is only a limited research literature on Malaysian English, it is useful to consider what is known of Singapore English (SE), a related variety. These two varieties are known to converge on particular discourse features. One example is the use of a pragmatic particle ‘lah’. The function of this enclitic particle ranges from emphasis to a softener, according to the prosody of its delivery (Gupta, 1992). Another regularly used particle is ‘ah’, which in final position marks question forms, and has a topic marking function, as well as signalling an intention to continue when produced after a noun phrase. The interrogative word ‘what’ can appear in

final positions to support an argumentative stance by marking something as obvious. However, this is not to be confused with questions formed by placing a 'wh' word in final position, which is a feature of ME and SE question forms. The inversion of subject and verb does not occur in either variety.

Another recurring question format shared by ME and SE involves the use of tags, which includes the use of 'it' as a generic pronoun in structures like 'isn't it?', and modals like 'can' as in 'can or not' or even 'can ah?'. The use of terminal rising intonation marks this as a question form. In SE, according to Deterding (2007, p. 68) "the tendency to front the topic in utterances is attributable to influence from Chinese used widely in the population but this may also be due to the fact Malay is also a topic prominent language.". It is not surprising to find topic-comment structure to be common in ME as this variety shares the same substratum languages as SE. The influence of these different substratum languages has been discussed widely in literature on the two varieties, but remains speculative as it is not possible to ascertain the exact source of a feature that is adopted into a variety in a linguistically diverse population. What is certain though, is that ME, like other non-native varieties of English, is not a mere fossilized form of interlanguage, i.e., a learner variety.

1.1.3 Aphasia Research in Malaysia

Aphasia is an understudied condition in Malaysia; at present prevalence and incidence data are not available. However since stroke is a common underlying aetiology of aphasia, investigation of stroke prevalence data could provide some relevant information. However, statistics related to stroke cases can only be estimated from hospital-based registries; these are difficult to access. A neurologist at a research university in Kuala Lumpur estimates that there are about 600 admissions for stroke per year in the teaching hospital, while the Kuala Lumpur General Hospital (KLGH), run by the Ministry of Health, may see about 700-800 cases annually (Koran, unpublished interview, 2010). Tan, Wong and

Venkatasubramaniam (2006) claim that stroke is the primary cause of adult disability and dependency in Asia. Evidentially, they note that the ethnic and cultural diversity of the population affects stroke epidemiology (Tan, et al. 2006), and thus may have direct implications for aphasia in the Malaysian population. They advocate stroke research be given priority in the Neurology research agenda for the Asian region.

Tan et al. (2006) also highlight an inequitable distribution of resources for management of stroke in Asia. For example, in Malaysia, 80% of neurologists in government-run public hospitals work in the capital city, Kuala Lumpur (Tan et al., 2006). Stroke survivors are often referred to rehabilitation units or seek the services of private speech and language therapists (SLTs). Services rendered by the latter tend to be costly. In addition, speech and language therapy is still a developing profession in Malaysia and acceptance of services, especially for the adult population, is not yet well established. Some non-governmental organisations (NGOs) like the National Association of Stroke Malaysia (NASAM) provide support services for stroke survivors and their families. Although services provided by physiotherapists are readily available in the day care centres run by these NGOs, speech and language therapy is not. Given this background, the size of the problem cannot be ascertained even from practising SLTs or NGOs. It seems essential that the gap in research on aphasia in Malaysia be addressed in order to minimise the guesswork involved in service provision.

Recent attempts to develop assessment tools for Malaysian PWAs mark an important milestone. Van Dort, Vong, Razak, Mustafa Kamal and Hooi (2007) report initial norms according to age and education for a Malay version of the Boston Naming Test (M-BNT). This important tool for identifying word finding disorders that cut across aphasia sub-types has been in use in the English-speaking world since its original publication by Goodglass and Kaplan in 1983. More recently, the Semantic Assessment Battery developed for Malay-speaking adults with aphasia in the South-East Asian region by Jalil, Rickard Liow, and

Keng (2011) is another noteworthy accomplishment. Similarly, Postman's (2011) report on considerations for adapting the Bilingual Aphasia Test for the Indonesian language is encouraging, given that *bahasa Indonesia* is a dialectal variety of Malay spoken by Malaysians. In their attempts to establish norms for these new Malay language tests, Van Dort et al. (2007) and Jalil et al. (2011) report problems that include participants' use of code-switching. This highlights the challenges faced by researchers and practitioners in dealing with linguistic diversity and language contact phenomena in this region. See Koran (2013) for further details on aphasia research in Malaysia.

1.2 RATIONALE AND SCOPE OF THE PRESENT STUDY

Section 1.1 has highlighted diversity both in the society and the linguistic repertoire of Malaysian bilinguals, and a lack of knowledge of how aphasia impacts on this population. Most cross-linguistic evidence of aphasia reported in literature has been from Indo-European languages while Malay, a major language in this country belongs to the Austronesian language family. Structural differences that exist between typologically distant languages warrant investigation of aphasia in Malay. Knowledge about language specific deficits is essential for accurate assessments and planning of intervention for PWAs. While this may drive the initial goal of the present study to be aligned with the national agenda for stroke research in Malaysia, documentation of aphasia in Malay may be a justified aim as an estimated number of 300,000 individuals speak this language. Malay is the official language of four countries in the Asian region including Malaysia, Singapore, Brunei and Indonesia. It is also widely used in southern Thailand, Cambodia, Vietnam and southern Philippines. Additionally, there are sizeable Malay speaking communities in Sri Lanka and South Africa. So, in practical terms, findings from this study can inform service provision for these individuals. A potential theoretical contribution can come from the identification of specific linguistic features of Malay that are susceptible to breakdown in brain damage. Conversely, features of this

topic-prominent language such as the non-obligatory copula, pro-drop and non-inflectional verb morphology may appear to be fortuitous for Malay speaking PWAs as these linguistic features have also been documented as having counterparts in certain types of aphasia. Thus, the need to address the lack of information about aphasia in Malay language provides the rationale for this study.

English language is the other language used widely in this linguistically diverse population due to socio-economic reasons. A key distinction of bilingualism in this region is that this is not a recent phenomenon. Sociolinguistic factors have shaped the adaptation of the non-native variety of the English language. There are individual variances in terms of acquisition history, domain and extent of use as well as degree of proficiency in the English language. Another notable pattern in this society is the prevalent use of code-switching. Societal bilingualism in this context creates the need to maintain the use of the second language post onset of aphasia. All these influences provide a unique opportunity for cross linguistic comparison within individual Malaysian bilingual PWAs in this study. Insights gained from these inherent bilinguals have the potential to contribute towards a better understanding about cross-linguistic connection between the languages in their repertoire and about language selection or control process. Thus, there is a need to study the manifestation of aphasia in both the languages of the Malaysian PWA and patterns of code-switching in their conversations.

Clearly, the Malaysian population provides a rich research site for exploring the impact of aphasia on bi/multilinguals. It will be argued in this thesis that a CA approach is particularly suited for such an exploration. With its principal aim of discovering “how participants understand and respond to one another in their turns at talk” (Hutchby and Wooffitt, 2008, p.12), CA provides the essential tools for beginning to explore and understand how aphasia plays out in this population. It obviates the necessity for comparison against any normative data, which is neither

available for conversational language used among (non-aphasic) bi- and multilingual Malaysians, nor for language performance or use in Malaysians with aphasia. A CA methodology is judged viable for this study as it affords the opportunity “to develop an ecologically valid understanding” (Hutchby and Wooffitt, 2008, p.200) of how aphasia manifests in natural conversations. Wilkinson (1999, p. 251) argues that “it is in conversation that aphasia is likely to be most visible and problematic for people with aphasia and their conversational partners in everyday life”. Thus this study will explore the conversations of Malaysian bilingual PWAs using a CA approach.

Specifically, this study investigates the turn construction resources used by Malaysian bilinguals as they adapt to the demands of conversation where one speaker has aphasia. Three individual PWAs were selected for this purpose. The participants were recruited from daycare centres run by an NGO called NASAM (the National Stroke Association of Malaysia). The procedures included video recording of everyday conversations in the home in order to capture the reality of their home language(s), and informal interviews and language sampling, to gain an initial understanding of their language difficulties. Ethnographic interviews to establish the history of aphasia and bilingualism were also conducted. A second conversation was then video recorded for two of the participants with a conversation partner with whom they reportedly used a language other than the home language; for the third individual no such person existed. Inevitably this conversation partner was less familiar to them. In keeping with CA principles, the analysis was data driven. Instances of recurring phenomena were identified via repeated scrutiny of transcripts alongside the video recordings, and an analysis was conducted of how both conversation partners use and respond to interactional resources for turn organisation. A full overview of the methods and findings of CA is presented in Chapter 3.

1.3 RESEARCH QUESTIONS

The research questions that guide this study are as follows:

1. What turn construction resources are deployed by a PWA from the linguistically diverse Malaysian population in conversation with:
 - a) a regular conversation partner in his or her home environment?
 - b) a less familiar conversation partner from outside the home with whom he or she reportedly uses a language other than the home language?

2. Given that societal bilingualism is the norm in the Malaysian population, how is code-switching, a turn organisation resource available to both conversation partners, deployed in a bilingual PWA's conversations with:
 - a) a regular conversation partner in his or her home environment?
 - b) a less familiar conversation partner from outside the home with whom he or she reportedly uses a language other than the home language?

1.4 ORGANISATION OF THE THESIS

Chapter 1 has provided the background to the study, firstly discussing the history and extent of linguistic diversity in the Malaysian population, linguistic features of the relevant languages and adaptations to the non-native varieties that make up the linguistic repertoire of Malaysian bilinguals. The paucity of aphasia research involving Malaysian bilinguals has been established. Justification for examining the natural conversations of single cases using a CA methodology has been presented, along with the research questions that guide this data-driven analysis. Chapter 2 provides an overview of the theoretical approaches and key findings arising from the study of aphasia in bilinguals, a field otherwise known as bilingual aphasia. The chapter concludes by highlighting a lack of research in bilingual aphasia that approaches the phenomenon from an interactional perspective.

Chapter 3 presents the basic principles of a CA methodology, and reviews key findings from studies of typical (non-language disordered) conversations that inform the present study. CA studies of bilingual conversations and of aphasia and related disorders are also reviewed. This chapter argues for the potential of CA to improve understanding about bilingual aphasia in the Malaysian population and to inform practices for providing services for such individuals.

Chapter 4, documents the methodology of the study, including participant selection, recruitment, observations and informal interviews, language sampling, and collection of the core data for the study, video-recorded conversations. Profiles of the participants with aphasia are provided in this chapter, using data obtained from interview and language sampling procedures. Considerations for transcription and translation of the conversation data, as well as translation validation procedures, are also reported. The analysis process is explained, including how extracts were selected for analysis.

Chapter 5, the first of three data analysis chapters, systematically investigates the use of topic-comment structure as a resource for construction of first position turns. It also explores the potential for this resource to be used in a novel way, in second position turns in question and answer sequences. This latter pattern has not previously been documented in CA studies of aphasia. Topic-comment structure in the non-aphasic conversation partners' turns is also analysed here. The chapter concludes by identifying that topic comment structure transcends the linguistic boundaries of the bilinguals; it appears in turns constructed in Malay and in Malaysian English.

Chapter 6 documents the different resources for displaying knowledge that are available to these bilingual PWAs, namely repetition, formulaic expressions and co-construction. All appear to be used for construction of turns in both their languages. The analysis shows both how PWAs use the resources to display knowledge, and

how conversation partners scaffold displays of knowledge from the PWAs by using known-answer questions. The influence of familiarity on the outcome of turns constructed to display PWA competence varies for the different partnership. Comparison between conversations at home and with a friend outside the home reveals that familiarity is complex issue.

Chapter 7, the final data analysis chapter, explores code-switching as resource for turn organisation, and reveals that a contrasting choice of language is deployed by PWAs both to display their competence as a bilingual, and to organise repair brought about by their aphasic difficulties. The analysis reveals considerable overlap in the use of code-switching by PWAs as an organisational resource, and as a resource that indexes identity. The use of code-switching in the non-aphasic conversation partners' turns indicate that this may be a routinely deployed resource. In these data it is argued that the use of code-switching by PWAs does not appear to be pathological.

Chapter 8 summarises the main findings of the study which are that: 1. The turn construction resources of topic-comment structure, co-construction and repetition are deployed by PWAs in conversation with regular and less familiar conversation partners; they appear to cross the linguistic boundaries of the languages in the repertoire of these Malaysian bilinguals ; 2. Code-switching is found to be an organisational resource used for display of bilingual competence and to organise repair; 3. The relationship between familiarity and interactional success is a complex one which appears to vary for each partnership. The chapter concludes with a discussion of theoretical and clinical implications of the findings. Suggestions for future research in the area of conversations of bi/multilingual people with aphasia are also presented in the concluding section of the chapter.

2 Bilingual Aphasia

2.0 INTRODUCTION

This chapter provides an overview of bilingual aphasia research. In conjunction with Chapter 3 (Conversation Analysis) it aims to show how the literature informs the design of the present study. Section 2.1 highlights two core phenomena pertaining to bilingual aphasia, specifically patterns of language recovery (Section 2.1.1) and code-switching (Section 2.1.2). Section 2.2 introduces theoretical implications drawn from these observations, highlighting two complementary theoretical frameworks: the neurolinguistic theory of bilingualism (Section 2.2.1) and the language control framework (Section 2.2.2). Section 2.3 reviews methodological issues in cross-disciplinary research on bilingual aphasia. Section 2.4 concludes this chapter with a discussion of how the literature reviewed here informs the present study. A review of conversation analytic studies that have investigated bilingual interactions in the unimpaired population, and in aphasia (and other conditions), is reserved for Chapter 3.

2.1 KEY PHENOMENA IN BILINGUAL APHASIA: PATTERNS OF RECOVERY AND CODE-SWITCHING

In bilinguals, the acquisition of aphasia allows us to observe the effects of brain damage on components of language by examining two sets of linguistic resources. Research has identified two key phenomena that have been influential for theory building, namely patterns of language recovery, and code-switching. These will be outlined in Sections 2.1.1 and 2.1.2 below as a precursor to reviewing key theoretical frameworks of relevance to this study.

2.1.1 Patterns of language recovery

Pitres' (1895) landmark study on polyglots with aphasia laid the foundation for a large literature on patterns of language recovery in bilingual aphasia. In his study of seven polyglots, he observed that the most used language was recovered first. Prior to Pitres' seminal work, Ribot (1882) had stipulated that a first acquired language would be the preferred one in restitution of polyglots. Thus Pitres introduced the condition of intensiveness of use to Ribot's rule of antecedence. What came to be known as Ribot's rule and Pitres' rule established a research trend to test these predictions. The evidence that accumulated from such endeavours provided the data for Paradis' (1977) influential formulation of a typology of recovery patterns, detailing six patterns of recovery. According to Paradis (1977), one of these six, parallel recovery (where similarly impaired languages are recovered at the same rate), appears to be the most prevalent pattern in bilinguals with aphasia; 40% of the cases he reviewed revealed this pattern. Over thirty years after this seminal work, there appears to be sustained research interest in uncovering new recovery patterns in PWAs who speak two or more languages - see for example Venkatesh, Edwards and Saddy (2012). Research on patterns of recovery will not be addressed in any further detail because it is not relevant to this study. Readers are referred to Lorenzen and Murray (2008) for a review.

2.1.2 Code-switching

A second key feature of bilingual aphasia noted in the early studies is 'switching' between or 'mixing' of languages in the speaker's repertoire. In many early studies, switching and mixing were treated as two separate features, where mixing (of languages within utterances) was considered to be a typical occurrence, but (code) switching was often seen as pathological, i.e. a specific symptom of aphasia. As early as 1929, Kauders described three behaviours related to code switching, namely the phenomenon of interference between languages, word finding via the use of a foreign language word, and the use of fixed linguistic expressions in a

foreign language in spontaneous speech. In a later large scale experimental study of Spanish-Catalan bilingual PWAs, Junqué, Vendrell, and Vendrell (1995) found frequent occurrence of erroneous mixing, shifting dominance in language use, and selective loss of access. In these studies, the occurrence of code-switching is interpreted as a deficit associated with aphasia.

Pathological switching has variously been defined as inappropriate language behaviour attributable to a lack of control (see for example Fabbro, Skrap & Aglioti, 2000) and a violation of grammatical constraints (see for example Hyltenstam 1995). Abutalebi, Miosso and Cappa (2000) observed an Armenian-English-Italian trilingual PWA who was unable to maintain conversations in only a single language. She was fully aware of mixing her languages and able to switch voluntarily from one language to another. Multidirectional mixing between all three languages was also evident during a picture naming task. On the basis of the lesion recorded in the PWA's CT scan, this pattern of pathological mixing is hypothesized to involve a neural route that includes the left basal ganglia and frontal cortex, and that controls language selection and accessibility of lexical representations (Abutalebi, et al., 2000). Mariën, Abutalebi, Engelborghs and De Deyn (2005) also suggest a similar location for the neuroanatomical device that controls language selection, based on a case of an early bilingual child with transcortical sensory aphasia. This case study provided the authors the opportunity to observe longitudinal changes in the child, who showed evidence of pathological switching and mixing after experiencing a second stroke which resulted in extended subcortical damage. In the late phase of the second stroke it was found that reperfusion of the left frontal lobe and caudate nucleus correlated with the remission of spontaneous pathological switching and mixing while translation difficulties persisted. This, according to Mariën et al. (2005) indicates the role of left caudate-frontal lobe circuitry in language control in bilinguals.

In a quantitative meta-analysis of functional neuroimaging studies, Luk, Green, Abutalebi and Grady (2012) concluded that cognitive control of language switching

in bilinguals involves multiple cortical and subcortical brain regions. They reviewed studies that investigated language switching in experimental conditions and high-level baseline conditions that focused on single language processing among neurologically normal bilinguals. This meta-analysis substantiates the findings from bilingual aphasia studies that identified lesions in frontal subcortical brain regions (i.e. the caudate nuclei or prefrontal cortex) to be responsible for the control mechanism. Interestingly, it also reveals that regions implicated in this mechanism are reported to be involved in non-language cognitive control. A relationship between code-switching and high-level cognitive process that are not specific to language processing is thus implied. Kong, Abutalebi, Lam and Weekes (2014) specifically investigated lesions correlated not only to language control deficits but also to impairment in executive function. Based on evidence of pathological switching and mixing in a Cantonese-English-Mandarin PWA subsequent to damage to the executive control system in the frontal cortex, they claim that both language control and executive function may be implicated when specific neural regions are damaged. The authors reported the occurrence of more prevalent switching to Cantonese than to English in tasks assigned in Mandarin, due possibly to the linguistic similarities between Cantonese and Mandarin. In addition, they claim that more prominent switching in connected speech over confrontational naming may provide insights into how task processing demands differ for linguistic and cognitive resources in multilingual speakers. They argue for a shared or partially overlapping cognitive and neural system for domain-general executive functions and the language control mechanism. This may have interesting implications for switching that are typically practiced in some bilingual speech communities.

However, not all studies conclude that switching observed in PWAs is pathological. Munoz, Marquardt and Copeland's (1999) investigation of code-switching patterns in four Hispanic bilingual PWAs and four neurologically normal age-matched individuals revealed that all used code-switching, but that it occurred at a higher frequency in the conversations of the PWAs compared to the non-brain damaged

adults. The authors argued that increased frequency of a typical pattern does not necessarily entail a pathological language behaviour. They caution that identifying pathological switching is more complex than “a dichotomous decision regarding appropriateness” (Munoz, et al., 1999, p. 270).

Evidence that code-switching may function as a communicative strategy comes from Goral, Levy, Opler, and Cohen (2006), who investigated cross-language lexical connections among words in the multilingual lexicon of a Hebrew-English-French trilingual PWA. Goral et al., (2006) examined interlanguage activation during conversations and lexical retrieval performance on a word-translation task, and viewed lexical items in the non-target language as evidence of inter-language interference, i.e. cross language activation. The authors found such activations occurring either intentionally or unintentionally during natural conversations, and suggested that such switches may be a conscious strategy to deal with word-finding difficulties, as access to translation equivalents in the other languages can facilitate production of the target word. In a second experiment on lexical retrieval during a translation task, they discovered asymmetric patterns in translation direction and stimulus type (e.g. cognate versus non-cognate words and concrete versus abstract words) which implied lexical connections existed between the non-native languages, independent of their connections to the first language. Goral et al. (2006) claim that access to words in the mental lexicon of this trilingual PWA was influenced by the degree of language use prior to aphasia, and similarities between the languages including degree of shared vocabulary. They acknowledge the role that age of language learning plays in recovery but emphasise the influence of language- and speaker-specific characteristics in multilingual lexical connections. These findings suggest that studies should pay attention to pre-morbid patterns of inter-language lexical connections that can remain potent in bilinguals with aphasia.

Since effective code-switching can function as a communicative strategy, research has also investigated PWAs' use of code-switching as a strategic

adaptation to enhance communication in inherently bilingual communities. Chengappa, Daniel and Bhat (2004) administered various sections of the Malayalam-English Bilingual Aphasia test (BAT) to investigate code-switching used by PWAs and neurologically normal bilingual adults in India. As they observed code-switching in the speech of both groups of participants, Chengappa and colleagues concluded that this bilingual behavior is appropriate in the context of the local speech community. Code-switching was only considered to be atypical where the increase in frequency of occurrence in a PWA's speech became disruptive. Bhat and Chengappa (2005) similarly compared this behaviour in Kannada- English bilingual Indian PWAs and neurologically normal bilinguals in conversation tasks. More code-switches were found in the first acquired language, Kannada, compared to English conversations. The PWAs also appeared to use spontaneous translation strategies. The authors highlight pause and hesitation behaviour before translation of English words into Kannada as evidence of a communicative strategy adopted by the PWAs. It is possible that since English has a higher social status for these bilinguals than their L1, the switch to English is preferred whereas a switch in the opposite direction is not. This observation brings into focus the influence of social factors in code-switching which remain relevant to PWAs.

In an attempt to train the use of code-switching as a communicative strategy, Ansaldo, Saidi and Ruiz (2010) introduced an intervention programme called Switch Back Through Translation (SBTT). This was based on observations of a Spanish-English bilingual PWA with word finding difficulties who showed evidence of compulsory /involuntary language switching in the context of conversations with monolingual partners. The authors noted that the PWA was aware of the language-switching deficit but could not prevent it even when instructed to do so. In this case, translation ability was better preserved than naming across the bilingual's languages. Ansaldo et al. (2010) account for this profile adopting Green's (1986) control framework (see section 2.2.2),

explaining the pathological switching as a result of insufficient resources to activate a target lexical item and inhibit any non-target items. Preserved translation ability is attributed to the different schemas or cognitive devices that are involved in naming versus translating. On this basis, Ansaldo et al. (2010) propose SBTT as a model-driven intervention where a speech and language therapist (SLT) would prompt the PWA to translate a code-switched item into the target language. In this manner, the PWA can exploit the unimpaired schema for translating and eventually learns to self-cue in order to switch back to the target language. They conclude that the model-based account of dissociation between naming and translation provides a rationale for developing a self-regulated strategy for dealing with “uncontrolled” code-switching in bilingual PWAs. An interesting question arises here as to whether individuals from linguistically diverse populations may spontaneously devise such strategies to adapt to deficits associated with bilingual aphasia. This issue is explored further in Chapter 3.

2.2 INFLUENTIAL THEORIES OF BILINGUAL PROCESSING

These long-noted observations concerning recovery patterns and code-switching have major theoretical implications for language representation and processing in bilingualism. Two complementary theoretical frameworks will be presented in this section: the neurolinguistic theory of bilingualism (Section 2.2.1) and the language control framework (Section 2.2.2). The pivotal piece of research that links these two theories was conducted by Pitres (1895). Pitres’ explanation of a “psychophysical mechanism of temporary inertia” (p.47) underlying the sequential recovery of different languages captures his dynamic perspective. Thus, Pitres identifies inhibition, and not damage to the system, to be the underlying reason for dissociation of languages in recovery. This notion of inhibition is the central idea underpinning both Paradis’ (2004) neurolinguistic theory of bilingualism and Green’s (1986, 1998) language control framework. These will now be reviewed in Sections 2.2.1 and 2.2.2, respectively. More

focus will be placed on the language control framework as it has direct relevance for this study.

2.2.1 Neurolinguistic theory of bilingualism

The neurolinguistic theory of bilingualism is an amalgamation of Paradis' work of over 25 years. Paradis (2004) proposed that implicit linguistic competence, explicit metalinguistic knowledge, pragmatic ability and motivation are four components of the verbal communication system. These jointly make it possible for intentions formulated in the cognitive systems to be realised. Adopting the distinction between declarative and procedural memory, Paradis (2004) discusses representation of competence and knowledge components. The implicit linguistic competence that is acquired from exposure to the environment is part of procedural memory, while explicit metalinguistic knowledge that is learned consciously is part of the declarative memory system.

According to Paradis (2004), damage to the functional system manifested as aphasia affects implicit linguistic competence, while metalinguistic knowledge remains unaffected. The PWA has to rely on three remaining mechanisms to communicate, namely; metalinguistic knowledge, pragmatic abilities and motivation. For instance, metalinguistic knowledge enables an individual to plan how to use gestures to compensate for limited linguistic resources, while pragmatic ability enables him or her to combine prosody with minimal verbal output to convey meaning. Motivation determines if the individual will use the available strategies or not.

This theory brings together several hypotheses. Firstly, the three-store hypothesis postulates two separate stores for sets of linguistic representation, with a third 'linking' conceptual store. Next, the subsystems hypothesis makes provision for each language to be represented as a subset of a larger language neurofunctional system. The languages of bilinguals are represented as

subsystems and the content is represented orthogonally to these subsystems. The activation threshold hypothesis explains that lowering of the threshold enables selection of a particular item from the others in the subsystem. Lastly, Paradis' direct access hypothesis explains how selection from the two subsystems is determined by lexical meaning. This makes access an automatic process.

By bringing these hypotheses together, the neurolinguistic theory of bilingualism shows how items represented separately in subsystems can be selected directly through automatic lowering of the threshold for corresponding items and simultaneous raising of the threshold for competing items. Paradis (2004) argues that this account fits with observations of aphasia, since impaired linguistic competence is not due to loss of language, but to raised activation thresholds that inhibit access.

2.2.2 Language Control Framework

Green and Abutalebi's (2008) language control framework establishes a causal link between control and linguistic performance. The origin of this perspective can be traced to Green's (1986) bilingual speech control framework which rests on three key constructs, namely control, activation and resources. Deficits observed in aphasia are attributed to failure to *control* the intact system. *Activation* of the internal representation of linguistic items is controlled by available *resources*. In this context, the term resources refers to energy that fuels the workings of the brain. Thus, these three elements are perceived to be central to linguistic functioning. Brain damage affects the availability of resources, which in turn affects regulation of activation.

More specifically, Green's (1986) Inhibitory Control (IC) model demonstrates how two language systems are regulated by resources that control activation. In bilinguals, one linguistic system must be selected and the other suppressed for

speech to be produced in the selected language. Activation of a system, for instance L1, can be achieved either internally or externally. When L1 is activated, it can exert external control over L2 to deactivate the competing system. Green (1986, p.217) postulates that in “speaking L1 spontaneously, L2 is *externally* suppressed whereas in translating from L2 to L1, the output of L2 is *internally* suppressed”.

Green (1998) revisits his ideas about the IC model in bilinguals. Comparing mental control of language processes with control of actions, he suggests the existence of *multiple levels of control*. The IC model is further clarified by introducing the concepts of task schemas, the lemma level and language tags. Task schemas refer to the procedures by which an individual performs tasks. It is at the level of task schema that output is controlled in order to regulate the competing linguistic systems. The selection of items in the system is controlled at the lemma level; i.e. the level of the conceptual form. Language tags are markers that set lemmas from different languages apart. Therefore, selection of a word is controlled by means of the language tags and this control can be both inhibitory and reactive. When one word is selected, it deselects its competitor/s. Thus, within the processing system of bilinguals, a delicate equilibrium of control systems is at work.

Pursuing the notion of bilingual language control, Green and Abutalebi (2008) distinguish a neural network representing languages from that of language control. The network for language is a shared one as it is an adaptive one. Thus, acquisition of the first language will utilize this network and acquisition of a subsequent language will adapt the same network. An ongoing process of adaptation results in convergence as proficiency in the second language increases. Management of this single network lies with the control circuit, which is a separate entity from the language network.

Green (1998) argues that other contemporary bilingual processing models have much in common with his IC model, but the IC model amplifies these aspects “by specifying the locus, the means and the mechanism of selection” (p.78).² Although Green’s (1986, p.210) framework and model started out as “a conceptual nervous system” and not an account of the underlying neural mechanisms, Green and Abutalebi (2008) turn to findings from neuroimaging studies to support their stance on the causal basis for different recovery patterns in bilinguals. For example, they report Fabbro, et al.’s (2000) MRI study of pathological switching, as leading to the identification of the control circuit. Green and Abutalebi (2008) contend that identifying causative links in this way will contribute to aphasia rehabilitation efforts.

A common criticism of Green’s language control framework is that code-switching which is a typical bilingual language behaviour, is not addressed. Green and Abutalebi (2013) propose the adaptive control hypothesis following a discussion on the effect of three interactional contexts i.e. single language, dual language and dense code-switching . They claim that the control processes adapt to the demands imposed by these context. For example, in the single language context where exclusive use of one language for interactions, linguistic intrusions must be avoided. In the dual-language context although specific language is used with different speakers, code-switching may occur so the bilingual speaker must limit interference to include some extent of code-switching. The third context, dense code-switching requires the speakers to adapt words from one of their languages and interleave them in single utterances. In the present study, the targeted conversation data would include the Malaysian bilingual PWAs’ natural interactions where each of the languages in their repertoire are used. Against the background of societal bilingualism in Malaysia it is likely that conversations in the home language and the other language may involve dense-code-switching and dual language contexts, respectively. Interactions outside the home occur less frequently and involve less familiar conversation partners. So it is expected that the natural

²A discussion of the other models of processing is not within the scope of this chapter.

interactions may provide opportunities to observe the PWAs responding to differing demands on the control process. This may potentially provide insights that can help differentiate between pathological switching and strategic switching reported in the literature (see section 2.1.2) .

In summary, the idea put forward in Paradis' (2004) neurolinguistic theory of bilingualism that a deficit in implicit linguistic competence may be compensated for by other components of the verbal communication system, is of direct relevance to this study. It highlights the fact that observed linguistic performance may not be a direct reflection of impairment but a result of compensation. It is important to bear this in mind in investigating manifestations of aphasia for the first time in the bilingual population in Malaysia. As these individuals are necessitated by societal bilingualism to maintain the use of the languages in their repertoire post-stroke, it will be relevant to revisit Green's (1986,1998) notion of control and inhibition in the light of the findings of this study. The next section reviews the methodologies used in studies of bilinguals with aphasia in order to identify issues that can inform the design of the present study.

2.3 METHODOLOGICAL ISSUES IN BILINGUAL APHASIA RESEARCH

From the early case reports of neurologists, bilingual aphasia research has always gained insights from a cross-disciplinary approach employing multiple methodologies. This section highlights some of the concerns about methodologies that have been adopted in this research area.

2.3.1 Systematic observations but no quantification in early case studies

Pitres' (1895) work is widely recognised as the first systematic study of aphasia in polyglots and bilinguals (see Green, 2008; Fabbro, 2001; Lebrun, 1995; and others). His case studies of more than a century ago reflect a systematisation of

observations and assessments. Pitres achieved consistency across case summaries by following a set format to record important details such as age, gender, and clinical features. Assessments of comprehension and expressive abilities are also reported in these summaries. His more detailed descriptions focussed on language acquisition and language use factors; these two variables became central to Pitres' rule. For one case study, Pitres supplemented his data with simple language experiments that involved testing the ability to recognize written words and phrases that would be common to the patient. Periodic assessment of this patient from six months post-onset enabled Pitres to identify distinct stages of recovery. Despite the systematic manner in which Pitres' carried out his study, evidence of recovery was presented without any kind of quantification. Other case studies that followed Pitres' work included findings from physical and neurological examinations and pathological investigations of the brain and lesion sites obtained from post-mortem (Pick,1903) as well as explorations of linguistic and psycholinguistic factors (Pick,1921; Minkowski, 1927; 1928 and others).

A lack of quantification in these early case studies made it necessary for Paradis (1977) to use estimates of conventional proficiency rates and time taken for recovery. This estimation may have compromised the accuracy of the graphs and extrapolations made for the various recovery patterns. By tabulating language status variables, namely mother tongue, most fluent language, and language of the surroundings, Paradis (1977) was able to explore correlations between these factors and recovery types. He demonstrated that the factors of primacy, fluency and usefulness all lacked predictive value. Even a multifactorial approach that considered other personality factors such as psychology, visual acuity, automaticity, severity of aphasia, and appropriateness, was unable to yield an all-encompassing rule to predict recovery in bilingual PWAs (Paradis, 1977).

2.3.2 Practicalities of assessing bilingual PWAs

Following reviews of the early case studies, formal assessment of linguistic abilities in all languages became an important focus of bilingual aphasia research. Recognizing the importance of this issue, Paradis and Libben (1987) designed the Bilingual Aphasia Test (BAT) to be an equivalent measure of linguistic performance in different languages.

The BAT aims to provide an assessment tool to aid further experimental and clinical studies in neurolinguistics. Part A of the BAT is a 50-item interview questionnaire for gathering information about the patient's language history. Part B begins with a 17-item interview on the patient's linguistic experience followed by elicitation of 5 minutes of spontaneous speech by asking a question about the patient's life. The other sections of Part B include linguistic tasks covering semantics, auditory comprehension, expression, reading, writing and arithmetic, for example: auditory discrimination, syntactic comprehension, naming, sentence construction, mental arithmetic, text listening comprehension, reading words aloud, and spontaneous writing. Pictorial stimuli accompany the items where relevant. In this manner, BAT covers both different linguistic levels and linguistic modalities in order to provide assessment of the patient's linguistic abilities in two or more of his or her languages. Part C includes items that test the patient's translation abilities, including word recognition, translation of words, translation of sentences and grammaticality judgements.

Recognising potential problems with the length of the test, Paradis and Libben (1987) also give suggestion for a shorter version. The test aims to make possible cross language comparison but does not attempt to assess communicative competence. The BAT is currently available in 150 languages and covers 65 language pairs but this does not include the variety and dialects of the languages spoken in Malaysia. The writers of the test have selected items and pictorial stimuli that will ensure cross-linguistic equivalence as well as

cultural relevance. Further suggestions are also made about adapting the test for new language combinations. (See Paradis, 2011 for a comprehensive review of recent development of the BAT and adaptations).

2.3.3 Reliability and validity of conversational discourse data

Conversational data appear to have been explored since the beginning of research on bilingual aphasia. From the repeated references to ‘conversations’ in Pitres (1895), it may be that inferred spontaneous speech was assessed based on Pitres’ own conversations with his patients (details of this process of eliciting language are not provided). In describing these exchanges Pitres mentions patients’ use of intonation and gesture. Pick (1903) continued Pitres’ meticulous procedures for documenting conversations with patients. For example, Pick drew from a report of a German-Malay bilingual child who retained prosodic features of the second language long after he had forgotten that language. This is of particular relevance here not only because it refers to one of the languages of the present study, but precisely because linguistic elements such as prosody can give clues about interactions between linguistic systems of bilinguals. And these elements become highlighted in mundane everyday conversations.

More recently, conversational discourse has been examined in Muñoz, Marquardt, and Copeland’s (1999) attempt to evaluate occurrence of code-switching as a specific deficit in bilingual aphasia. The context of the conversation, with pre-selected topics and assignment of language specific roles to the conversation partners, compromised the naturalness and validity of the conversation data in this study. Nevertheless, their findings give an important insight into the complex nature of code-switching and the limitations of using an “appropriateness” measure to identify deficits.

In a later experimental study, Muñoz and Marquardt (2004) again attempted to sample conversation by assigning language specific roles to the conversation partner, to control the linguistic environment. This again raises the question of validity as linguistic identity is not perceived solely on the basis that the person is producing utterances in only one language. Especially in populations where bilingualism is the norm, restricting the conversation partners' language mode will not create a genuine necessity for the PWA to avoid code switching. Muñoz and Marquardt (2004) rightfully acknowledge that although the bilingual partners had been instructed not to respond to utterances in languages other than those in which they were speaking, they could have inadvertently displayed comprehension via gesture or prosody.

In summary, conversation is perceived by researchers to provide authentic data in which to explore manifestations of bilingual aphasia, but often the procedures used in collecting conversation data can raise issues of reliability and validity of the findings.

2.4 CONCLUDING REMARKS

This review chapter has highlighted two key phenomena that have been the focus of bilingual aphasia research from the beginning of aphasiology - recovery patterns and code-switching. Dissociations in the languages of bilinguals established from recovery studies were believed to hold the key to our understanding about language representation and processing in the bilingual brain. Yet a typology of language recovery patterns derived from the accumulated evidence does not appear to have predictive value. Many factors have been suggested to influence the patterns observed, and attempts have been made to postulate rules of recovery based on these factors. However, even a multifactorial approach has failed to yield a single generic rule to account for differing recovery patterns. This underlines the marked heterogeneity in bilingual aphasia. As a result, in this first ever exploration of

aphasia as it manifests in Malaysian speakers, who commonly have two or more languages, it is clear that a wide-angled qualitative approach needs to be taken. In a study of such individuals, it is necessary to collect data pertaining to the various factors identified in the literature. Thus, interviews must accumulate as much information as possible about language acquisition history, pre-morbid and post-onset proficiency levels and patterns in language use.

Findings about different recovery patterns also make it imperative to examine all the languages in a bilingual speaker's repertoire in trying to understand the manifestation of aphasia in the Malaysian population. This is particularly true for language pairs that have received little research attention. A novel finding about dissociation at the linguistic level reported in Hindi- English in Venkatesh et al., (2012) shows that in typologically dissimilar languages, there can be differences in a PWA's syntax profile. Therefore, language structure or typology of the languages of the bilingual is another factor that needs to be accounted for. This is relevant for the present study because the languages of Malaysian bilingual PWAs are established to be linguistically distant. Not only is there a difference in terms of the structure of the topic-prominent Malay language and the subject-prominent English language, but also in terms of the degree of shared vocabulary. (See Chapter 1, Section 1.1.2 for details about languages used in Malaysia). It is imperative to account for these differences in studying manifestations of aphasia in languages and language pairs that have received little research attention.

Code-switching is a well-documented practice in the linguistically diverse population of Malaysia. This review of the literature has highlighted code-switching among bilingual PWAs as a phenomenon that has received much attention. Following the prevailing approach to treating code-switching as a shortcoming in (neurologically normal) bilinguals, initial investigations approached code-switching in aphasia as pathological switching. Other approaches identify code-switching in aphasia as a deviant behaviour resulting

from compromised grammatical ability. However, some studies found no evidence of deviance and their findings suggested code-switching can be a communicative strategy in typical conversations. Given this, it might also be considered an effective adaptation to bilingual aphasia. In the Malaysian population, there may be a strong case for this as bilingualism is not a minority issue but a commonly practiced strategy. Studies that have investigated code-switching in the conversations of both non-impaired speakers and those with aphasia (and other conditions) will be reviewed in Chapter 3.

Theoretical implications drawn from observations of bilingual PWAs give us insights about bilinguals in general, and also about how the system can fail in cases of aphasia. The dynamic perspective shared across the theoretical frameworks reviewed here suggests that the language processing system itself may not be damaged in PWAs but inhibited. Thus, it will be essential to document what is evident in naturally occurring conversations and revisit both Paradis' (2004) neurolinguistic theory and Green's (1986) IC model. Paradis' contention that intact components of verbal communication can be used by PWAs to compensate for a deficit in implicit linguistic competence is of relevance to this study. It is also essential to investigate Green's notion of the delicate equilibrium of the control system that regulates activation of one language and suppression of the other, because the use of code-switching and lectal variations are documented norms in the Malaysian population. The present study will explore resources that remain useful to the Malaysian bilingual PWA who essentially interacts on a daily basis in contexts that require or allow for the use of single language, dual language or dense code-switching.

Methodological issues in bilingual aphasia research reviewed here suggest that the case study approach is particularly suited for the present endeavour, a first study of aphasia in the linguistically diverse population of Malaysia, where no formal tools of assessment currently exist. Data from the bilingual PWAs must account for the different languages in their repertoire. Conversations in their

home language can be recorded with the PWAs' regular conversation partners while a conversation partner with whom they reportedly use a language other than the home language will also have to be recruited to participate in this study. Selection of partners from a PWA's existing social network aims to avoid issues of validity that arise when pre-selected conversation partners are assigned language specific roles.

Quantification is likely to remain an issue since assessment tools are not yet available for the target population, let alone equivalent assessment tools in the languages of these bilinguals. The BAT (Paradis & Libben, 1987) has been adapted for more than 65 language pairs but this does not include the variety and dialects of the languages spoken in Malaysia. There is one newly developed tool, the mBNT Naming Test, standardised for the Malaysian population which will be adopted for assessing the bilingual PWA's language ability (see Chapter 4 for details).

In summary, given the constraints imposed by the linguistically diverse society within which this study is set, the relative infancy of aphasiology in Malaysia, and the conflicting nature of the bilingual literature, an appropriate way to proceed is to investigate manifestations of aphasia by analysing naturally occurring conversation. Importantly, this will provide findings of high ecological validity. The next chapter will present an overview of the principles of Conversation Analysis (CA), the method to be used, and review the CA literature on bilingual interactions of non-impaired speakers, and of speakers with aphasia (and other conditions). It will also review CA studies of monolingual aphasia.

3 Conversation Analysis, Bilingual Interactions and Aphasia

3.0 INTRODUCTION

This chapter provides an overview of the methodological principles of conversation analysis (CA), and key findings of CA studies that provide the framework for the present study. It begins with an overview of typical conversation with reference to sequence and turn organisation, and repair, followed by findings for bilingual interactions, particularly concerning the use of code-switching. The next section draws together findings from CA investigations of aphasic conversation and includes a cross-linguistic comparison of CA studies of aphasia. The final section looks at CA studies of bilinguals with aphasia and other related language disorders, and highlights the gap in CA research on bilingual aphasia. At the time of the present study, there is a dearth of CA studies on the languages spoken commonly among typical bilinguals in Malaysia i.e. Malay and Malaysian English. As a result, this review makes a case for adopting the CA approach in this explorative study of bilingual PWAs in Malaysia.

3.1 PRINCIPLES OF CA

CA approaches conversation as a systematically organised social activity. Sacks' attempt to transform the study of sociology into a naturalistic, observational science has been recognised as the methodological roots of CA (Hutchby & Wooffitt, 2008). Positioning of a participant's talk within the context of the on-going conversation, i.e. the natural environment of occurrence, reveals the orderly manner in which talk-in-interaction is structured as a coherent whole. The central claim of this methodology is that explorations of naturally occurring conversations

can provide an ecologically valid explanation of how the organisation of a particular social activity is accomplished by conversation partners.

One of the basic tenets of this approach is that analysis is data-driven and participant centred. Authentic conversation data is recorded and transcribed for the purpose of cyclical review and scrutiny of the interactional minutiae. The analytic procedure itself begins with the process of transcribing the participants' turns-at-talk. Phenomena of interest in conversation data are identified on the basis of the participants' orientation to these as relevant occurrences and not according to the analyst's a priori assumptions about norms and conventions. CA aims to discover procedures used by participants to construct and interpret each turn-at-talk as the conversation unfolds.

The identification of recurring patterns is used to demonstrate regularities in the data. "Generally the analyst will also take steps to demonstrate that the regularities are methodically produced and oriented to by the participants as normatively oriented-to grounds for inference and action." (Atkinson & Heritage, 1984, p. 2). Quantification of recurrence via frequency counts is used in some branches of CA, such as the examination of doctor-patient interaction, but is approached with caution by traditionalists. The objective of analysis is not to assume generalisation of findings to wider populations but to make links to findings of other studies that can serve as a point of reference. In this manner, CA continues to evolve as a means for investigating cross linguistic interactions and also for carrying out interdisciplinary studies. Inductive analysis of recurrent patterns of use of resources to construct turns has uncovered the organisational principles underlying sequences, turn taking, adjacency pairs, and repair. These CA principles and related concepts will be discussed in the following sections before key findings from typical conversations that guide the present study are reviewed.

3.2 SEQUENCE ORGANISATION

Turns that constitute a sequence are organised on the basis of the action that is accomplished by the individual turns. *Actions* refer to the tasks that a turn is designed to implement (Schegloff, 2007), for example, topic proffer, comment, assessment. The placement of a turn vis-à-vis other turns in a sequence determines the outcome of the action that it is intended to implement. A turn may be designed to initiate a sequence if it occupies the first turn position in a sequence. First position turns often set up an expectation that a specific next turn will follow, making a minimal sequence called an *adjacency pair*, consisting of a first pair part and a second pair part. Each utterance in such a pair is produced adjacently by a different speaker. The completion of the first pair part *sequentially implicates* the production of the second pair part from the same pair type as the first. Examples include question-answer, offer-acceptance/rejection, greeting-greeting (Sacks & Schegloff, 1973). Sacks (1992: Vol. II, Spring 1972, Lecture 4, p.554) explains that for utterances positioned next to each other, their adjacency is oriented to as a 'tying technique', and he refers to this notion as *sequential implicativeness*.

Hutchby and Wooffitt (2008, p. 46) highlight that "another inferential aspect of adjacency pair sequences stem from the fact that certain first pair parts make alternative actions relevant in second position... these alternatives are non-equivalent.". Therefore, there is a system of organising *preferences* for the alternatives that are available for the different first pair parts. The concept of preference is not a psychological construct; it is an interactional phenomenon concerning the design of turns associated with a particular course of action. Preferred second pair parts are usually delivered promptly while dispreference is typically marked with hesitations and delay. Accountings, or talk that justifies a certain action performed via the turn, often follow a dispreferred turn. Thus, sequence organisation involves organisation of turns into adjacency pairs, and preference organisation. These two phenomena affect the establishment of

mutual understanding, or intersubjectivity (Schegloff & Sacks, 1973). In other words, second pair parts in adjacent turns display that intersubjectivity has been accomplished. According to Schegloff and Sacks (1973, p.229), interpretation of the subsequent turn is guided by the question 'why that now', especially if divergence from preference organisation occurs.

3.3 TURN ORGANISATION

Sacks, Schegloff and Jefferson (1974), in their seminal paper, offer an approach for studying turn organisation as a social system. They propose a model for explaining the systematic distribution of turns in typical conversations, in which they introduce two core components: *turn construction* and *turn allocation*. In the English language, they posit, a turn construction unit (TCU), can be realised through different unit types ranging from sentences, clauses, and phrases to lexical items. One key feature of a TCU is *projectability*, whereby a TCU is internally structured to signal what is to be the relevant next item. Completion of a TCU opens what Sacks, et al. (1974) refer to as a *transition-relevance place* (TRP); i.e. a possible point for change in speakership.

The system of turn allocation and turn taking is governed by a set of rules (Sacks, et al., 1974). The base rule stipulates that the transfer to next speaker can happen when current speaker selects next or next speaker self-selects. When neither of these occurs, current speaker may continue; in this case no transfer takes place until a next TRP is reached. This is a *local management system*, in which the first priority is for current speaker selects next, so participants in an interaction collaborate over the distribution of turns. In order for this to work, turns have the inherent feature of *recipient design*, i.e. they are "designed in ways which display an orientation and sensitivity to the particular others who are co-participants." (Sacks, et al., 1974, p. 727).

Progressivity is another inherent feature of turns. This term is defined as a preference for "next parts" in a TCU to be produced in a timely manner (Schegloff,

1979, p.268). Lerner (1996) suggests that preference for progressivity provides for progression of a TCU towards completion either by means of sequential or serial adjacency. Sequential adjacency concerns the grammatical links that underlie the successive production of next words in a turn, while serial adjacency accounts for the cohesion of a word with a next word.

Sacks et al. (1974) defined TCUs to be constituted from words, phrases or sentences and in so doing placed grammar as the central resource for turn organisation. Recent research reinforces the critical role of grammatical resources (Schegloff, 1996; Fox & Thompson, 2010), as well as highlighting the importance of other resources such as prosody (Selting, 1996; Ford & Thompson, 1996), pragmatics, and non verbal behaviours such as gaze (Goodwin, 1981). Grammar and prosody will be discussed below.

3.3.1 Grammatical resources for turn organisation

CA views language as a grammatical system that is shaped by the context in which it is used, i.e. the turn at talk, and at the same time influences the shape of that turn. Schegloff (1996, p. 53) defines turns-at-talk as the “key proximate organisational niche into which bursts of language are introduced, and to which they may be expected to be adapted. And grammar is one of the key types of organisation shaping these bursts.”.

It is Schegloff’s (1996) contention that there is a two-way relationship between grammar and interaction, in the sense that each can organise and be organised by the other. He substantiates this claim by citing examples of particles, tag forms, single-word answers and pre-sequences which take on a particular grammatical function based on their position within a TCU, and the position of the TCU itself within a turn or sequence. As some unit types are expected to occur in certain positions in a turn, Schegloff introduces the term *positionally sensitive grammar* to account for the TCU types recurring in particular conversational loci. He suggests that lexical and phrasal TCUs are likely to appear in next turn positions following

questions and thus be “symbiotic with” and “parasitic on” (Schegloff, 1996, p. 63) the prior turn.

Exploring this notion of grammatical fit, Fox and Thompson (2010) investigate responses to *wh*-questions in American English conversations. Their finding that phrasal responses “do simple answering” and therefore are the preferred form is supported by the observation that no trouble was indicated in the sequences where these response types occurred. They found neither prefaces nor delays preceding phrasal answers to *wh*-questions. Accountings did not follow such productions either. In contrast to this pattern, delivery of clausal answers to *wh*-questions was preceded by delay and prefacing while accountings also expanded on such answers. Fox and Thompson thus concur with Schegloff’s (1996) claim that grammar is positionally sensitive and suggest that “lexicogrammatical fittedness between phrasal responses and *wh*-questions is nicely correlated with their social ability to do simple answering as seconds to *wh*-questions” (2010, p. 153).

It seems possible that the grammatical system of the non-native variety of Malaysian English, which has been documented to include features such as copula omission and pro-drop, may also have been shaped by the context in which it is used. The influence of the substratum languages of the linguistically diverse Malaysian population has been speculated to contribute to patterns such as topic-comment structure, which is common in topic-prominent languages (Baskaran, 2004). However, how speakers themselves orient to these adaptations has yet to be explored. Koh’s (1990) account of the grammar of colloquial Malay, a variety commonly used in conversation, reveals that topic-comment structure is more common in conversation than in Standard Malay (refer to section 1.4.1.1 for features of Malay). However, it must be noted that Koh’s data come from conversations that appeared in cartoon strips.

The next section examines what we know about topic-comment structure from CA studies of typical conversations in the English language.

3.3.1.1 Topic-comment structure

Topic-comment structure is a distinctive grammatical turn construction resource in conversation. This combination of a topic (one that sets the theme of the discourse) and a comment about the topic is suggested to be a distinguishing feature that sets topic-prominent languages apart from subject-prominent ones (Li & Thompson, 1976). Topic-comment structure is said to be less common in subject-prominent languages like English. According to Li and Thompson (1976), topic-prominent languages share additional features such as surface structure coding for topics. For example, in some of these languages, definite noun phrases occur as topics in sentence initial positions and appear to control co-referential pronouns from these positions. They also report that dummy subject sentences and passive constructions are rare in topic-prominent languages while double subject constructions such as in the following example occur commonly as topics:

Neike shu yezi da (Mandarin)
that tree leaves big
"That tree (topic), the leaves are big.

(Li & Thompson, 1976, p.469)

Keenan and Schieffelin (1983) also discuss a similar structure that they refer to as the "referent + proposition" construction where "some referent is specified initially and is then followed by a proposition relevant in some way to this referent." (1983, p.158). Auer (1984a) demonstrates that in first position turns in the German language, a topicalised referent can be marked as potentially problematic with expressions like *kennst du X* (do you know X). Recipient techniques that include the use of continuers to signal recognition are used to display fit or lack of fit with recipient background knowledge. If there is a problem in recognising the referent, simple question particles and general repair initiators like "hm?" or "was?" (what) can be used in second position turns. Since these minimal responses do not interrupt the progress of the conversation, they constitute a useful intermediate strategy for responding. In this way, establishing a mutually recognised referent

becomes a sequence in its own right (Auer, 1984a), which involves interactant collaboration.

Geluykens (1992) reports on a conversational phenomenon akin to topic-comment structure called left-dislocation, or fronting. This construction achieves the conversational action of introducing a referent through a collaborative process broken into three stages, i.e. a speaker introduces a referent, a hearer acknowledges the referent, and finally the speaker incorporates the referent into a subsequent proposition by means of a pronominal such as a co-referential pronoun (Geluykens, 1992). Although these structures are not a common occurrence in English, Geluykens (1992) reports uses of fronting in typical English conversations that include contrasting or invoking already mentioned references, or raising alternatives.

In summary, the deployment of topic-comment structure as a turn construction resource in typical conversation depends on collaboration between the participants. It thus displays how language is adapted to turns-at-talk, and how turn construction is also an adaptive process.

3.3.1.2 Co-construction of turns

Another locus where the role of grammar as resource for turn organisation becomes apparent is the construction of single turns initiated by one speaker and completed by another. Focusing on collaborative construction of what he calls a compound TCU, Lerner (1991, 1996) shows how a preliminary component can project a possible form for the final component. Lerner (1996) suggests that the projectability of the turn final component provides a conversation partner with opportunities for conditional entry into a current speaker's turn. An example of a compound TCU is the 'if-then' structure, where the 'if' clause delivered first projects a 'then' clause that can be completed by the collaborating conversation partner because its meaning is often highly projectable.

Lerner and Takagi (1999) explored cross-linguistic differences in this practice by extending the investigation to Japanese. They assume Japanese will reveal grammatical constraints on co-construction as it is a structurally different language from English; the language in which much of the exploration of co-construction has taken place. They found that in many cases, the initial element of (Topic + wa) in the Japanese language projects a comment to follow. They only found a difference in the 'not X but Y' construction where Japanese appears to project the final element with a negative marker positioned after the referent X. Helasvuo (2004) extends the exploration into Finnish, a language characterised by a rich inflectional system, to uncover a pattern which includes co-construction of predication, assessment, characterising phrases and compound nouns. This cross-linguistic evidence shows that grammar can be adapted to interaction and can also influence the shape of interaction. Grammatical resources are clearly important in turn organisation but as the next section reveals, prosody is also key.

3.3.2 Prosodic resources for turn organisation

Prosodic cues are one of a cluster of resources that also includes gaze and gesture, which indicate the end of a turn and open up a TRP. Sacks et al. (1974) in suggesting that a TCU can take the form of a single word, demonstrate that the grammatical entity of a single word can become a complete TCU by virtue of the intonation of its delivery. Auer (1996) argues for the contextualising function of prosody in German with examples of turn expansions beyond syntactic completion points. According to Schegloff (1996), increments to turns that have reached a TRP can be made in a linear manner using prosody. Selting (1996) meanwhile shows that in German, while turn ending is marked with falling or rising pitch, turn holding is indicated with mid level pitch. Ford and Thompson (1996) report a similar strategy is used in American English. They also argue that intonational, syntactic, and pragmatic phenomena cluster at points where transition is relevant. Selting (2000) explains that the local projection of "more to come" is accomplished through a prosodic marking of turn-holding with level pitch accents.

Prosodic cues in Malay conversations were investigated for the first time by Zuraidah (1996) using a corpus of radio broadcast interviews. In a related paper, Zuraidah and Knowles (2006), investigate prosodic cues at transition points that signal turn holding, or turn-yielding, and turn-competitive incoming. They find that turn ending is marked by pre-final lengthening that begins on the penultimate vowel, by a drop to low pitch, and by a fall in loudness. This is followed by the next speaker taking a turn with minimal gap between the turns, which suggests that turn ending is signalled to conversation partners via these prosodic features (Zuraidah & Knowles, 2006).

The same authors state that turn competition in Malay conversation is marked with different prosodic features depending on whether it is a competitive or non-competitive incoming (Zuraidah, 1996, Zuraidah & Knowles, 2006). They find a combination of high pitch, loudness and slow tempo aids in securing the turn in competitive incomings. Comparing their observations with what has been reported for the English language, Zuraidah and Knowles (2006) conclude that Malay signals display only superficial differences. However, as Malay typically uses a narrow range of pitch, they note that this can make prosodic patterns difficult to identify and may give the impression that prosody does not play a significant role in Malay conversation.

3.4 REPAIR ORGANISATION

Another important concept in CA is termed repair, a mechanism concerned with the resolution of *trouble* in turns. Schegloff, Jefferson and Sacks (1977), in their seminal paper, define a trouble source as a point in a turn that is oriented to as repairable. Repair itself includes two components; initiation and completion. Following this division, Schegloff et al., (1977) identify four types of repair organization, namely, self-initiated self repair (SISR), self-initiated other repair (SIOR), other-initiated self repair (OISR) and other initiated other repair (OIOR). Here 'self' refers to the speaker whose turn contains the trouble source, and 'other'

to the conversation partner. An interactional (rather than a psychological) preference is noted for self-initiated-self repair, as this provides for a swift resolution to trouble by a speaker of a trouble source, thus saving face, while other repair is *dispreferred*; marked for example with hesitations and delay.

Repair organisation involves identification of the trouble source within a turn-at-talk i.e. initiation of repair is the first action in a repair sequence. This first action can appear in the same turn as the trouble source. Repair can be initiated either pre-positionally (before a trouble source occurs), as a word search, or post-positionally after completion of the turn (Schegloff, et al.1979). Goodwin and Goodwin (1986) suggest that gaze and gesture are key features of solitary word searches. Post-positional repair can also be initiated in the next turn by the conversational partner.

Zuraidah (2007), in her report on parentheticals in repair sequences in Malay, provides interesting examples of how expressions such as 'apa tu' (what is that), 'apa ni' (what is this), 'apa nama' (what is the name) are marked off from the primary utterance by means of a pause and overall lowering of pitch. These expressions appear to initiate self-repair, and although the trajectory of the turns that follow is not explored in Zuraidah (2007), the excerpts included in this paper reveal that self-initiated repair is resolved in the same turn. Thus it appears that this prosodically marked expression may have been used as a metalinguistic comment that enables a speaker to hold on to the turn while resolving their word finding difficulty. Cross-linguistic difference in the management of repair was explicitly investigated by Lerner and Takagi (2004) and it was found that differences in the grammatical structure of languages do not contribute to differences in repair structure.

In summary, Sections 3.3 and 3.4 illustrate that patterns of turn construction, turn-taking and repair both converge and diverge across languages. Specifically, repair organisation appears to be independent of language, whereas turn construction resources appear to be influenced by the grammatical structure of the language in

question. Exploration of resources for turn organisation by bilingual speakers is a relatively new area of study in the CA field. This will be discussed in the following section.

3.5 CA STUDIES OF BILINGUAL INTERACTIONS

Given what we know about the sequential organisation of turns and the accomplishment of social action in typical monolingual conversations, it is natural to ask how the availability of more than one linguistic system influences the deployment of interactional resources. To date, alternation between languages (termed code-switching here) has been investigated largely from a perspective of psychological processes and social motivations that drive the practice³. However, recent CA research suggests that our understanding of code-switching can be enhanced by adopting the sequential approach advocated by this method. This section will present a review of CA studies of code-switching, highlighting its uses as a resource for turn organisation and for indexing identity.

3.5.1 A CA approach to code-switching

In what has now come to be recognised as seminal work in the area, Auer (1984b) proposes a model of bilingual conversation that accounts for alternation between the languages of the interacting bilinguals. He asserts that the overarching principle of *sequential implicativeness* guides language choice in bilingual conversations; language used for the construction of a turn or a part of it influences language choice for subsequent turns constructed by either the same participant or the next speaker (Auer, 1984b, p.3). Thus, the interactional features of code-switching are best approached from the perspective of *members own procedures*.

³ Auer (1984b; 1999) subsumes code-switching under the umbrella term language alternation but for the present purposes, code-switching is used as a general term for referring to the occurrence of elements from different languages in turns-at-talk.

The CA approach to code-switching that Auer (1984b) adopts appears to be aligned to Gumperz's (1982) theory of contextualisation. In this theory, societal convention for language use is the backdrop against which code-switching is explored. The meaning potential of code-switching is gauged on the basis of the societal norm. For example, the convention of using a specific minority language for interaction within an ethnic group, and contrasting this against the majority language, can invoke a dichotomy of "we-they" code to correspond with the in-group and out-group in a bilingual society (Gumperz, 1982; Blom & Gumperz, 1972). Thus, switching to the majority language in a conversation among a minority group can function as a contextualisation cue, in the same way that prosodic features, gaze and gesture can contextualise meaning. Despite this, Gumperz (1982) warns that a linear one-to-one relationship between the content of an utterance and the language in which it was uttered does not exist. Auer (1984b) contributes to the resolution of this issue by introducing the participant perspective into the interpretation of such cues. Thus, examining the locus of code-switching and a conversation partner's orientation to the behaviour can help to identify the action it accomplishes. Auer asserts that sequential analysis can demonstrate the contextualisation accomplished via code-switching without invoking external factors or macro-level social norms.

Auer's (1984b) distinction between discourse-related and participant-related alternation provides an alternative to the 'we-they' dichotomy. It does not invoke reference of societal norms but parallels may be drawn with the dichotomous concept of situational and metaphorical switching originating from Blom and Gumperz's (1972) work on Norwegian bilinguals. Situational switching refers to switching according to the social event. For example, code-switching can be deployed to introduce a new topic of talk. So, discourse-related alternation and situational switching can work as a resource for organising conversational actions. Metaphorical switching, on the other hand, adds another layer of meaning to the talk, and thus is similar to participant-related alternation. The point of departure for Auer's dichotomy is the shift in focus away from the rules stipulated by norms in

the society. His sequential approach advocates looking at the locus within a conversation where a switch occurs, and accounting for the significance of the switch on the basis of a conversation partner's response.

Auer (1995) summarises the different actions accomplished in various conversational loci where switching occurs to include the following:

- (i) *reported speech*
- (ii) *change of participant constellation*, particularly addressee selection- this includes the used of code-switching in order to include/ exclude/ marginalize co-participants or bystanders
- (iii) *parentheses or side comments*
- (iv) *reiterations*, i.e. quasi-translations into the other language, for example for the purpose of clarification, or for attracting attention, e.g. in the regulation of turn-taking (also called 'translations', 'repetitions' or 'recycling')
- (v) *change of activity type*, also called 'mode shift' or 'role shift'
- (vi) *topic shift*
- (vii) *puns, language play, shift of 'key'*
- (viii) *topicalisation, topic/ comment structure.*

(Auer, 1995, p.120, italics in original)

However, he cautions that *a priori* categorisations based on patterns of use can be problematic because they suggest that code alternation should have the same conversational status in both directions, i.e., from language A into B or vice versa. Such interpretations depend on 'episode-external' preferences of speakers for one language or the other, or community norms for that particular kind of interaction.

The practice of switching between the languages in an individual bilingual's repertoire shows that in bilingual communities, there is a "cline", or continuum, from pragmatics/discourse to grammatical structure. There is a tendency for the two linguistic systems to amalgamate into one. Based on this observation, Auer (1999) proposes a typology of bilingual speech which accounts for the dynamic nature of language alternation. This typology represents the continuum from prototypical code-switching (CS) to language mixing (LM) and fused lects (FL). In, CS, the contrast between one code and the other is meaningful, and can be interpreted by participants as indexing either some aspect of the situation (discourse-related) or feature of the code-switching-speaker, such as diverging language preferences

and competences (participant-related). In LM, alternational and insertional strategies converge so it is difficult to identify the language of interaction. In FL, the grammatical structure becomes sedimented and a mixed variety emerges as a single language. As this is an evolving process, a bilingual community may stabilise at a certain point on the continuum. It appears that Baskaran's (1987; 1994; 2004; 2005) documentation of the lectal cline for Malaysian English is an example of a similar typology. (See section 1.1.1 for these and related studies on English used in the linguistically diverse Malaysian population).

Li Wei (2002) demonstrates that, in order to explain the meaning of code-switching in bilingual interactions, the 'how' question must precede the 'why' question. As does Auer, Li Wei makes a case for detailed turn by turn analysis of participants' conversational work, because issues such as attitude, preference, and community norms are often "brought about" (Li Wei, 2002, p. 168) through code-switching. In his work on the interactions of Chinese families, Li Wei shows that both the language preference of speakers from different generations, and the authority structure, can be alluded to through the language choices of participants at strategic points as a conversation unfolds. Among the criticisms that Li Wei addresses is the unwillingness of the CA approach to invoke "obvious" factors like identity, power relations, rights and obligations, participant motivations, the institutional context of the interaction, and the wider social context, socio-psychological associations and others. He shows how a turn by turn analysis can bring into focus such factors, citing an example of a turn where the switch to another language is preceded by a long pause to signal a dispreferred second pair part. The diverging language choice, thus reinforces this display of dispreference because the conversation partners differ in terms of their language preference. Both resources accomplish the same action of indexing dispreference but code-switching brings into focus identity ascribed to the adult in this intergenerational interaction. According to Li Wei, such occurrences support the claim that code-switching can constitute a cluster of factors and resources that organise turns.

Li Wei (2002) argues that three fundamental issues need to be considered when analysing conversational code-switching: (1) relevance, (ii) procedural consequentiality, and (iii) the balance between social structure and conversational structure. Relevance here refers to the impact of code switching being demonstrably relevant, that is, on the basis of a conversation partner's response. Next, the participants in the conversation themselves have to orient to and display procedural consequence of the extra-linguistic factors related to the ongoing interaction. Thirdly, the analyst must be able to demonstrate how elements of social structure such as authority and attitude influence the structure of the interaction. Thus the emphasis is on finding evidence from within the conversational episode itself.

Gafaranga and Torras (2002) also attempt to redefine code-switching by adopting a participant perspective, in order to avoid a monolingual bias. They claim this bias exists in research that adopts as a starting point the notion of preference for one language in interaction. Since interactions can occur in an inherently bilingual medium, looking at how the participants orient to alternation can provide clues for defining code-switching. Participants may treat language alternation as a typical occurrence (as in the bilingual medium) or as a deviant form that requires repair. Gafaranga (2000) introduced the idea of *mot juste*, where a speaker has problems finding the right word to convey what they want to say, and thus switches to the other language in such instances. In this case, participants may repair the medium or treat it as 'other language', where the medium has been switched or suspended. Thus, four categories can be identified : "language alternation itself as the medium, medium repair, medium switching, and medium suspension" (Gafaranga and Torras 2002,p.19). According to the authors, orientation to interactional otherness becomes a defining feature of code-switching. Code-switching is therefore redefined as "*any instance of deviance from current medium which is not oriented to by participants as requiring any repair.*" (Gafaranga & Torras, 2002, p.18, italics in original).

The most significant contribution of this approach to defining code-switching becomes apparent in Gafaranga's (2012) attempt to systematically describe the relationship between language alternation and repair. He documents a potential for language alternation to occur at any locus in the repair structure from the initiation to implementation of repair. Observed patterns of occurrence suggest that language alternation can be either the focus of repair or a resource for organising the repair (Gafaranga, 2012). The question of what language alternation accomplishes in repair sequences reveals distinct functionalities of this resource. When language choice is the problem that requires repair, alternation can be used to initiate repair, to implement repair and also to indicate failure of repair. In cases where repair is organised via language alternation, it can be a resource for organising self-initiated other repair or to help speakers to deal with problems in using their other language.

In summary, research on bilingual interactions has led to the development of several different typologies of code-switching. These confirm the importance of examining the occurrence of the resource within the locus of turns and sequences, as CA permits us to do, to gain insights about interactional motivations for such practices. A sequential approach appears to offer a socially valid explanation from a participant's own perspective; this has high ecological validity. The approach is also able to accommodate variations across communities, from emergent bilingual communities where language choice is related to linguistic competence or identities to relatively stable communities, where shared norms have been established (Auer, 1984b). The next section discusses findings from studies that investigate the actions accomplished through the deployment of code-switching as a resource for organising talk-in-interactions.

3.5.2 Code-switching as an organisational resource

Important research in communities undergoing language shift has shown that code-switching can be used as a resource for organisation of preference and repair. In an investigation of code-switching practices across three generations in a

Chinese community in Tyneside, UK, Li Wei and Milroy (1995) show that the participants' differing preferences for and abilities in Chinese and English influence the use of code-switching in their interactions. They found that preference organisation in an offer-refusal sequence can be accomplished by means of a contrastive choice of languages in consecutive turns. Similarly, repair initiation done in a language that is different from the language of the turn can contextualise the action that is to be accomplished. Implementation of repair via translation equivalents that replace the trouble source is another way that repair is organized in this community (Li Wei & Milroy, 1995). Having observed deviation from a generational language choice norm, for example in order to accomplish an indirect request, Li Wei and Milroy conclude that "the relationship between code-switching structure and community-level language preference is not a simple one-to-one relationship" (1995, p. 297). This implies that language choice in conversation can only be interpreted by looking at how the speakers themselves arrive at a local interpretation within a sequence of turns. Li Wei and Milroy (1995) conclude that code-switching is an additional resource for managing conversation.

The question of how code-switching accomplishes the action of organising turns and sequences is further addressed in Li Wei's (1998) paper on Cantonese-English bilingual conversations. He finds evidence that a code-switch can function to index a pre-sequence following the closure of a preceding sequence. In addition, as in Li Wei and Milroy (1995), he argues that dispreferred second pair parts in certain adjacency pairs can be contextualised with code-switches in much the same way as pauses and hesitations are used in monolingual conversations. Finally, Li Wei, shows a contrastive code selection to be a resource for signaling turn taking. This resource serves the function of aligning with a particular speaker, and is found to accomplish turn-competitive self-selection.

Auer (1998) is an important publication bringing together a collection of papers that show code-switching can be both discourse-related (i.e. accomplish conversational

organisation) and identity-related. The next section reviews literature on code-switching and identity.

3.5.3 Code-switching as a resource for indexing identity

In addition to its organisational function, code-switching in bilingual interactions can also contextualise construction and negotiation of social identities. According to Li Wei (1998), societal norms, such as contrasting language preferences between adults and children, and the authority structure of families, can be 'brought about' by speakers to index identity. Sebba and Wootton (1998) illustrate that construction, negotiation and renegotiation of social identities in interaction between bilinguals who speak London-Jamaican (LJ) and London-English (LE) is accomplished by means of code-switching. Based on their finding that young black Londoners tend to use both LJ and LE as 'we' codes, Sebba and Wootton challenge the Gumperz (1982) 'we-code' and 'they-code' distinction that is associated with the ethnic minority versus majority language of a given linguistically diverse population. However, in analysing how code-switching between LJ and LE is used to index upgrading of salient materials in LJ, but *downgrading* in LE, they show that the 'we-they' distinction still applies in some respects. Sebba and Wootton (1998) conclude that local, sequential explanations of code-switching need to be complemented with an investigation of the social context of occurrence.

In the conversations of Zairian immigrants in Belgium, as reported in Meeuwis and Blommaert (1998), code-switching between the indigenised Lingala-French, and Swahili-French appears to be both discourse-related and identity related. To explain this, the authors propose a monolectal perspective to code-switching. This is put forward to explain a pattern of switching where the code-switched variant is not seen as a product of blending between two or more languages, in this case French and either one of the local languages i.e., Linghala or Swahili (with its implication of full knowledge of both), but as "*one code in its own right*" (Meeuwis &

Blommaert, 1998, p. 82, italics in original). Thus they argue that Lingala-French and Swahili-French are fully-fledged languages with their own range of social, stylistic, register-related and other variants. This is illustrated by an extract from a conversation involving two graduate students, and another involving three young women educated until 16 years of age, in which there is more French, and greater level of sophistication in the French used, in the first conversation compared to the second. This highlights the existence of different sociolects of the Linghala-French 'language' and also that high levels of proficiency in either of the languages is not a prerequisite for code-switching. Additionally, the authors find that switching between Swahili-French and Lingala-French can be used for speaker selection. They argue that since these languages are local variants, the salience of language differences is a locally negotiated construct and the indexicality of the codes cannot be determined *a priori*. What is certain is that code-switching between these lects can be used to index identity. Gafaranga and Torras, (2002) suggest that Meeuwis and Blommaert observation of this default form in bilingual interactions is the same as, 'language alternation itself as the medium' in their categorization. These examples suggest similarities with the practice of using the indigenised variety of Malaysian English and the educated variety of Malay discussed in section 1.3.

Expansion of the idea of code-switching for indexing identity can be seen in Li Wei (2005 p. 384), who states that "the choices of, and switches between, languages are by no means accidental and are sequentially organised to invite inferences from the co-participants". Some of these inferences may be about identity of the participants, and are often linked to generational differences in language preference. From conversations involving a mother and daughter, and others involving friends, Li Wei (2005) shows how in a request sequence, code-switching is used to mark a dispreferred response following a series of indirect requests, gaps and silence. In contrast to this, the same code appears to be maintained for preferred (positive) responses to requests. Li Wei (2005) argues that bilinguals are

primarily oriented to the interactional task at hand and they use code-switching in a programmatically relevant manner.

In summary, a small number of CA-based studies of bilingual conversation reveals the potential benefits of a sequential approach for extending our understanding of code switching as a resource for turn organisation and for indexing identity. The next section reviews studies of how aphasia shapes interactions and how speakers adapt to it.

3.6 CA STUDIES OF INTERACTIONS IN APHASIA

CA studies that investigate naturally occurring talk-in-interactions with PWAs have become well established because of the importance of ecological validity; CA provides a method of uncovering what PWAs and their CPs do in real interactions, as a complement to clinical investigations of language and communication. Employing the data-driven methodology of CA, many early studies of aphasia investigated repair and word searching. As a result we know that repair sequences in aphasia are often long and may draw attention to aphasic difficulties (see for example, Milroy and Perkins, 1992; Ferguson, 1994; Goodwin, 1995; Wilkinson, 1995; Laakso and Klippi, 1999; Lock et al., 2001, Wilkinson, et al., 2003; Helasvuo, Laakso, & Sorjonen, 2004, among others). This section provides a brief overview of research on aphasic repair before reviewing more recent investigations of turn organisation.

Ferguson (1994) carried out a comparison of the occurrence of repair in interactions of PWAs with their regular conversation partners, and less familiar conversation partners, and found differences in the frequency and patterns of repair. A higher incidence of other repair was observed in conversations of PWAs with less familiar partners. Ferguson (1994) attributes this to the reduced potential for face-threats to both participants when trouble is resolved rapidly by the non-aphasic conversation partner. She also suggests that variations across individuals

in adjusting to aphasia and differences in activity type may also influence the occurrence of repair. In a similar study, Wilkinson (1999) compared repair sequences in a PWA's conversation with his speech and language therapist (SLT) against those in conversations with his spouse. In a recurring pattern, the spouse inserted revision sequences (designed to help the PWA to say a word correctly) after a trouble source in the PWA's turn, whereas the SLT was seen to curtail repair by accepting an approximation to the target word. According to Wilkinson (1999), it is possible that face-threats associated with overt repair may not be as significant in PWA-spouse interactions.

Goodwin (1995) studied word search sequences in the home conversations of Rob, a man with aphasia who could only produce the words 'yes', 'no' and 'and'. Goodwin found that, despite his severe linguistic limitations, Rob became the focal participant in interactions, with family members engaged in the systematic work of making guesses. Rob's use of gesture and prosody enabled him to maintain participation and guide his conversation partners to collaboratively format guesses that he could accept or reject. In these instances, repair was accomplished collaboratively.

In summary, CA studies have identified a preference for self-initiated repair in speakers with aphasia that is similar to patterns seen in typical conversations, however the nature of aphasia means that speakers often cannot successfully complete their repair attempts. Instead a preference for other-completed repair has been noted, as this can help to keep aphasic trouble off the interactional surface.

More recently CA studies of aphasia have investigated turn organisation resources, including grammar and prosody. Goodwin (2003) brings together some of this work in a collection on conversation and brain damage, covering monolingual native speakers of English with aphasia and speakers of other European languages. A new phase of research is also applying the findings of CA studies of aphasia to clinical intervention, including conversation partner training (for a systematic

review, see Simmons Mackie, Raymer, Armstrong, Holland & Cherney, 2010). SPPARC (Supporting Partners of People with Aphasia in Relationships and Conversation (Lock, et al., 2001) and Better Conversations with Aphasia (Beeke, Sirman, Beckley, Maxim, Edwards, Swinburn & Best, 2013) are among notable developments in this area. See Wilkinson (2010) and Wilkinson and Wielaert (2012) for reviews. Section 3.6.1 below provides a review of selected papers on turn organisation in the conversations of PWAs. This is followed by a cross-linguistic comparison of turn organisation resources in aphasia in section 3.6.2.

3.6.1 Turn organisation in aphasia

Wilkinson et al. (2003) compare two distinct turn construction formats in the conversation of individuals with fluent aphasia, a canonical SVO structure, and a turn with a fronted noun, which represents the referent, akin to topic-comment structure. The authors report that while full form lexical items are used in SVO structures, “general meaning” (i.e. semantically light) lexical items are commonly used in combination with a fronted referent. The fronted structure involves introducing a referent first (with intonation that suggests the turn is incomplete) and then adding a proposition related to this referent. In this manner, the authors suggest that two monolingual English speakers with aphasia, DW and GB, are able to initiate and hold a turn, signaling its ongoing incompleteness through linguistic resources of grammar, pragmatics and prosody. Geluykens (1992) and Schieffelin (1983) report the occurrence in typical English conversations of topic-comment structures similar to fronting, used to contrast or invoke already mentioned references, or raise alternatives. See Section 3.3.1.1 for a review of this work.

Wilkinson et al. (2003) argue that since their two participants encounter word finding difficulties when using a conventional SVO structure, with long repair processes threatening to highlight their aphasic difficulties, there appears to be an interactional motivation for using fronting and general meaning lexical items “to produce actions and activities *by means of* his or her talk, *rather than the*

(disordered) form of talk itself becoming the focus of the activity through repair" (Wilkinson, et al. 2003, p. 73, italics in the original). In a fronted, turn initial position, a lexical item can be produced in relative isolation from the rest of the turn construction, which may be beneficial for access. Wilkinson et al. (2003) suggest that both turn construction formats (SVO, fronting) are available to the speaker with aphasia to accomplish certain social actions, and in certain sequential locations there appears to be a preference for one over the other. They emphasise that this selection may not be a conscious process.

Beeke, Wilkinson, and Maxim (2003) compare their findings on grammatical phenomena in non-fluent aphasia with those reported in Wilkinson et al., 2003 for fluent aphasia, and for typical conversation. In this first CA study of agrammatism in a monolingual speaker of English, Connie, they find two methods of constructing a turn - fronting of a temporal and/or noun phrase (as per Wilkinson et al., 2003), and sequential construction of a proposition (where words in a turn are linked not by grammar but by serial adjacency). These grammatical phenomena are argued to be adaptations to aphasia because they are unconventional for two reasons. Firstly, although fronting of temporal and noun phrases are common in typical conversation during storytelling (to set the scene in terms of character/s and time reference), in this instance, fronting is unconventional in terms of recipient design, because it is used to signal a new topic. Secondly, it is only on the basis of their adjacency that the series of referents that constitute a fronted turn, or a sequentially constructed proposition are hearable as being linked. The semantic relationships between words are not marked via syntax or morphology. Despite these unconventional turn construction methods, mutual understanding between Connie and her conversation partner is achieved. The rarity of breakdowns suggests that these adaptations are successful.

In order to explain the interactional motivation for their deployment, Beeke et al., (2003) discuss the advantages of these grammatical resources. So for example, they argue that, with a temporal phrase such as 'tomorrow' in turn initial position,

any subsequent verb does not need to be marked for tense. Thus, grammatical processing demand for taking a turn in a conversation may be reduced. A reduction in processing demand also becomes a possibility when a noun is fronted and then linked to a following proposition via a pronoun (similar to the construction seen in Wilkinson et al.'s 2003 data for fluent aphasia), as producing a noun in isolation may be easier than within a grammatical structure. The progressivity of a turn towards completion is facilitated, which may also explain the interactional motivation for using these structures for adapting to aphasia. According to the authors, another key advantage from the interactional perspective is that turn holding is achieved, due to the inherent projectability of a fronted phrase, which clearly signals there is more talk to come. A conversation partner has to wait for the unfolding turn to reach completion before its meaning can be ascertained. Sequential construction of a proposition is advantageous because it circumvents any difficulty in manipulating syntax and morphology experienced by individuals with agrammatic aphasia. The serial adjacency of lexical items indicates the link between them, avoiding the need for manipulation of grammar.

Beeke, et al. (2007a) further explore grammatical phenomena in the talk of agrammatic English speakers, analyzing both task-based and conversation data. Four recurrent methods of turn construction are identified: turn initial-noun construction; turn-initial adjective construction; talk and mime construction; collaborative turn construction sequence. The first method is what Wilkinson et al. (2003) refer to as fronting, and is akin to topic-comment structure in the conversation of typical speakers. A noun or noun phrase is produced first as a referring expression and a comment on the referent is delivered next. In a turn initial-adjective construction, Beeke et al. (2007a) note that prosody, sequential adjacency, grammatical connectives and formulaic expressions establish the links between the adjective and the rest of the turn, which lacks a verb. In a talk and mime construction, mime appears to be used as an adaptation to compensate for the lack of a verb when recounting an event. Connectives, discourse particles and nouns or elements of reported speech make up the rest of such turns. In these

turns, mutual understanding remains unaffected despite the omission of verbs. In the final turn construction method that the authors identified, a conversation partner's turn, which takes the form of a version of what the PWA is attempting to say, becomes an interactional resource for the PWA to accept or reject, and thus a method of adding their meaning to a conversation without having to complete a full turn. Beeke et al. (2007a, p. 272) conclude that these "interactional alternatives to standard grammatical structures" reduce the impact of a PWA's agrammatism. Additionally, they find that recounting of events does not occur as often in these conversations as the actions of commenting, assessing and reasoning, however task based activities to elicit aphasic language predominantly involve recounting events. It is postulated that assessing and reasoning are actions that provide opportunities for a PWA to tie his talk to a conversation partner's prior turn.

Bloch and Beeke (2008) investigate a turn construction method they call co-construction, which involves a co-participant. They report that co-constructions observed in the conversation of Donald, a man with agrammatism, is different to that reported in the literature on typical speakers by authors such as Lerner (see Section 3.1.1.1). They demonstrate this through the analysis of a single episode of conversation between Donald and two other non-aphasic participants. One conversation partner, Tim, is seen providing a grammatically fleshed out version of Donald's agrammatic turn so that the other conversation partner, Paula, can respond. This is different from co-construction in typical conversation where grammatical resources in the initial component of a turn are used to project the final component so that another speaker can choose to complete the projected turn. The authors argue that Tim does not merely complete Donald's turn; he restates the whole turn in full grammatical form. Bloch and Beeke (2008) argue that this form of co-construction allows for a display of the PWA's competence, as well as the partner's competence in understanding the intended meaning of the agrammatic turn. Co-construction thus becomes an important resource that brings together a PWA and a conversation partner in mutual adaptation to the demands of constructing meaningful turns at talk.

Oelshaeger and Damico (1998a, 2003) also report on a conversation partner's collaborative responses, this time during word search sequences in the conversations of Ed, an English speaking man with aphasia. They identify devices that invite collaboration, including gaze, wh-questions, sound stretches and gesture. Here, the information shared between Ed and his conversation partner determines the partner's ability to collaborate. One key motivation for collaboration of this kind, according to Oelschaeger and Damico (1998a, p. 475) is to support the person with aphasia as a "competent communicator". Goodwin (2003) reports a similar display of knowing accomplished by Chil (called Rob in earlier publications), a man with aphasia who could only produce the words 'yes', 'no' and 'and' plus gestures with his left hand. In his interactions with his family, Chil becomes the focal participant while the others engage in the systematic work of making guesses.

However, not all conversation partner behaviours that affect turn organization promote the PWA as a competent communicator. In a stark contrast, Beeke, Beckley, Best, Johnson, Edwards and Maxim (2013) illustrate how a conversation partner's use of "test" questions may expose a PWA's lack of linguistic competence, even though they are often constructed in order to promote a PWA's ability to construct a turn. Test questions (also called "known answer" questions, see Schegloff, 2007) seek information which both partners have equal access to; the conversation partner asks a question despite already knowing the answer. Although common in pedagogic dialogue (see for example Searle, 1969, Levinson, 1992), such questions are rarely used in peer conversation. Beeke et al. (2013) analyse two types of sequence from two people with severe agrammatic aphasia, a test question sequence and a sequence where the PWA produces an extended turn. They find that in sequences where the PWA is required to access a known, often one-word answer to a test question, their aphasia appears more severe than when they have the interactional space to take an extended turn that is not constrained by a prior question. Although their data reveal no overt signs of frustration on the part of PWAs to being asked test questions, in a subsequent

interview with one dyad, the PWA expressed negative emotions towards being pressured to produce a specific answer in response to a test question. Beeke et al. (2013) argue that although their effect can be negative, test questions are motivated by a conversation partner's wish to help the PWA to talk. Equal access to knowledge provides safe ground in the sense that if the PWA displays difficulties in answering the question, the conversation partner is able to provide scaffolding to help the PWA retrieve the information required. Based on these observations, Beeke and colleagues assert the advantages of conversation-based interventions that can identify and resolve problems that arise when such pedagogic sequences become a less than rewarding routine for a PWA.

If patterns of aphasic turn construction do reflect an interactional adaptation to linguistic impairment, then it seems possible that PWAs might develop different methods of turn construction at different stages of recovery from aphasia. Adopting this line of reasoning, Wilkinson, Gower, Beeke and Maxim (2007) compare the conversations of Derek at 15 weeks and 30 weeks post stroke. The earlier conversation reveals the use of 'replacements' in repair sequences focused on word finding difficulties. This results in the production of a general meaning lexical item followed by negation, before Derek replaces the general referent with a full form lexical item. For example, in one turn he produces the phrase 'the things' and in a subsequent turn replaces it with 'these saws'. In addition to this post-positioned repair, Wilkinson et al., (2007) also find what they call 'extensions', or post-positioned increments. This is where Derek produces a turn that appears to have reached completion and then adds another related element. Both replacements and extensions ensure progressivity of the PWA's turn, providing him with an alternative to producing the next word due, and thus earning him extra time to produce a full form. This strategy also appears to help him to self cue. As such these turn construction devices can be said to be interactional adaptations to limited linguistic resources. At a later stage of Derek's recovery, the authors find him using 'insertion', a different repair form, in which the whole unit containing the

trouble source is repeated and the full form lexical item is inserted within the new structure; this is more akin to repair in typical conversation. Wilkinson et al. (2007) conclude that turn construction practices are dynamic and change over time according to the demands of the conversation and the severity of aphasia.

A form of turn construction that appears particularly challenging for PWAs is topic initiation. Barnes, Candlin and Ferguson (2013) provide an important analysis of a PWA's use of linguistic resources for the construction of topic-initiating turns in their CA study of an (Australian) English speaking PWA, Valerie, talking to a regular conversation partner in a care home. According to Barnes et al. (2013), topic talk is a challenge for PWAs because either a referential or sequential problem may arise from the transition to a new topic. Thus, a newly introduced referent may not be recognised by the conversation partner, or the relationship between the new topic and the previous turns may not be clear enough to enable the smooth transition to a new sequence. Barnes et al. (2013) note that Valerie's routinely deployed practice of *and*-prefacing a turn appears to be an effective organisational resource for adapting to topic talk in aphasia. The conjunction serves as link between the prior talk and the next topic and so makes the sequential status of the turn explicit. It also shows the present topic to be related to the bigger agenda of the ongoing talk. Despite its utility, the authors identify instances when Valerie's use of *and*-prefacing can become sequentially misplaced. On account of this, they recommend adopting interaction-focused intervention to provide ecological validity to both the assessment of problematic turn organisation, and the selection of meaningful intervention goals.

Having reviewed key work on broad turn-construction practices in fluent and non-fluent aphasia, it is now useful to highlight several specific resources, namely repetition, formulaic expressions and prosody.

3.6.1.1 Repetition

Oelschaeger and Damico (1998b) demonstrate that spontaneous repetition of part of a previous speaker's turn is a resource that individuals with aphasia can use to display knowledge. They identify the sequential organisation of turns in which repetition is deployed in a three-party conversation of a PWA called Ed, and classify them on the basis of similarities in action and meaning. In this way, four types of repetition are uncovered, for expressing: (1) uncertainty in clarification sequences; (2) agreement in question and answer or joint sequences; (3) alignment in assessment sequences; and (4) acknowledgement in continuation sequences.

In type 1 repetition, Ed repeats an element of the conversation partner's prior turn to identify the exact location of the uncertainty. The authors argue that the success of the conversation partner's next turn repair confirms the effectiveness of this type of repetition as a way of seeking clarification. In type 2, repetition occurs in a question and answer sequence that constitutes a word search initiated by Ed. In the word search his conversation partner, M, offers a candidate answer that Ed then repeats to confirm his agreement. The single word provided by M is both a question and a candidate answer. Thus by repeating it, Ed not only provides an answer but confirms his hearing and understanding. Type 2 also includes joint production sequences where repetition of a word spoken by M is used to display Ed's agreement as well as to complete the turn he initiated. In type 3, M repeats to verify and at the same time aligns his assessment to exhibit agreement. In type 4, upgraded acknowledgement displayed via a repeat during an extended story telling sequence from M signals Ed's participation. It not only shows that Ed is attending to the talk but also brings to the fore his role as a knowing recipient. In summary, Oelschlaeger and Damico (1998b, p. 982) suggest that repetition may help Ed to "position himself socially as conversationally proficient".

Evidence for the use of repetition by language impaired speakers to accomplish displays of competence also comes from a rare CA study of dementia. Mikesell (2010) analysed the conversations of SD, who had been diagnosed with fronto-temporal dementia (FTD). As most FTD patients experience a major decline in social competence, Mikesell argued that SD's claim to hear and understand the words of her conversation partner, achieved by means of repetition, is an important and perhaps unexpected feature of her conversations. Mikesell also noted that SD tends to modify the prosody and/or grammar of repeated items, which additionally accomplishes a claim of epistemic knowledge about the information produced by her conversation partner.

In summary, repetition of key words from a conversation partner's turn is a useful resource for a PWA as it enables them to accomplish the important action of responding in a second positions turn. In this way, the PWA displays knowledge about turn-taking in conversation, as well as an understanding about what was said by the conversation partner in the prior turn.

3.6.1.2 Formulaic expressions

Formulaic expressions (FEs) represent another important resource for turn construction in aphasic conversation. Wray (1999), in her survey of the formulaic language use of second language speakers and those with language impairments, defines the term in the following manner:

“...native-like idiomaticity, where a speech community has a ‘preferred way’ of saying something, seems to indicate that certain word-strings are prioritised during processing and hence are likely to be selected as the default expression of a given idea, even though other grammatically acceptable ways are also possible”.

(Wray 1999, p. 213)

Wray (1999) suggests a potential benefit of using FEs, for both second language speakers and individuals with compromised linguistic abilities, is a reduction in processing load.

Beeke (2003) reports on an agrammatic speaker, Roy, who produced few verbs in his conversation, except for when he produced FEs like 'I suppose'. Beeke et al. (2007b) also investigate Roy's conversation, and discuss how FEs appear as 'islands of fluency' amidst haltingly produced telegraphic turns. Similarly, Johnson (2008) finds that FEs enable Donald (the same PWA discussed by Bloch and Beeke, 2008), who has non-fluent agrammatic aphasia, to construct first pair parts in question and answer sequences. These are judged successful since his conversation partner is able to provide a relevant second pair part, despite Donald's aphasic difficulties. Johnson explains that it is the conventionalised form of an FE and the sequential context in which it is used that makes the conversation partner's interpretation possible. Although FEs like 'well alright for some' can be ambiguous in isolation, when tied to a prior turn they become meaningful. Johnson argues that one of the interactional benefits of FEs is that they make Donald's aphasia momentarily invisible; he is able to produce fluent-sounding turns and position himself as a competent conversationalist who is able to ask questions and comment on current topics.

In a new contribution on second positions turns in the conversations of PWAs, Barnes (2011) documents the importance of reciprocity displayed via the use of the FE 'that's right'. He explains that this formulaic response was useful for Valerie as it "made simultaneous claims of epistemic access and rights and alignment with an ongoing course of action, thereby promoting interpersonal affiliation." (Barnes, 2011, p. 380). In achieving this display of reciprocity, Valerie is also seen to have accomplished a display of competence by tying the expression 'that's right' to the conversation partner's prior turn.

3.6.1.3 Prosody

Prosodic resources have been found to enhance the effectiveness of aphasic turn organisation by providing a link between the limited lexico-grammatical resources that a PWA is able to produce. In a study of the conversation of three participants

with agrammatic aphasia, Beeke, Wilkinson and Maxim (2009) illustrate how prosody can be used to package a series of agrammatic words into a turn at talk in the absence of grammar. In turns constructed using topic-comment structure (see Section 3.6.1), they find that missing grammatical links such as those provided by verbs are compensated for by a distinctive intonation pattern whereby all non final words in a turn are produced with level pitch indicating more talk to come, and the turn final word is produced with a final falling or rising pitch, marking the end of the turn. Beeke et al. (2009) contrast this with evidence that intonation is different for PWA turns designed from the outset as single word utterances, and also for interrupted multiword turns. They argue that the differential use of prosody in these instances suggests that “at some level, a speaker with agrammatism is able to plan ahead for the production of more than one word at a time, and thus does not simply produce a series of isolated single words, as suggested in the agrammatism literature.” (Beeke et al., 2009, p.152). This suggests that prosody can be a useful resource for interactional adaptation to aphasia.

The turn construction resources outlined in this section are often combined to organise turns relevant for specific positions in sequences, and for the agenda of the talk-in-interaction. Other resources such as gesture and facial expression can also be included to convey meaning in these instances. Beeke et al.(2013) demonstrate how three agrammatic English speaking monolinguals were able to construct extended turns combining such multimodal resources. Their PWAs used prosodically packaged lexical items and facial expressions as well as body postures to construct turns that accomplish actions ranging from recounting, to elaborating and expressing strong opinions or taking an argumentative stance. They acknowledge that grammatical deficits are apparent in these turns, but these do not become the focus of the turns that follow.

In summary, CA research on English speaking monolingual PWAs has identified turn organisation resources deployed in adapting to aphasia, and has begun to translate this knowledge into intervention goals. Because CA reveals such

adaptations to be interactional in nature, it is likely that similar adaptations are made in conversations of PWAs who speak languages other than English. A cross-linguistic comparison of findings from PWAs who speak other languages is the focus of the next section.

3.6.2 A cross-linguistic comparison of turn organisation resources in aphasia

A collective effort to document manifestations of aphasia in different languages and make cross-linguistic comparisons has been initiated (e.g. Paradis, 2001; Menn et al., 1995) but most of this work has been carried out using experimental or decontextualised language sampling methods. CA studies of aphasia show test performance can yield a different picture of aphasia to the observation of conversation, and hence cross-linguistic comparisons of aphasia using CA become necessary. This section brings together the few CA studies that have investigated aphasia in different European languages.

3.6.2.1 Finnish turn organisation resources in aphasia

In their analysis of the conversations of Finnish speaking PWAs with fluent and non-fluent aphasias, Laakso and Klippi (1999) focus on word search sequences that involve collaboration. They identify four phases that begin with the establishment of the word finding problem, followed by the establishment of a participation framework, the hint-and-guess phase, and finally a long confirmation phase. In the first phase, the authors identify sound stretching, pausing and search questions like ‘what is it?’ as signals of word finding difficulties. In this phase, they also identify gaze direction to the middle distance as a marker of self-directed word-finding activity. In the second phase, the use of mutual gaze opens up the participation framework to include the conversation partner in resolving the trouble in the PWA’s turn. The third phase involves mutual collaboration or “hint and guess”, where the PWA provides verbal and gestural hints as to the target word. The conversation partner then identifies a category set from which to select

possible candidate answers. The process of hint and guess can be cyclical if a guess is rejected resulting in the PWA providing additional hints. In the final confirmation phase, multiple acknowledgement tokens are produced to indicate the word search is at an end, and Laakso and Klippi (1999) identify prosodic variations which suggest heightened involvement at this stage.

Helasvuo et al. (2004) also report on word search sequences in conversations of Finnish speakers with fluent aphasia. They show that syntactic and sequential construction of a word search is characterized by certain linguistic expressions that include the question format; *mika se on* (what is it). Iconic gestures that represent the searched-for referent were also noted to accompany these constructions. This strategy combined with gaze directed at the conversation partner allows a person with aphasia to display 'knowing' the referent but being unable to produce the word, and it enables them to enlist their conversation partner's participation in the search. They are also able to signal assumed shared knowledge. In this manner, Helasvuo et al. (2004) concur with Laakso and Klippi (1999) that word searches can be successfully resolved through collaboration.

There are striking similarities between these practices in Finnish aphasia and those observed by Goodwin (1995, 2003) and Oelschaeger and Damico (2003) (see Section 3.6.1). In both languages, it appears that the selection of a candidate answer from a particular semantic field is a core interactional practice oriented to by both a PWA and their conversation partner. Additionally, constructing a display of collaborative competence appears to be a universally present interactional motivation for both speakers.

3.6.2.2. German turn organisation resources in aphasia

In a study of an agrammatic German-speaking PWA, Heeschen and Schegloff (1999) report variations in turn construction practices employed by a PWA in interactions with the same conversation partner. They found that the PWA was

using telegraphic speech as a resource for mobilising the conversation partner to collaborate in producing a fleshed out version of what the PWA intended to say. This is similar to the co-construction described between an English-speaking man with agrammatic aphasia and his conversation partner by Bloch and Beeke (2008). Heeschen and Schegloff (2003) observed a division of labour in co-formulating information between W, a PWA with agrammatic aphasia, and her conversation partner and daughter, D. Thus, D elaborates on W's expressions by providing a candidate for a given argument. Her co-formulations become the vehicle for marking her stance toward the co-formulated information. This kind of support is tailored to W's specific language problems, namely, W's difficulty with syntactically parsing spoken language, and with syntactically and prosodically organising her own turns. In other instances, such as when W has word finding difficulties, D appears to respect W's strong preference for self-repair, and thus does not co-construct. Thus, Heeschen and Schegloff (2003) conclude that it is not only W who adapts to agrammatism, but also D. Adaptation, they show, is a mutual phenomenon. A similar practice of producing telegraphic speech is reported in Beeke et al's. (2007b) study of an English speaking PWA and his conversation partner, in which it is also suggested that both speakers mutually adapt to aphasia.

3.6.2.3 Norwegian turn organisation resources in aphasia

Lind's (2002) report of a Norwegian speaking man with non-fluent aphasia, Askel, includes a comparison of prosodic features of single- and multi-word utterances which reveals that he uses a "list" intonation for the latter, implying that the multi-word turns are planned from the outset. Lind (2007) reports further on prosodic contextualisation of minimal responses to closed yes-no questions. She shows that a speaker with aphasia is able to use pitch variation in a systematic and meaningful manner to indicate decisive and indecisive answers. This ability to plan a turn is similar to what has been reported for English-speaking PWAs in Beeke et al. (2009). Lind (2005) also reports on a PWA's turn construction strategy to first establish a referent prior to delivering a comment on it. This bears great similarity

to the findings of Beeke and colleagues on fronting and topic-comment structure in the conversations of English-speaking people with agrammatism (see Section 3.6.1).

In summary, despite the limited number of CA studies of PWAs speaking languages other than English, and the complete lack of explicit cross-linguistic studies, a comparison of findings shows that in some cases, the resources used by PWAs appear to cross language boundaries. To date, there remains a dearth of studies that have explored conversations of PWAs in non-European languages. Even more lacking are studies that investigate bilinguals with aphasia. The next section discusses the limited literature available on CA studies of bilingual aphasia and other related disorders.

3.7 BILINGUAL APHASIA AND RELATED LANGUAGE IMPAIRMENTS

Due to much attention that code-switching has garnered as a ‘deviant’ behavior in bilingual aphasia, the investigation of conversation, where this resource is routinely deployed, is not so lacking as it can be in other fields. Despite this, methodological issues surrounding this research suggest that the conversational data collected may have been compromised in many ways. (See sections 2.1.2 and 2.3.3 for a comprehensive review of such studies). However, there are some studies that employ CA to investigate everyday conversations in bilinguals with language disorders, and these will be reviewed here.

3.7.1 CA studies of bilinguals with aphasia

In a first study to compare cross-linguistic performance of a German-English-Italian trilingual PWA, Springer, Miller and Bürk (1998) investigated her interactions with different conversation partners and formal test scores. They aimed to explore the relationship between the non-fluent PWA’s linguistic profile in her two main

languages, i.e. German and English, and the occurrence of trouble sources and repair strategies in her conversations in both these languages. The test scores identified a comparable pattern of syntactic impairment across languages but a differential impairment was noted at the lexical-semantic level. Conversation analysis also revealed word finding difficulties to be the main trouble source. Springer, et al. (1998) found differences in performance in free conversations and the interview type interactions that they attributed to the effects of conversation partner and the setting. For example, intrusions of German into English was observed most in the interview where the PWA was familiar with the conversation partner. Drawing on this, Springer et al. (1998) make an important contribution suggesting inclusion of conversation partners in assessing a PWA and for planning intervention.

In an attempt to document manifestation of aphasia in Afrikaans, a language used in the linguistically diverse South African population, Penn, Venter and Ogilvy (2001) target discourse level analysis of grammatical and narrative features. The features of the Malay and English, the two languages focused on in the present study is found in Afrikaans would suggest relevance to the present study. More importantly, Penn et al.'s finding about evidence of bilingual tradition in Cape Afrikaans that includes code-switching used as a robust compensatory resource and scaffolding structure for some of the primary aphasic deficits is a pattern in discourse that may be evident in the Malaysian bilingual PWAs too.

Penn, Frankel, Watermeyer and Russell (2010) offer a new perspective by adopting a CA methodology to investigate the relationship between executive function (EF) and interactional strategies in bilingual aphasia. Their two pronged approach aimed to measure the performance of two English-Afrikaans bilingual PWAs on an EF test battery, and to examine their naturally occurring conversations for evidence of executive skills. The performance of the bilingual PWAs was compared with seven monolingual PWAs and one person with right hemisphere damage. The EF battery revealed that the bilingual PWAs had better

“inhibitory control, increased flexibility, better working memory and planning, heightened resistance to interruption, and evidence of creativity and flexibility” (Penn et al., 2010, p.299) than the monolingual PWAs. To compliment this, there was evidence of better conversational management in the bilingual PWAs. They displayed in an increased ability to initiate topic, carry out successful repair and show conversational flexibility.

Penn and colleagues suggest that the differences in cognitive control between monolinguals and bilinguals with aphasia provide one explanation for this findings. So, bilingual PWAs with intact EF may have resorted to compensatory and shifting strategies that they had routinely used before the stroke to help them interact. The authors propose adopting a bilingual approach to intervention for PWAs with better cognitive control, especially in linguistic environments where strategies such as code-switching (as documented in Penn et al. 2001) are a common feature. Individual profiling of this nature appears to offer potentials for capitalising on the link between EF and conversational abilities in order to develop individualised intervention plans.

3.7.2 CA studies of bilinguals with related language disorders

In research involving four Afrikaans-English bilinguals with Alzheimer’s dementia at a residential home, Friedland and Miller (1999) tracked the progression of pragmatic deficits over a 12-month period. Specifically, they adopted a CA framework to gain insights into the phenomenon of inappropriate language mixing in naturally occurring conversations. The authors recorded each participant in a 10 minute conversation with a monolingual speaker of Afrikaans and English respectively, and this procedure was repeated after an interval of 6 months and again at the end of the study, at 12 months. In addition to using qualitative methods, the authors calculated the percentage of code-switched utterances occurring in these conversations. This measure was used to ascertain the extent of code-switching in both the languages of the bilinguals with language impairment.

The different repair types and the length of repair trajectories were also counted in order to understand how trouble was managed following inappropriate language mixing.

Friedland and Miller (1999) found that all occurrences of language mixing in their data were inappropriate, except for those specifically marked with a metalinguistic comment or other linguistic device. Code-switching was found to occur more frequently in L2 conversations for two participants (EB and BL) who were less proficient in their second language, Afrikaans, compared to English. The stage of dementia did not appear to influence the amount of code-switching that occurred in these conversations. However, the number of repairs initiated correlated with the amount of language mixing. The authors also report that there were less trouble sources in the conversations of participants who did not code-switch as frequently, but they caution that the conversation partner's interaction style may account for this finding. Closer analysis revealed that some conversation partners may have opted to not initiate repair because although they adopted the role of a monolingual speaker in this context, they were able to understand expressions in the L2. Analysis of the trajectory of repairs revealed that the conversation partners may be adapting to the language constraints of the bilingual speakers with dementia. In the complete report of the larger study to which this work belongs, Friedland (1998) highlights that both formal tests and CA are important to understand language decline in patients with dementia. She explains that while formal tests are useful for charting patterns and rates of loss in the two languages and revealing the interaction between variables, changes in specific bilingual behaviour over time are best represented by the CA findings. This study makes a significant contribution in proving the CA methodology to be useful in the study of bilingual language disorder.

Finally, in a CA study not of language impairment but of SLT processes, Friedland and Penn (2003) examined the dynamics of a mediated interview with parents of an 8-year-old child involved in a motor vehicle accident. The parents were

proficient Zulu speakers and had minimal receptive skills in the English language. The attending SLT conducted the interview in English so a second clinician took on the role of the mediator. Through a detailed turn by turn analysis of the interview, the authors uncovered the dynamics, social and power aspects, shifting roles and pace of the interview to be salient aspects in conversations when a third party (a mediator) is introduced into a clinical interview. Friedland and Penn (2003) also show CA to be a more useful tool compared to the standard checklists for understanding the layers of complexity in conversational success in such an interview. Based on this, they advocate the use of CA to examine cross-cultural and cross-linguistic interactions, in order to improve clinical effectiveness. Considering the gain from interaction focused intervention documented for monolingual PWAs, bilingual PWAs may also benefit from such an approach. The delivery of bilingual therapies focused on interaction is likely to require recruitment of bilingual mediators. If this is the case, the methodology and findings of Friedland and Penn (2003) will become a useful reference point.

3.8 CONCLUDING REMARKS

This chapter has presented the key principles of CA including the notions of *sequence organisation*, *turn organisation* and *repair organisation*, and has discussed how these are manifested in typical conversations (Sections 3.1 to 3.4). In addition, the idea that resources of turn organisation may cut across language boundaries has also been discussed. These issues are highly relevant for the present study which seeks to understand the organisation of conversation for bilingual speakers with aphasia in languages that are little studied.

Section 3.5 has brought into focus insights from CA studies of bilingual interactions, specifically the bilingual language behaviour of code-switching. A participants' perspective has been highlighted as being paramount in identifying what constitutes a code-switch, and exploring the conversational actions that are accomplished by deploying this resource. This is key for the present purpose

because the societal linguistic diversity in Malaysia makes code-switching a routinely deployed resource in conversation.

Section 3.6 presented findings from CA studies of aphasia. These deal mostly with English speakers, but a few studies target other European languages. All have focused specifically on how speakers adapt interactionally to cope with aphasia. Mechanisms of repair and the deployment of resources for turn organisation have been shown to be an important initial consideration in the field of CA and aphasia. Interactional motivations for deploying resources have been revealed to be linked to the accomplishment of conversational actions, and to maintaining a PWA's participation as a competent conversation partner. The few CA studies pertaining to bilinguals with aphasia (and related disorders) have been reviewed in Section 3.7. The potential for CA studies to give new insights into aphasia, and to motivate interventions, have been underlined throughout sections 3.6 and 3.7.

The principles of CA guide the methodology of the present study, which uses sequential analysis of natural conversation to uncover patterns of adaptation to aphasia in the interactions of bilingual speakers from Malaysia. The interpretation of the data will follow the well established participant-proof procedure. Given the limited number of CA studies of bilingual aphasia, the findings of CA studies of aphasia in monolingual populations will guide this study, This is particularly important given that the conversation of Malay-English bilingual PWAs, is an unexplored territory. The next chapter builds on this review of CA to detail the research design adopted for the present study.

4 Methodology

4.0 INTRODUCTION

This chapter describes the methodology adopted for the present study. Section 4.1 provides information about the participants, i.e. the bilingual PWAs. This includes background information pertaining to the individual PWA, the case history, a brief overview of his/her bilingualism history and characteristics of the individual's aphasic impairment. Section 4.2 discusses the procedures used, from the recruitment of these participants and collection of the information presented in section 4.1 to the video recording of the conversations which make up the core data in this study.

4.1 PARTICIPANTS

Six participants with aphasia were recruited for this study but only data from three will be included in this thesis⁴. Information pertaining to the three bilingual PWA's gathered from ethnographic interviews and language sampling procedures is presented in this section. Pseudonyms are assigned to the PWAs and their respective conversation partners for the purpose of maintaining confidentiality.

4.1.1 Zin: information from ethnographic interviews and language sampling

Zin was a 38 year old single male who was 3 years post-stroke at the time of recruitment. He was attending physiotherapy sessions at one of the support centres run by the National Stroke Association of Malaysia (NASAM). During the interview, Zin recalled that he was in a meeting at his workplace in the capital city

⁴ Data from the other three bilingual PWAs is not included here for the following reasons:

- 1) One PWA had a dysarthria which significantly decreased the intelligibility of the recorded conversation.
- 2) For another PWA, the authenticity/ naturalness of the recorded conversation was compromised as her niece, her regular conversation partner, was busy preparing to move to Australia.

of the country, Kuala Lumpur, when he experienced inability to control his posture and subsequently fell to the floor. He was kept under observation for about 6 hours at a clinic near his office before he was transferred to a private hospital.

Documents available from that hospital reveal that Zin presented with acute loss of speech and dense right hemiplegia. His Cerebral MRA report indicates “Encephalomalacia in the temporal lobe with a relative attenuated distal part of the M1 segment of the left middle cerebral artery and its distal branches (M2 segment)”. Despite intense physiotherapy and medication Zin remained aphasic when he was discharged from the hospital 6 months post-onset.

Zin reported that he was unable to see the left side of his own face while he was in the hospital but he was able to hear and comprehend spoken language. His sister, Ain, clarified that in the initial stages Zin only responded when he was spoken to in English. Following his discharge from the hospital, Zin moved to his family home in a Malay village in Melaka. He then attended speech therapy sessions at a nearby public hospital. These monthly sessions included naming therapy in his home language, Malay. Zin opted to discontinue speech therapy after 3 months and joined the physiotherapy group that met at the NASAM centre in Melaka.

Observations of Zin’s routine activities in his home revealed that he interacts with his primary caregivers; i.e., his mother and his sister Ain. At the time of Zin’s stroke, Ain had just completed her tertiary education. She postponed seeking employment in order to assist her mother to care for Zin. As such, there were many opportunities for the siblings to interact. Zin identified Ain as his regular conversation partner. Zin and Ain are the 5th and 8th child, respectively, in this Malay family of 9 children. Their late father was a school teacher while their mother is a fulltime homemaker. Both Zin and Ain have a similar history of language acquisition. They share Malay as their home language and English is their other language.

3) The wife of the third PWA decided to withdraw from the study.

Zin acquired English formally when he attended a pre-university programme which included an intensive language course. He was motivated to master the English language at the age of 18 as it was important for his academic career. Thus, it is possible to classify Zin as a successive bilingual.⁵ Opportunities for Zin to use his second language increased when he joined the workforce after completing his first degree. Firstly, he was employed as an accountant by an international company and then he moved to a local company. He maintained that,, despite this change, the necessity for using the English in his workplace remained because the nature of his job as an auditor requires him to deal with English speaking clients. However, following the stroke, Zin's return to his family home in a Malay kampung (village) resulted in reduced opportunities for using his later acquired other language.

Observations and interviews revealed that at the time of the research, Zin used the English language only in interactions with friends from the NASAM centre. Of these, he identified Tony, a 63-year-old multilingual man, to be the one he speaks to the most in English.. Tony's language repertoire included English, Hokkien, Cantonese, Portuguese, and Malay. His competence in these different languages was closely linked to Tony's successful career as a manager of a well-known hotel in the area. He had qualified with a Diploma in Building Construction before joining the hospitality industry. Zin and Tony's partnership illustrates the unique 'intergenerational' difference in language dominance among Malaysian bilinguals. Tony belonged to what is commonly referred to as the pre-independence generation. Due to the availability of native speaker models in Malaysia during their school days, those of Tony's generation tend to be more proficient in the English language than Zin's generation. This is possibly the reason why Zin spoke to Tony in English most of the time.

Tony attended the physiotherapy sessions at the same NASAM centre as Zin. He volunteered to organise additional sessions in the home that he shared with his

⁵ See Li Wei (2007) for classification of bilinguals.

wife, Fran, whenever the centre was closed. Tony himself had had a stroke 4 years earlier. He explained that the doctors were unable to diagnose his condition during the first two days when he was hospitalised as his symptoms were somewhat atypical. They eventually diagnosed Tony as having had a transient ischemic attack. His left upper and lower limb remained weak but he reported experiencing no language difficulties. Tony's wife confirmed that his language abilities did not change after his stroke.

The difficulties that Zin experiences in communicating with others following his stroke were mostly related to his inability to produce fluent speech. Zin's spoken language elicited through a story telling task (see section 4.2.2.2 for a description of this task) shows that he is able to present a relatively well-developed storyline despite his difficulties. The following excerpts (1 to 3) from Appendix 7(b), illustrate the non-fluent nature of Zin's spoken output as he attempted the task in his home language, Malay. Excerpt 1 presented below is from the initial phase of the activity which comes after Zin was given instructions on how to complete the task. Fillers, false starts and missing grammatical links seen here indicate Zin's typical difficulties in completing the story-telling task.

Excerpt 1 from Zin's story telling in Malay

- 007 R *macam mane ceritanya?*
how does the story go?
- 008 Zin ((*looking down at the picture*)) *bersiar-siar,*
walking about
- 009 R mhm,
- 010 Zin *hmm. a:h, ternampak,*
(suddenly) saw
- 011 R *mhm, siape bersiar-siar?=-*
who (was) walking about
- 012 Zin *=ah, tum- ah, ahm a tree er ni apeh?*
what (is) this
- 013 *ah pokok,*
tree
- 014 R mhm.
- 015 Zin *terjatuh.*
has fallen
- 016 R okay.
- 017 Zin *tibe-tibe, erm, ahm, po- ah buaye,*
suddenly (the) crocodile
- 018 R mhm.

019 Zin *aduh aduh,*
(groaning noise)
020 R mm.

Zin begins telling the story in line 7, with the verb 'bersiar-siar' (walking about). His production with the prefix 'ber' and the reduplication of the word 'siar' shows his ability to produce use the correct prefix for the verb.. He continues in line 10 with fillers and another verb with the prefix 'ter' to indicate unintentionality. Although both of the verb forms are accurate, in both instances Zin does not state the subject performing the action he is referring to. Despite the researcher's attempt to seek clarification, Zin does not identify the omitted referent. He continues with a non-fluent stretch of talk and a code-switched referent (tree) in line 12, before producing the translation equivalent 'pokok' (tree) in Malay. The prefix 'ber' is used when the referent is animate and 'ter' for inanimate referents. This being an inanimate object is not likely to be linked to the verb that he produced earlier in line 8. He then says 'terjatuh' (has fallen) in line 15 completing the subject-verb (SV) structure; 'pokok terjatuh' which means that the tree has fallen.

It is interesting to note that, although Zin often produces only subject-verb combinations, he produces a transition marker 'tibe-tibe' (suddenly) in line 17. With this adverb, he effectively establishes the link between the events in the story. After another series of fillers and false starts, Zin introduces one of the main characters in the story with 'buaye' (crocodile). In line 19, he says 'aduh-aduh' (groaning noise) appearing to quote the 'buaye' (crocodile). He does not produce any grammatical elements to mark this utterance as direct speech or to attribute this to the subject 'buaye' (crocodile) that he mentioned in line 17.

This excerpt that comes at the beginning of this activity bears evidence of Zin's difficulties in producing fluent speech and tendency to omit function words. However, he is seen to produce appropriate verb forms in this task. The next excerpt shows Zin using the same transition marker 'tibe-tibe' (suddenly) to continue the story. As he marks every transition in the story with the same adverb,

it becomes an overused expression here. Zin also produces fillers and omits verbs in this excerpt.

Excerpt 2 from Zin's story telling in Malay

- 078 Zin *tibe-tibe, ah, ah, lela- ah, Sang Kancil pun satu ide.*
suddenly, (first two syllable of 'lelaki') Mr Mousedeer also (had) an idea
- 079 R okay ((nodding))
- 080 Zin ah ah, err ah, er, lelaki, ah, ah, a:pe nameh, erm bukan
(the) man, what (is the) name not
- 081 lelaki, pokok yang terjatuh ah, ah, (die) buaye, atas ah
(the) man, (the) tree that had fallen he (the) crocodile top
- 082 R mhm,
- 083 Zin di atas, (dropping his hand to the table)a:h pelepah yang erh
on top (the) frond that
- 084 R pelepah ke kayu?
frond or tree trunk
- 085 Zin kayu. kayu. ((laughing))
tree trunk tree trunk
- 086 R =hhh, kalau pelepah tak sakit tuh.
if (it is a) frond, that (will) not be painful

Zin says 'tibe-tibe' (suddenly) and after a non-fluent phase marked with fillers 'ah' and a cut off 'lela-' introduces the central character, 'Sang Kancil' (Mr. Mousedeer) in line 78. After another filler, he adds the phrase 'pun satu ide' (also an idea). There is no verb to link the phrases here. He continues with another non-fluent phrase with fillers and the Malay noun 'lelaki' (man) and more fillers before saying 'a:pe name' (what's the name). He follows this hesitation marker with a self-correction, 'bukan lelaki' (not the man) in lines 80- 81. Zin finishes the description in line 81 with the noun phrase 'pokok yang terjatuh'. Here he includes a relative pronoun 'yang' (which) and a verb marked with the prefix 'ter' to complete his description of the tree. More fillers follow and he continues with 'buaye' (crocodile) and 'atas' (top). Zin's intended meaning here remains obscure even after he adds details to his description in line 83 with the referent 'pelepah' (the frond). An additional problem with Zin's description is that 'pelepah' is not an accurate name for the referent. The picture depicts a tree trunk on the crocodile's tail. He is able to respond appropriately when the researcher clarifies this inaccuracy. It is apparent from these two excerpts that Zin is familiar with the plot of the story and, when he does produce verbs in Malay, he is able to manipulate the morphology. The next

excerpt from the last part of this activity reveals that Zin is aware of the conventions of storytelling in Malay.

Excerpt 3 from Zin's story telling in Malay

128 Zin er, *Sang Kancil itu*
that Mr. Mousedeer,
129 R mhm,
130 Zin ah a:h (1.1) *berpade-pade*.
(part of an idiomatic expression)
131 R okay=
132 Zin =(XXX), *sangat sekali ke apeh?*
(part of an idiomatic expression) or what?
133 R o:h. *buat baik berpade-pade*,
(part of an idiomatic expression)
134 Zin yes.
135 R *buat jahat*,
(part of an idiomatic expression)
136 Zin sa- se se *apeh?*
what?
137 R *jangan*,
(part of an idiomatic expression) don't
138 Zin *sekali*.
(part of an idiomatic expression)ever
139 R ((nodding)) ah.
140 Zin ah ((laughs))
141 R *itu moral cerita inilah*.
that is the moral of this storylah.
142 Zin ah. yes

Zin produces a noun phrase 'Sang Kancil itu' (that Mr. Mousedeer) to refer to the main character again in line 128. He continues in line 130 with filled and unfilled pauses before he says 'berpade-pade'. Interestingly, this is not a commonly used expression in Malay. It only appears as part of an idiomatic expression often used to advise or refer to moral values in children's stories. Zin then attempts to continue with another part of the idiomatic expression in line 132. He confirms this interpretation when he collaborates with the researcher to produce the fleshed-out version of the expression in lines 133 to 138. Zin also confirms that this is his inference of the 'moral of this story' in line 142. This final excerpt highlights Zin's use of key words that enable him to convey complex ideas in telling a story in Malay. It also shows his awareness of the formulaic structure of such stories that, by convention, end with a statement of the moral of the story.

Zin's performance for the same task in English suggests that he may be less proficient in this language. Incidentally, Zin opted to carry out this task in English first. The first excerpt from Appendix 7(a) below shows Zin producing mostly single words to introduce the main characters. The frequent omission of grammatical links between the content words and the longer non-fluent phase marked with fillers and pauses seen here suggest that Zin has more difficulties in completing this task in English. An alternative suggestion might be that his production of content words in English cued those words in Malay, meaning that he was then able to produce slightly more fluent language.

Excerpt 1 from Zin's story telling in English

012 R okay. start with the first picture.
 013 Zin °hmm.° ((*looking at first picture*)) crocodile,
 014 R mhm.
 015 Zin m, (5.4) ((*sits with his arms folded, looking at the picture*)) er the er
 016 the crawl. ((*drops his hand to resting position, laughing*))
 017 R okay. next,
 018 Zin ((*laughs*)) err, help help.
 019 R okay. what's this? ((*pointing to the picture*))
 020 Zin ah. man,
 021 R this is a man. yeah.
 022 Zin man. ah, (*nodding*)
 023 R yes. what is this?
 024 Zin ah, erm (6.5) °pokok fall° tumbang? ((*laughs*))
 tree fell
 025 R okay. say it in English. what do we call pokok in English?
 tree
 026 Zin the tree,
 027 R yes,
 028 Zin fall. ((*drops his hand to the table*))
 029 R okay. on what?
 030 Zin on the, (2.1) ah, °ah,° the, ah, c(r)ocodile,
 031 R ((*nodding*)) yes.

Introducing the main character with a single noun 'crocodile' in line 13, Zin follows with a filler, a long pause of 5.4 seconds and more fillers. He completes this description with what appears to be a noun phrase 'the crawl.'(line 16) .The missing grammatical link in Zin's production makes it difficult to interpret his meaning. He goes on to say 'help help' (line 18). This appears to be a direct quote but the referent that he is quoting is not mentioned. It is possible that Zin is

in producing fluent speech. For the next question, he identifies the referent and in the next line appears to use code-switching to retrieve a relevant adjective to describe the villain. He says 'jahat' (bad) in line 248 and tries to replace the word with 'angry' which he rejects with 'bukan' (not) and after another non-fluent phase says 'mean. mean.' His efforts at finding a suitable translation equivalent to the word 'jahat' shows that Zin is considering the appropriateness of his translation which is an indication of his metalinguistic ability. Zin's ability to make inferences is also evident in excerpt 4 below which refers to the final frame of the picture sequence.

Excerpt 4 from Zin's story telling in English

305 R so, the moral of the story is,
 306 Zin yes.yes.
 307 R when somebody helps you, you,
 308 Zin ah erm ni nih ah er er, apeh (4.3) ape nameh,
 this this what what (is the) name,
 309 R the man helped the crocodile but the crocodile,
 310 Zin a:hm, *terima kasih*.((laughs))
 thank you.
 311 R what is *terima kasih* in English?
 thank you
 312 Zin ah, ah, *ape ni ah*,thank you.
 what (is) this
 313 R so, the crocodile didn't say thank you, yeah?
 314 Zin yes. yes. ((laughs))
 315 R crocodile was not being grateful?
 316 Zin yes.

Following the prompts in lines 305, 307 and 309, and a rather long non-fluent phase in line 308, Zin produces an approximation of the target answer with a single code-switched expression in Malay in line 310. He says 'terima kasih' (thank you). and produces a translation equivalent 'thank you' in line 312 when he is asked to do so. This indicates that Zin knows that the moral of the story is related to the notion of 'being grateful' or 'gratitude'. He confirms the researcher's interpretation in lines 314 and 316. Similar to his performance in Malay (excerpt 3 from Appendix 7b), Zin is seen expressing complex ideas using merely key words.

Zin's spoken output in English for the story telling task reveals the following features: single nouns, short subject-verb combinations, fillers and pauses and use of key words to represent complex ideas. He took 13 minutes and 2 seconds to complete the task in English producing 31 code-switches in Malay. Zin appears to use the code-switches for dealing with difficulties in retrieving the English words. Among Zin's code-switches, there were 10 instances of phrases and words in Malay used as hesitation devices. For example, he says 'ape ni' (what is this) and 'ape name' (what is the name) during non-fluent phases. Zin also uses the word 'bukan' (not) 3 times to negate his chosen word. The rest of the occurrence takes the form of content words in Malay. This is in contrast to the Malay story telling session where only 7 instances of code-switched words and phrases were noted and where he also completed the activity in a significantly shorter time. During the 6 min and 43 second-long activity in Malay, he produced 2 code-switched noun phrases in English to refer to one of the main characters, 'the man' and 'a tree'. In one instance, he merely produced the definite article 'the' and completed the phrase with a Malay word. There were also instances of false starts, with Zin producing the first syllable of the English words before abandoning the attempt. In the final 2 instances (Seen in excerpt 4 in page 96), Zin produced code-switched affirmative tokens, 'yes.' to show agreement with the researcher's interpretation.

For the Malay version of the Boston Naming test, (see section 4.2.2.2 for a description) Zin's performance demonstrated a naming impairment. His total score in this assessment was 38 out of 50. He was given 12 phonemic cues but no semantic cues because, whenever he was not able to provide an answer, Zin confirmed recognising the items on the picture cards. Following the phonemic cues, Zin was able to produce 5 more correct answers. He said 'don't know' for the other 4 items and produced 2 phonemic paraphasias and 1 semantic paraphasia. Of these answers he produced 6 in English and when asked to answer in Malay, he produced 1 correct answer. Phonemic cueing in Malay for these items enabled Zin to produce 3 more correct answers but he said 'don't know' for another 2.

The same test items were used to assess Zin's naming ability in English and he scored 29 out of 50. He was given 21 phonemic cues which enabled him to produce 10 more correct answers. For 6 items he said 'don't know' but following phonemic cues, he produced 5 answers in Malay. When asked to answer in English, he said 'don't know' for 4 of these items. For only 1 item, he was able to produce the correct answer after a phonemic cue was given. Zin's score of 38 in Malay confirms his naming difficulty which is in contrast to the mean score of 47 reported in Van Dort et al., (2007) for those in his age group (30-39) with more than 12 years of education. Although he does have naming difficulties in Malay, his score of 29 for the same test in English suggests a higher degree of deficit in the later acquired language. The differences observed in Zin's performance in his two languages, namely Malay and English, may not, however, indicate a differential impairment. Without having documented evidence of pre-onset competence for the bilingual PWA's language, it is not possible to compare the degree of loss between the languages post-onset. The language sampling procedures suggest that, at the time of the research, Zin's language difficulties affect both languages but he performs better in Malay compared to English.

4.1.2 Mus: information from ethnographic interviews and language sampling

Mus was a 63 year old married man with aphasia at the time of recruitment. He had had a stroke 2 years earlier and was attending the NASAM centre near the capital city, Kuala Lumpur. His wife, Zi reported that Mus had been in the habit of keeping long hours at work prior to his stroke. Following one such busy night, Mus woke up early the next day to get ready for work when he collapsed. It is not known for how long he had been unconscious when his daughter found him. After 4 days in a private hospital, the doctors confirmed that Mus had had a stroke. No hospital records were available for Mus at the time of data collection. The attending doctors had informed his family that there was "a blood clot that affected the major parts of Mus' left brain". Movement on the right side of his body was severely restricted in the initial stages. Mus also complained of blurred vision in his right eye at that time.

After 30 days of hospitalisation, Mus returned home to continue with traditional treatments that included massages and special prayers.

Mus indicated that he acquired both Malay and English simultaneously during his childhood. His wife, Zi explained that, as Mus' mother was a Singaporean Malay and his family had a high socio-economic status, English was used widely for interactions in his home. After marriage, Zi who is from a kampung (Malay village) acquired English through her interactions with Mus' siblings. However, their home language changed from being English dominant after Mus and Zi had children. Mus' interacted with his daughter and son as well as the grandchildren mostly in Malay. He maintained English for interactions in the workplace. Mus was running his own pharmaceutical company. He also organised Motivational Camps for students. His highest qualification is the High School Certificate of Education (HSC; the Malaysian equivalent of A-levels). The English language was the medium of instruction during Mus' twelve years of education and Malay was only taught as a single subject within the primary and secondary school curriculum then. Following his stroke, Mus reportedly used Malay at home most of the time while English is used for interactions at the NASAM centre.

Observations of Mus' activities in his home show him interacting with his primary caregiver, his wife, Zi, most of the time. Zi does not share a similar history of bilingual language acquisition with Mus; Malay was her home language during childhood and English was acquired in adulthood, after marriage and in the workplace. She had worked in a number of places and held administrative positions in the marketing division of a property developer before her retirement. According to Zi, her interactions with Mus after his stroke are mostly in Malay. However, she agrees that they use a 'mixed' language (Malay and English) often.

Both Mus and Zi confirmed that his friends from the NASAM centre provided more opportunities for using English. Of these, they identified Alan, a 63-year-old

volunteer from the NASAM centre as his regular conversation partner outside the home. Alan's language repertoire included English, Tamil, Malay and Cantonese. He claimed that he was exposed to Tamil at home but the linguistic environment of the neighbourhood and the school he attended resulted in English becoming his dominant language. Alan recalled having teachers from the UK and Ireland as this was the practice in the English schools in Malaysia during that time. Alan's work at an international tobacco company provided more opportunities for using English as much of his in-service training sessions were also carried out by expatriate trainers from the UK.

Alan's involvement at the NASAM centre began soon after his own stroke about 2 years prior to data collection. He remembered that what started out as an episode of food poisoning escalated to his losing consciousness for a period of 4 weeks. No medical records were available on Alan's stroke. He recalled that those who visited him in the hospital had difficulties understanding his slurred speech. His left hand remains weak but Alan reported experiencing no language difficulties. He is a volunteer at the NASAM centre and assists the speech and language therapist during group language activities.

Mus reported that, following his stroke, the difficulties he experiences in communicating with others can be very frustrating. He often finds it difficult to produce words despite knowing what he wants to say. Mus' performance in the story telling task shows that he recognises the main characters in the story but was only able to name them after cues are provided. The long pauses seen in the first excerpt from Appendix 7(d) presented below illustrates his word finding difficulties when he attempted the task in his home language, Malay. In the preceding lines when instructions for the task were given, Mus responded with 'tak tau' (don't know) .He is, however, able to complete the target answers after phonemic cues are given.

Excerpt 1 from Mus' story telling in Malay

- 022 R *pokok. ah. ape jadi dengan pokok kat sini?*
yes. tree. what happened to the tree right here?
- 023 Mus *ah, ((tracing the picture)) (5.4) ((holding mid distance gaze))*
- 024 R *pokok ja:,*
tree (first syllable of 'jatuh')
- 025 Mus *hm, ((looking at the picture)) (4.5)*
- 026 R *pokok ja:, jat-,*
tree (first syllable of 'jatuh')
- 027 Mus *JATUH.*
fall
- 028 R *ah. jatuh atas?*
fell on?
- 029 Mus *jatuh,*
fell,
- 030 R *mhm,*
- 031 Mus *atas, (6.0) ((looking at the picture))*
on
- 032 R *((pointing)) yang ni, ni ape?*
this one, what is this?
- 033 Mus *ahh, (5.7) ((looking at the picture and then holding a mid-distance gaze))*
- 034 R *atas?*
on
- 035 Mus *pokok*
tree
- 036 R *ah. pokok. pokok jatuh atas*
(the) tree tree fell on
- 037 Mus *atas,*
on
- 038 R *e:?*
(first syllable of 'ekor')
- 039 Mus *ekor.*
tail.
- 040 R *ah. ekor sape?*
whose tail
- 041 Mus *ekor, ah, (2.8) ((touching the picture)) ah,*
tail
- 042 R *m. siapa tu?*
who is that?
- 043 Mus *ahh. (1.1) ((turning to R))*
- 044 R *bu:,*
(first syllable of 'buaye')
- 045 Mus *buaye.*
crocodile
- 046 R *ah. die jatuh atas ekor buaye ye? ah, gambar nombor due,*
it fell on (the) crocodile's tail, right? (the) second picture
- 047 Mus *due,*
second,
- 048 R *emh?*
- 049 Mus *buaye,*
crocodile
- 050 R *mhm*
- 051 Mus *jatuh. ar- noh.*
fall
- 052 R *no?*

053 Mus *buaye, erm* (3.3) ((*looking down*)) *NANGis*
 crocodile (is) crying

054 R *ah. buaya nangis. yah. buaya nangis.mintak,*
 (the) crocodile (is) crying. Yes. (the) crocodile (is) crying asking (for)

055 Mus *tolong.*
 help

056 R *mintak tolong daripade?.*
 asking (for) help from?

057 Mus *ah kawan*
 friend

Mus begins to answer the question ‘ape jadi dengan pokok kat sini’ (what happened to the tree here) in line 23 with a filler ‘ah’. In the 5.4 second pause that follows, Mus traces the picture of the tree with his index finger but he does not produce a verbal response. Another pause of 4.5 seconds follows. Only after the prompt is repeated for the second time, Mus completes the answer with ‘jatuh’ (fell) in line 27. A further expansion of ideas is carried out in the same manner with the researcher asking questions in lines 28, 32, 34, and 36. For each of these, Mus either repeats the words and phrases from the preceding lines or produces fillers. In response to the first syllable cue in line 38, Mus responds with ‘ekor’ (tail). Again in lines 40 to 45, prompts and phonemic cues helps Mus to produce the targeted answer. In line 46, the researcher redoes the complete version of the description for the scene depicted in the first frame before guiding Mus’ attention to the second frame. Mus repeats the last word ‘due’ (second) in line 47 and says ‘buaye’ (crocodile) in line 49 in response to a go ahead signal, ‘emh?’. He then produces the verb ‘jatuh’ (fall) without a prefix. He rejects his own answer with ‘no(h)’ in English. He responds to the researcher in line 53 with a repeat of ‘buaye’ (crocodile) and in the 3.3 second pause that follows, Mus appears to be studying the picture. He then says ‘nangis’ (is crying). Here the verb is produced without the prefix ‘me’ but his use of /n/ in initial position marks it as the verb form (the noun form is ‘tangan’). In this manner, Mus completes his first subject-verb structure. He appears to understand the researcher’s redoing of his description in line 54 and is able to complete the prompt ‘mintak’ (asking for) with the word ‘tolong’ (help). A further extension of Mus description is initiated with a repeat of ‘mintak tolong’ (asking for help) and the word ‘daripade’ (from) requiring him to produce a noun to

complete the phrase. Mus says 'ah kawan' (friend) in line 57, to identify the other main character in this story.

Mus progresses from producing complete words or phrases only after being given a cue to producing single word answers on his own as the activity continues. The next extract from the end of the task shows Mus' difficulties in articulating words that he knows. Here he makes repeated attempts to produce an adjective to describe the emotions of the two main characters in the story.

Excerpt 2 from Mus' story telling in Malay

201 R *mereka berdue ni,*
 they both
202 Mus ah, (2.4) ((*looking at R, frowning*))
203 R *gem-*
 (first syllable of 'gembire')
204 Mus *biri bire- ah, tch. bila ah-*
 (last two syllable of 'gembire')
205 R *re? gem,bi=*
 (last syllable of 'gembire') (first two syllable of 'gembire')
206 Mus *bire.*
 (last syllable of 'gembire')
207 R ah, *pulang dengan gembirelah.okay?*
 (returned (home) happily)
208 Mus ah.

Mus responds to the prompt 'mereka berdua ni,' (they both) with a filler and a 2.4-second pause in line 201. His facial expression indicates that he does not know how to complete the prompt. He also faces difficulties in completing the first syllable cue 'gem' given in line 203. In an attempt to complete the word with the last two syllables, he says 'biri' first and self corrects to say 'bire'. He tries once more and says 'bila', mispronouncing the last syllable. This is likely to be evidence of a phonemic paraphasia. In line 206, Mus completes the cued word accurately and agrees with the researchers redoing of the full answer.

These two excerpts reveal Mus' prevailing difficulties in speech production. He repeatedly initiates a response with fillers and long unfilled pauses follow. He often shows a reliance on syllabic cues but is seen producing single word answers with

greater ease as the activity progresses. There is also evidence of phonemic paraphasia in his spoken output. In performing the same task in English, Mus produces single words to complete prompts. He chose to do the story telling activity in English first. The next excerpt from Appendix 7(c) reveals Mus' difficulties in articulating his answers and also there is evidence of perseverance in his spoken output.

Excerpt 1 from Mus' story telling in English

004 R this is the story of
005 Mus (cro)codile.
006 R crocodile yeah?
007 Mus crocodile.
008 R crocodile and who?
009 Mus c(r)ocodile,
010 R mhm
011 Mus and
012 R mhm,
013 Mus erh, (2.9) ((*turning to R*)) ah,
014 R the,
015 Mus *bomoh*. ah, no.
shaman
016 R m?(0.8) ((*looking at Mus*)) *bomoh*?
shaman
017 Mus no. no(h).
018 R no. not *bomoh*. crocodile and the,
shaman
019 Mus (ch)i- ah, tears.
020 R okay. this is the story about the crocodile and a man, yeah?
021 Mus ah. c(r)ocodile and (ch)eers.

Mus completes the prompt with an effortful production of the word '(cro)codile'. When prompted to expand the list of characters in the story, he repeats 'c(r)codile' in line 9 before adding the connective 'and' (line 11), only to follow it with fillers and an unfilled pause (2.9 second) in line 13. He finally completes his answer with a code-switched word 'bomoh' (shaman) in line 15. He rejects his own answer and continues in line 19 with a false start and the word 'tears'. Despite the researcher redoing the answer and replacing the reference to 'bomoh' with a more generic noun 'a man', Mus repeats the phrase 'c(r) ocodile and (ch) eers' (in line 21) with the last word possibly being a phonemic paraphasia for the word 'tears' that he produced earlier in line 19. It is also perhaps an example of a word perseveration.

This reading of Mus' answer is confirmed in the next excerpt taken from the middle of the activity. Here, he repeatedly produces the phrase 'crocodile tears'.

Excerpt 2 from Mus' story telling in English

086 Mus ((*touching the picture*)) crocodile TEARS.
087 R that's right.
089 Mus tears.
090 R mhm. the crocodile's got tears.crocodile is /kr/,
091 Mus cro(c)odile TEARS.
092 R yeah. he's got tears so the crocodile is /kra:/,
093 Mus CRYING.
094 R crying. ah, okay. then, who's this?

In line 86, Mus points to the picture of the crocodile saying 'crocodile tears' and confirms his reference to 'tears' with a repeat in line 89. He says the same noun phrase in line 91 in response to a prompt that ends with a phonemic cue /kr/. Only after a redoing of the prompt line 92 does Mus produce the target answer, 'crying' in line 93. It is not clear if Mus is merely completing the syllabic cue or has understood the connection that the researcher is attempting to make to his contribution 'tears'. The last excerpt from this set shows Mus having difficulties with a more complex task i.e., making an inference about 'the moral of the story' based on the events described so far.

Excerpt 3 from Mus' story telling in English

298 R yes. this kind of the story we always say the moral of is
299 the story is,
300 Mus hm.
301 R when,
302 Mus erh, (1.5) ((*looking at R*))
303 when, some-
304 Mus ah, crocodile,
305 R m,
306 Mus bite,
307 R mhm,
308 Mus ah ((*pointing to the picture*))

Mus' responses in lines 300 and 302 reveal that he is not able to complete the prompt that requires him to state the moral of the story. Another attempt at

prompting in line 303 results in Mus initiating a recap of the story. He reintroduces the main character 'crocodile' before continuing with the verb 'bite' in line 306. His pointing gesture in line 308 confirms that he is attempting to revisit the scenes that have already been described. This suggests that Mus may be aware that the scenes hold a cue about the 'moral of the story' but he is not able to produce the inference on his own.

The story telling task in English took 9 minutes and 41 seconds for Mus to complete. He appears to perform better in this language although his articulation suggests possibilities of phonemic paraphasias and perseverance. Mus was seen to produce 7 code-switches in Malay. This included 6 instances of the same word 'punya' (a pronoun that can be taken to mean 'his'), used as a stalling device when Mus appeared unable to produce a word that he knows. Only in one instance did he use the code-switched content word, 'bomoh' (shaman). Mus had more difficulties in completing the task in Malay, his home language post-stroke. This activity had to be terminated after 7 minutes and 29 seconds because Mus indicated that he was tired. He merely completed the prompts given in Malay and code-switched to English 4 times. Mus used the negative marker 'no' in English 3 times and produced code-switched content words only once.

For the Malay version of the Boston Naming test (mBNT) Mus' scores was 4 out of 50. He was given 33 semantic cues and he repeated the last word in the cue for 8 of them, produced 1 related word and he showed knowing the answer either with a gesture or with 'ah' 5 times, and indicated not knowing 11 of the items. For the rest of the items he just looked away. With 46 phonemic cues, he produced 26 more correct answers. Of the remaining 20, he produced 6 nonsense syllables, 4 semantic paraphasias, and said 'tak tau' (don't know) for 10 items. For 1 item only, Mus produced his answer in English and was able to produce the right answer after phonemic cuing was given for the Malay word.

Mus' naming ability in English, assessed with the same test items, produced a score of 1 out of 50. He was given 48 semantic cues and repeated the last word of the cue for 16 of them. Although there were 22 instances of Mus indicating that he understood the semantic cue, he did not produce an answer. For 4 of the items he repeated the name of an item presented earlier. For the rest of the items, Mus indicated that he did not want to continue. He was given 48 phonemic cues and produced correct answers for 30 more items. For the other 18, he produced answers in Malay 4 times and was able to correct 2 of these when prompted in English. He also produced 5 phonemic paraphasias and repeated the first syllable for 4 items but did not complete the answer. For the rest of these items he said 'don't know'. Mus' score of 4 in Malay and 1 in English shows severe naming difficulties. Van Dort et al. (2007) reported the lowest mean score was 41.76 for those normal subjects who were 60-69 years of ages and had less than 12 years of education. Mus appears to have performed better in English than Malay in the storytelling task but the reverse is seen in his naming test scores.

4.1.3 Tana: information from ethnographic interviews and language sampling

Tana was a 76 year old PWA who, at the time of recruitment, was 6 years post onset. She was attending the same Stroke Support centre as Mus. During the interview, Tana explained that she had her stroke while on holiday in the United States of America. She was on the last leg of a month-long holiday that included London, Canada and the United States. She received initial treatments in an American hospital and subsequently was brought home to be admitted to a public hospital in Petaling Jaya, a major city in Malaysia. She was kept under observations for 3 days. She then moved into her sister Rani's home. Neither information pertaining to the onset of her aphasia nor her medical records were available at the time of interview. Tana recalled that the doctors in US told her that she had had a stroke on the left side of her brain. After she was discharged from the hospital Rani had arranged for Tana to undergo a series of intensive reflexology sessions and acupuncture. Tana had no complaints about her eyesight

or hearing following her stroke but she complained of persistent weakness in her right hand and leg.

In the self- report for bilingualism history, Tana indicated that English was her dominant language. She also claimed that this language was acquired in childhood at the same time as Tamil. However, her sister's report provided a contradictory picture of Tana's language acquisition history. Rani remembered that only Tamil was spoken in their family home when they were children. It is possible that the presence of older school-going siblings may have contributed to Tana's early exposure to English within their home. Rani reported that, post-stroke, Tana used more English in her interactions and appeared quite proficient in Malay too. Tana's dominant language for interaction prior to her stroke was English for all purposes while Tamil was maintained at home. Tana's husband died 20 years ago and she does not have any children of her own but maintains a good relationship with Rani's children. Tana's highest qualification is the Malaysian Certificate of Education (MCE, the Malaysian equivalent of O-levels). After completing her formal education, Tana obtained a certificate in Stenography which enabled her to join a government department as a Stenographer. Upon retirement she ran a newspaper and magazine shop. At the time of the interview, Tana reportedly used English and Tamil at home while Malay was sometimes used for interactions at the NASAM centre.

Rani was Tana's primary caregiver and regular conversation partner as they share a home since her stroke. Rani's bilingualism history is similar to Tana. They went to an urban English school where Chinese and Indian children made up most of the school population. English language was the medium of education then, while Malay was taught as a single subject. Rani's daily activities included reading her prayer books, ferrying her grandchildren to and from school and other routine tasks of managing the home. Both Rani and Tana do go out for meals with their friends and relatives. They agree that such occasions can be particularly stressful for Tana

as she finds it difficult to express her ideas. However, Rani felt that Tana's interactions at home and outside the home can be equally challenging.

Tana's spoken language, elicited through the story telling task shows that she can name the main characters but she tends to produce strings of content word with no apparent grammatical link between them. There are long pauses between Tana's effortful articulations of single words. She uses pointing gestures to establish joint attention on the different parts of the picture she is focusing on. She also gestures to represent action or objects. The first excerpt below (from Appendix 7e) illustrates Tana's difficulties in producing fluent speech as she attempts the story telling task in her dominant language, English.

Excerpt 1 from Tana's story telling in English

019 Tana /s/, /s/ wait- erm, the crocodile, sleep ((*lowers her hand, palm*
020 *facing down*)) erm
021 R okay.
022 Tana okay, erm, (2.2) ((*looking at the picture and then shifting gaze to R*))
023 R what is this? ((*pointing to the picture*))
024 Tana a:h, ((*moving her hand back and forth, sawing motion*)) pa:lam. ((*laughs*))
bridge
025 R pa::lam? this not a pa:lam. this is a, look at this.
bridge bridge
026 Tana erm,
027 R /tr/,
028 Tana ch? ((*looking at R*))
029 R /tr/,
030 Tana tree.
031 R ah. the tree. what happened to the tree?
032 Tana erm, cross er that that tree,
033 R yes,
034 Tana /f/ fall down.
035 R yes. the tree fell down on the,
036 Tana the the a:p, th:at man,
037 R mhm,
038 Tana o:, (3.3) ((*swinging her hand to the back*)) o:v Ɂ(7.5) ((*pointing*
039 *to the picture*))the man,
040 R mhm,
041 Tana a:h,the man,
042 R m,
043 Tana a:hm, (6.5) ((*tracing the drawing on the paper*)) crocodile,
044 R mhm.
045 Tana falling.
046 R mhm.
047 Tana that man, erm, / l/ man STAND, ing, ((*touching her own chest*))
048 R m,
049 Tana erm, ((*brings her right hand close to her chest*)) crocodile,

050 al(rea)dy, dead. ((*flicks her wrist, spreading out her fingers*))
051 R okay. then what happens next?

Tana begins the task in line 19 with false starts and a filler before introducing the main character, 'the crocodile'. She completes the subject-verb structure with the single word 'sleep'. A grammatical link between the two words is missing as Tana does not produce the copula 'be' or indicate the tense of the verb. She produces more fillers in lines 20 and 22 and after a 2.2 second unfilled pause, a prompt is given. Tana responds with a code-switched noun 'pa:lam' (bridge). Moving her hand back and forth almost like in a sawing motion, she prefigures the Tamil word. Tana's gesture appears to suggest that the object in question is placed across something. Although the picture depicts a tree trunk that may be used as a bridge across streams, in this instance, the tree trunk lies across the crocodile's back and does not function as a bridge. Thus, Tana's code-switched answer is rejected and further cues are given. She completes the first phoneme cue to say 'tree' in line 29. Tana then tries again saying 'cross' in line 31 but abandons this to return to the established reference with 'that that tree'. She completes describing the scene in line 33 with 'fall down'. The verb she produces here is also not marked for tense. Tana's difficulties in continuing the task becomes evident, this non-fluent phase being marked with fillers, false starts and long pauses of 3.3, 7.5 and 6.5 seconds in lines 36 and 41.

In line 43, she produces a single verb (falling) in the 'ing' form but her referent is unclear as there is no grammatical or logical link with the noun 'crocodile' that she produced in line 41. She restarts in line 45 with 'that man' as the subject and adds a single word 'standing'. Once again she produces the 'ing' verb form. Tana adds 'crocodile already dead' in lines 49-50. Interestingly, her interpretation that the 'crocodile is already dead' shows a lack of logical development in ideas as, in the next frame, the crocodile is seen biting the man's leg. Tana's lack of familiarity with this Malay folk tale or problems with comprehension may be a contributing factor here. The following excerpt from towards the end of the task also suggests that Tana may be not familiar with the conventions of such a genre.

Excerpt 2 from Tana's story telling in English

236 R what is the moral of the story?
237 Tana ah.
238 R so what can we learn from this story?
239 Tana the man is ,
240 R mhm,
241 Tana leg, the the what (2.4) ((*pointing to the picture*))
242 R crocodile
243 Tana ah, crocodile ah that ((*tapping on the picture*))
244 R the tail?
245 Tana crocodile
246 R mhm,
247 Tana that((*pointing*))
248 R the tail?
249 Tana went down.
250 R went down?
251 Tana no(h)
252 R no?
253 Tana crocodile is ((*pointing to the picture*))
254 R under the tree.
255 Tana the, er under the tree,
256 R so this man,
257 Tana man,
258 R helped didn't he?,
259 Tana ah help.
260 R this man helped.
261 Tana the the man helped,there. ((*pointing*))

Tana's responses to the question on 'the moral of the story' reveal that she is not able to provide an appropriate answer. In line 239, she is seen initiating a recap of the events in the story that she had already narrated. She starts again with the main character 'the man' and says 'is'. She introduces another noun 'leg' in the next line and another non-fluent phase follows. During the 2.4 second pause that follows she points to the picture. Through her gestures, Tana invites collaboration to produce words that describe the picture in lines 241 and 243 and 247. Only in line 249 does she make an independent contribution with 'went down'. The meaning of Tana's description remains ambiguous and an attempt to seek clarification is responded to with a rejection. She restarts in line 253 with the phrase 'crocodile is' and points to the picture, prompting the researcher to provide options that she merely repeats in the next line. Having established this pattern, Tana continues repeating the elements from the preceding lines to show agreement with the researcher's interpretation. In line 261, she shows understanding of the

interpretation of ‘the man helped’ by identifying the picture sequence that represents this idea. While in this excerpt Tana successfully initiates collaborations to deal with her difficulties, she is not able to infer the moral of the story. In the last excerpt below, it is evident that Tana is able to complete a complex task, presenting her evaluation of the main characters in the story.

Excerpt 3 from Tana’s story telling in English

285 Tana m.the (1.4) ((*pointing*)) the man, (2.2) ((*pointing*)) nice man.
286 R mhm
287 Tana the kancil erm kancil very nice.(0.8) ((*pointing*)) that,
288 R mhm, ((*pointing*)) this one?
289 Tana *busuk orang*.
idiomatic expression (evil or wicked person)
290 R
291 Tana ah.
292 R the crocodile is bad. because this man helped but he bit him.
293 Tana a:h there (*pointing at the picture*)
294 R so, the crocodile is not nice.
295 Tana ah. ((*laughing*))

Tana identifies one of the main characters as ‘the man’ in line 274 and after a 2.2 second pause describes him as ‘nice man’. She then moves to the next character ‘the kancil’ and upgrades her evaluation saying ‘very nice’. When prompted to describe the crocodile, she produces a code-switched expression ‘busuk orang’ in line 289. The Malay adjective ‘busuk’ (literal meaning is rotten or is an elliptical form of the idiomatic expression ‘busuk hati’, evil hearted) is used here to aptly describe the villain in the story. Tana’s use of the Malay expression is remarkable as she had earlier declined to attempt the task in Malay claiming that she was not proficient in that language.

Tana’s story telling in English was completed in 15 minutes and 45 seconds, with 8 instances of code-switched words or expressions. In 6 of these instances, she produced Malay code-switches and these included 3 repeats of the expression ‘busuk orang’ and one instance of the elliptical form ‘busuk’. The other two Malay words that she used were ‘jatuh’ (fall) and ‘malu’ (was embarrassed). Her choice of these code-switched words can be attributed to the stimulus being a well-known

Malay folk tale although English versions of this story are used widely in Malaysian schools. Only 2 out of the 8 code-switches were in Tamil. However, assessing Tana further in Tamil was not a feasible option for the researcher.

For the BNT, Tana' naming test score in the English language was 17 out of 50. She was given 13 semantic cues and was able to name 2 more items correctly. One of her answers was a semantic paraphasia. For the other 10, she continued to use gestures to represent the word that she could not produce verbally. 31 phonemic cues were given and she produced another 16 correct answers. She continued to describe the items in 4 instances and repeated only the phonemic cue for 5 other items. Tana also produced 1 phonemic paraphasia. For the rest of the items she used gestures to represent meaning. Tana produced the Malay name for one item but she was only able to replace it with a translation equivalent after a phonemic cue was given. Tana's score for naming in English is considerably lower than that identified as the norm for healthy Malaysian adults of her age range. It is possible that Tana's use of gestures in the story telling task is related to her naming deficits. A comparison of Tana's abilities in all the languages in her repertoire has not been possible.

4.2 RESEARCH PROCEDURES AND INSTRUMENTS

This section describes the steps involved and the instruments used in data collection. The rationale for each step and instrument are discussed in the following subsections.

4.2.1 Observations and recruitment

The first step in this study involved observations of PWAs at two NASAM Stroke Support Centres in Malaysia. The main purpose of these observations was to gain an understanding of the PWAs and to find out about the routine activities at the centres. The researcher's role as a Communication Support Volunteer at the UK

Stroke Association (Barnet Branch) provided the necessary training and experience for interacting with the PWAs. The initial observations also served to establish a close rapport with the PWAs attending the stroke support centres. It was observed that a social network of individuals from diverse linguistic backgrounds was evolving in this setting. As such, conversations in both Malay and English were the norm at these centres. Thus, the preliminary unstructured observations helped to focus the research on the languages commonly used by Malaysian bilinguals.

Recruitment of participants followed next, with informal discussions with the attendees and family members present about and the steps involved in the present study. The staff at the centres also made suggestions about the PWAs who might be suitable for the study. The PWAs and their families were then approached directly to discuss their potential participation. No selection criteria were imposed at this or any other stage of the research. At the end of the sessions at the Centre, potential participants and their family were given a copy of the Participant Information Sheet. These documents were prepared in the two official languages of the country, i.e., Malay and English (See Appendix 1a and 1b). The Malay translation of the documents were verified by means of back translation. A supplementary sheet with a diagrammatic representation of important steps in the research was also included.

Having recruited the participants in this manner, the first visit to their home was made. The interactions of the PWAs in their homes were observed before holding further discussions about the research. Questions arising from the information sheet were also answered then. When the participants indicated their agreement to participate, they were given the consent form to sign (See Appendix 2 a and b). Only after they returned the signed document were the data collection procedures initiated.

4.2.2 Gathering the relevant background information

Relevant background information about the participants was gathered by means of ethnographic interviews and language sampling via a pictorial stimuli in addition to administration of a newly developed test. These procedures will be discussed below.

4.2.2.1 The ethnographic interview

Following the guidelines for designing an ethnographic interview schedule presented in Spradley (1979), a series of questions were formulated. This was expected to allow for a further exploration of issues arising during the interview. Sources such as the Bilingual Aphasia test (BAT) (Paradis and Libben, 1987) and Conversation Analysis Profile for People with Aphasia (CAPPA) (Whitworth, Perkins & Lesser, 1997) were also referred to in developing the interview agenda (See Appendix 5). For the purpose of triangulation, each PWA and his or her regular conversation partner were interviewed. The interviews were carried out during the home visits and an informal tone was maintained during all the sessions. For two of the PWAs, there was an additional interview with a conversation partner from outside their home with whom the bilingual PWA reportedly used his other language. In order for the participants to get accustomed to the presence of the recording equipment, all the initial interactions were also video recorded.

4.2.2.2 Language sampling materials

Due to the lack of documented evidence about the language abilities of the bilingual PWAs participating in the present study, language sampling became a necessity. (See section 1.1.3 for a discussion on the lack of standardised language test for the Malaysian PWAs.) A survey of assessment materials commonly used for English speaking PWAs became the necessary first step in identifying a workable language sampling procedure. Picture description tasks, such as the

Cookie Theft picture from the Boston Diagnostic Aphasia Examination (Goodglass and Kaplan, 1983) may have been appropriate for gauging the participants' linguistic ability. However, extended language sampling by means of a picture sequence such as those based on Aesop's Fables appeared to be more suitable for the selected PWAs. So, available materials on Malaysian folktales were surveyed. One language stimuli made up of a series of 6 picture frames from a well-known local story was then developed. As the pictures were taken from a children's book, in order to make this task more appropriate for the adult PWA, the participants were instructed to take on the role of a storyteller addressing a young child from their family.

In order to obtain a naming score for individual PWAs, the recently developed Malay version of the Boston Naming Test, the mBNT (Van Dort, et al., 2007) was also administered. Although the mBNT only targeted picture naming in Malay and was not designed to be used as a 'bilingual' test, for present purposes the same items were used to assess the two languages of the bilingual PWAs. As the items in the mBNT had been adapted to be culturally appropriate, the Malaysian bilinguals were expected to be able to name the items in both Malay and English. (See Van Dort et al., 2007 for a discussion on the development of the test and the norms for scores in Malay).

4.2.3 Collection of the core data: Video recording conversations

A second visit to the each PWA's home was arranged for the purpose of recording their home conversation. On the day of recording, the researcher set up the video camera in a room chosen by the PWA and his or her conversation partner. After positioning the video camera on a tripod at an appropriate distance from their regular sitting positions, another member of the household was shown how to switch it on and off. The researcher then left the premises. Returning after about an hour to collect the video recording of the conversation, the researcher continued with interview questions that could not be completed during the first visit. For two

PWAs (Zin and Mus), the language sampling procedure their home language was also continued during the second visit as both of them had chosen to do the task in English during the first visit. Arrangements were then made to record another conversation for these two PWAs because they reportedly used their other language (English) for interactions with friends from the NASAM centres. For one PWA, the second conversation took place in the living room of his friend's house and for the other PWA, it was in the waiting area at the NASAM centre.

The conversations, recorded on Sony Mini DV tapes, were transferred to the computer and the analysis software Transana 2.4.1 (Woods & Fassnacht, 2007) was used for managing the video materials in this study. The time-coding function available on this software was found to be useful for identifying overlapping talk, overlap between gesture and talk, pause length, and other features considered to be relevant for analysis. The Praat programme version 4.4.20 (Boersma & Weenik, 2006) was used for analysing audio files extracted from the video recording of these conversations only when necessary. For example, when it was not possible to discern the change in pitch by only listening to the recording pitch traces were generated (as in the utterance analysed in Figure 1, in chapter 5). Preliminary analysis of the data included identification of recurrent patterns in each data set and a comparison across the data sets were made only after patterns within each set had been identified.

A final visit was made to the homes of the participants to obtain permission for archiving the conversation data for the purpose of future academic exercises. The participants viewed the video before signing the consent form for storage (see appendix 3). The data sets used in this study are available at www.ucl.ac.uk/ls/cava. For one PWA and his conversation partner an additional form was created since retaining the PWA's real name in the transcript became essential. (See appendix 4).

4.2.4 Transcription, translation and validation

Transcription of the core data in this study i.e. the conversations of the PWAs, followed the CA conventions presented in Wooffitt and Hutchby (2008) and adaptations suggested in Beeke, et al., (2003) for transcribing conversations of PWAs (see Appendix 6 for transcription notations). Translation of words and phrases in languages other than English were included in smaller fonts below each line. An expert informant who is a researcher in the field of Aphasia in Malaysia and a native speaker of Malay, was recruited to verify and validate the translations. The verification process involved the expert informant looking at the expressions in Malay in the transcript and offering a translation in English. The researcher then compared it against her own translation. Whenever there was a mismatch, the rationale for translation was discussed and the video was reviewed to look at the sequential context of that expression. The discussion continued until an agreement was reached. The language sampling data was also transcribed verbatim following the same procedure.

4.3 SUMMARY

Information pertaining to the three bilingual PWAs in this study presented in section 4.1 was obtained by following the procedures detailed in section 4.2. Data from the ethnographic interviews informs us about the PWA's background, case history, language acquisition history and domains of language use. The analysis of language sampling data focused on the PWA's production to gauge his or her language difficulties. The core data of this study, i.e., conversations of these PWAs will be analysed in the next three next chapters adhering to the principles of CA discussed in Chapter 3. By scrutinizing the conversational turns of both the PWA and his or her conversation partner, sequential analysis will identify the participants' own procedures for turn construction given that one of them has aphasia. The findings from the analysis of the conversation data will be discussed in chapter 8 by bringing together the background information gained from

ethnographic interviews and the deficits seen in the language samples. Because this study is the first exploration of Malaysian bilingual PWAs, the two most commonly used languages in the population, Malay and (Malaysian) English are targeted for analysis. It is hoped to provide insights about the manifestations of aphasia in the languages spoken by Malaysian bilinguals and about bilingual aphasia in general.

5 Topic-comment structure as a resource for turn construction

5.0 INTRODUCTION

This chapter documents the use of topic-comment structure as a turn construction resource in conversations of bilinguals adapting to aphasia. This practice involves first introducing a topic, i.e. what the talk is about, and then adding a comment about that topic. Section 5.1 examines this resource in the sequential locus of first position turns (where a topic is initiated), section 5.1.1 investigates its use in conversations with regular CPs and section 5.1.2 with less familiar conversation partners. Section 5.2 investigates the potential occurrence of topic-comment structure in second position turns in question-and-answer adjacency pair sequences. These analyses focus on the bilingual PWAs' construction of topic-comment turns and the conversation action/s accomplished via this resource. Section 5.3 examines the use of topic-comment turns in the talk of the non-aphasic conversation partners. By analysing the sequential organisation of topic-comment turns, the chapter aims to identify interactional motivations for deploying topic-comment structure in conversations of bilingual PWA, including the influence of the languages spoken. The chapter concludes with a summary of patterns in the deployment of this resource (Section 5.4) that are common across participants as well as those that are specific to individual partnerships, and discusses whether the language environment of these bilingual speakers encourages the use of topic-comment structure.

5.1 TOPIC-COMMENT STRUCTURE IN FIRST POSITION TURNS

The conversational action of introducing a topic of talk is implemented within first position turns. Sequences are organised on the basis of the action accomplished by the first position turn (Schegloff, 2007). See Chapter 3 section 3.2 for further

discussion of the sequence organisation of first position turns. The interactional demands of constructing a first position turn have been noted to be particularly challenging for PWAs (Milroy and Perkins, 1992; Lock et al., 2001, Beeke, et al. 2003, 2007; Wilkinson, et al. 2003, 2011; see discussion in Chapter 3 section 3.6.1). In the data analysed here, bilingual PWAs are seen constructing their first position turns by deploying a fronted referent to introduce a topic and then adding new information about the topic, a comment, via a common word or formulaic expression. The topic referent is marked prosodically to indicate more talk is to come, and is often followed by acknowledgement of the referent by the conversation partner and encouragement to continue, before the PWA completes the turn with a comment. Thus, topic-comment first position turns are built incrementally; one meaningful unit is delivered at a time, in collaboration with the conversation partner. Some turns constructed in this way reach completion with relative ease and thus accomplish the action they are designed to implement. For others, a PWA encounters trouble in either establishing a mutually recognised topic referent or constructing a comment. In such instances, the trouble is often resolved quickly, minimising the delay in accomplishing the action the turn is designed for. Finally, a PWA's first position topic-comment turn runs the risk of not reaching completion if a conversation partner takes the floor before the turn is completed. This section analyses examples of PWAs' first position topic-comment turns and the actions they accomplish upon completion, firstly in conversations at home with a regular conversation partner (Section 5.1.1) and secondly in less familiar partnerships outside the home (Section 5.1.2). The overarching purpose of this section is to gain a better understanding of topic-comment structure in first position and its effectiveness as an adaptive resource for bilingual PWAs.

5.1.1 Topic-comment in a PWA's first position turns in conversations at home with a regular conversation partner

First position topic-comment turns are incrementally constructed in such a way that the first action involves the introduction of a referent, which the conversation

006 Ain a:h, tak tau(:l)ah nak cakap. heh hh.
Ø NEG know PRT Ø want to say
a:h, I don't knowlah what Ø to say. heh hh.

007 Zin heh HEH. ↓

008 Ain i:tu tunggulah, result die.
that Ø waitPRT Ø PRO
that we waitlah, for the result.

009 Zin °hmm.°=

010 Ain =Tapi, ah, orang tu cakap, mmm-
but PRO that say
but, ah, that person said,

011 Zin lah per↓ sediaan. persedian.
preparation preparation
ah preparation, preparation.

012 Ain ((turning to Zin)) persediaan?=
preparation
preparation?

013 Zin =/butf/- bace buku ke ape?
readØ bookØ or what?
/butf/- reading books or what?

014 Ain ah. (single syllable) memanglah, bace buku, tap- ah tapi
of coursePRT Ø readØ bookØ bu- but
ah. (single syllable) of courselah, I read books bu- ah but

015 Zin hmm.↓

016 Ain yang bace tu, ah macam pelan induk pembangunan tu tak,tak
PRO Ø read that like Ø plan master development that NEG NEG
the ones that I read like the development masterplan didn't didn't

017 keluar. die tanye pasal isu semase,
out PRO askØ about issueØ current
come up. he/she asked about current issues,

In the turn of interest (lines 2 to 5, indicated by arrows in the transcript), Zin shifts his gaze from the newspaper to Ain during an initial 0.8 second pause before producing fillers and a turn holding particle 'ah'. He then produces a proximal deictic marker in Malay, 'ni' (this), which projects a noun that is known to both of them (line 3). Zin introduces his topic with the loan word 'interview' (interview, line 3). This fronted referent invokes their shared knowledge about the events of Ain's day. The single noun is repeated for emphasis and the continuative tone (marked with a coma in the transcript) indexes the incompleteness of his turn at this point. Ain's 'ah' response confirms her recognition of the referent, and her delivery of this acknowledgement token with a rising tone prompts him to continue. Zin completes his topic initiating turn with, 'macamaneh' (how, line 5); a comment tied to the topic 'interview' (interview). This expression, which can also be realised as 'macamana', is a common question marker in conversational Malay (Koh, 1990; Zuraidah & Knowles, 2006) as opposed to the more formal 'bagaimana' used in Standard

Malay. The English equivalent of the comment would be 'how was it' (as shown in the gloss) or 'how did it go'. In this case, Zin is able to complete his topic-comment turn with a single commonly used question word.

Ain's responses confirm that Zin's turn, constructed with topic-comment structure, achieves his interactional goals of topic proffer. She initially appears to decline the proffer with 'tak taulah nak cakap' (I don't knowlah what to say, line 6), the phrase 'nak cakap' (what to say) reveals her recognition of his expectation for her to discuss the topic. She then justifies her reluctance with 'tunggulah result die' (waitlah for the results, line 8), adds a resumption marker 'TApi' (but) in line 10, and continues with 'orang tu cakap' (that person said). Zin comes in with 'persediaan' (preparation) in overlap to narrow the topic and clarifies further with 'bace buku ke ape' (reading books or what). Ain responds with an extended turn (lines 14-17), finally reporting that the interviewer asked her about 'isu semase' (current issues, line 17). This demonstrates that she has indeed interpreted Zin's turn as a topic proffer, which she accepts. With the topic-comment structure completed in line 5, Zin effectively shifts the burden of talk to Ain.

The linguistic features of Malay may hold the key to Zin's turn appearing grammatically unproblematic. The verb 'be' is non-obligatory in Malay (Asmah Omar, 1993, Windstedt, 1913). In this pro-drop language pronouns are omitted when they can be inferred from the context of the sequence (Mashudi Kader, 2003.) Koh (1990) explains that, although in standard Malay SVO is documented as the canonical structure, topic-comment structure (such as Zin's first position turn in this extract) is common in conversational Malay⁷. Interestingly, a similar practice of introducing a topic with a fronted noun and adding a comment has been documented in the conversations of English speaking monolinguals with aphasia (Beeke, et al., 2003; 2007; Wilkinson, et al., 2003). A comparison of such talk with an individual's sentential grammar (elicited via language testing) leads Beeke, Wilkinson and colleagues to suggest that topic-comment structure serves as an

⁷ Refer to Chapter 1 section 1.3 for a detailed description of linguistic features of Malay.

adaptation to producing a turn at talk with limited grammatical resources (their speakers had agrammatic aphasia). Zin's difficulties outlined in Chapter 4 section 4.2.1 indicate that he may have a form of aphasia that affects his grammar⁸. However, his difficulties do not become visible in the topic initiating turn discussed here (lines 2-5) and neither does his conversation partner treat his turn as grammatically problematic.

This extract illustrates how Zin constructs a topic-comment turn in first position by combining a fronted noun and a common question word to accomplish the conversational action of topic proffer. He uses his shared knowledge about Ain's interview to establish a mutually recognised topic before incrementally adding the comment to complete his turn. Ain's extended response provides positive proof of the successful outcome of Zin's turn.

A second example of Zin's use of topic-comment structure in first position is shown in Extract 2 below, taken from the same conversation about Ain's interview. Here, Zin is seen taking a longer turn, with a topic referent introduced via circumlocution and a formulaic list making up the comment. The use of prosody to establish links between the elements of the incrementally built turn is evident, and Ain orients to his unfolding turn with minimal responses. Together the topic and comment frame a question; Zin is inquiring about the duration of the training programme that Ain will attend after she gets through her interview.

Extract 2: interviu dah berjaya (Zin-Ain)

```
001→ Zin    [ (0.8)
              ((looking down briefly)) ] interview, interview,=
                                              interview interview
                                              interview, interview,=
002  Ain    =erm?
              ((nods))
003→ Zin    DA:h berJaye:,
              have succeed ø
              have succeeded,
004  Ain    mm,
```

⁸ At the time of this research, there was no documented evidence for agrammatism in Malay, and language tests have yet to be developed.

005→ Zin *ape:,ni:h, nih a:s- sTAhun ke, due ta(h)un ke,tige*
 what this, this, one year or two yearø or three
 what, this, this, a:s- one year or two years or three

006→ *taɾun ɿ*
 yearø
 years

007 Ain *ʌST ʌahun.*
 one year
 one year.

008 Zin *ɿstahun. ɿ*
 one year
 one year.

009 Ain *ʌstahun. ʌ* ((turning towards the house entrance and back to Zin))
 one year
 one year.

010 *ape ni, ka:n. ape tu stahun. sta:hun jelah.*
 whatø this NEG TAG what ø that one year. one year only PRT
 what's this, isn't it. what's that, one year. one year onlylah.

Zin introduces the topic referent 'interview' (interview) after a brief pause and gaze shift in line 1. In a latched turn, Ain displays acknowledgement of the referent with a nod and 'erm?' delivered with a raised tone marking it as a 'go-ahead' (line 2). Zin continues with the phrase 'DA:h berJAye' (have succeeded, line 3). This verb phrase suggests that, on this occasion, Zin is able to manipulate morphology⁹. The word 'DAH', is a contracted form of the aspectual marker 'sudah' (have), and 'berjaye' is a stative verb derived from the Sanskrit loanword 'jaya' (victory/ success) combined with the Malay prefix 'ber' (an affix for marking intransitive verbs)¹⁰. In Malay the borrowed root word 'jaya' is known to only occur in this indigenised form or as part of formulaic expressions such as 'maju jaya' (progressive and victorious) (Asmah Omar, Nov, 2011, personal communication).

At this point, Zin's turn, constructed incrementally over lines 1 and 3 ('interview dah berjaye'), appears to be a complete topic-comment first position turn. He produces it with relative ease possibly because the combination of this particular noun and verb phrase represents a common collocation. However, Zin then continues his turn past the end of the topic-comment structure, by

⁹ This is the only instance where Zin produces a verb in 10 minutes of transcribed conversation data. He does, however show ability to produce complex verb forms in the narrative task.

¹⁰ Refer to Chapter 1 section 1.1.3 for an overview of the relevant linguistic features of Malay.

successfully deploying intonation to signal a turn-in-progress. Ain's 'mm' (line 4), a continuer, confirms her orientation to a turn that is still unfolding; Zin intends to take an extended turn. Based on Finnish conversation data, Lind (2007, 2002) suggests that prosodic packaging used to project a continuing turn is an indication of a PWA planning ahead for a longer turn. This observation appears to apply here as, after a prebeginning 'ape:, ni:h, nih.' (what, this, this., line 5) which allows him to hold his turn while engaged in a word search, and a false start ('a: s-'), Zin continues with a formulaic listing 'sTahun ke, due ta(h)un ke, tige taun' (one year or, two years or, three years, lines 5-6). Zin uses the Southern dialect of Malay so the word 'ke' produced with a schwa can function as a question tag (is it?), which means the phrase 'stahun ke' (as in 'one year, is it?') on its own could be a complete question. However, here the turn continues, and it is the pitch of Zin's production that marks each temporal phrase as one item in a list of three alternatives and thus here lends 'ke' the meaning 'or'.¹¹ The terminal rising pitch of the last item on his list suggests that this turn is designed to accomplish the action of asking a question.

The eventual completion of Zin's first position turn in line 6 reveals that the topic and comment combination 'interview DAH berjaya' (interview have succeeded) acts as a circumlocutional reference to the training programme or course that Ain will attend after successfully getting through the interview. With the listing of options making up a comment tied to the circumlocutional reference, the initial embedded topic-comment structure develops into a more complex structure. From Zin's introduction of the topic referent, 'interviu' (interview), the sequence appears to set up a series of events that begins with one attending an interview, succeeding in the interview, and then embarking on a training programme. In this way, Zin successfully uses circumlocution to establish a referent without producing the word latihan (training) or 'kursus' (course). His incrementally produced turn appears to be asking Ain about the duration of the course that

¹¹ Beeke (2005, p.167) documents a similar formulaic phrase, ('amazing because two years or three years') used in the conversation of an English speaking PWA. This suggests that formulaic

will follow the successful outcome of her interview ('interview dah berjaye', lines 1-3). In overlap with the last item on Zin's list, Ain answers 'stahun' (one year). In the next lines, Zin and Ain engage in successive repeats of this answer. After a short distraction, Ain continues and the sequence ends with her fuller confirmation 'stahun ajelah' (one year only, line 10). Ain's response confirms that Zin has effectively posed his question without using the phrase 'berapa lama' (how long); his list of numbers 'stahun ke, dua tahun ke, tiga ta(u)n' achieves temporal reference.

In this extract, Zin delivers an extended turn in an incremental manner and his conversation partner collaborates by displaying recognition at relevant points in his unfolding turn. His introduction of the topic itself takes the form of a topic-comment structure which then develops into another more complex topic-comment structure. The embedded first topic-comment structure is a circumlocutional reference while the listing of options constitutes a comment tied to this reference. Prosodic packaging is essential to the successful production of this incrementally-built extended turn, since it conveys to Ain that the isolated nouns and noun phrases are linked, and that the meaning conveyed is the sum of these elements (see also Beeke et al., 2009). In this case, although grammar does not appear problematic, prosodic packaging appears to be an important marker of the syntactic relationship between the fronted referent and incrementally added elements.

As can be seen from the pitch trace (Figure 1, on page 129), the fronted noun 'interview' in line 1 is delivered with a level pitch approximately in the middle of Zin's pitch range projecting more talk to come¹². Selting (1996) describes level pitch in German as the continuative intonation that indexes incompleteness of an unfolding turn. The word 'berjaye', delivered with a continuative intonation similarly marks Zin's turn as incomplete at the point where a topic-comment

expressions referring to the concept of duration may be similar across languages.

¹² Refer to Chapter 4 (section 4.2.3) on extraction of audio files and pitch trace analysis.

structure has been produced. Ain's response tokens at lines 2 and 4, i.e. within Zin's extended turn, have marked rising pitch contours, indicating not only her recognition of the referent that is being established, but also her recognition that the turn is not yet complete. Both Zin's prosodic marking of his unfolding turn and his sister's uptake tokens reveal the interactional motivations of the mutually adapting conversation partners. This enables Zin to complete a lengthy (for him) construction without losing his turn.

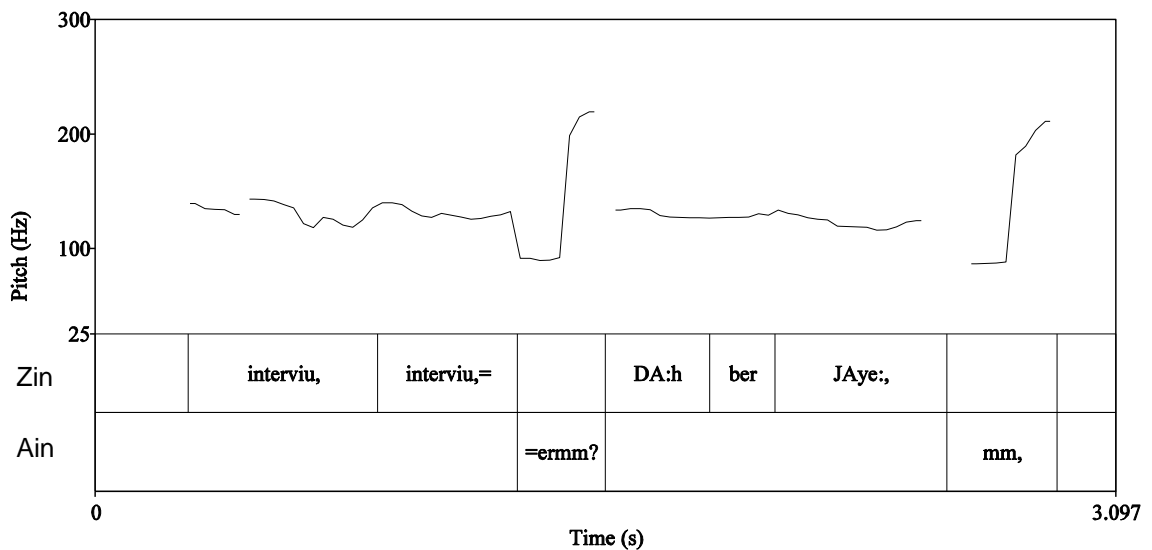


Figure 1: Pitch trace of Zin's turn from line 1 to 3 in Extract 2

A third example of topic-comment structure in Zin's conversation with Ain is presented in Extract 3, again from their conversation about Ain's interview. The talk is about the training programme that Ain will attend after her interview.

Extract 3: Batu Pahat macamane? (Zin-Ain)

```

001→ Zin  macam nih. ape name:h  ʔdekat nih,  ʔ
          like this what ø ø name
          like this. what's the name(h)
          L((swinging his hand to the left,))  ʔ
002→      ʔa:h nih Batu Pahat.  ʔ
          this
          a:h this Batu Pahat.
          L((touching his nose))  ʔ
003 Ain  a:h.

```

004→ Zin macamane?
 how ø ø
 how (is that one)?

005 Ain Batu Pa:hat *tuh*, a:h DPLI.
 that ø
 Batu Pa:hat *that (one)* a:h DPLI

006 Zin °KPLI°,
 007 Ain D.
 008 Zin DPLI [yeh?]

 TAG
 DPLI is it ?

009 Ain L AH.↓*diploma, pendidika::n DP, D- diploma pengambilan,*
 diploma education diploma intake
 ah. diploma, (in) education DP, D- diploma

010 *lepasan ijazah. diploma, pengambilan lepasan ijazah.*
 post degree diploma intake post degree
 post graduate intake. intake (for) post-graduate diploma

011 [(1.7)
 ((mid distance gaze and mouth movements, Zin looks attentively at Ain))]

012 Zin o:h ha:h, *yes yes.* ha:ah.

013 Ain *die tu untuk sekolah menengah.*
 PRO that for schoolø secondary
 that one is for secondary schools.

014 Zin °hmm.°
 015 Ain *atau pun kolej.*
 or also college
 or ø college.

In line 2, Zin introduces the name of a town in Malaysia, ‘Batu Pahat’, after initial word finding difficulties. His use of the ‘nih’ preface suggests that the reference is a mutually recognised one. In the next turn Ain displays recognition, allowing Zin to complete his turn in line 4 with an element that recurs often in his talk, the question word ‘macamane’ (how is that).¹³

The trajectory of the turns that follow the completion of the topic-comment structure shows that Ain recognises Zin’s turn as a question. Interestingly, her answer reveals that she recognises Batu Pahat is not a mere reference to the town, but to the training programme that will be held there. Zin’s use of an elliptical reference is not treated as problematic. In line 5, in a topic-comment structure of her own (see Section 5.3), Ain repeats the location of the training and proceeds to comment with an acronym that conveys the course she will attend, ‘DPLI’. Zin’s attempted repeat reveals an error (‘KPLI’, line 6) that he is able to correct after Ain confirms the first

¹³ Zin uses the question word ‘macamane’ or variations of it in Extract 1, and elsewhere in their conversation.

letter is 'D' (lines 7 and 8). Ain's elaboration reveals not only what the acronym stands for but also that it is a postgraduate training programme for a diploma in education (lines 9-10). Zin's previous attempt, 'KPLI', is a certificate level programme. After a 1.7 second pause, Zin shows uptake in line 12. Ain provides a final explanation about the qualification in lines 13-15, saying 'die tu untuk sekolah menengah' (that one is for secondary schools) and 'atau pun kolej' (or colleges).

Extracts 1-3 have shown that the topic-comment structure used frequently by Zin in his home language (Malay) is similar to that documented for English speaking monolinguals with aphasia. Thus, this adaptive resource appears to cut across linguistic boundaries. This turn construction may be a recurring pattern because of the relative availability of nouns in Zin's conversation, as reflected in his naming test score (see Chapter 4, Section 4.2.), which suggests his aphasia is the least severe of the speakers with aphasia studied in this thesis. So far, examples of this turn construction pattern have been taken from Zin's conversation with his sister. It is possible that, being his regular conversation partner, Ain may be familiar with the strategies that he has adopted. Thus he is able to complete his first position turns with relative ease and accomplish his conversation actions; Ain recognises when his topic-comment turns are incomplete.

Extracts 4 and 5 show another PWA in this study, Tana, also deploying topic-comment structure in her conversations at home, with her sister Rani. In Extract 4, below, Tana's first position turn with topic-comment structure reaches completion in a similar fashion to Zin's; however, unlike Ain, Rani then initiates repair because the topic referent proves to be problematic. Although this delays the action that Tana's first position turn is designed to achieve, the extract illustrates how the resource enables a PWA to deal with the demands of constructing a sequence initiating turn.

Extract 4: stroke centre money, give (Tana-Rani)

001 Tana [(a:yah) (owh-)]
 ((swings hand overhead repeatedly, index finger extended))

002→ Stroke Cent- [erm mone:y? give.
 ((holding out open palm to Rani))]
 003 Rani which one?
 004 Tana ((moving her palm up emphatically)) give.
 005 Rani which mon[ey?] I gave a(l)redy wha:t?
 006 Tana [hehhhh]
 007 Tana ffforty dollar,
 008 Rani I gave you thirty,
 009 Tana ye- thirty=
 010 Rani so I have to give you another ten.((putting hand into pocket))
 011 Tana ye:, ten.
 012 Rani okay.

After an initial non-fluent phase (line 1), Tana initiates a turn by making reference to 'Stroke Center', which was mentioned in the prior sequence where they discussed the NASAM funfair¹⁴, and the issue of where Tana would get the money for the tickets. This referent is cut off and followed by a filler (line 2). Tana then delivers a complete topic-comment turn, 'mone:y? give.' Her gesture (open palm held out to Rani) overlaps with her verbal production and so appears to prefigure her subsequent comment, the verb 'give'. This is delivered with falling intonation marking the completion of the turn. In this way, Tana deploys topic-comment structure to perform the conversational action of requesting or instructing; the meaning of her turn appears to be 'give me the (Stroke Centre) money'. Tana's cut-off production of Stroke Centre may suggest that she is treating the fronted topic as a known referent; they have discussed it prior to this sequence. However, Rani's next turn repair initiation reveals it to be a trouble source - she seeks clarification with a question 'which one?' (line 3). The pronoun 'one' appears to refer to the referent 'Stroke Centre'. Instead of attending to this repair initiation, Tana continues with another repeat of the verb 'give' (line 4). Rani's rephrased question 'which money?' (line 5) now locates the trouble in Tana's turn to be with the referent 'money'. Rani extends her repair initiation with 'I gave a(l)redy what?', justifying her confusion; it appears that Rani believes she has already given Tana the money she is requesting.

¹⁴ NASAM is the acronym for the National Stroke Association of Malaysia, which runs the Stroke Support Centre that the PWAs in this study attend. The funfair is one of the annual fund-raising activities organised by this association.

It is possible that, at this juncture, the sequence is progressing into the delicate matter of face issues in discussing the subject of money. Tana's laughter in line 6, produced in overlap with Rani's 'money' (line 5) could be in anticipation of the rejection of her request. In line 7, Tana attempts a repair, saying 'ffforty dollar,'. The continuative intonation indicates Tana's turn is incomplete at this point, but Rani comes in with a clarification - she states the amount of money she has already given, 'I gave you thirty,' (line 8). Tana responds with 'ye- thirty' (line 9). In a latched turn, Rani deduces 'so I have to give you another ten.', as she puts her hand into her pocket. Tana displays agreement. Thus the topic referent introduced in line 2 appears to have been disambiguated - she needs forty dollars and her sister has only given her thirty; Tana is asking for the remaining ten dollars. Rani's 'okay' in line 12 brings the sequence to a close.

This extract shows how a turn constructed with topic-comment structure can run into difficulty if the topic referent proves problematic. However, once the misunderstanding is resolved, Tana's turn is successful in conveying her wishes. Rani gesturally indicates that she accedes to Tana's request (in line 10), showing that Tana's topic-comment first position turn does eventually accomplish her action of requesting the remaining ten dollars.

The four extracts presented so far reveal how topic-comment structures used in first position turns in conversations with familiar partners can be an effective resource for bilinguals adapting to aphasia. However significant disruption to topic-comment turn structure can occur in conversations between regular conversation partners. Extract 5, from Tana's conversation with Rani, has been chosen to illustrate this. Here, Tana is seen abandoning a haltingly constructed first position topic-comment turn. It is Rani who provides the single word that brings Tana's turn to completion. Rani then controls the subsequent sequence, advancing her own agenda. In the spate of talk preceding this extract, Rani mentions that, although Tana complains about being unable to sleep at night, she is often heard snoring.

Extract 5: quietly will come (Tana-Rani)

001 Tana AT time •hhh [snore.
 [((swings hand held at chest level))]
 002→ [(1.8)
 [((raises her head points upwards and swings hand to the left))]
 003→ °what° err the mm, ((pointing to the left))what thatt erm
 004→ [↑urine.
 [((fingers curled, palm facing upward and then turned over.))]
 [(1.6)
 [((looking up, brings her hand close to her own forehead))]
 005→ [ff quietly will erh.
 [((swings hand backwards and drops it on her seat))]
 006→ Rani will come?
 007 Tana a- hh [hhhh hhh.
 008 Rani [quie(h)tly will come.] [(0.5)
 [((Tana looking down))]
 009 Rani you don't expect your [urine to make noise and come,]
 [((Tana covering her eyes))]
 010 isn't it?
 011 [(0.7)
 [((Tana holding her head and laughing quietly))]
 012 Rani ahh?
 013 [(1.1)
 [((Tana drops her hand onto her lap, her body shaking))]
 014 Tana ((lifting her head)) hh hhh (chuckles)
 015 Rani ah?
 016→ Tana a::h, ((turning slightly to face Rani))YES. ((nodding))

After a first turn at line 1, Tana initiates a topic-comment turn by trying to point to a referent to introduce her topic. This is marked by a 1.8 second pause (line 2). The pressure to produce a relevant next item becomes evident from her repeats of the question word 'what' and production of fillers (line 3). Only in line 4 does she introduce her topic with the single word 'urine'. In the subsequent 1.6 second pause, her gestures signal her sustained participation in a still-progressing turn. These also make her difficulties visible. She then continues with a verb phrase 'quietly will' (line 5), which appears to be a comment tied to the topic. Dropping her gesturing hand to her seat as she delivers the filler 'erh' with a falling tone, Tana terminates her turn after producing only an auxiliary verb despite projecting a main verb is to follow.

The severe disruption to Tana's first position topic-comment turn here appears to be due to her aphasic difficulties. In line 6, Rani orients to the trouble in Tana's turn

and offers a candidate answer, repeating 'will' from Tana's prior turn and completing the turn with 'come', with rising intonation. Tana laughs in response. Without reciprocating Tana's laughter, Rani repeats the comment, this time adding in the other word that Tani used (quietly), 'quietly will come' (line 8). Wilkinson (2007) attributes laughter produced after repair of aphasic difficulties to a PWA's orientation to his or her exposed linguistic incompetence as a delicate issue. In this instance, Tana's laughter could additionally be related to the potentially embarrassing nature of the issue she has referred to in her initial turn, namely urine. The collaboratively completed turn suggests that Tana is making a circumlocutional reference to her problem of urinary incontinence. This may also be her attempt at using euphemism for introducing a sensitive topic. This first position turn appears to be designed to support Tana's claim that 'AT time hhh snore.' (line 1) but at all other times this problem keeps her awake.

Having completed Tana's disrupted turn, Rani initiates her own subsequent sequence of turns. In line 9, she downplays Tana's complaint, turning Tana's "troubles talk" (Jefferson, 1988) into a jocular sequence (lines 9-12), while Tana maintains her participation with laughter tokens (lines 13-14). Despite Tana's difficulties in completing her topic-comment turn, there still appear to be interactional benefits in using this adaptive resource. Rani's completion of Tana's abandoned turn reveals that there was sufficient information in that turn for Rani to suggest relevant next word(s). Tana's intended action appears to be accomplished although the trajectory of the turns that follow, despite Rani taking control of the topic and achieving her own actions.

In summary, four of the five extracts in this section reveal how topic-comment structures used in first position turns in conversations with familiar partners can be an effective resource for bilinguals adapting to aphasia. Establishment of a mutually recognised topic appears to be an essential first step for the successful outcome of a PWA's topic-comment turn. As Extract 4 reveals, post-positioned repair to clarify a referent can delay the accomplishment of a PWA's conversational

action. Extract 5 showed that significant disruption to topic-comment turn structure can occur in conversations between regular conversation partners. Nevertheless topic-comment structure provides a framework for working out intended meaning, and trouble can be resolved. The use of prosody appears key to the bilingual PWA holding onto the emerging turn whilst a comment related to the topic is formulated. Non-aphasic conversation partners are seen to orient to the incompleteness of a PWA's unfolding topic-comment turn by providing acknowledgment and go-ahead tokens.

It is interesting to note that three of the five extracts feature Zin and Ain. In conversation with his sister in their home language, Malay, Zin initiates many conversational topics via the use of topic-comment structure. His relatively good naming ability suggests this may be a turn construction resource that has benefits for him - he can produce topic referents with which to begin such turns with relative ease. Extracts 4 and 5, from Tana's conversation with her sister, Rani, show that topic-comment structure may be a useful resource for dealing with the pressures of producing a first position turn, even when there is trouble in that turn. This is particularly the case because Rani is able to collaborate in clarifying Tana's referent, or in bringing an abandoned topic-comment turn to completion. Section 5.1.2 will now investigate the use of the topic-comment turn construction resource in conversations between the PWAs and their less familiar partners.

5.1.2 Topic-comment in a PWA's first position turns in conversations outside the home with a less familiar conversation partner

This section will show a PWA's first position topic-comment turn in conversations outside the home with a less familiar partner is constructed similarly to that used in conversations at home. This suggests that the resource may cross the language boundaries in the repertoire of a bilingual PWA. However, with a less familiar partner, the essential first action of establishing a mutually recognised referent appears more susceptible to trouble, as does the delivery of a comment tied to the

topic referent. Such turns may be disrupted before the conversational action is accomplished. The analysis will reveal the typical pattern involves collaborative resolution of trouble. This can provide the conversation partner with opportunities to enter into a PWA's turn space, an event that can lead to unfavourable outcomes for the PWA. It will be argued that disrupted turns such as these provide insights into factors that contribute to effective adaptation via the use of topic-comment structure in conversations involving bilingual PWAs. Data are drawn exclusively from Zin's conversations with Tony. This is because it was not possible to record Tana with a less-familiar conversation partner, and Mus, although recorded with Alan at the day centre, does not use first position topic-comment turns due to the relative severity of his aphasia¹⁵.

Extract 6 has been chosen to illustrate the successful deployment of a topic-comment first position turn with a less familiar partner - here Zin with his friend Tony. It illustrates the resource can be effective for Zin not only in Malay (with Ain, as seen in the previous section) but in his other language, English¹⁶. Prior to this extract, Zin and Tony talked about Tony's children and established that his only son works as a computer engineer. At line 1, Zin initiates a sequence with a question about Tony's son's university education with a fronted noun and a wh- question word.

Extract 6: university, when when? (Zin-Tony)

001→ Zin [a::h.] [a:hm,] university,
 [((nodding))] [((turning away from and back to Tony))]
 002 Tony [mmh.]
 [((nodding))]
 003→ Zin a: [when when?] ah. [ah, a:m]
 [((moving his cupped hand))] [((tilts head and looks away))]
 004 [°Australia°] ((moves hand to his mouth)) °ermh° =
 [((turning palm up and down))]
 005 Tony =university,
 006 Zin [AH.=]
 [((turning to Tony))]
 007 Tony =Au:strialia.

¹⁵ Mus' use of topic-comment in second position is discussed in section 5.2.

¹⁶ Interview data reveals that, post-stroke, Zin's opportunity for using Malaysian English is restricted to interactions outside his home.

008 Zin Australia, [(1.0)°Australia, hah (o)kayh.°
 [(turning away, mid distance gaze, finger on his lips)]
 009 [(1.7)
 [(Zin holding mid distance gaze, Tony eating)]
 010 Zin ((turning to Tony) ah, Melbourne ke peh?
 or what
 ah, Melbourne or what?
 011 Tony a:h [(1.6)
 [(mid distance gaze)] ((turning to Zin)) yeah. [Melbourne.
 ((nodding))]

In line 1, following a turn beginning marker ‘ah’, Zin introduces a topic referent ‘university’. Tony orients to the prosodically marked incompleteness of Zin’s turn at this point and produces an uptake token, ‘mmh’, while nodding. Zin delivers a comment with the question word ‘when?’ (line 3) to complete his question. As a structure, this topic-comment combination is complete despite the lack of a verb and co-referential pronoun. In the topic-prominent Malaysian English variety, both copula dropping and pronoun omissions are well documented (Baskaran, 1987; 1994; 2004; 2005). Interestingly, Zin does not relinquish the conversational floor after his turn reaches completion. As the cupped hand gesture made in overlap with his delivery of ‘when’ ends (line 3), he immediately launches a word search with fillers (‘ah’ and ‘am’) and shifts his gaze away from Tony. Zin then produces ‘Australia’ (line 4) at lower volume than the surrounding talk. It is possible that he is using this word as a self-cue to repair a trouble source in his turn. Moving his hand to his mouth, he then produces a filler ‘ermh’, marking the turn so far turn as incomplete. The lower volume and gesture typically index dispreference, yet after initiating repair Zin appears unable to resolve the trouble in his turn.

Despite this, there appears to be sufficient meaning in the topic-comment turn for Tony to make a guess. Tony first takes a latched turn in line 5 to clarify the topic of talk, ‘university’, to which Zin responds with the acknowledgement, ‘AH.’. Tony then says, ‘Au:strialia’ (line 7), confirming that Zin’s tentative suggestion in line 4 is indeed the answer to the question. In line 8, Zin repeats ‘Australia’, and after a 1.0 second pause during which he holds a thinking posture, repeats it one more time before producing receipt tokens ‘hah (o)kayh’. Tony’s response appears to have

008 Zin Beijing, a:h, ah-
009→ Tony jadi tuan rumah?=
beø ø host
is the host?
010→ Zin =/e/vent, e- e, e:vent ʔ^opeh^o. ʔ a:h ʔ (°acara apeh°)ʔ
what event what
what. a:h event, what
ʔ((smiling))ʔ ʔ((lowering head))ʔ

011 [(3.6)
((Zin looks down, index finger on his lips))]
012 Zin [erm, (0.8)] [event event
((looking down))] [((rotates his wrist twice))]
013 Tony yeah, ye [ah.]
014 Zin [e] ven(t). a:, a::pe nameh ʔe:rm, ʔ
what ø ø name
a:, what's the name erm,
ʔ((lowering his head))ʔ

015 Tony what they good?=
016 Zin ((looking up at Tony)) [=an-]
017 Tony [they] good for what?
018→ Zin yes. yes. yes. yes. ((nodding))
019 Tony what are they good?
020 Zin ah.
021 Tony a [a:] china good for what?
022 Zin [a-]
023→ Zin [e:rmmm,] [(0.7) a-eCRObatic.
((mid distance gaze))] [((turning to Tony, moving his hand))]
024 Tony acroba tic. ah. (three syllables)
((pointing with index finger at Zin, holding up his thumb))]

In the turn of interest, Zin marks the transition to a new topic with a turn initial 'ah' and the metalinguistic comment 'ape name' (what's the name, line 1). He then introduces the topic referent 'China' with a continuative intonation, projecting more to come. Subsequent to Tony's go-ahead signal 'a:h,' (line 2), Zin repeats the referent (line 3) and in the 2.4 second pause that follows, is seen to be gazing to the middle distance while Tony continues to look at him. Zin comes out of his solitary word search with a turn holding filler (line 3) and the just-audible Malay word 'pertunjukan' (performance/show, line 4). The combination of the two nouns in this turn may be an example of a "double subject" noted to occur in topic-prominent languages (Li and Thompson, 1976). Zin's production of a Malay word here may be a self-cue rather than a switch of code.

Zin's smile at the end of this turn may allude to his difficulties. Tony then takes a turn in line 5 with 'yeahlah China hostlah'. The appended Malaysian English

pragmatic particle 'lah' hints at the obviousness (Baskaran, 1987, 1994; Gupta, 1992) of Tony's reading of Zin's problematic turn. Zin resumes with the turn holding fillers 'a::ah' and 'nih ah' (this ah) in line 6, again highlighting word finding difficulties. In a latched turn, Tony mentions Beijing, the city in China where the Olympic Games are being held. Zin acknowledges Tony's contribution by repeating the referent and attempts to hold his turn with another series of fillers (line 8). However, Tony enters Zin's turn space to offer a candidate understanding in Malay of Zin's unexpressed meaning *jadi tuan rumah?* (is the host?, line 9). The expression 'tuan rumah' is a translation equivalent for the word 'host' used by Tony in line 5; Tony appears to be using code-switching as a resource in this sequence of talk¹⁹.

In line 10, Zin introduces another referent in English, 'event', without responding to Tony's prior try-marked, and thus questioning, turn. Zin encounters a production difficulty which he then repairs by producing the first phoneme of the word in isolation and repeating the word with an elongated initial vowel. Then he launches another solitary search with the Malay word search marker 'peh' (what) and the word 'acara' (event), followed by 'peh' (what). Holding a thinking posture with his head lowered and a finger on his lips, he continues his search for another 3.6 seconds (line 11). His gaze and gesture suggest that the Malay words may have been used to mark Zin's word search to be a self-directed activity. However, his self-repeat of 'event' at line 12 and his iconic gesture appear to indicate the passing of the floor to Tony. Tony responds with repeated affirmations 'yeah yeah' (line 13). In overlap Zin takes another turn beginning with another repeat of 'event' and the formulaic expression 'a::pe name' (what's the name), signalling initiation of yet another word search. His first attempt to introduce a mutually recognised topic referent in line 1 and the subsequent repair sequence that stretches up to line 14 takes 25.9 seconds.

¹⁹ The analysis of code-switching in this extract is dealt with in Chapter 7.

As Zin's problems persist and his aphasia becomes very evident, Tony becomes more active in the exchange. He moves the conversation on by beginning a sequence of questions related to the topic referent introduced in line 1, China. In line 15, he asks 'what they good', and in line 17 he reformulates the question with 'what' in turn final position, to which Zin responds with 'yes, yes, yes, yes' (line 18). The affirmative tokens do not appear to be a relevant next turn response to Tony's open ended question; they seem similar to a behaviour described by Goodwin (1995) as an attempt to exit a repair sequence when a conversation partner's guess is in the "ball park" but not correct. It is possible that Zin is treating Tony's question as being close to the first position turn that he (Zin) has been trying to construct. In line 19, Tony asks the question for a third time, and this time the turn takes a tone of formality and deliberateness with the inclusion of the verb 'are'. In the Malaysian English variety where the copula is often omitted, grammatical accuracy achieved with the inclusion of the 'be' form is reflective of the more formal mesolectal variety (Baskaran, 1994, 2004). After a minimal response from Zin, Tony asks the same question for a fourth time with a specific reference to 'China' (China good for what, line 21). In line 23, Zin finally answers Tony's question with 'a-ecrobatic' to which Tony responds by repeating the word before acknowledging it (line 24), thus subtly repairing Zin's pronunciation. By this point in the sequence, Zin has effectively lost the opportunity to complete the topic-comment turn he initiated in line 1.

This extract highlights the potential for a PWA's topic-comment turn to fail to progress to completion, primarily due to word finding difficulties. Zin's attempts to establish a mutually recognised referent run into trouble and the self-cues in his home language, Malay, do not appear to aid the resolution of the trouble. His conversation partner appears to orient to this use of Malay as indicative of Zin's trouble with the language of interaction, which is English. This suggests that a lack of familiarity in this partnership may be a contributing factor in Zin's turn not reaching completion.

Extract 8 below occurs immediately after Extract 6. It has been chosen to show how Zin's attempt to incrementally construct a first position topic-comment turn may be hijacked by Tony, who does not appear to recognise Zin's adaptive strategy of holding a turn with prosody.

Extract 8: daughter university, (Zin-Tony)

001→ Zin *ape nameh*, daught, daughter, daugh- daughter, a: *ape nih*,
what ø øname what's the name what's this, what's this,

002→ university,

003 Tony *noh. daughter all not not- university, tapi tak kerja.*
but NEG working but not working.

004 Zin *o:h. okay.*

005 Tony *suma tak kerja. suma, suami ((gesture for money)) banyak*
all NEG working all husbandø a lot of all (of them) are not working. all (the) husbands (have) a lot of

006 *waꞑng. suma tak kerja.ꞑ*
money all NEG working money. all (of them) are not working.

007 Zin *ˌHEH HHH ˌhh hh •hh.*

Moving on from the talk about Tony's son, in line 1 Zin introduces a related topic with the referent 'daughter'. After a brief word search he adds the word 'university'. Despite Zin's delivery of this second word with a continuative tone indicating more to come, Tony enters Zin's turn space to take his own turn, beginning with a negative token. This suggests that he is rejecting Zin's proposal that his daughter/s went to university. Tony continues with 'daughter all not not-' before self-repairing to say emphatically 'university', which seems to confirm that they did go. Tony completes his turn in Malay, with 'tapi tak kerja' (but not working). Thus, Zin's incomplete topic-initiating turn is taken to be a question about Tony's daughters' level of education, although he may have intended to enquire about where they went to university, as in the immediately prior sequence in Extract 7. Following Tony's completion of his turn, Zin does not attempt repair. He merely displays uptake with 'oh okay' (line 4). Tony then pursues the topic further, clarifying the reason for the non-working status of his

daughters (all husbands a lot of money, lines 5-6). Zin responds with laughter in line 7.

This extract shows how a PWA's attempt to incrementally construct a first position topic-comment turn can be hijacked by a conversation partner who does not appear to recognise the PWA's adaptive strategy of holding a turn with prosody. The amount of time spent interacting may be one factor in this lack of awareness. Another may be the drive by the partner to avoid the PWA's difficulties becoming the focus of the interaction. Even though Tony is able to respond early to Zin's incomplete turn, it is not certain if Zin's meaning is understood here.

Extract 9 showcases an extreme case of disruption to a first position topic-comment turn. In this particular instance, there is clear indication that the lack of familiarity between Tony and Zin contributes to an unfavourable outcome for Zin.

Extract 9: computer, computer (Zin-Tony)

001→ Zin ((mid distance gaze)) a:h ni, a:h, computer, [computer,]
 [((pointing))]
 002→ Tony eh, you know computer [this.
 [((pointing to the computer behind him))]
 003→ you knowh?
 004 Zin ye:s.(nods)
 005 Tony you know a:h?
 006 Zin emm.
 007 Tony house got.
 008→ Zin yes. yes.
 009 Tony got ah?=
 010→ Zin =aa:h,
 011 Tony [ada] email? got email also ah?
 got
 got,email?
 012 Zin la:,]a:m,tak- ah. ade [adeh ahah.]
 NEG got got
 no- ah. got got ahah.ah,
 013 Tony [adalah . (two syllables)] habis,
 gotlah then
 gotlah.(two syllables)then
 014 sometime bila free boleh tengoklah.
 when ø can lookPRT
 sometimes when you are free, you can looklah.
 015 Zin yes. yes.=

016 Tony =*boleh tengok macam-macam* ah?
can look all sorts ø ø
can look at all sorts of things ah ?

In line 1, Zin initiates a turn with fillers and a Malay deictic marker 'ni' (this). Then, as he points to the computer placed on a desk behind Tony, Zin says 'computer' twice. Despite Zin's use of prosody to indicate an incomplete turn, in line 2 Tony takes the floor, as he did in Extract 8. His 'eh' prefaced question indexes a "departure from expectation" (Hayashi, 2009). The question 'you know computer' is followed by a deictic marker 'this' and a pointing gesture to the same object introduced in Zin's turn. Tony's elaborate multimodal construction appears to highlight his surprise that Zin knows computers. Tony then passes the turn to Zin with 'you knowh?', delivered with a rising intonation (line 3). As a result, Zin's attempt to establish a topic with the referent 'computer' in line 1, which may then be developed into a topic-comment turn, is interrupted.

After Zin answers Tony's question with an affirmative token, the conversation continues with Tony's repeat of the same question in line 5. This gets a minimal response from Zin in line 6. As in Extract 8, Zin does not take the opportunity to redo his initial turn. Tony develops the topic further in line 7, asking if Zin has a computer at home with 'house got'; a typical Malaysian English construction. Zin's repeated minimal response 'yes yes' may be an attempt to close down the question and answer sequence. However, Tony follows this with another confirmation-seeking turn 'got ah?' (line 9). Following Zin's latched confirmation 'a:ah,' (line 10) Tony delivers another topic extending question - Zin's prosodic marking of his minimal response with a continuative intonation does not succeed in securing the turn space for him to continue. Tony inquires about 'email' in line 11, to which Zin responds with a negative token (tak) and repairs quickly with three repeats of 'ade' (got). This self-repaired trouble in Zin's turn is possibly due to the ambiguity in the referent 'email' introduced in Tony's turn. It is unclear if Tony's question addresses the availability of email facilities on Zin's computer at home or Zin's having an email account. So, Zin's initial response

'tak' (no) could be interpreted to mean he does not have access to email on his computer at home and the repaired 'ade' (got) to say that he does have an email account. Tony's turn in lines 13-14 'habis, sometime bila free boleh tengoklah' (when you are free you can look lah) and 'boleh tengok macam-macam' (can look at all sorts of thingslah), reveals that he may not have been referring to email per se but to an internet connection, a source of all kinds of information. This suggests that the digression from Tony's first action of establishing a mutually recognised topic referent, 'computer', may be due to Tony's own limited knowledge. Whatever the reason, as in Extract 8, Zin loses the opportunity to comment on a topic that he introduced and, in contrast to Extract 7, here the disruption to his first position turn does not appear to be due to aphasia but to a lack of familiarity between the conversation partners - Tony does not appear to know that Zin is familiar with computers, nor to know much about what computers have to offer.

In summary, Extracts 6-9 show how Zin's topic-comment first position turns - shown to be an important resource for him in home conversations - can run into trouble with a less familiar conversation partner. They reveal how Tony's collaborative efforts towards trouble resolution can produce unfavourable outcomes for Zin, i.e. the loss of his topics from the ongoing talk. His incrementally produced topic-comment turns can be seen to be disrupted at two points, firstly, where the essential first action of establishing a mutually recognised topic referent is attempted, and/or secondly where a comment tied to the topic is delivered.

In conjunction with the findings of section 5.1.1, these extracts reveal that Zin uses topic-comment structure as a resource for construction of his first position turn across different conversation partnerships. However, difficulties in completing such turns appear to occur more frequently in conversations in Malaysian English with his less familiar conversation partner. A lack of familiarity between the conversation partners appears to be a contributing factor. Zin's competence in Malaysian English is also seen to influence the outcome of such problematic sequences. He

is seen using his home language (Malay) when having word finding difficulties in his Malaysian English interactions with Tony. Mutual understanding appears to be compromised although Tony is seen orienting to Zin's difficulties as he provides translation equivalents in Malay. The impact of lack of familiarity on the effectiveness of topic-comment structure as an adaptive resource becomes particularly evident in Extract 9 where Zin's initial attempt to establish a mutually recognised referent becomes unsuccessful when the conversation partner takes over the conversation floor. The question and answer sequence that Tony subsequently initiates reveals a lack of understanding about the topic referent introduced by Zin, which may account for the disruption to Zin's first position turn. Despite the potential for topic-comment first position turns to become problematic for Zin in conversations with his less familiar partner, these examples show that even partial attempts at topic-comment constructions can aid a speaker with limited linguistic resources in the design of first position turns.

5.2 DOES TOPIC-COMMENT STRUCTURE OCCUR IN SECOND POSITION TURNS?

In these datasets, it appears that answers to questions can also be constructed with a fronted referent and a comment, suggesting that topic-comment structure may also be a resource for turn construction in *second* position. This indicates a divergence from the pattern documented for monolingual PWAs who are native speakers of English (Beeke, et al., 2003, 2007a; Wilkinson, et al., 2003), where a topic-comment structure generally occupies first position, accomplishing initiation rather than response. Second position occurrences of what may be topic-comment structure in these data begin with repetition of a key word or words to refer to a topic initiated in the conversation partner's prior question. This repetition accomplishes two goals; it enables a PWA to display hearing and understanding of what the question is about, and also to hold the turn while attempting to answer the question. The answer can then be presented as a comment linked to the repeated topic. In this section, examples of second position turns that resemble topic-

prior sequence was about the Olympic Games, the single word 'leading' may be taken to be an elliptical reference to 'the leading team in the Olympic Games'. So, Mus' second position turn conveys what may be glossed as 'the leading team in the Olympic Games, it is China'. In the literature on topic referent and comment combinations in the first position turns of native speakers of English with aphasia, the verb has been reported to be hearably missing (Beeke, et al., 2003, 2007a; Wilkinson, et al., 2003). Mus' second position turn here also lacks a verb, and as in Extracts 3- 7, it is 'is' that is missing. Omission of the co-referential pronoun 'it' conforms to norm for the non-native variety, Malaysian English, where copula omission and the grammatical phenomenon of pro-drop have been documented as typical features (Baskaran, 1987; 1994; 2004; 2005). Additionally, consistent with observations in the first position turns in section 5.1.1, Mus' use of prosodic packaging appears to compensate for the lack of grammatical linkage. Zi appears to treat Mus' turn as grammatically unproblematic.

The contrast between Mus' answer in line 6 and his initial attempts in lines 2-4 suggests that his use of repetition may have enabled him to buy time to construct his single word answer. Zi's sequence initiating question 'siapa menang' (who is winning, line 1) is followed by a 2.7 second pause during which Mus' turn does not progress beyond gestures that highlight his aphasic difficulties. Although his repeated gesture with two fingers resembles the one he produces in line 8, the reference he is attempting to make in this turn remains ambiguous. He is seen abandoning the problematic turn as he drops his gesturing hand to his seat before producing repeated negative tokens (lines 3-4). Set against this, his turn initiated with a repeat of the key term from Zi's prior turn is seen to progress with relative ease to completion to accomplish a relevant action in line 6.

His answer to Zi's subsequent question shows that the repeated referent may have been useful in earning sufficient turn space for Mus to retrieve the answer and construct a relevant second position turn. Zi's response to Mus' answer in line 6 takes the form of a single word prompt, 'second?' (line 7). This transition to another question related to the Olympic Games suggests that not only is Zi treating his prior turn as having delivered an acceptable answer to her first pair part, but she is also acknowledging his ability to answer on the topic of Olympic games. Mus responds to the second question with a turn holding 'a:h,' delivered at a lower volume. His gesture (two fingers held up, line 8) may be interpreted as a display of his understanding the word 'second' introduced in Zi's turn. This could be similar to the display of understanding he accomplished with the repeated key word. Zi draws his attention to her face with a gesture (touching her own cheek) before producing a phonemic cue 'a'. Zi is able to provide a cue that restricts Mus to produce the targeted single word answer because her first pair part is a known-answer question²¹. Mus is seen orienting to the expectation set up in Zi's turn when he produces the single word answer 'Am(b)eriCA'(line 10). She displays acceptance in the next turn with 'wow' and an evaluation 'very good'. It must be noted that Zi does not resort to cueing when Mus initiates his second position turn with a repeated key word (as seen in line 6). Incidentally, her own redoing of the answer shows fronting of the answer 'America' linked to a comment 'menang' (winning), which is similar to the topic and comment combination that Mus produced in line 6.

As demonstrated in lines 5 and 6, the availability of a topic referent in Zi's prior turn enables Mus to borrow a key word or words to be produced in his answer. Prosodically marking the borrowed word with a continuative tone, he secures turn space to formulate the novel part of his answer, which he delivers subsequently. In contrast to this his response over lines 8 to 10 bears a resemblance to his performance in the naming test (see Chapter 4, Section 4.2.2) where a single word answer is projected but there is no opportunity to

²¹ Known-answer question sequences are discussed in Chapter 6.

borrow language. During picture naming, he displays recognition of an item but only names it after a cue is provided. Thus, the structure analysed here, which resembles topic-comment occurring in a second position turn, may be indicative of a strategic adaptation for dealing with the pressure of constructing an answer, given Mus' limited language ability.

Extract 11 below reveals a similar structure, which also resembles topic-comment structure in second position, in the home conversation of the sisters, Tana and Rani. In the prior stretch of talk, Tana provides a convincing argument for rejecting Rani's suggestion for her (Tana) to stay overnight at one of their relative's home. The extract begins with Rani initiating what appears to be a statement but its terminal rising tone marks it as a question. The action implemented here is a complex one since it is a question that is also designed to be a counter argument, challenging Tana's stance on the issue of her spending the night away from their shared home.

Extract 11: America faraway (Tana-Rani)

```

001 Rani that day you went and stayed the weekend with Shantini
002 when Shantini was down here from America?
003→ Tana AmeriCA:, ov- ov- .h where- .h once in a wayla::h.
      ((moves head backwards, index finger pointing upward, dropping hand ))
004 Rani yeahlah. [this a(l)so ] this also once in a way what?
005 Tana [ a:h hemmm ] a:m. °(at time)°(0.5) °nono°
006 [ (0.9) ] once in a waylah.
      ((shifting body position))
007 Rani yes [ah? ]
008 Tana [ye:s. ]
009 Rani mmm.
010→ Tana america, fa(h) away.
011 Rani faraway?
012 Tana ha: eh. ((nodding))

```

In line 3, Tana constructs her second pair part answer to Rani's question by repeating the last word 'America'. The continuative intonation of her delivery of the referent is followed by a non-fluent phase with false starts and the abandoned question word 'where'. Tana, then completes her turn with the formulaic expression 'once in a wayla::h'. This somewhat awkward expression

appears to be a modification of the phrase 'once in a while'²² or 'once in a blue moon'. Rani's repeat of the same expression in line 4 appears to confirm their mutual understanding. More importantly, Rani's repetition acknowledges that the comment 'once in a waylah' tied to the topic reference 'America' is an answer to her question. By repeating the referent 'America' in fronted position, Tana is elliptically establishing a relational link to the occasion 'when Shantini was down here from America'; previously mentioned in line 1. Given this, the comment, in the form of the formulaic expression, provides an explanation as to why Tana made an exception when she 'stayed the weekend with Shantini'.

The pitch trace in Figure 2 (in the next page), illustrates how the formulaic expression is tied to the rest of the turn by means of prosodic signalling. The word 'America' is produced with a turn holding mid-level pitch, projecting more to come. It is also notable that the formulaic phrase that is produced last is delivered as a whole unit and in a shorter time compared to the rest of the turn. Prosodic packaging of juxtaposed words in a PWA's turn is believed to compensate for missing grammatical links (Beeke et al., 2009). Furthermore, formulaic expressions have been argued to give a PWA's turn an appearance of fluency (Beeke et al., 2007b). Combining a formulaic expression with repetition of a key word from Rani's prior turn makes the resulting topic-comment structure an effective resource for adapting to Tana's aphasic difficulties. This is particularly so when she is under pressure to produce a turn that addresses the complexities and potential threat to face that Rani's question imposes on her.

²²This interpretation is supported by Tana's use of the word 'occasionally' in line (177) in the transcript (see Appendix 12).

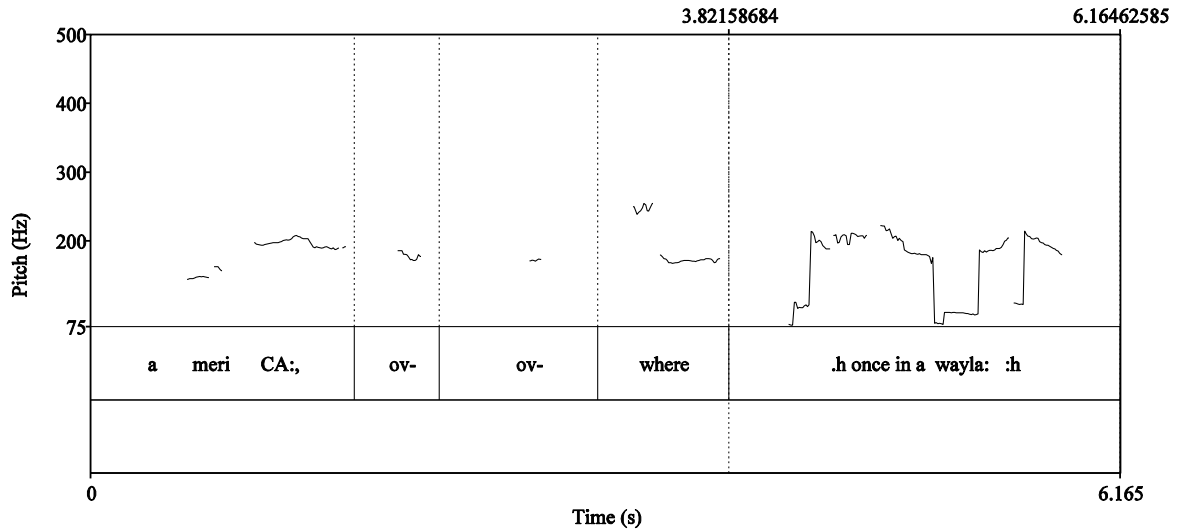


Figure 2: Pitch trace of Tana's turn in line 3 in Extract 11

Rani acknowledges Tana's second position turn constructed with a repeated referent from her conversation partner's prior turn and a formulaic expression, as having answered her question. However, she continues to challenge Tana's stand on the issue. She refers to her own suggestion with 'this' and argues that it can also be a 'once in a way' occurrence. The word 'what' that Rani produces in final position functions as grammatical particle. In Malaysian English, this grammatical particle is often used instead of the tag 'isn't it' (Baskaran, 2005). Tana produces another combination of a referent and comment in line 11 where she appears to initiate a topic extending first position turn with the same referent 'America'. The comment 'fa(h)away that completes the turn suggests that, in this turn, she is using the word 'America' as a direct locative reference. Rani launches an understanding check with a repeat of 'faraway' delivered with a question tone. Mutual understanding is achieved with minimal repair when Tana's minimal confirmation in line 12 brings the sequence to a close. Tana's use of the same single word as an elliptical and direct reference selectively suggests that she is strategically adapting the resources available in her conversation partner's prior turn. The similarity in structure here suggests that both instances, these are topic-comments that are used for accomplishing different actions i.e. answering a question and extending a topic.

Extracts 10 and 11 provide examples of turns constructed by using a repeated key word from the conversation partner's prior turn combined with a novel comment that may represent topic-comment structure in a second position turn. There are only a limited number of examples such as these in the data sets of this study. They are structurally similar to the first position topic-comment turns discussed in section 5.1, and those documented in the literature on monolingual English-speaking PWAs, with respect to prosodic rather than grammatical linkage between the elements of the turn. By contrast, there is no inserted sequence to establish the 'topic' as a mutually recognised referent in these examples as there is in examples in section 5.1, but the fact that the referent is repeated in itself confirms mutual understanding of the topic. The conversation partners' display of acceptance of answers delivered in this manner shows this turn construction to be an effective resource in the sequential locus of second position.

The next three extracts have been chosen to illustrate why a definitive answer to the question of whether topic-comment structure does occur in PWAs' second position turns remains elusive in this dataset and requires further investigation. Extract 12 shows a second position turn by Mus that begins with a repeated key word from his less familiar conversation partner's prior turn, which may be said to function as a topic referent. However, the talk that follows does not appear to function as a comment tied to the topic. The question and answer sequence in this extract follows on from a discussion of a forthcoming fund raising activity, a funfair organised by NASAM, which runs Mus' care centre²³.

Extract 12: funfair definitely (Mus- Alan)

001 Alan so will Muthana be coming for the funfair?
 002→ [ah funfair, [((pointing to the back))] [definitely. [((moving index finger emphatically))]
 003 Alan definitely. very good. who you coming with?
 004→ Mus ah, [daughter, [((holding up his thumb))]

²³ This is the same event referred to in Tana and Rani's conversation in Extract 4.

005 Alan em. ((nods))
006→ Mus [(3.2)
((Mus extending index finger, mid distance gaze. Alan looks at Mus))]
007 Alan coming with your daughter,
008 Mus [(2.1)
((Mus pointing to his left, Alan looks at him attentively))]
009 [a:hm, tch. ah.
((pointing to the left))]
010 [(5.3)
((moving his hand to touch his nose and dropping it to his lap))]
011 Mus ((holding up his thumb)) °(i:)°
012 Alan your wi:fe?
013 Mus [Wife wife ɿ wiɿfeɿ
((moving his thumb emphatically))] Lwiɿfe
014 Alan
015 Mus wife.

Alan initiates this sequence by directing a question to Mus. He says 'so will Muthana be coming to the funfair?' (line 1). His use of Mus' full name makes this a slightly odd construction as such strategies are often used in conversation directed to children. Mus responds by repeating the last word from Alan's prior turn, 'funfair' after producing an acknowledgement token 'ah' (line 2). He completes the turn with the single word, 'definitely'. The topic referent is delivered with a continuative tone while the completion of the turn is marked with falling terminal intonation. The pointing gesture accompanying this delivery reinforces the referent, while the emphatic movement of the index finger highlights the next part of Mus' answer, 'definitely'. Thus the gestures appear to demarcate the two parts that constitute the turn.

Alan displays acceptance with a repeat of the answer 'definitely' and an evaluative comment 'very good' (line 3), before extending the topic to ask 'who you coming with?'. The word 'coming' repeated here and again in line 7 creates topical cohesion and suggests that 'coming to the funfair' (as in Alan's initial question) is the topic. It is possible then that the word 'funfair' repeated in Mus' second position turn is an elliptical reference to the topic 'coming to the funfair'. The resulting combination 'funfair, definitely.' could then be construed as a topic-comment structure in second position, as in Extracts 10 and 11. However, Mus' answer

'definitely' is a second pair part to Alan's yes-no question. It is an upgraded affirmation. By the same token it is not a comment (or new information) about 'funfair'. Thus, the resemblance of this second position turn to topic-comment structure is merely superficial.

The trajectory of the subsequent turns confirms that Mus has successfully answered Alan's question with the repeated keyword and single word answer. Mus' response to Alan's subsequent open ended question appears to be consistent with Fox and Thompson's (2010) observation about dispreference for clausal answers in typical American English conversations. However, his difficulties in producing a series of single word answers suggest that the longer structure he produces in line 2 may be an interactional adaptation. In response to Alan's topic extending question in line 3, Mus produces a single word answer packaged prosodically to project more to come. Alan's minimal response is followed by a 3.2 second pause. Mus' gestures during this long pause indicate that he is trying to construct a list. The shift in gaze back to Alan indexes Mus' turn yielding. Orienting to the incompleteness of the prior turn, Alan initiates repair. He redoes Mus' prior turn and with a continuative intonation invites Mus' participation. In subsequent turns, dispreference for the non-progressing turn is indexed via Mus' gesture and a 2.1 second pause (line 8) and self-admonishment (line 9). Mus appears to continue with his word search, only to finally signal termination by dropping his hand onto his lap at the end of a noticeably long pause of 5.3 seconds (line 10). This difficulty with constructing a series of single word answer is in contrast to the smooth progressivity of his turn in line 2, where his aphasic difficulties do not come to the surface.

In answering questions, there can be additional pressure for a PWA to produce a turn that progresses to completion. The long pauses in lines 6, 8 and 10 draw attention to Mus' word finding difficulty, and affect the progressivity of his phrasal answer turn. At this juncture, the long word search turns into a hint and guess sequence. Holding up his thumb again, in line 11, he produces the sound 'i:' at a

lower volume than surrounding talk. Alan's try marked delivery of 'your wife' (line 12) implies that Mus' cue could have been for the Malay word 'isteri' (wife). Mus indicates the resolution of the trouble repeating the word 'wife' three times²⁴. Alan in overlap produces this word once more and Mus does a final repeat in line 15, marking the long final confirmation phase of a word search sequence (Laakso & Klippi, 1999). Arguably, Alan's open-ended question, which sets the agenda for this stretch of talk, places significant interactional pressure on Mus.

The single word answer 'definitely' implies an element of assessment in Mus' next turn affirmation to Alan's yes-no question. However, Mus is not assessing the topic referent 'funfair'. There is a remarkable similarity between Mus' turn here and the examples given in Deterding (2007) to support his argument that a phrase occurring in initial position in utterances can represent a topic in topic-prominent languages but may not necessarily be a constituent of the main clause. He cautions that "in these circumstances, it cannot be analysed as something that is fronted." (Deterding, 2007, p. 63).

The next example of a second position turn that bears a superficial resemblance to topic-comment structure is also from Mus' conversation with Alan. Here, Mus' appears to initiate his answer to Alan's open ended question about his holiday plans with a repeated keyword. While the repeated keyword displays his understanding of what the question is about, there is ambiguity in the answer that comes next. The lack of link between the repeated word and the juxtaposed elements suggests that the resulting combination is not a topic-comment structure.

²⁴ Incidentally, Mus is seen producing the same word with relative ease in extract 17 presented in Chapter 6.

The repair sequence (from line 5 to 14) appears to deal with the trouble source in Mus' second position turn. In responding to Alan's repair initiation, Mus uses gestures and repeated single words to represent the activity that he will engage in during his holiday. Placing his open palm on his ears, Mus delivers an iconic 'prefiguring gesture' (Schegloff, 1984, Streeck, 2009) that corresponds with his verbal production 'se:leep'. He emphasises the first syllable and repeats the word two more times. Alan orients to this with his own repetitions in overlap but he does not reciprocate Mus' laughter at line 7. In repair sequences, a conversation partner's orientation to aphasic difficulties as a delicate issue is reflected in the apparent lack of response to a PWA's laughter (Wilkinson, 2007).

Alan and Mus continue to collaborate to construct Mus' answer. Alan repeats 'sleep' in line 8 and extends the answer by offering another (try marked) candidate activity 'watch television?'. Mus' negative response in this instance appears to indicate a rejection of Alan's suggestion. Pinching his index finger and thumb to gesturally present the concept of something small, Mus produces what may be the first syllable of the Malay word '*sikit* (a little), 'si-' (line 9). He abandons this and continues by repeating the word 'television' from Alan's turn. He follows this with three repeats of 'sleep', accompanied with a repeated turning of his hand. He then says 'ha:h' while repeating the pinching gesture made with his index finger and thumb. Mus' multimodally constructed turn in line 9 can be glossed as 'a little bit of television and a lot of sleep'. Alan's candidate understanding, 'little bit of television?' (line 11) and 'and sleep?' (line 13) and Mus' acceptance tokens ('a:hh', line 12 and 'yeah', line 14) confirm this interpretation. The eventual resolution of the trouble in Mus' answer reveals that he has no plans for the impending holiday, thus it is likely that Mus' negative tokens produced in line 2 are not a comment related to the topic 'holiday'. The repeated referent may have initiated a topic-comment second position turn but Mus appears to abandon this activity with the repeated negative tokens.

The final extract in this section represents a recurrent pattern the dataset, where a PWA second position answer that begins with a repeat of key word/s from the conversation partner's question is disrupted before it reaches completion. Because such turns remain incomplete, the question of whether the projected next item would have been a comment tied to a topic referent remains unanswerable. In Extract 14, Mus and his wife, Zi, resume their talk about his favourite pastime, watching television. In second position, Mus repeats two key words selected from his wife's question turn to begin his answer. Despite this display of understanding of and orientation to answering her question, Mus' turn does not reach completion because Zi takes the floor.

Extract 14: TV(h), cite:r, (Mus-Zi)

```

001 Zi    TV, tengok citer ape?
           watch story what
           tv, what programme do you watch
002→ Mus TV(h), cite:r,
           story
           tv(h), programme,
003 Zi    skarang tengah apeh, dekat Beijing?
           now is what in
           what is going on in Beijing now?
004 Mus   [ a:hh ,
           [ ((hand raised, pointing with index finger to his left)) ]
005 Zi    o:
006→ Mus  olymPIC.

```

The question and answer sequence in this short extract begins with Zi's first pair part question; 'TV *tengok cerita ape*' (TV, what programme do you watch). In response, Mus repeats two key words 'ti vih, cite:r,' (line 2) the first word from Zi's turn and another word from the middle of her turn. Since Zi's first position turn is constructed using topic-comment structure, Mus' repetition of her first word alone would have sufficed to initiate his second position answer. Mus may select a second word (cite:r) from Zi's turn to produce what Li and Thompson (1976) refer to as a 'double subject'; a common feature in topic-prominent languages.

Similar to topic referents fronted in first position turns (see section 5.1), his delivery of the prosodically packaged topic referent indicates more to come but here his turn does not progress any further because Zi takes the floor to reformulate her question, to include a specific time reference and an aspectual marker 'skarang tengah ape' (what is going on now, line 3). She also provides a locational reference with the incrementally added phrase 'dekat Beijing' (near Beijing). Despite Zi's more elaborate question, Mus' subsequent response does not progress beyond a turn initial filler, 'a:hh,'. The pointing gesture accompanying this displays his recognition of the referent introduced in Zi's turn; appears to point to the TV (which is not visible on the video) to acknowledge her topic. When Mus' finally answers her question, it is in response to a phonemic cue (line 5), which prompts the targeted single word answer 'oLYMpic.'. Zi's cue to the answer reveals that the first pair part in the sequence is designed to be a known-answer question.

Mus' second position turn begins with two repeated words from his conversation partner's prior turn, and is thus structurally similar to the disrupted first position topic-comment turns documented in section 5.1.2. Although Mus' effort at selecting the two words to refer to the topic in this turn suggest a potential for it to develop into topic-comment structure, he loses the opportunity to complete the turn when the Zi takes the floor to revise her question, despite his prosodic signal for more talk to come. This being a recurrent pattern in the datasets, it is difficult to conclude whether topic-comment structure does occur in PWA second position turns.

In summary, section 5.2 presents some evidence for a new pattern of use of topic-comment structure in second position turns, specifically question and answer sequences. However, some examples may only be superficially similar to this adaptive resource (Extracts 12 and 13) and others are inconclusive because the PWA lost the conversational floor (Extract 14). Four out of the five extracts discussed here are from Mus' conversations; there are no examples of Mus producing topic-comment structure in first position because he does not initiate any

topics of conversation. His performance on a naming test reveals severe word finding difficulties (see chapter 4, section 4.1.2); this may explain why he constructs only second position turns. These examples illustrate the interactional benefits to be gained from deploying topic-comment structure for constructing answers to questions. Extracts 10 and 11 show second position turns constructed with a repeated referent that projects a subsequent answer; these are structurally similar to first position topic-comment turns discussed in section 5.1.1. This suggests that topic comment structure may be a resource for constructing a PWA's second position turns, especially for answering questions; so far the literature on (English) aphasic conversation has only documented topic-comment structure in first position. It appears that a PWA can initiate a relevant second position turn by borrowing a key word from the conversation partner's first position turn to refer to an already mentioned topic. When a repeated key word is used to make an elliptical reference to the topic, the completion of the turn with a subsequent answer produces a turn akin to topic-comment structure.

The conversation partner's acceptance of an answer delivered as a comment tied to a repeated topic referent shows the potential of this adaptive resource. Extract 12 reveals that it may possible for a second position turn to have a superficial structural resemblance to topic-comment structure, but to actually achieve a different conversational action to commenting. Here, Mus is seen responding to a yes/no question in a heightened way. There is no link between the topic referent and the subsequently delivered single word; he appears to be invoking an assessment rather than commenting. This suggests that second position turns constructed in this manner cannot then be analysed as topic-comment structure. However, any interpretation must be offered with caution; there is only one example of this type of turn in the dataset. Finally, Extract 14, which fails to progress to completion because the conversation partner takes the floor, is similar to disrupted first position topic-comment turns seen in 5.1.2. This pattern of disrupted second position turns raises the question of the potential for many more PWA turns to develop into topic-comment structures in this sequential locus, given

more interactional space to complete a turn. If there were more opportunities for the production of topic-comment structures, given the utility of the structure as a successful turn construction resource, individual PWAs may achieve more complete conversational turns, and thus have more success and influence in their conversations with their family and friends. However, the question of whether topic-comment structure occurs in second position turns remains elusive due to the limited number of these turns reaching completion in the current dataset. In order to arrive at a definitive conclusion about topic-comment structure as a resource for construction of second position turns, analysis of further datasets is needed.

The analysis will now examine the occurrence of a similar pattern of turn construction in the non-aphasic conversation partners' talk, with a view to considering whether the languages spoken by the Malaysian population create an environment that encourages topic-comment structure.

5.3 DOES TOPIC-COMMENT STRUCTURE OCCUR IN THE TALK OF THE NON-APHASIC CONVERSATION PARTNERS RECORDED FOR THIS STUDY?

The analysis so far has shown that, despite the potential for disruption, topic-comment structure can be an effective resource for bilingual PWAs. This appears to be because of specific features of the languages they use. Topic prominence in conversational Malay and Malaysian English provides that a topic can be introduced first, with the tied comment added incrementally. The non-obligatory copula in Malay (Asmah Omar, 1985) and the practice of copula dropping in the basilectal variety of Malaysian English (Baskaran, 1987; 1994) results in the link between the elements in a topic-comment structure typically being indicated by serial adjacency. As these features of the languages have been documented in the typical Malaysian population, topic-comment structure might be expected to occur

in the non-aphasic conversation partners' turns. This section examines such occurrences in their talk with the PWAs.

Extract 15 comes from the conversation at home between Mus and his wife, Zi, and is an example of Zi introducing a topic using topic-comment structure. It has been noted that Mus, a PWA with severe word finding difficulties, does not construct first position turns - it is his wife who accomplishes the conversational action of initiating the topics in this partnership. Here, Mus and Zi continue a conversation that has been disrupted by the arrival of Ustaz, a guest in their home. Zi informs Ustaz that Mus and she have been trying to find a suitable name for their newborn granddaughter. She tells him about the options that they have considered. She then glances at Mus and introduces a new topic - *boys' names*. This stretch of talk occurs in Malay.

Extract 15: name lelaki senang (Mus-Zi)

- 001→ Zi ((glancing at Mus)) name lak- name lelaki senang. banyak.
name bo- name boy easy many.
name, bo- (a) boy's name (are) easy. (there are) many.
- 002 Mus a:pe:h, (punye),
what POSS
what, (his)
- 003 Zi yelah. Papa beri name Abas, tapi sebab ini pempuan, (.)
yeslah. TOA gave name but because this girl
yes. you gave Abas (his) name, but because this (is a) girl,
- 004 name pe(re)mpuan, eh?
name girl
(has to be) a girl's name, eh?
- 005 Mus °ahm°, ((turns away from Zi.))

In the turn of interest at line 1, Zi self-repairs a false-start to produce the topic referent 'name lelaki' (boys' name). She then adds a comment with a single word 'senang' (easy) tied to the topic by adjacency. Thus, her evaluation of the process of naming boys is achieved via topic-comment structure. She relinquishes the conversational floor after adding another single word 'banyak' (many), thus extending her turn by adding a second comment. The conversation continues with Zi reminding Mus that he named their grandson Abas. The topic then returns to choosing girls' names.

A second example of a topic-comment turn produced by a non-aphasic speaker in these data comes from the home conversation between siblings Tana and Rani. Their home language is Malaysian English. In Extract 16, Rani uses her knowledge about Tana's favourite teatime treats to introduce a topic referent and adds a comment to construct a question in first position.

Extract 16: currypuff, how many (Tana-Rani)

001→ Rani currypuff, how many you wan(t). five, ten?
 002 Tana no. vvv ((*looking at her hand, holding up three fingers, then two*)
 003 °one, ° two enough. ((*drops her hand to the sofa*))
 004→ Rani two enough. vade?
 005 Tana vade, [e:r m,
 [(*looking to her left, then holding mid distance gaze*)]
 006 Tana ((*holding up index finger*))one enough.

Rani initiates this sequence of talk by introducing the referent 'currypuff,' (line 1). Continuative intonation indicates that her turn is incomplete at this point. She then comments 'how many you want'. Unlike Extract 10, the comment seen here is an utterance in its own right, though it gains its full meaning from the prior mention of currypuff. This is an example of the conversational occurrence of what Geluykens (1992) refers to as left-dislocation, akin to topic-comment structure. Rani then extends her topic-comment turn with specific amounts for Tana to respond to, 'five, ten?', though these numbers suggest a deliberate overestimation, possibly as a way of prompting Tana to take the next turn. Tana manages to reply without too much difficulty, and the sequence as a whole appears relatively untouched by aphasia.

The next example is taken from Zin's conversation with his friend Tony, and has previously been analysed in section 5.1.2 as an example of topic comment structure in Zin's first position turns. It also provides an example of topic-comment structure used by the non-aphasic conversation partner.

Extract 6: university, when when? (Zin-Tony)

001 Zin [a::h.] [a:hm, university,
 ((nodding))] ((turning away from and back to Tony))]
 002 Tony [mmh.]
 ((nodding))]
 003 Zin a: [when when?] ah. [ah, a:m
 ((moving his cupped hand))] ((tilts head and looks away))]
 004 [°Australia°] ((moves hand to his mouth)) °ermh° =
 ((turning palm up and down))]
 005→ Tony =university,
 006 Zin [AH.=]
 ((turning to Tony))]
 007→ Tony =Au:striaia.
 008 Zin Australia, [(1.0) °Australia, hah (o)kayh.°]
 ((turning away, mid distance gaze, finger on his lips))]

In the turn of interest here, Tony responds to Zin's haltingly constructed topic initiation in lines 1-4, a question about where Tony's child attended university, with the topic-comment structure 'university,...Au:striaia.' (lines 5 and 7). Interestingly Tony's turn appears to be missing a verb. It is possible that this is an example of the well documented Malaysian English feature of copula dropping, and that it accounts for why Zin's understanding of Tony's turn is not affected by the missing grammatical link.

The next example is taken from Zin's conversation with his sister, Ain, and has previously been analysed in section 5.1.1 as an example of topic comment structure in Zin's first position turns. It also provides an example of topic-comment structure used by the non-aphasic speaker.

Extract 3: Batu Pahat macamane? (Zin-Ain)

001 Zin *macam nih. ape name:h* [dekat nih,]
 like this what ∅ ∅ name
 like this. what's the name(h)
 L((swinging his hand to the left,)) J
 002 [a:h nih Batu Pahat.]
 this
 a:h this Batu Pahat.
 L((touching his nose)) J
 003 Ain a:h.
 004 Zin macamane?
 how ∅ ∅
 how (is that one)?

population. This suggests that the languages spoken by the Malaysian population create an environment that encourages topic-comment structure. For the conversation partners, turns constructed in this way progress quickly to completion and accomplish conversational actions with ease. There may be similarities, in this sense, with a PWA's motivation for using topic comment structure to initiate new topics, a conversational action that is known to be difficult for PWAs. Barnes et al., (2013) document evidence of the "inherently hazardous action" of topic initiation for PWAs. For a PWA the analyses in Sections 5.1 and 5.2 have shown that this resource appears to provide a quick and relatively easy way of constructing a turn despite linguistic impairment (provided that he or she does not have too severe a word finding difficulty). For a typical bilingual speaker from this population, the initial evidence suggests it promotes construction of recipient designed turns.

These examples of topic-comment structure in the talk of the conversation partners are important because any occurrence shows that the structure is not just a resource for Malaysian PWAs. However, it must be noted that there are modest numbers of examples from CPs in these data, which suggests that despite the utility of topic-comment structure, its occurrence may be restricted by the nature of conversation. We cannot rule out the possibility that, despite the favourable language environment for topic-comment structure, these non-aphasic speakers, or speakers in general, may construct their turns differently when interacting with a PWA. The PWA's linguistic impairment may influence the resources used by partners to produce recipient designed turns. This may be why Alan, Mus' less familiar conversation partner, does not use topic-comment structure; Mus has a severe aphasia and Alan's methods for holding a conversation with him appear to rely on asking closed questions (Chapter 6 provides further examples). Further research into the interactions of typical (non-aphasic) bilingual speakers from this population is needed to shed light on the role of topic-comment structure for these speakers, and in turn, its adaptive role for PWA.

5.4 SUMMARY

This chapter has presented an investigation of topic-comment structure as a turn construction resource in the conversations of Malay-Malaysian English bilingual PWAs, and revealed its potential to be an effective adaptive resource. Section 5.1 explored the use of the resource in first position turns, to initiate new topics. It was shown that a topic is introduced in turn-initial position and followed incrementally by a comment tied to the topic. The establishment of a mutually recognised topic can become a sequence in its own right (Auer, 1984a), and this was evident in the extracts analysed here. In topic-comment turns, a PWA delivers the fronted topic referent with a continuative intonation marking the turn as incomplete. The conversation partner's minimal response displays orientation to the incompleteness of the turn, while simultaneously acknowledging the referent. This collaboratively established topic is then followed by production of a comment. Prosodic packaging of the fronted topic referent enables the PWA to hold the emerging turn while formulating the comment. In some instances, introduction of the topic is achieved via circumlocutional reference while the comment usually takes the form of words or formulaic expressions. The latter have the added advantage of making a PWA's turns sound relatively fluent.

Section 5.1.1 showed examples of topic-comment structures in PWAs' first position turns from conversations at home with a regular conversation partner. Upon reaching completion, these turns accomplish interactional actions that range from asking a question and making a request, to proffering a topic. The trajectory of turns that follow a PWA's topic-comment structure show that although, in terms of standard grammar, some items are hearably missing, the regular conversation partner treats the turn as unproblematic. Such collaboration is important to avoid the PWA's linguistic difficulties becoming the focus of the interaction. When troubles that threaten mutual understanding do occur, they are resolved quickly

with post-positioned repair; after both the topic and comment is delivered. As topic initiation is known to be interactionally challenging for PWAs, the incrementally produced topic-comment structure appears to be an effective resource involving both partners in adapting to aphasic difficulties.

Topic-comment structure in first position turns has been reported in CA literature on English speaking monolingual PWAs (Beeke, et al., 2003; 2007a; Wilkinson, et al., 2003). In this literature, it is suggested that topic-comment turns may be an example of interactionally motivated adaptation to aphasic difficulties. In English conversations, fronting of a referent, also known as left dislocation, is said to have specific functions such as foregrounding or referring to a previously introduced topic (Geluykens, 1992). Li and Thompson (1976) identify English as a subject-prominent language. Thus, topic-comment structure is not a common occurrence in the English language; the non-canonical structure is seen as an adaptation to interactional demands.

The present study has shown the existence of turns constructed using topic comment structure in conversations of Malaysian bilinguals with aphasia for the first time. This recurring pattern of topic-comment structure in first position turns produced by a Malay speaker with aphasia shows a remarkable similarity to the pattern documented for English native speakers with aphasia. Considering the linguistic distance between Malay and English, this observation suggests that adaptation to aphasic conversation via use of this resource may not be language specific.

Section 5.1.2 examined first position topic-comment turns in a PWA's conversation with a less familiar partner outside the home. During this project, it was only possible to record two of three PWAs in conversation with a less familiar partner (Mus and Zin), and only Zin used topic-comment structures in first-position. For Zin, the use of topic-comment constructions in conversation outside the home, where Malaysian English is used, is shown to be similar to use of the same

resource in his home conversations in Malay. This suggests that topic-comment structure may cross the linguistic boundary of languages in a bilingual's repertoire. As is the case for first position topic-comment construction in English native speakers with aphasia, Zin's topic-comment turns in Malaysian English also have a hearably missing verb. The conversation partner does not treat these turns as ungrammatical. However, section 5.1.2 reveals that, with a less familiar partner, the attempt to establish a mutually recognised referent can become problematic. Also topic-comment turns appear to be more susceptible to becoming disrupted, and therefore may fail to accomplish the conversational actions that they were designed to implement. A lack of familiarity between the partners, or a non-aphasic conversation partner's lack of knowledge about a topic, can result in an inserted clarification sequence, which may leave the PWA with no opportunity to complete the as-yet-incomplete topic-comment turn.

Comparison across participants reveals that topic comment structures in first position turns appear in Zin's, and also in Tana's conversations. Mus does not produce first position turns in his conversations, either with his wife or his less familiar conversation partner, Alan. For Zin, comparisons across conversation partnerships suggest that in a less familiar partnership with his friend Tony, topic-comment turns tend to be disrupted, while those in his conversations with his sister are more likely to reach completion and accomplish their conversational actions. Tony does not always appear to recognise when Zin's turn is incomplete; Zin's long self-repairs frequently result in Tony taking the floor during still-emerging turns. Tony's surprise at Zin's knowledge of certain topics highlights the lack of familiarity between them, and this is seen to directly impact on the success of topic-comment turns initiated by Zin. Tana's conversation with her sister Rani reveals how familiarity between conversation partners can also result in the *regular* non-aphasic partner taking the floor during a PWA's haltingly-produced topic-comment first position turn. The sensitive nature of topics appears to offer one possible motivation for Rani to complete her sister's turns. Here, familiarity enables Rani to anticipate relevant next talk and also to display a prompt understanding of a

potentially delicate topic. Thus although level of familiarity between conversation partners can result in a less successful outcome for the PWA in some topic initiation sequences, it is not always *less* familiarity that becomes problematic.

Section 5.2 explored the possibility of topic-comment structure occurring in second position turns constructed as a PWA's answer to a conversation partner's question. This pattern does not appear to have been documented in the CA literature on aphasia. These second pair parts begin with a key word or words repeated from a conversation partner's prior questioning turn. This repeated referent enables the PWA to display understanding of the topic introduced by the conversation partner and to hold a turn while constructing an answer. In some instances, the repeated word represents an elliptical reference to the topic. The fronted referent is packaged prosodically to project more talk to come, and the projected answer is produced as a comment tied to the topic. The continuative intonation of the repeated topic referent results in the conversation partner treating the turn as emergent. However, in some second position turns, this combination of repeated referent and subsequent talk only bears a superficial resemblance to topic-comment structure; there is no grammatical or pragmatic link between the two serially adjacent items. It is also common to find second position turns that look structurally similar to topic-comment structure but do not progress beyond the repeated referent. Thus, from these data sets, it is not possible to conclude with certainty that topic-comment structure occurs in second position turns. Further investigation of this pattern is warranted to ascertain the possibility of such a structure potentially being an effective resource for bilinguals adapting to aphasia.

Comparison across participants shows that Mus uses what appears to be topic comment structure in second position turns. His performance on the Malaysian Naming Test (m-BNT) suggests severe word finding difficulties (see Chapter 4, section 4.1.2). Given this, it is possible that, for Mus, opportunities for taking a turn using a borrowed referent from his conversation partner's prior turn may prove to be highly useful. Tana's turns in her conversation with her sister are constructed

using topic-comment structure in both first and second position. Initiation of second position answers to questions that may have proved to be examples of topic-comment structure, but do not progress to completion, occur in familiar partnerships for Tana, and in both familiar and less familiar partnerships for Mus. Thus, familiarity does not appear to determine the opportunity for a PWA to complete second position turns that begin with a repeated topic referent.

Section 5.3 revealed that topic-comment structure also occurs in the turns of the bilingual non-aphasic conversation partners recorded for this study. Such structures occur in both the Malay and English turns of the conversation partners, as they do in the talk of the PWAs. Thus, topic-comment structure is not an aphasia-only turn construction resource in this population. This suggests that the languages spoken by the Malaysian population create an environment that encourages topic-comment structure. For non-aphasic speakers, the turns reach completion quickly and with ease. This contrasts with the PWAs' incrementally produced topic-comment turns, some of which are vulnerable to disruption. It was noted that there are modest numbers of examples from CPs in these data, which suggests that, despite the utility of topic-comment structure, its occurrence may be restricted by the nature of conversation. One of the five conversation partners, Alan - Mus' less familiar interlocutor - was not observed to use any topic-comment structures. Mutual adaptation in conversations involving a PWA with very limited linguistic resources like Mus may necessitate a partner's turns being constructed as closed questions, making open-ended topic-comment structures less likely to occur.

Malay and English have long been used as lingua franca in this linguistically diverse population. Conversational Malay is classified as a topic prominent language (Koh, 1990) and the verb 'be' is non-obligatory in this pro-drop language. For the local variety of English, Malaysian English, the typical features of copula dropping and pronoun omission or null subjects, as well as topic-prominence, is considered to be an adaptation resulting from the influence of other languages

spoken in the society (Baskaran, 1994; 2004). Therefore, the bilingual PWA's use of topic-comment turns in both his languages not only appears unproblematic but it also appears grammatical. Additionally, a single speaker may switch between structures that approximate Standard English and those that are typical of Malaysian English, as variation along the lectal cline indexes different levels of formality. As such, it is possible that language adaptation is a well-practised strategy for bilingual Malaysians, which may explain the recurring patterns observed in the conversations of the bilingual PWAs; clearly investigation of other bilingual speakers with and without aphasia is warranted.

In summary, topic-comment structure can be a useful adaptive resource for Malay-English bilingual PWAs as well as their conversation partners. The fact that topic-prominence is a feature of conversational Malay may explain the usefulness of this structure. In addition, it does not expose the linguistic difficulties of the PWA. The lectal cline of the non-native variety of English used in typical interactions of Malaysians (Baskaran, 1994; 2004) suggests that topic-prominence in Malaysian English could be a result of adaptation. The finding that topic-comment structure cuts across linguistic boundaries, and is used by conversation partners, suggests that interactional adaptations may already be well-practiced strategies available to bilingual PWAs in linguistically diverse populations. It is for this reason that the potential occurrence of topic-comment structure as an effective adaptive resource for PWAs constructing second position turns warrants further investigation.

6 Turn construction resources for displaying knowledge in conversations of bilinguals with aphasia

6.0 INTRODUCTION

This chapter documents the use of turn construction resources for displaying knowledge in conversations of bilingual PWAs. Knowledge that is displayed can be either shared knowledge or privileged knowledge. The former concerns information available to both conversation partners while the latter refers to information exclusively available to only one of them; in this case, the PWA. This is not a clear cut distinction as PWAs can also claim epistemic rights to the information presented by their conversation partner in a prior turn. Displaying knowledge is both challenging for a PWA and important for his or her interactional independence. It is acknowledged that conversation partners also display knowledge; however the focus of the analysis here is solely on methods used by the PWA. However, conversation partners' behaviours are important. They can be seen to treat a PWA as a knowing participant by either acknowledging the PWA's claim to knowledge or by designing their turn to invite such a display. Section 6.1 examines turn construction resources deployed by the PWA to display knowledge, namely collaborative completions and repetition. Section 6.2 investigates the PWA's display of knowledge where it is scaffolded by the conversation partner in known-answer sequences. By analysing the turn construction resources used and the trajectory of turns surrounding these displays of knowledge, this chapter aims to identify the interaction outcomes of such practices. The chapter concludes with a summary of patterns that are common across participants and those that are specific to individual partnerships (Section 6.3).

6.1 TURN CONSTRUCTION RESOURCES DEPLOYED BY PWA TO DISPLAY KNOWLEDGE

The action of displaying knowledge in a conversation can be achieved through collaborative completion of turns initiated by a conversation partner, and repetition of key elements of a prior turn. As such, these resources share the property of being linked to the prior turn. They serve as a display of a PWA's knowledge in two ways; firstly, by demonstrating a local understanding of the conversation partner's prior turn and secondly, by displaying an ability to anticipate or project the trajectory of the turn in progress. This section presents an analysis of PWA displays of knowledge that highlights the individual's participation as a competent co-participant in conversation. The conversation partner is shown to orient to the PWA as a "knowing participant" (Goodwin 1987) by providing sufficient space for the PWA's turn to reach completion. This analysis will show that repetition of keyword/s from a partners' prior turn, and/or completion of a partner's prior turn, are important resources that allow a PWA to display knowledge that is relevant to the unfolding sequence. This is particularly so given the limited linguistic resources available to the PWA. The analysis presented in this section will reveal that the interactional motivations for this practice are for the PWA to claim either shared knowledge or epistemic access to the information presented in the prior turn.

The first extract shows Mus successfully doing a display of his socio-cultural knowledge in conversation with his wife, Zi. This sequence involves a gender joke about the practice of polygamy that favours Muslim men and is viewed unfavourably by the wives. Mus appears to draw upon his knowledge of their shared experiences and culture to collaboratively complete Zi's turns. The rapid exchange between Mus and his wife demonstrates that he is able to anticipate the trajectory of the sequence from the beginning and showcases him as a competent conversation partner. This spate of talk involves a third person, Ustaz, who has just joined them. In the sequence preceding the extract below, Zi and Mus engage in the activity of finding a suitable name for their new born

grandchild. Zi informs Ustaz of this and establishes a context for elaborating on the naming practices adopted in Mus' family, who hail from the south of Peninsular Malaysia. This practice involves giving the names of grandparents to grandchildren. His full name, Muthana, is an exception because it has not been inherited from either of his grandfathers. Zi initiates the following sequence with a pre-beginning, a comment about Mus' name. The humour hinges on the meaning of his name, which translates as 'more than one'.

Extract 17: two wives (Mus-Zi)

001 Zi [°so°,back to the same (three syllables). eh?]
 [((shifting gaze to Mus))]
 002 except for Mu:,
 003 [(1.0)
 [((Mus turning to Zi, maintains mutual gaze))]
 004 [except for your namelah.] very difficult.
 [((pointing to Mus))]
 005→ Mus MU [THANA.
 [((turning to face forward))]
 006 Zi MuTHA [na,
 007→ Mus [MU
 [((smiling))]]thana.
 008 Zi mean more than, [(0.5)
 [((holding up index finger))]] [one.]
 009→ Mus [ONE.]
 010 Zi so must be [two,
 [((holding up two fingers))]]
 011→ Mus [↑WIFE.=
 [((smiling))]]
 012 Zi =[aik.
 [((leaning back))]] [heh hhh
 013 Mus [ha:h
 [((smiling))]] [hhh hhhh.
 [((turning to face forward))]]
 014 Ustaz [hah hah hah.
 015 Zi ish.=
 016 Mus [=ha:hh.
 [((smiling))]]
 017 Zi no good man. [heh hah hah.]
 018 Mus [hhhh hhh hh.]
 019 Ustaz [ha ha hah.]

In line 2, Zi concludes her explanation of the naming practice with 'back to the same' which sums up the tradition of 'recycling' the names of elders in the family. She invites Mus' participation with a first syllable cue at the end of the phrase 'except for Mu:,'. Mus turns to Zi and maintains mutual gaze during the

1.0 second pause that follows. Mus' acknowledgment of her passing the floor to him is significant because Zi's explanation in the prior sequence was directed to Ustaz. In line 4, Zi repeats the phrase 'except for' and makes specific reference to 'your namelah' (the Malaysian English particle 'lah' marks it as obvious). As Zi finishes her comment with 'very difficult', Mus takes a turn in line 5 and says his name emphatically at louder volume, which marks his involvement as a competent conversation partner. Mus' gaze is directed forward indicating that he is maintaining a three-party conversation that includes Ustaz, who is seated opposite him (but not visible on the video).

At line 6, Zi initiates another turn, repeating the name with a continuative tone and, in overlap, Mus repeats it. He delivers the first syllable with the louder volume typical of competitive incomings similar to those documented in Zuraidah and Knowles (2006), for Malay conversations, and French and Local (1983) for English. This is possibly Mus' attempt to claim ownership of the information. Zi then continues with the phrase 'mean more than,'. The continuative tone of the last word is accompanied with a prefiguring gesture projecting the next item in her turn. While holding up her extended index finger she produces the word 'one' (line 8). Simultaneously, Mus completes her turn, saying 'ONE' (line 9) with a louder volume than his surrounding talk, once again competing to display his knowledge of the next relevant item. His recognition of and completion of her turn permits him to display his competence.

The sequence continues with Zi adding, 'so must be two,'(line10), again projecting more to come. Mus' turn in line 11 provides a second example of the use of collaborative completion as a resource to display his knowledge. He completes her turn with the word 'WIFE'. His pitch and volume suggests heightened involvement in the talk, and he also smiles. It is interesting to note that, at other times, Mus experiences difficulty in accessing the word 'wife', for

example in his conversation with a less familiar partner, Alan²⁵. It is possible that the local context of this sequence may have enabled Mus to produce this word with relative ease. Zi's latched next turn response 'aik' and laughter confirms Mus' successful accomplishment of humorous intent with his completion. The lack of plural marking in Mus' completion is not treated as problematic possibly because, as noted in Baskaran (2005), consonant clusters tend to get reduced in Malaysian English. Mus' confirmatory 'ha:h' is followed by Mus' and Ustaz's joint laughter. Having responded with laughter, Zi pretends to take offense with 'ish' (line 17), and a typical Malaysian evaluative comment 'no good man' (line 17), bringing on more joint laughter. Mus' involvement in the construction of the joke in this sequence establishes him as a knowing participant.

The joke hinges on the fact that, although polygamy is allowed in the Muslim religion, women do not favour this practice. Mus' name bearing the meaning 'more than one' is used as a pun to invoke his right to marry 'more than one'. Hence, the punch line of the joke is 'two wife' (wives). This is a formulaic punch line in the sense that the word 'two' is regularly collocated with the noun 'wife', reflecting this socio-cultural practice. Additionally, the word 'wife' invokes Zi's relationship with Mus; being the first wife of this Muslim man makes her the brunt of the joke. Joint laughter of both the men in this three-party talk confirms this observation, as does Zi's pretending to take offense.

It is clear that Zi designs her turn in line 2 so that there is an opportunity for Mus to deploy collaborative completion. Mus' competitive incomings appear to be indicative of his knowing the trajectory of Zi's talk from the beginning of the sequence. Zi's interactional motivation appears to be to provide Mus opportunities for collaborative completion while Mus' prosodically marked delivery displays heightened involvement reflective of his motivation to interact in this sequence. With his single word completions of Zi's turns, especially the

²⁵ See extract 12 in Chapter 5.

punch line, Mus displays his access to this complex cultural knowledge, and thus his continued competence as a speaker and member of his community. Thus, Mus and Zi's interactional motivation in this sequence shows them adapting to his aphasia.

The second extract comes from the same conversational partnership and precedes extract 17. This time, Mus displays knowledge to which he has epistemic access (via unique personal experience) through repetition of key words from his conversation partner's prior turns. Once again this is a three-party conversation.

Extract 18: *penat* *penat* (Mus-Zi)

001 Zi (three syllables)you, sleep well last night?
 002→Mus well, °well°.
 003 [(2.1)
 [((Mus holding mid distance gaze while Zi looks at him))]
 004 Zi y- how's your, tu. your new medicine tu bagus? ubat.
 that that ø good ø medicine
 y- how's your that. your new medicine that(one).(is it)good? medicine.
 005 die o(r)ang trykan susu ba(r)u tu.
 PRO INF milk new that
 they tried (for him) that new milk. [((Mus turns to visitor))]
 006 jadi,apeh,(.) tch.ade side effects (i)nilah, die rase
 so, what ø have ø that PRT PRO felt so, what,
 (it) has side effects. thislah. he felt
 007 *penat semalam.*
 tired last night
 tired last night.
 008→Mus ((looking at Ustaz))pe_rNAT, pe(D)AT
 tired tired
 tired, tired
 L((swings hand to right & back to sofa))
 009 hah=
 010 Ustaz =ngantuk? [ngantuk ye?
 sleepy TAG
 sleepy? sleepy, were you?
 011 Zi [ngantuk dan *penat.*
 sleepy and tired
 sleepy and tired
 012 Mus [ah, ah. ah, pu(nye,)
 POSS PRO
 [ah, ah. ah, its
 L((holds his hand in a grip, flicks wrist, drops hand back to his lap))]
 013 tch.

014 Zi ((*looking at Mus*)) *susu awal lembu, die panggil. mahal.*
milk first cow PRO call expensive
they call it cow's first milk. (it is) expensive.

015 *seratus lapan puluh, setin kecil. satu scoop campur dengan*
one hundred eighty 0 one small can one mix with a
one hundred and eighty, (for) one small can. one scoop mix with

016 *seratus (two syllables) air, eh? ba (ng)?*
hundred water TOA
a hundred (two syllables) water.eh? dear?

017 Mus ((*nods gently*)) °ah.°

018 Zi *goncang, ape pa rase, ade perubahan? sihat sikit ke, rasanya?*
shake what TOM feel any changes? well little TAG feeling?
shake, what do you feel, any changes? feeling a little better, are you?

019 *penat ke?*
tired TAG?
tired are you?

020→ Mus oh, peNAT, ((*moves hand horizontally*)) penat. °penat.°
tired tired tired
oh, tired .tired. ° tired. °

021 Zi tired, ye?
TAG
tired, are you?

022 Mus ha::h.

The sequence begins with Zi asking Mus a closed question ‘you, sleep well last night?’ (lines 1-2). This first pair part question sets up an expectation for either an affirmative or a negative answer. Mus’ second position turn constructed with two repeats of the key term ‘well’ is an upgraded answer in that it displays his hearing and understanding of Zi’s prior turn and his alignment with her turn. After a 2.1 second pause, Zi does a topic proffer about Mus’ ‘new medicine’ (line 4). She then provides the Malay speaking visitor, Ustaz, with some background information on the topic with ‘die o(r)ang trykan susu ba(r)u tu’ (they tried that new milk, line 5). She continues to explain about the ‘side effects’ and finishes with ‘die rase penat semalam’ (he felt tired last night, line 6-7). Zi refers to Mus using the third person singular pronoun, clearly showing that this turn is designed for Ustaz.

In line 8, Mus, in a self-selected turn, repeats the key term ‘penat’ (tired) from Zi’s turn. In doing so, he aligns himself with Zi’s comment in the prior turn. The repeated word is modified prosodically with louder volume and raised pitch on the second syllable, and displays heightened involvement in the topic, as does the accompanying gesture. This consists of an emphatic swing of Mus’ hand, and appears to be an exemplification of his degree of tiredness. Importantly, this

repetition modified via prosody and gesture allows Mus to mark the repeated word as his own contribution, thus taking ownership of the assessment of his personal experience of this side effect of his medication. Mikesell (2009) reports on similar modified repeats accomplishing displays of epistemic knowledge in conversations of individuals with dementia.

Ustaz then directs a turn to Mus, seeking clarification with 'ngantuk? ngantuk ye?' (sleepy? sleepy, were you? , line 10). This reveals that Ustaz is orienting to Mus' claim to knowledge. In overlap, Zi comes in with a repeat of 'ngantuk' (sleepy) followed by 'dan penat' (and tired). Mus' attempt to construct another turn (line 12) does not progress beyond 'ah, ah. ah, pu(nye,)' (ah, ah, ah, its,). He abandons the incomplete turn with a self-admonishing 'tch', marking his frustration. At this point, where Mus' aphasic difficulties become the focus of the conversation, Zi takes an extended turn (lines 14 to 16), providing Ustaz with more information detailing what the medication is called, the cost and how it is prepared. She completes this turn with 'bang' (a term of address normally used to refer to one's husband or a brother). Her tag question seeks confirmation of the information she has presented to Ustaz, but it is essentially an invitation for Mus to participate. Mus' nod displays his agreement and confirms their shared knowledge. These lines illustrate that, although Mus' interactional motivation to display competence may lead to successful deployment of repetition as an adaptive strategy, it does not ensure his continued participation in the interaction. Zi shows that she is sensitive to Mus' aphasic difficulties by diverting attention away from trouble, taking the floor while maintaining his participation with turns that require minimal responses from him.

Completing her explanation on how the medicine is prepared with the verb 'goncang' (shake) in line 18, Zi then directs an open question 'ape pa rase,' (what do you feel?) to Mus. Listing options with a series of three yes/no questions; 'ade perubahan?' (any changes?), 'sihat sikit ke rasenya? (feeling a little better, are you?) and 'penat ke?' (tired, are you?) (line 19), she then relinquishes the floor. Mus responds with a newsmark 'oh', followed by three repeats of the word 'penat'.

His repetition here reiterates the mutually agreed prior assessment of his experience at lines 7 and 8. Once again, he prosodically marks the repeat of 'penat' (tired) at line 20 to reflect heightened involvement in the conversation. Zi responds with a nod and confirms with an English equivalent 'tired' followed by a tag question 'ye' (are you) in line 21, which Mus acknowledges with 'ha::h' (line 22).

The two extracts above show Mus displaying understanding of what his regular conversation partner's turn entails, and what is implicated to be the next relevant conversational action, by deploying the resources of turn completion and repetition in order to display knowledge. In the third extract, below, we see evidence of the same pattern of behaviour in his conversation with a less familiar partner, Alan, outside the home. In the sequence that precedes this extract, Mus and Alan discuss a forthcoming fundraising event organised by the National Stroke Association of Malaysia (NASAM) that runs the support centre where Mus and Alan meet²⁶. At the beginning of this extract, Alan asks about Mus' participation in one of the activities to be held during the event. Only Mus has access to the information that Alan is seeking in this sequence.

Extract 19: cake cake (Mus-Alan)

- 001 Alan so, are [you going to take care of the stall?]
 ((moving his hand towards Mus))]
- 002→ Mus [stall, ep, ap, a: e- a:m,
 ((raising his index finger and tracing circles with it))]]
- 003 [(5.4)
 ((Mus drops his hand to his lap and holds mid distance gaze. He
 raises his eye brows briefly, opens his mouth and exhaling shifts
 gaze to Alan. Alan looking at Mus.))]
- 004 Alan [going to take care of your stall?] are you going to sell some
 ((moving his hand towards Mus))]
- 005 things?
- 006→ Mus sel- ah, selling [selling selling.
 ((turning his wrists in a circular motion twice))]]
- 007 Alan what are you- what is your stall selling?
- 008→ Mus °aah m tch° [(5.5)] [tch. (1.5)
 ((mid distance gaze))] [((shaking his head))]]
- 009 Alan are you going to sell Nasi Lemak?

²⁶ Alan is a full-time volunteer at this centre.

010→ Mus [↑no, no, no=
 ((rotating his hand and then places hand on his lap))]

011 Alan no? no Nasi Lemak. ↑cakes?

012→ Mus ↑aah [cake,cake.] [(s)mall,small, ball.]
 ((index finger extended)) [((index finger and thumb together
 making a circle))]

013 Alan small ball.

014→ Mus no.↓no. ((bringing his thumb and index finger close)) °small°

015 Alan round, round cake?

016 Mus ↑hah.

017 Alan cupcake?

018→ Mus HAH. (cr)up cake.

Mus' use of repetition in line 2 to initiate a second pair part answer to Alan's question in line 1 displays his hearing and understanding of what the question is about and projects an answer to the question. His active participation in the interaction is notable from his gestures. His raised index finger appears to identify 'stall' as the key term. He then begins a word search signalled by fillers 'ep, ap, a: e- a:m,' while moving his index finger as if he is tracing circles. This multimodal response earns Mus space to continue with his word search. During the 5.4 second pause that follows, Mus drops his hand to his lap indicating the termination of one phase of the search, but he continues to hold his turn by gazing to the middle distance (Goodwin 1987). At one point during this solitary search, his facial expression (raised eyebrows and opening his mouth as if he is going to say something) suggests a heightened involvement. However, he then downgrades his participation, displays difficulties in producing the next part of his turn, and relinquishes the floor with an out-breath and shift in gaze towards Alan (line 3). Thus, the turn that began with Mus' repetition of a key term from Alan's prior turn does not progress to completion. The long search phase, during which Alan waits for an answer, indicates Alan orienting to Mus as knowing the answer to the question.

The sequence continues with Alan redoing the question, firstly by repeating it and then by asking 'are you going to sell some things?' (line 4). Mus responds with a repeat of 'sell', a key term from Alan's new question. This repeated verb is abandoned in favour of the present progressive form, 'selling' which Mus

repeats three times. His syntactically modified repeat appears to mark his production as tied to Alan's turn and at the same time to represent his own unique contribution. The gesture he uses reflects the modified form of the verb; the repeated movement of his index finger indicates a 'continuous' or 'repeated' activity. Mus' answer displays that he has specific knowledge about the activity referred to in Alan's prior turn, even if elaborating on it is difficult. This is significant since Alan's question only sets up the expectation of a yes-no response.

Mus' difficulty in displaying knowledge that he has privileged access to becomes more evident as the sequence progresses. In line 8, Mus initiates a second pair part answer to Alan's next (open) question 'what is your stall selling?' (line 7), producing a filler. He then marks trouble with a self-admonishment 'tch' and long pauses. In line 9, Alan provides a candidate answer, 'Nasi Lemak' (a typical Malay rice preparation usually sold at food stalls). Here, Alan is drawing upon their shared cultural background to select from the category of food items that are appropriate for selling at the stalls. He treats Mus as a 'knowing participant' and at the same time invokes his identity as a Malay. Alan's turn requires Mus to either indicate acceptance or rejection. This is similar to Goodwin's (1995) observation of Rob, an American English speaker with aphasia, being assigned a central position as the one with the answer, despite his limited linguistic output. Mus provides a relevant response with 'no no no' (line 10). Following this he places his hand on his lap, thus marking the end of his turn. Alan confirms the rejection and produces another try marked candidate answer, 'cakes?'. Mus then displays recognition and acceptance of Alan's guess with 'aah' produced at louder volume and two repeats of the word 'cake' (line 12). He does not merely borrow the words from Alan's prior turn; he extends his display of knowledge by appending additional information about the cakes, 'small small ball' (line 12). This is accompanied by a hand shape, formed by finger and thumb, which appears to be an iconic representation of a small round object.

The trajectory of the turns that follow reveals Mus' appended description to be a trouble source. The turns that follow involve Alan drawing from their shared cultural background to present candidate answers. Thus, Mus' turn in line 12 appears to have initiated a hint and guess sequence (Laakso & Klippi, 1999). Alan responds with an understanding check, a repetition of the phrase 'small ball' (line 13). Mus rejects Alan's guess with 'no' and attempts to self-repair, bringing his thumb and index finger close (almost like a pinching gesture) before repeating the word 'small' (line 14). Alan then guesses again with the try marked 'round, round cake?', which Mus confirms. Alan's final guess 'cupcake?' is responded with an emphatic 'HAH' and a final repeat of the answer. The mutual establishment of 'cupcake' as the item that Mus plans to sell at his stall is finally accomplished in line 18. With Mus' having successfully shared his privileged knowledge, Alan brings the sequence to a close.

Lines 2, 6, 12 and 18 show Mus constructing his turns with repetitions to display local knowledge about the prior turn and to project an answer is forthcoming, or to accept the conversation partner's try marked guesses. Although the long word search highlights Mus' difficulties, it is also reflective of his conversation partner, Alan, orienting to Mus as a 'knowing participant'. Alan adapts to Mus difficulties by drawing upon what shared knowledge they do have, here cultural, to provide candidate answers. Mus' active participation is notable from his verbal modification of repeated items and his use of accompanying gestures.

The next extract also shows Alan exploiting shared cultural knowledge to provide a candidate answer and thus allowing Mus to display privileged knowledge. Prior to the extract Alan has been asking about Mus' plans for the day. In a stepwise transition from the preceding turns about dinner plans, Alan concludes 'so your dinner is in a restaurant.' (line 1). The type of restaurant where Mus will be having his dinner then becomes the new topic of discussion. Alan's inquiry pertaining to this in line 3 and Mus' display of knowledge in lines

matter being discussed. Zin aligns with acknowledgement tokens ‘ah a:h’ in line 3.

It is only in line 5 that Zin loops back to Ain’s incomplete turn in line 1 with ‘nga:n’, a modified repeat of the word ‘dengan’ (with). He then produces a word search marker ‘nih apeh’ (this what) and completes his turn identifying ‘Rashidah’ as the other politician that Sharifah was photographed holding hands with. Zin’s turn appears to be a (delayed) collaborative completion of Ain’s abandoned turn in line 1. Ain’s acceptance of this (line 6) is overlapped with Zin’s prosodically upgraded repeat of Rashidah in line 7. Zin’s upgraded repeat reflects a claim to authoritative knowledge, and appears similar to Mus’ repetitions in Extract 18. In line 8, Ain acknowledges Zin’s epistemic access to the information that she glossed over in line 1. Zin’s use of repetition and collaborative completion in this extract establishes his position as a competent co-participant, despite his aphasic difficulties.

The next extract is taken from Zin’s conversation with his less familiar conversation partner, his friend Tony. This example demonstrates how collaboration between the participants in a word search sequence produces a display of Zin’s privileged knowledge (Tony’s wife, Fran joins them at this point in the conversation). This stretch of talk occurs after Tony makes a general inquiry about Zin’s mother’s health.

Extract 22: brapa umur (Zin-Tony)

001	Tony	brapa <i>bra</i> pa umur? how many how many age how many, how (many years) old (is she)?	}
002→	Zin	((turns his palm over)) ((folding his thumb in)) °satu°, one one	}
003	Fran	L BRapa umur? how many age how (many years) old (is she)?	J
004→	Zin	r °dua, tiga, empat, lima:, ° nam. two three four five six two,, three, four, five, six. L ((continuing counting gesture while looking down))J	J
005→	Zin	((raising his head)) r enam J enam puluh. six sixty six sixty.	J

002 happened?
003 [(1.2)
 [*((Tana holds mid distance gaze as she swings her hand to the side))*]
004 Rani Aarthi was supposed to come, Aarthi never came. Seetha
005 was supposed to come,
006→ Tana nno:h. [a:h, Aarthi,
 [*((raising her hand, points upwards with index finger))*]
007 [e:rr=
 [*((moves her hand forward, holding up an open palm))*]
008 Rani =looking after her daugh[ter?]
009→ Tana [a:h.] [daughter,
 [*((moving her open palm))*]
010 [and sa:- so(n) noh.
 [*((bringing the open palm close to her chest))*]
011 [that,
 [*((turns over her palm, leans forward& raises her hand to chest level))*]
012 [er °mmhhh°
 [*((moves her hand horizontally and then raises it))*]
013 [the:,
 [*((moves her hand horizontally, then returns it to her seat))*]=
014 Rani =GRANDchildren.
015 Tana ah.
016 Rani so that's why she doesn't have ti[me.]
017 Tana [erhm,] [timelah.]
 [*((nodding))*]

This sequence begins with Rani directing an open question to Tana about their cousin Seetha, who was expected to visit them but ‘never came’ (line 1). She completes her turn with ‘what happened?’ and passes the floor to Tana in line 2. During the 1.2 second pause that follows, Tana holds a mid distance gaze while Rani continues to look at her. Tana’s “thinking face” (Goodwin, 1995) appears to have been interpreted by Rani as Tana being engaged in planning her answer. She continues to treat Tana as a knowing participant who will produce an answer until Tana indicates gesturally, with the swing of her hand, that she is abandoning her search. Rani then takes another turn in lines 4-5, elaborating with another example of a cousin who did not come, before returning to the topic of Seetha. In line 6, Tana initiates a turn with ‘nno:h’. She raises her hand, points upwards and produces the particle ‘ah’, repeating the name ‘Aarthi’ from Rani’s prior turn with a continuative tone, projecting more to come. Repetition here enables Tana to indicate that she knows the answer to the question pertaining to Aarthi, which she attempts to convey by then appending additional information. This is consistent with Oelschlaeger and Damico’s (1998) observation of the ‘appendor’ function of

repetition in (US-English) aphasic conversation. Although Tana's accompanying gestures and the filler 'err' hint at difficulties in constructing her turn, with the use of repetition she is able to display that she knows the relevant next action.

Before Tana can finish her turn, Rani offers a possible answer to her own question with a try marked 'looking after her daughter?' (line 8). Tana's overlapped acceptance token at line 9 and the continuative prosody of the repeated word 'daughter,' (marked with a comma in the transcript), accompanied by her open palm gesture signals an incomplete turn. She then produces 'and sa:- so(n)' but promptly initiates a self-repair with 'noh'. She continues in line 11 with the deictic marker 'that', once again displaying knowledge of the relevant next item, which she then represents gesturally while producing fillers (lines 11-12). Leaning forward in her seat, Tana first holds her downward facing palm at the chest level and moves it horizontally. She then raises her hand before moving it horizontally again. The contrast between these two positions appears to represent height variations, a salient feature of the intended referent. With these gestures, and the word 'the' (line 13), Tana provides hints that Rani successfully interprets as referring to 'grandchildren' (line 14). The sequential position of this complex gesture after Tana repeats 'daughter', and says 'son', provides an important clue about the category set that the referent belongs to, that of 'familial relationship'. The sequence comes to a close with Tana's acknowledgement, in line 15, of Rani's proffered referent 'grandchildren'. Tana's use of repetition achieves two outcomes. Firstly, it allows her to acknowledge her partner's contribution and secondly it allows her to project her own still progressing turn. Her use of elaborate gesture shows her active participation in constructing a referent that enables her to display her knowledge of the relevant answer to Rani's question.

In summary, the seven extracts in this section show a PWA doing a display of knowledge, in turns constructed via collaborative completion and/or repetition of key elements from the conversation partner's prior turns. As such, the PWA's knowledge-displaying turn is closely linked to the turn that precedes it. This reflects

a sustained participation in the conversation. Heightened involvement in a topic becomes apparent via the PWA's prosody (increased volume, marked intonation), and can signal a competitive incoming into the conversation partner's still progressing turn. Repetitions are not exact repeats, they display modification in terms of prosody and grammar, and are sometimes accompanied by gesture, all of which indicates the PWA's active participation in conversation. These behaviours serve to stake the PWA's claim to be the owner of information presented in the conversation partner's prior turn. Repetition and turn completion as a display of knowledge are particularly striking features in Mus' conversation, possibly due to the severity of his aphasia. (See Chapter 4, section 4.1.2 for Mus' profile). However, the ability to display knowledge in these ways is also relevant for Zin and Tana. Repetition and turn completion appear to be valuable for all three PWAs in this study.

It has been argued that a display of knowledge accomplished in this manner enables a PWA to appear competent, despite his or her aphasia. Such displays of knowing, and their link to the concept of competence, appear to form the basis of the interactional motivation for using repetition and collaborative completion in this way in these data. The familiar partner is seen to treat the PWA as knowing. This is evident during long pauses in the PWA's turn in which the partner does not take the floor; the PWA either engages in a word search or resorts to using gesture to represent a next relevant item. This recurring pattern of turn construction is traceable in the home conversations of all three bilinguals studied here.

Additionally, for Mus, and for Zin, repetition appears to be deployed in conversations outside the home with a less familiar conversation partner. The picture for Tana is incomplete since it was not possible to record her with a less familiar partner. It is likely that shared knowledge will be limited in a less familiar partnership. Genuine information gaps in less familiar partnerships provide opportunities for PWAs to display privileged knowledge, but in these data non-

familiar partners tend to take different turns than familiar ones. In contrast to familiar conversation partners, less familiar ones are seen to seek information via questions and then to produce try-marked guesses as to the answers. Thus, while repetition is still a feature of PWA responses, often used to accept or reject the guesses provided, and with additional information appended to the repeated item, collaborative completion of turns is not seen in these data.

The analysis presented in this section reveals interactional motivations for this practice to be for the PWA to display knowledge to which he or she has access. Effective adaptation in this instance showcases the PWA's participation as a competent co-participant in conversation. Repetitions and/or collaborative completion thus become effective resources for PWAs to construct their turns in such instances. In contrast to turn constructions which reveal PWA knowledge and highlight competence, the next section analyses sequences where the conversation partner's turns are designed to tightly scaffold a display of PWA knowledge via the use of known answer questions. Although the aim appears to be to support participation and thus reveal competence, such sequences will be shown to impose problematic restrictions on a PWA's talk that ultimately highlight aphasic incompetencies.

6.2 PWA'S DISPLAY OF KNOWLEDGE SCAFFOLDED BY CONVERSATION PARTNER IN KNOWN-ANSWER SEQUENCES

In addition to the practices discussed above, opportunities for PWAs to display knowledge can also be created in *known-answer sequences* where first pair parts are designed with a question to which the answer is already known to both partners. Schegloff (2007) discusses these as a distinctive type of sequence typically occurring in pedagogic interactions, where the objective is to cue or prompt an expected response; this action becomes evident in third position where the questioner offers an evaluative comment. Known-answer questions serve to

invite participation but they also restrict it to production of an expected answer, often a single word (noun). Such questions, called *test-questions* in the aphasia literature (Lock, Wilkinson & Bryan, 2001; Beeke, et al., 2013), result in a display of knowing the expected answer, but the response often becomes problematic because of aphasic trouble in producing it. Shared knowledge available to both partners in conversation is the basis for developing this type of sequence - the conversation partner's turns are designed to tightly scaffold a display of PWA knowledge. Although the aim appears to be to support participation and thus reveal competence (Beeke, et al., 2013), such sequences will be shown to impose problematic restrictions on a PWA's talk that ultimately highlight aphasic incompetencies. Dispreference for such restrictions will be shown to be present in the behavior of the PWA. The analysis will reveal interactional motivation for engaging in known-answer question sequences to be partner led, although these appear to create opportunities for a display of a PWA's knowledge.

The first extract shows Zin's sister, Ain, exploiting their shared knowledge via a known-answer question sequence. She initiates the sequence and continues with semantic cueing in an attempt to facilitate Zin's production of her expected answer. Prior to this extract, Ain informs Zin about a party she will be attending. The venue of the party is in a location that she knows him to be familiar with. She sketches a map to help Zin visualize the location and they collaborate to identify some of the buildings in the area.

Extract 24: ape name (Zin-Ain)

- 001 Ain ʃkalau kite ke depan ni, ade ape? ʃ
 if we to ø front ø this, there what ø
 if we go to the front of this, what is there?
 L ((looking down and pointing to the map)) ʃ
- 002→ Zin ((lifting his head) ʃ ah, ʃape name mm, ʃ
 whatø ø name
 what's the name
 ah,
 L ((looking down)) ʃ L ((downward gaze)) ʃ
- 003 Ain Bang Zin slalu ʃjalan kat si(ni.) ʃ
 TOA used to go near here
 Bang Zin (you) used to go here
- 004→ Zin ʃape nameh, ʃem e- nih. ah factory.
 whatø ø name this
 what's the name, em e- this. ah factory

005 Ain ah, ʔah a:h.ah. factory ape?ʔ
what

006 Zin ah, ah a:h.ah. what factory?
 LHEH hhh heh heh J ah, [(1.6)
((mid distance gaze))]

007→ mmh ni ape nameh ʔ (2.4) a:m, mmmm ape, ʔ
this, whatø ø name what
 mmh, this, what is the name (2.4) a:m mmm what
L ((mid distance gaze)) J

008 Ain mm?

009→ Zin mm, [(1.4)
((mid distance gaze))] balak, mm bukan bukan ape nameh
timber, NEG NEG whatø ø name
timber,mm no no what's the name

010 [(1.2) err,
((mid distance gaze))]

011 Ain makanan. makanan.
foodstuff foodstuff
foodstuff. foodstuff.

012→ Zin ah nih. ah ni Mag- Maggi- Ma:m- Ma:mee. Mamee.
this this
 ah this. ah this Mag- Maggi- Ma:m- Ma:mee. Mamee.

013 Ain ah.=

014 Zin = hehh heh.heh heh.

015 Ain ah. Maggi:?

016 Zin TA:k.bukan. Ma:mee.
NEG NEG
NO. Not. ma:mee.

017 Ain °ma:mee.°

018→ Zin MA:mee. EH heh.

019 Ain mm, Ma:mee.

020→ Zin Ma:mee Ma:mee.

021 Ain emm. m.

Pointing to the map, Ain asks Zin in line 1 ‘kalau kite ke depan dari sini, ade ape?’ (if we go forward from here, what is there?). This being a map that Ain herself had sketched, it is apparent that she is asking a known-answer question. In line 2, Zin attempts to construct a second pair part to her question with a turn holding filler ‘ah’ followed by the formulaic phrase ‘ape name’ (what’s the name). Although this formulaic expression is a question form, Zin’s gaze is directed away from Ain confirming that he is not appealing for help. The expression functions as a metalinguistic comment pertaining to Zin’s word finding difficulties and thus establishes Zin as ‘knowing’ the answer but he is unable to produce it. The use of formulaic expressions in a PWA’s haltingly produced turn is significant because they represent “islands of fluency” (Beeke, et al., 2007).

Despite Zin marking his word search as a self-directed activity, Ain orients to his difficulties and provides a semantic clue drawing on her knowledge that Zin ‘...slalu jalan kat si(ni)’ (used to go here) in line 3. This is further evidence that they both know the answer to her question in line 1. Zin continues with his word search and signals knowing the next relevant item with ‘ni’ (this) and turn holding ‘ah’. His turn then progresses to completion with the answer ‘factory’ in line 4. Ain produces acceptance tokens and repeats ‘factory’ from his turn before adding the question word ‘ape’ (what). Having taken two turns (in lines 2 and 4) to produce his answer, Zin’s overlapped laughter at this juncture may be an indication of his “making light” (Wilkinson, 2007) of his difficulties. Ain does not respond to this laughter; this mirrors Wilkinson’s (2007) observation that conversation partners do not reciprocate such laughter.

Zin continues with his attempts to answer Ain’s second question, producing word search markers that include pausing, gaze shift, fillers and metalinguistic comments (line 7). Ain’s go-ahead ‘mm’ in line 8 shows that she is again treating him as knowing the answer. In line 9, Zin produces the word ‘balak’ (timber). He initiates a self-repair with ‘bukan’ (no) and repeats the formulaic utterance ‘ape name’ once more. A 1.2 second pause follows. In line 10, Ain gives another clue ‘makanan’ (foodstuff). In line 11, Zin responds with ‘ni’ (this) repeated twice before producing a brand name, ‘Maggi’ and then self repairing with another brand name, ‘Mamee’. In this manner, he resolves his trouble identifying the building that Ain pointed out in her map, via the brand name of the foodstuff produced there. Ain produces an uptake and in a latched turn, Zin continues with laughter, as in line 6. Ain produces a try-marked repeat of the word ‘Maggi’ which he rejects before asserting his own answer with a repeat of ‘Ma:mee’. Their repeated production of the answer ‘Ma:mee’ in the lines that follow confirms the resolution of the word search sequence.

This extract demonstrates how a conversation partner’s known-answer question appears to be designed to encourage participation of a PWA in the conversation.

Here, the semantic cue provided to scaffold Zin's turn construction is comparable to the broad categorical information offered by an SLT (see Lindsay & Wilkinson, 1999). Although the conversation partner's efforts assist Zin in producing the expected answer, they restrict his participation in the conversation to the production of single nouns. Turn holding devices, such as the formulaic expression 'ape name', enable Zin to display knowing the expected answer but also reflect his being under pressure to produce it. Zin's laughter, which follows completion of the answers, appears to signal a dispreference for the highlighting of his aphasic difficulties in this situation.

The next extract, taken from from Zin's conversation with his friend Tony, also concerns an impending event but, in this case, it is an event that has received wide media coverage. Thus, Tony anticipates that Zin's will have sufficient knowledge about it to provide a known answer.

Extract 25: what time (Zin-Tony)

001 Tony Beijing [tonight ah?]
 002 Zin [ah- ah]_{m, er, ((index finger on his lips))}
 003 Tony wha(t) time?
 004 Zin a:h,=
 005 Tony =eight thirty?
 006 Zin e- ei:ght thirty e:h?
 007 [(1.0)
 ((Tony nodding))]
 008 Zin oh, okay. °okayh.°=

In line 1, Tony asks a closed question, introducing the topic of the Opening Ceremony of the Olympic Games to be held later that evening in Beijing, China. He says 'Beijing', the name of the city where the event is to take place, to establish the mutually recognised referent. He then seeks confirmation with 'tonight ah?' (line 1). The tag 'ah' in Malaysian English is equivalent to the English 'isn't it'. Zin responds to this known-answer question with an affiliative token 'ah- ah.', confirming his knowledge about the event. Zin continues to hold the turn with a filler and gesture that resembles the 'thinking face' described in Goodwin (1995). With Zin's non-progressing turn potentially drawing attention

to his aphasic difficulties, Tony then asks another known-answer question, 'wha(t) time?' (line 3). Zin's response with a turn initial 'ah' suggests his knowing the answer but, in a latched turn (line 5), Tony answers his own question. He appears to anticipate that Zin's turn in line 4 will also be problematic. Tony's delivery of the answer with a raised terminal intonation suggests that this is a try marked answer, a guess (as in 'is it at eight thirty?'). By doing this, Tony places Zin in the position of needing to accept or reject the answer and at the same time display epistemic knowledge.

In line 6, instead of producing the expected acceptance token following Tony's known-answer question, Zin repeats 'eight thirty' and appends it with the tag 'e:h'. He shows hearing and understanding of Tony's answer but does not claim to know that to be the answer to the question. Tony's gestural confirmation in the 1.0 pause that follows again hints at his trying not to draw attention to Zin's trouble in display knowledge that he is expected to know. Zin's final response with a surprise token 'oh' and two repeats of 'okay' shows his alignment with Tony's effort to quickly resolve the trouble.

In the next extract, from Mus' conversation with Zi, she is seen using a known-answer question and cueing to scaffold Mus' participation. Her first word cue projects a specific single word as the relevant next item. Here, the talk moves on from a discussion of the name of the rice noodle dish (Kuey Teow Kung Fu) that they had had for lunch to the ingredients that went into the dish.

Extract 26: Kuey Teow ingredients (Mus-Zi)

001 Zi *habis, dalam Kuey Teow tu ade ape?*
 then in that was what
 (and) then, what was in the Kuey Teow?

002→ Mus [(2.0)
 [((raises his hand))]

003 Zi [fish,
 004→ Mus [((brings all his fingers together))] [ball.
 [((holds hand shape))]

005 Zi [fish ball, say-]
 (first syllable of the word sayur, vegetable.)
 L((Mus lowers his hand))J

006→ Mus ((waves his hand and shakes his head)) no noh.
 007 Zi vegetables, and fish, ((lip spreading as if to form the sound /k/))
 008→ Mus [CAke.
 [((spreading his fingers, drops hand to lap))]
 009 Zi fish cake. and egg.
 010→ Mus °egg. °
 011 Zi you enjoy?
 012 Mus ah ((tilting his head)) °enjoy. °

Marking the progression from the previous sequence with 'habis' (then), in line 1, Zi asks a known answer question 'dalam Kuey Teow tu ade ape?' (what was in the Kuey Teow?). It is apparent that both partners know the answer to the question since Mus had just had this dish for his lunch and it was Zi who prepared it. Mus signals his participation with a prebeginning gesture (Streeck, 2009) in the next turn. His raised hand serves to take the conversational floor and to display that he knows the answer. However, he is unable to begin to verbalise his answer and a 2.0 second pause follows. Zi provides a first prompt in line 3, delivering 'fish' with continuative intonation, indexing the turn as incomplete, and offering Mus an opportunity to complete it for her. In an overlap to Zi's cue, Mus produces a gesture that is possibly an iconic representation of small food items. Holding this gesture Mus produces the single word 'ball', collaboratively completing the answer initiated by Zi. She displays acceptance with a production of the full form 'fish ball' in her next turn, before moving on to the next item in what now appears to be a list of ingredients in the 'Kuey Teow' meal.

Zi continues with this pattern of cueing and in line 5, she produces the syllable 'say', possibly the first part of the Malay word 'sayur' (vegetables). Mus rejects this second cue with a wave of his hand, head shakes and negative tokens 'no. noh.'. Zi appears to treat his multimodal turn as a rejection of her code-switch to Malay, and repairs with the English word 'vegetables' (line 7). Although his other-initiated repair showcases Mus as a competent co-participant, Zi persists in supporting his participation with single word cues. She signals continuation of the list with the conjunction 'and' before projecting another incomplete list item, with 'fish' delivered with continuative intonation. Since the dish includes both fish balls and fish cakes, Zi invites Mus to participate by also providing him with a visual cue for the first

sound of the next word, moving her lips as if to produce the sound /k/. Mus completes the turn with 'CAke' (line 8). His answer confirms that he is able to recognise that the prompt 'fish' requires a different answer in the second instance. Along with this, he drops his hand onto his leg. This gesture may indicate his interpretation of Zi's 'and' as projecting the last item on the list. But, according to Streeck (1993), while a frozen gesture signals an ongoing activity, the return of the hand to a resting position marks a boundary in a sequence. Thus, Mus' gesture in line 8 may make visible his attempt to terminate the activity of collaboratively constructing the list of ingredients in his lunch, suggesting dispreference for this conversational sequence. However, Zi persists with the activity of listing the ingredients, redoing the full form 'fish cake' and then completing the list with 'and egg'. This deviation from the cueing pattern in her prior turns is possibly a reflection of her orienting to Mus' terminating gesture. The sequence comes to a close with Zi asking the question 'you enjoy?' to which Mus displays agreement via a downgraded, quiet repeat²⁸. This downgrading in his later turns appears to mark his withdrawal from continuing with the activity of listing within a known-answer sequence.

Given the severity of Mus' word finding difficulty (his BNT scores are 1 and 4 out of 50 for Malay and English, respectively), the known-answer question with which Zi initiates the sequence provides her with an opportunity to use their shared knowledge to cue Mus to produce nouns. This practice appears to facilitate his word retrieval but it also restricts Mus' participation to constructing answers (mostly single nouns) in concordance with her cues. Although, in this manner she encourages his participation, Zi does not give Mus long to attempt his answers before launching her cueing strategy, which appears to suggest that facilitating his participation with cues was her agenda from the beginning. The systematic downgrading of Mus' answer appears to indicate dispreference within a sequence where Zi's tight scaffolding of the next relevant item makes demands on him to produce a specific answer.

²⁸ Zi produces the word 'enjoy' with 'i' indexing her Malaysian English pronunciation of the word.

The next extract, also from Mus and Zi, again illustrates how a known-answer question puts a PWA under pressure to produce an expected answer, this time when the known-answer question is followed by single syllable cues for a proper noun. Here, using the context of selecting the name for their grandchild and the cultural practice of using names of elders in the family to name the next generation, Zi sets up a known-answer recall task.

Extract 27: mother's name (Mus-Zi)²⁹

001 Zi if we can put er, your mother's name also very nice.
 002 Mus °ah.°
 003 Zi wha(t) IS your mother's name?
 004→ Mus °a:h, °[*((moves mouth as if to form words))*]
 005 Zi [°Sa°,
 006 Mus °a:h°h, *((raises his hand, with index finger pointing))*
 007 Zi Sa:h, s s Sa, le,
 008→ Mus [LEHAH.
 [*((brings his fingers together, opens palm, drops hand to his lap.))*]
 009 Zi *((nodding))* say that again. sss, =
 010→ Mus =leh HAH. *((placing his hand on his lap))*
 011 Zi S sa,
 012→ Mus *((looking at Zi))* le, hah.
 013 Zi *((nodding))* ha:h. Saleha, and then your great grandmother,
 014 [that turkish lady?
 [*((Mus rotates his wrist & spreading his fingers, drops the hand onto*
 his lap.))]
 015 Roh, gayah, ha:=
 016→ Mus = °Han-° Hanim.
 017 Zi (i think) we can do like (this0.Saleha, plus Hanim is, name is
 018 Saleha Hanim.nice name eh? you, t(h)ink they like the name?
 019 do you t(h)ink,Eti and Rozaidi like the name? their daughter
 020 to be named tha(t)? *((sniffling))*

Zi initiates the sequence by sharing her opinion that Mus' mother's name is a nice option for their grandchild. She then asks 'wha(t) IS your mother's name' (line 3). Her prior assessment of the name as nice, as well as the nature of the topic, confirms that this is a known-answer question. In response, Mus begins with a turn holding 'ah' delivered with continuative prosody (line 4). He delivers it at a lower volume than the surrounding talk. Almost immediately, Zi comes in with phonemic cue 'sa', the first syllable of Mus' mother's name (which is Saleha), also delivered

at lower volume (line 5). Mus' next turn is again a turn holding 'a:hh' accompanied by an index finger held in a pointing gesture. In line 7, Zi follows up without waiting for Mus to complete his turn. She provides a series of prompts that includes the first syllable, repetition of the first sound and then the first syllable, followed by second syllable. In this manner, the expectation is set up for Mus to respond with a single word (a proper noun).

After her production of the first and second syllables of his mother's name, Mus completes the projected answer by repeating the second and completing the third syllable, 'LEHAH', at a louder volume (line 8). Following his emphatic delivery, Zi requests Mus to 'say that again' and provides the first phoneme only. Thus she treats Mus' answer in line 8, comprised only of the second and third syllables of his mother's name, as insufficient. However, Mus persists in producing only this latter part of the name in line 10, marking it prosodically with pitch and tempo that is clearly different from that of his first delivery. The first syllable is produced with a slightly rising pitch, followed by a minimal gap before the second syllable is delivered with a falling pitch in a louder volume. Dropping the gesturing hand to the lap to mark turn completion (Streeck, 1993) is consistently used by Mus at the end of both productions in lines 8 and 10.

Despite Mus' clear indication that he has finished his turn, and thus has provided the information that Zi was seeking, Zi does yet another repair initiation in line 11, prompting him again with 's sa'. Mus responds again with only the last two syllables, 'le hah' (line 12), delivering 'le' with a continuative tone and 'hah' with a falling pitch. His syllable-timed delivery appears to convey deliberateness. There is no variation in loudness in this instance, and the falling terminal pitch communicates his intention to exit from the sequence of saying his mother's name. Zi orients to this prosodic downgrading with a receipt token, 'hah', and then delivers the full form of the name, 'Saleha' (line 13). Her repair initiation and redoing is similar to the pattern of revision in PWA-spouse talk reported in the

²⁹ Analysis of this extract has benefitted greatly from discussions during a CAIR session at UCL.

literature (Lindsay & Wilkinson, 1999). However, in this instance, it is not clear if Mus' production of only the last two syllables the name is an error in the first place.³⁰

In line 14, Zi swiftly moves on to pick a second name for the grandchild from another relative's name. In doing so she constructs a second known-answer sequence in which Mus is to participate. This time, she first introduces semantic cues for the name of the relative she has in mind, identifying her as 'that Turkish lady'. Despite her treating Mus as a knowing participant, his gesture of rotating his wrist appears to convey his not knowing the referent. This may convey an attempt to opt out of the sequence. In line 15, Zi goes on to give the first name of the relative, 'Rogayah'. She then produces the first syllable of this woman's second name, 'ha', and in a latched turn, and after a false start, Mus produces the second name in full, 'Hanim' (line 16). In line 17, Zi finally reveals her choice of names for the granddaughter to be 'Saleha Hanim'. This appears to explain her insistence on Mus' production of the name 'Saleha' in full, in contrast to 'Rogayah', which she provides, and 'Hanim', which he manages to say after only one prompt. These cued words constitute the names she had in mind for their granddaughter. In a sequence closing turn, Zi appears to seek Mus' approval for her choice with the question 'nice name eh' but, without waiting for his response, she moves on to the more important question of whether the child's parents will like the name. The real issue is not if Mus likes her choice but if the parents of the child, Mus and Zi's daughter and son-in-law, will like it. Zi's own agenda for the sequence may also explain why Mus' participation is restricted to recalling only the relevant parts of the name.

It is evident here that Zi exploits their shared background to set up two recall tasks initiated through the use of known-answer questions that enable her to cue Mus to complete a projected answer. Zi's motivation for asking this type of question in this and the previous extract may be that it provides them both with safe interactional

³⁰ Leha is a common nickname or could be a shortened version of the name Saleha.

ground. Since these questions are designed to draw upon their shared background, both she and Mus know the answers, and she knows the target words that he is attempting to say. Zi's motivation may be to help Mus to talk by creating opportunities such as these. However, Mus' turns become problematic when he is unable to conform to the expectations of the interactional sequence. His attempts to exit from the sequence make visible a dispreference for this kind of interaction.

The next extract, from Mus and Alan, shows a divergence from the pattern of PWA's display of knowledge discussed thus far. In this conversation outside the home, with his friend, Mus' trouble in completing the second pair part in a known-answer question sequence is followed by his conversation partner initiating a repair. Prior to the extract, Mus and Alan have been discussing the funfair; a fundraising activity organised by the association that runs his day care centre.

Extract 28: funfair time (Mus-Alan)

001 Alan what time you [coming
 002 to the [funfair?
 003→ Mus [a:h, °(fun)°(p)air,] [(3.0)]
 004 ((looking down,scratching behind his left ear))] [(counting gesture)]
 005 ((holding up three fingers)) three e- ° a:h°tch er,
 006 [(7.5)
 007 [((holds up three fingers,right thumb touching the left,looks at Alan.))]
 008 Alan what time?
 009 [(3.1)
 010 [((Mus moves his mouth, raises his hand and then rotates his wrist))]
 011 Alan [d you know, do you know what time the funfair start?]
 012 [((Mus continues rotating his hand and moving his mouth))]
 013→ Mus funfair, start, a: [hh, (3.5)
 014 [((holding up high three fingers))]
 015 Alan [not at eight o'clock,] funfair start at [ten o'clock.
 016 [((shaking his head))] [((holds up ten fingers))]
 017→ Mus [A::H. funFAIR.
 018 [((holding up his open palm))]
 019 Alan ((nodding))but you must be there by nine o' [clock.
 020 [((pointing at Mus))]
 021 Mus [O'CLOCK]
 022 Alan A:H. ah.

The turn of interest here occurs in line 8, where Mus responds to his conversation partner's question. Alan asks an indirect question 'do you know what time the

funfair start?'(line 8) and Mus displays knowing the answer by repeating the last two words from Alan's turn, 'funfair start, '. He then launches into a word search while gesturing with his fingers. Since Mus' movement is restricted to one hand, Alan appears to read Mus' extended three fingers as representing the number eight (five plus three). Alan then launches and completes other-initiated repair saying 'not at eight o'clock funfair start at ten o'clock (line 10). This behaviour is consistent with Ferguson's (1994) observation that other repair occurs in less familiar partnerships in order to resolve trouble quickly without drawing attention to it. Alan's response in line 10 confirms that the original question in line 8 is a known-answer question. The trajectory of the turns that follow this question is markedly different from the turns in Mus' conversation with his familiar partner, Zi. This will now be explored.

In response to Mus' display of trouble, Alan redoes his question shifting the topic from Mus' expected time of arrival (Mus' privileged knowledge) to the time that the funfair starts; information which they both have access to. The transition from an open ended question to a yes/no known-answer question appears to facilitate Mus' participation. His confirmation of Alan's answer is delivered with variations in volume reflective of his active participation. Alan concludes the sequence with 'but you must be there by nine o'clock' (line 12) which also accomplishes the action of reminding Mus. The information Alan provides here appears to resolve Mus' trouble in his second pair parts that do not reach completion. It is notable that Alan presents the information (line 12) as an approximation, qualified with the word 'by', which suggests that his first pair parts in lines 1 and 6 are not known-answer questions. Mus competitive incoming indexed by the louder volume of his overlapped production of 'O'CLOCK' and confirmation 'AH.' demonstrates hearing and understanding Alan's prior turn and perhaps his claim to the knowledge shared in Alan's turn.

This extract suggests that known answer questions are used differently by Alan, Mus' less familiar conversation partner, than by his wife. With Alan, a known-

answer question is used after trouble is highlighted in Mus' production of a second pair part to a question that addresses a genuine information gap in the partnership. The known-answer question itself is used to complete repair. In addition, Mus' consequent display of trouble in responding to a known-answer question is repaired quickly by Alan, via other correction. Mus' use of gesture for embodied completion and upgraded displays of knowledge reveals his active participation in the sequence. This contrasts sharply with the prolonged nature of the known-answer sequences with Zi, and the systematic downgrading of Mus' answers to her questions. Extract 25 also suggests that, for Zin and Tony, quick resolution of trouble is preferred in a known-answer sequence while, in Zin's conversation with his sister, word search sequences can be more elaborate.

The last extract in this section, from Tana's conversation with her sister Rani, shows the non-aphasic conversation partner using a known-answer question to initiate a sequence and then demand the PWA's display of privileged knowledge. Tana and Rani's discussion here is related to Tana's trouble with sleeping at night.

Extract 29: sleep at night (Tana-Rani)

001→ Rani you don't sleep at night?
002→ Tana nn^o]
003 Rani [bu]t every time I enter your room, I see you
004 snoring.=
005→ Tana =no [↑NO:.
[*((shaking her left hand at Rani.))*]]
006 Rani then?
007→ Tana [at ↑times got.]
[*((moving her hand held in supine position from chest level in a
semi circle))*]]
008 er er at time [(1.5)]
[*((Tana raises her hand up & down, then swings it
to the left while Rani continues to look at her))*]]
009 Tana [what er mmm what urine?
[*((pointing with index finger towards the back))*]]
010 Rani that yeslah. that is twice a day.

The negatively framed closed question that Rani asks in line 1 sets up an expectation for a single word answer in the next turn. The question pertains to Tana's experience and appears to require her to display privileged knowledge.

However, in partial overlap with Tana's response, Rani challenges her with "but every time I enter your room, I see you snoring." (line 3). This reveals that Rani not only knows the answer to her own question but she is also able to anticipate Tana's response. The trajectory of the turns that follow suggests that, from line 1, Rani's turns are designed to make it necessary for Tana to display her knowledge. Tana accomplishes this when, in lines 7 to 9, she agrees with Rani's observation about her snoring but qualifies it as occurring only 'at times' (line 7). Tana's haltingly produced turn in line 8, is accompanied with gestures highlighting her difficulties. She succeeds in delivering a pertinent comment on the somewhat delicate issue of the incontinence problems that keep her awake at night (line 9). Rani's response in line 10 confirms that the incontinence issue is known to both parties. It becomes clear that Rani expects Tana to rise to the challenge and defend her stance, as Tana has first-hand knowledge or epistemic access to the required information.

The known-answer question in this extract is designed to restrict Tana to producing the expected answer. The answer is then used to address the real issue that Rani wants to discuss. Subsequent to this, Tana constructs an elaborate turn qualifying her first response. Although the known-answer question places a demand on the PWA to produce the targeted answer, the regular conversation partner here is seen treating the PWA as a competent conversation partner who is able to bring to the interactional surface knowledge that she has epistemic access to.

The six extracts presented in this section illustrate how PWAs accomplish displays of knowledge in known-answer sequences. A conversation partner's first pair part is designed to draw upon their mutually shared knowledge. Then a PWA launches into a display of knowing the expected second pair part with turn holding 'ah's or formulaic expressions that allude to knowing the relevant next item. The formulaic expressions are particularly useful because they represent "islands of fluency" (Beeke, et al., 2007) in the PWA's otherwise halting production. However, the turn in progress then becomes interrupted due to aphasic difficulties such as the

retrieval of lexical items. The partner then scaffolds the production of the answer with cues that are semantic in nature or cue the production of a first word or first syllable. Such scaffolding appears to invite a PWA's participation and at the same time restrict it to the production of a single word answer. As highlighted by Beeke et al (2013) for British-English speakers, encouraging a PWAs' participation appears to be the interaction motivation for the use of known-answer sequences. Knowing the targeted answer may provide safe ground for a conversation partner in that, if the PWA is unable to display knowledge, then the partner can scaffold the production of the answer. However, the very specific nature of the expected answer places interactional pressure on the PWA, and this is marked by dispreference in these sequences.

6.3 SUMMARY

The analysis in this chapter has focused on the bilingual PWA's display of knowledge accomplished as a conversational action. Section 6.1 presented examples that illustrate PWAs' display of knowledge where epistemic rights to shared knowledge are asserted or privileged knowledge is shared with an "unknowing" conversation partner. Two primary resources, namely collaborative completion and repetition, are found to be deployed by PWAs in these instances. Both are effective resources for turn construction since collaborative completion demonstrates an understanding of the conversation partner's emergent turn and anticipation of a relevant next part, while repetition involves identifying the central idea in a prior turn before aligning with and/or projecting a further extension of that particular idea. All three speakers are seen to be actively engaged in sequences where they appear to claim epistemic rights to knowledge presented by their conversation partners.

One aspect of displaying knowledge that is revealed to be important is socio-cultural practices. In particular, when a humorous sequence is collaboratively constructed and is shown to be grounded in a socio-cultural practice of the society, the PWA's interactional motivation to claim identity as a competent member of the

society reveals active participation. Competitive incomings marked with variations in volume, and the use of gesture, reflect a PWA's involvement in claiming epistemic access to shared knowledge. Modified repetition is also an important resource for marking ownership of the knowledge displayed by non-aphasic participants in these sequences. Interestingly, conversation partners appear to treat the PWA as a knowing participant and are seen to accommodate PWA's participation. The PWAs are assigned a central role in these sequences where the conversation partner seeks information that the PWA has privileged access to. The available shared knowledge is drawn upon to format guesses which the PWA merely accepts or rejects. In both familiar and less familiar partnerships, heightened involvement is signalled in turns where display of PWA's knowledge is accomplished via resources that are linked to a conversation partner's prior turn. This suggests that PWA's participation as a competent conversation partner at home and outside the home provides the interactional motivation for deploying collaborative completion and modified repetitions as resources for adaptation to bilingual aphasia.

Section 6.2 illustrated how a PWA's display of knowledge can be scaffolded by a conversation partner using known-answer questions. Here, as in Section 6.1, a PWA's turns are shown to be tied to his or her conversation partner's prior turns, but in known-answer sequences, the opportunities for such links are created solely by the conversation partners. Shared knowledge is used to formulate known-answer questions. A PWA's next turn response displays hearing and understanding of the question and simultaneously displays knowing the expected answer. Invariably, however, trouble arises in the PWA's turn, necessitating the provision of cues ranging from semantic to first word or first syllable cues. The use of known-answer questions is argued to be advantageous to conversation partners because knowing the target answer enables them to provide cues which help a PWA to produce a word or words. However, these cues restrict a PWA's turn construction resources to single, as yet unspoken, nouns in contrast to repeated key words seen in Section 6.1. This practice which aims to aid the PWA by

creating opportunities for a display of knowledge, places the PWA under pressure to display specific knowledge within the assigned turn space. Although the PWA's effort at turn holding reflects his/her sustained participation, troubles in completing such turns are often alluded to via PWA laughter and gestures that signal an intention to exit the sequence upon completion of the turn. There is some indication of differences in the deployment of known-answer sequences between familiar and less-familiar partnerships, such that familiar partners continue to prompt after a PWA displays difficulty in producing the known answer, but less-familiar partners seek quick resolution of trouble. This idea requires further investigation in a wider dataset.

In both conversations at home and outside the home, the interactional motivation for engaging in known-answer questions and the subsequent scaffolding of targeted answers may be attributed to a conversation partner's effort at avoiding situations where aphasic difficulties become the focus of the interaction. However, the specificity of the linguistic item required for completion of such tightly scaffolded turns results in a PWA having no recourse to using other turn construction resources. The systematic downgrading of PWA's answers observed in these instances, particularly when the known-answer sequence has become extended, typically index dispreference.

A comparison across the bilingual participants in this study shows some patterns that are specific to individual partnerships. Firstly, for Mus, the severity of his aphasic difficulties makes the display of knowledge via repetition, completion and known-answer question sequences an important accomplishment, thus the patterns discussed in this chapter are common in his conversations. In particular, when a humorous sequence is collaboratively constructed and shown to be grounded in a socio-cultural practice of the society, Mus' interactional motivation to claim identity as a competent member of the society reveals active participation. His wife Zi draws upon shared knowledge of biographic information and socio-cultural practices to construct known-answer questions. This practice appears to

be driven by the opportunity for Zi to scaffold Mus' participation by cueing. It becomes evident that Mus is under pressure to produce the specific relevant next item projected by the cue and his behaviour indicates dispreference. In the presence of a third party, Ustaz, Zi appears sensitive to situations where aphasic difficulties can become "embarrassing incidents" and may accommodate by taking over the conversational floor whilst maintaining Mus' participation with questions that require minimal responses. In Mus' conversation with a less familiar conversation partner, Alan, displays of knowledge become a necessity due to the limited amount of shared knowledge that they have at their disposal. There appears to be a specific pattern in the use of known-answer questions in this partnership, such that subsequent to Mus' display of trouble in answering open-ended questions, Alan initiates repair with a known-answer question. He does not produce cues to scaffold Mus' production of a target answer (as Zi does) but repairs trouble in Mus' turn by answering his own question. A quick resolution of the trouble thus prevents aphasic difficulties from becoming the focus of the interaction. Mus' heightened involvement in the repair is shown by a prosodically marked competitive incoming as he attempts to use collaborative completion as a resource. Interestingly, in such instances, known-answer questions are used only after an initial attempt at information seeking turns out to be problematic. This observation warrants further investigation as conversations outside the home bring the issue of familiarity into focus.

Secondly, for Zin, although the resources used and the interactional motivations for displays of knowledge appear to be similar to Mus, the unfolding turns reveal individual variation. In his conversation at home, Zin appears to stake a strong claim on what Ain treats as common knowledge. His use of repetition to initiate repair, and collaborative completion to implement it, showcases his competence. In known-answer sequences Zin's use of formulaic expressions to mark a word search gives an air of fluency to his haltingly produced turns. Ain scaffolds his participation with semantic cues. This cue type may be reflective of the nature of Zin's aphasia and also of Ain's familiarity with his specific difficulties. In

conversation outside the home with Tony, Zin's display of knowledge involves biographical information to which he has sole access. Tony collaborates with Zin in his attempt to retrieve an answer but Zin claims epistemic rights to the knowledge by appending additional information. Tony's known-answer questions also exhibit individual variance. Here, Zin's difficulty in producing the required response results in Tony formatting the targeted answer as a guess or a reminder.

For the third participant, Tana, use of gesture to display knowledge of lexical items that she has difficulty retrieving leads to her regular conversation partner, Rani, collaborating by verbalising the answer for Tana. Tana acknowledges Rani's answer and then provides a more accurate formulation of it. Both gesture and prosody mark Tana's ownership of the knowledge. Rani's initiation of known-answer sequences with closed questions reveals a pattern that is unique to this partnership. Rani's familiarity with Tana, and perhaps her understanding of how Tana's aphasia affects her communication, enables her to design her turns to demand Tana's participation. The effect of familiarity could not be explored in this case as data from conversations with less familiar partners were not available for Tana (see Chapter 4).

In populations like the one studied here, societal norms for caring for the disabled may restrict a PWA's participation in wider society, with interactions outside the home becoming minimized. A significant reduction of opportunities for a PWA to display his or her knowledge may be an outcome of such practices. The analysis presented in this chapter appears to suggest that a lack of familiarity between conversation partners can be beneficial as it may provide opportunities for a PWA to display his/her privileged knowledge whilst avoiding the know-answer question sequences that appear commonplace within familiar partnerships. This information gap creates a genuine motivation for claiming identity as a competent individual. The effect of a bilingual PWA's familiarity with their conversation partners, whether conversation occurs within or outside the home, and the resulting implications for interactional adaptation, will be addressed further in Chapter 8.

7 Code-switching as a resource for turn organisation in conversations of bilingual PWAs

7.0 INTRODUCTION

This chapter deals with the use of code-switching as a turn organisation resource in conversations of bilinguals where one partner has aphasia. Code-switching is defined here as a juxtaposition of words, phrases and clauses from the different languages in a bilingual's repertoire, within a single turn or sequence of turns in a bilingual conversation. For the Malaysian bilinguals in this study, Malay and English are the common languages in their repertoire³¹. (See section 1.3 for details about linguistic diversity in Malaysia). Malay is often the first acquired language and retained as the home language, while English is learnt in school and used in the workplace by a majority of Malaysians. Code-switching in either direction, i.e. Malay to English or English to Malay, is a routinely deployed interactional resource in this linguistically diverse society. The analysis of bilingual PWAs' conversations in this study identifies sequential location and action as two key features of code-switching. Section 7.1 examines the use of code-switching as an organisational resource in the PWAs' conversations for displaying bilingual competence and section 7.2 investigates code-switching as a resource for repair organisation. By analysing the sequential organisation of code-switched turns, the chapter aims to identify interactional motivations for deploying this resource in conversations of bilingual PWAs. The chapter concludes with a summary of patterns of deployment (Section 7.3), and examines which are common across participants, and which are specific to individual partnerships.

³¹ Malaysian Indians and Chinese are typically trilinguals; their ethnic language is often reserved for interactions with older family members.

7.1 CODE-SWITCHING AS AN ORGANISATIONAL RESOURCE FOR DISPLAYING BILINGUAL COMPETENCE

The extracts presented in this section illustrate the use of code-switching as a turn organisation resource both with regular partners at home and with friends outside the home, to display a PWA's knowledge about a sequentially implicated next turn, and competence as a bilingual. Some code-switches of this nature occur in first position turns and some in second position turns. As such, code-switching may be used by a bilingual PWA to organise turns or to align contributions with that of a conversation partner. The responses of the non-aphasic conversation partner reveal a preference for the same code. Notably, turns constructed by the conversation partners reveal a similar pattern of code-switching. By engaging in this way, the conversation partners allude to the ability of the PWAs to comprehend the meaning potential of code-switches, and by responding the PWAs display this ability. The outcome of turns organised in this manner is a display of the PWA's knowledge about a sequentially implicated next turn, as well as a display of bilingual competence. It will be argued that when a display of PWA's competence is achieved in this manner, code-switching becomes an effective tool for adapting to bilingual aphasia.

The use of code-switching as a turn organisation resource is a recurrent pattern for all three bilingual PWAs in this study and their conversation partners. Examples from the Zin-Ain partnership reveal a recurrent pattern of English words and phrases juxtaposed in Zin's turns-at-talk in their home language, Malay. A similar pattern of switching is seen in Ain's turns. Extracts from Mus and Zi show evidence of code-switching between English and Malay, although Zi reports that their home language is Malay. The presence of a Malay speaking visitor sees both Mus and Zi switching to Malay to construct turns addressed to him. Tana and Rani, trilingual Malaysian Indians, will be shown to switch between English and Tamil. Finally, an example from the less familiar

conversation partnership of Zin and Tony illustrates that code-switching can also be a shared resource in conversations outside the home.

In Extract 30 below, the bilingual PWA, Zin, constructs a first position turn via code-switches. Sequential analysis reveals the interactional motivations for deploying this organisational resource. Ain, his sister, had attended an interview earlier in the day. Zin's interest in what transpired during the interview and other issues pertaining to the training programme that Ain will attend next were addressed in the lines prior to this extract. Here, he inquires about the salary that she will be earning. Zin and Ain's preferred language of interaction is Malay and they both report using English for interactions outside their home.

Extract 30: salary macamane (Zin-Ain)

- 001 Zin (ni) meca:m ni apeh, a:h yang [yang barukan, interviu,]
 this like this, what the one the one recent+NEG TAG interview
 this like this what, a:h the, the recent one isn't it, interview,
 L ((pointing to Ain)) J
- 002 Ain ((nodding)) mm em.
- 003→ Zin a:, salary salary macam [ane?]
 how
 a:, salary salary how will it be?
 L((turning towards noise in the background)) J
- 004→ Ain salary die, ((turning towards the people talking in the background))
 PRO
 the salary
- 005 °janganlah° bisng kat sini. ((turning to Zin)) salary die tuh,
 don'tPRT noisy near here PRO that
 don'tlah (be) noisy here. that one's salary
- 006 a:h, ikut gaji degreeelah. tapi ah, sebelum tuh ah, die bagi
 follow salary but before that PRO give
 ah, follows the degree salarylah but before that they give
- 007 elaun. mase yang kite belajar tu,
 allowance time which PRO study that
 an allowance while we are studying
- 008 Zin a:h,
- 009→ Ain die bagi elaun.
 PRO give allowance
 they give an allowance.
- 010 Zin °m.°
- 011 Ain seribu lebih kut.
 a thousand more perhaps
 perhaps more than a thousand.
- 012 Zin ah.
- 013 Ain ah. every mon(th) dapat seribu lebih.
 get a thousand more
 ah. every month (I will) get more than a thousand.
- 014 Zin oh, same (j)e.
 same just
 oh, just the same

In line 1, Zin initiates a turn with a non-fluent phase that consists of word search markers ‘(ni), meca:m ni apɛh, a:h’, repetitions and pointing to his sister Ain as he says ‘yang yang barukan, interviu,’, to refer to ‘the recent interview’ that she had attended. Ain displays orientation to Zin’s unfolding turn with a go ahead signal ‘mm em.’ Having established a mutually recognised referent, Zin introduces another noun to focus his topic with a double subject construction typical of the topic-prominent Malay language. He accomplishes this by inserting an English word, ‘salary’ (line 3). He repeats this English topic referent before adding a Malay formulaic expression ‘macamane’ with a terminal rising tone. Here the topic-comment structure used as resource for turn construction (discussed in Chapter 5) is completed relatively quickly compared to the non-fluent initial phase that brings into focus Zin’s aphasic difficulties. What is interesting is that in line 3, he combines an English noun with a comment in Malay. With this, Zin appears to switch to the educated variety of Malay where insertions of English words are common. A code-switched variety is seen as “*one code in its own right.*” (Meeuwis & Blomaert, 1998). Zin’s conversation partner is seen to orient to the educated variety that Zin’s has switched to as the preferred code for the sequence.

Ain repeats the same English word from Zin’s turn before continuing in Malay to construct her answer (lines 4-7). In line 6, she uses the word ‘gaji’, a translation equivalent for ‘salary’, which reveals that although the Malay word for ‘salary’ is available to her, she displays preference for the same code by repeating the English equivalent introduced by Zin and continuing with insertional code-switches. Subsequent to saying ‘gaji’ (salary), she introduces another English word ‘degree’ appended with the Malaysian English particle ‘lah’ (line 6) to refer to the salary scheme. She elaborates that while she is still studying (i.e. undergoing teacher training), they will be giving her an allowance. She uses the borrowed/loan word ‘elaun’ (allowance) in line 9. Loan words are another feature of the educated variety of Malay (Koh, 1990). After Zin’s minimal turn in line 10, Ain continues by specifying the amount that she will be

receiving. Zin responds with another passing turn (line 12) and Ain switches to the English phrase 'every month' (line 13) before she repeats the information that she provided in line 11. Finally, Zin provides an evaluative response with his comment 'same je' (just the same)³².

Zin's use of the code-switched word in English to introduce a topic related to Ain's impending employment appears relevant especially because English was the language of his workplace. It is also possible that since he worked in an accounts department, the word 'salary' may have been a common word in his interactions. Thus it may be preferentially available to him. While it is not possible to ascertain the reason for the switch, the interactional motivation appears to be the accomplishment of a display of identity. Ain's next turn response suggests an orientation to his switch to the educated variety of Malay for this stretch of talk. She does not repair the code-switched word although she uses the word 'gaji' (salary) in her extended turn. Neither does Zin repair her use of insertional switches in the turns that follow. By using a single English word to initiate a topic Zin appears to have invoked his 'educated' status and Ain treats him as a 'knowing' participant. Zin's use of code-switching here enables him to accomplish the conversation action of initiating a sequence and at the same time display his competence as a bilingual.

Extract 24 (part of this extract was first presented in Chapter 6), shows a second example from Zin and Ain. Ain has sketched a map to assist Zin in a recall sequence she has initiated about a venue they both know. She uses the map to prompt Zin to name the landmarks along the way to the venue.

³² The Malay word 'sama' (same) is pronounced with a schwa in the southern dialect. This is indicated with the letter 'e' in the transcript.

Extract 24: ape name (Zin-Ain)

001 Ain ꞑ*kalau kite ke depan ni, ade ape?* ꞑ
 if we to ø front ø this, there what ø
 if we go to the front of this, what is there?
 L ((*looking down and pointing to the map*)) J

002 Zin ((*lifting his head*) ꞑ *ah,* ꞑ ꞑ*ape name* mm, ꞑ
 ah, whatø ø name
 what's the name
 L ((*looking down*)) J L ((*downward gaze*)) J

003 Ain Bang Zin *slalu ꞑjalan kat si(ni.)* ꞑ
 TOA used to go near here
 Bang Zin (you) used to go here

004→ Zin L*ape nameh,* J *em e- nih. ah factory.*
 whatø ø name this
 what's the name, em e- this. ah factory

005→ Ain *ah, ꞑah a:h.ah. factory ape?* ꞑ
 what
 ah, ah a:h.ah. what factory?

006 Zin LHEH hhh heh heh J *ah,* [(1.6)
 ((*mid distance gaze*))]

007 mmh *ni ape nameh ꞑ (2.4) a:m, mmmm ape,* ꞑ
 this, whatø ø name what
 mmh, this, what is the name (2.4) a:m mmm what
 L ((*mid distance gaze*)) J

008 Ain mm?

009 Zin mm, [(1.4)
 ((*mid distance gaze*))] *balak, mm bukan bukan ape nameh*
 timber, NEG NEG whatø ø name
 timber,mm no no what's the name

010 [(1.2) *err,*
 ((*mid distance gaze*))]

011 Ain *makanan. makanan.*
 foodstuff foodstuff
 foodstuff. foodstuff.

012 Zin *ah nih. ah ni Mag- Maggi- Ma:m- Ma:mee. Mamee.*
 this this
 ah this. ah this Mag- Maggi- Ma:m- Ma:mee. Mamee.

013 Ain *ah.*

In line 1, Ain constructs an open ended question in Malay and Zin responds with a turn holding 'ah' and Malay formulaic expression 'ape name' (what's the name, line 2) indexing a word search. Ain provides another prompt explaining 'Bang Zin slalu jalan kat sini' (you used to go here, line 3). In overlap with Ain's turn, Zin produces another formulaic word search expression in Malay before he code-switches to produce the single word answer 'factory' in English in line 4. In her next turn, Ain acknowledges his code-switched answer and repeats the word 'factory' before appending it with the question word 'ape' (what) in Malay. She does not treat his answer or the code-switch as problematic but uses it to prompt him to produce a more specific answer. Zin's attempts to construct the answer expected by Ain become problematic over lines 6-10. Ain

provides further clues in line 11, by specifying the type of factory located in the region as she continues pointing to the map. Zin then displays recognition and produces the brand name of the food items produced at the factory; presumably this is the answer Ain is prompting.

Given that this appears to be another workplace related reference, the English word 'factory' may have been preferentially available to Zin in the same way that 'salary' was in the prior extract. Although he uses self-repair when he makes a wrong Malay word choice in line 9, neither he nor Ain repair the code when he switches to English. Ain's repeat of the same word suggests that the use of English terms is a common practice in this conversation partnership.

The next extract illustrates that code-switching to English is also deployed by Ain as an organisational resource in their conversations. Here the sequence follows on from the topic of Ain's interview (Extract 30). She continues to report what transpired during the interview.

Extract 31: beam retak (Zin-Ain)

001 Ain *die kate, ape yang ah, awak ni: ape(h), ape yang isu smase*
PRO say what the one PRO this what what the one issue current
he/she said what is the one ah,you this, what,what is the one current issue

002→ Ain *yang awak bace? pas tu, orang cakaplah, ape ni, MRR two, kan?*
the one PRO read after that PRO say PRT what that NEG TAG
the one that you read? after that I said, what is this, MRR two, isn't it

003→ Ain [MRR two?]

004→ Zin [yes yes.]yes.
((nodding))

005 Ain *yang pasal,=*
the one about
the one about,=

006 Zin =mhm.

007→ Ain *tu kan? beam, retak [tu ka:n?]*
that NEG TAG crack that NEG TAG
that (one) isn't it? the beam that cracked isn't it?

008 Zin *[retak] retak retak mm. aha:h*
crack crack
cracked cracked
crack

009→ Ain *ah. crack tu.*
that
ah. that cracked (one)

010 Ain *pas tu, a:: ape ni, orang cakap, die kate okay. selain tu*
after that what this PRO say PRO say okay besides that
after that what is this I said, he/she said okay. besides that

011 *ape lagi isu semasa.*
 what other issue current
 what are the other current issues.

In lines 1-2, Ain conveys that the interviewer asked her to identify an 'isu smase' (current issue) that she has read about. She continues with 'pas tu, orang cakaplah, (after that I said) and produces a word search marker 'ape ni' (what's this) before completing her turn with a referent in English, 'MRR two' (MMR stands for 'Middle Ring Road'; MMR two is in the news because a beam supporting this structure had cracked). She produces a confirmation check with the Malay tag 'kan' (isn't it) before repeating the English referent with a rising tone. In overlap, Zin produces acknowledgment tokens, with the English affirmative 'yes' repeated twice. He also nods to display agreement before producing another repeat of the word 'yes'. The juxtaposition of the English abbreviation MRR and the numeral 'two' in Ain's turn constructed in Malay suggests that this English term may be a commonly used referent. It may even be the term used in the newspaper report to which Ain refers.

Interestingly, Zin's acknowledgment tokens also show a switch to English at this point in the sequence. However, in line 5, Ain is seen continuing in Malay (*yang pasal, the one about*) before producing a comment tied to the referent she introduced in line 2. She confirms that Zin recognises the referent with 'tu kan' (that one isn't it, line 7) and produces another English noun 'beam' combined with the Malay word 'retak' (crack) and another repeat of 'tu kan' to deliver a turn that can be translated as 'the beam that cracked, isn't it'. In line 8, Zin repeats the keyword 'retak' three times followed by acknowledgement tokens. In overlap to his final repeat, Ain says 'crack' which is the translation equivalent to the Malay word 'retak'. She then continues to report about the interviewers' responses.

This extract illustrates that code-switching is also used by Ain to introduce a mutually recognised referent. Two possibilities arise from this analysis. Firstly, the referent 'MRR two' may be preferentially available to Ain as this may be the

term used in the newspaper report. Secondly, she may be attempting to construct a recipient designed turn, since Zin's preferred language for reading is the English language. Self-repair of the code is evident in Ain's turn even when Zin displays acknowledgement. The interactional motivation for using code-switching in this partnership appears to be the display bilingual competence. This suggests that code-switching used here to introduce a topic may be both discourse-related and participant-related.

The next two extracts are taken from Mus' conversation with his wife, Zi. She reported that after Mus' stroke, Malay has become the language of interactions at home although Mus' preferred language prior to the stroke was English (see Section 4.1.2 for further interview details for Mus). A recurring pattern of code-switching observed in the home conversation for this partnership suggests Zi's report and her actions differ. She is seen inserting Malay words in her turns constructed in English. Mus' single word responses are most often delivered in English. Extract 32 shows examples of this pattern. Here, they are discussing names for their newborn granddaughter.

Extract 32: kalau Papa suka (Mus-Zi)

001 Zi ((*nodding*)) (t)s very nice namelah. we should put (something
002 Zi like that). I have er, (*peh*), ((*reaching for the book on the table*))
003 Zi books here. all the names er ɾ *ape*, (1.6) ɿ
what,
what,
L((*Zi and Mus looking at the book.*)) ɿ
004→ (erk-) girls' namelah. *kalau Papa suka*, you just say
if TOA like
if you like (it)
005→ you like the name eh?
006 [(1.4)
((*Zi and Mus looking at the book*))]
007 Zi Tasa, Taddirah.
008 [(1.3)
((*Mus looking at Zi and gently shaking his head.*))]
009→ Mus °noh.°
010 [(2.1)
((*Zi returns to the book and Mus looks on*))]
011 Zi ((*lifting her head*)) Quaisarah? Sarah, nice name (h)?
012→ Mus ((*waves is hand*)) °no.°

013 Zi no [h?
 ((Mus shakes his head))]

014 [(2.9)
 ((Zi looks down at the book and Mus continues to look at her))]

015 Zi ((looking up to Mus)) Kamariah?

016 [(0.8)
 ((Mus looking at Zi))]

017 Mus [(Ka) mah a:h.
 ((animatedly waving his index finger))]

018 Zi Kamariah?

019 Mus yyah.

020 Zi so many people Kamariah. TOK CIK's errh grand daughter

021 a(l)so Khalidah Kamariah.

022 Mus °a::h°, tch. hmm. ((moves his index finger, holds it up)) noh.

In line 1, Zi concludes a prior sequence, in which they recall names of Mus' family members, with a comment 'very nice namelah.'. She then suggests that they should find a similarly nice name for their newborn granddaughter. She reaches to pick up a book of names from the side table as she says 'I have er (peh) books here. all the names er' (lines 2-3). She then signals a word search with the Malay question word 'ape' (what). After a pause of 1.6 seconds during which she looks down at the open book, she completes her turn with 'girls namelah'. In lines 4-5, by producing a complex turn constructed by juxtaposing Malay and English phrases, Zi invites Mus to participate: 'kalau papa suka, just say you like the name, okay?' (if you like it, just say you like the name, okay?). She delivers the 'if clause' in Malay and completes the turn by switching back to English. Zi's use of code-switching here resembles the pattern of layered switching reported in Meeuwis and Blommaert (1998) for Linghala-French speakers.

Having established the focus of the interaction in this way, in the 1.4 second pause that follows her instruction, both Zi and Mus maintain joint attention on the book. Zi then proceeds to read out girl's names (lines 7, 11 and 15). In the 1.3 second pause at line 8, Mus shifts his gaze to Zi and gently shakes his head to indicate disagreement. He then verbally rejects Zi's choice with a single negative token in English (line 9). This pattern of turn taking continues until line 15 when Zi reads out a name that Mus appears to like (Kamariah). After a 0.8

second pause, he repeats the name animatedly. However, after checking her understanding, Zi rejects his choice with an explanation over lines 20-21, which Mus appears to accept. Throughout this extract Mus produces single words in English to accept or reject the options presented to him, thus maintaining the preferred code of the interaction. Zi's use of predominantly English with brief code-switches into Malay appears to accommodate this preference for English. It is interesting to note that this pattern does not reflect Zi's report that post-stroke, Malay has become the language of conversations with Mus. It is possible that they orient to the layered code-switching as a typical occurrence.

The second extract taken from Mus' conversation at home with Zi reveals that the presence of a third person, Ustaz (who is a Malay speaker) can make it necessary for both Mus and Zi to deploy code-switching. They organise their turns via code-switches to either account for the presence of, or address the visitor directly. Code-switching to accommodate a changing participant constellation has been well documented in the typical conversations of different linguistically diverse societies (Gumperz, 1982; Auer, 1984, 1998; Li Wei and Milroy, 1995; Sebba and Wootton, 1998; see Sections 3.5.2 and 3.5.3). In Extract 33 below, Mus and Zi are in the middle of a discussion on the performance of different teams at the recent Olympic Games. Ustaz is sitting in a chair opposite (he is not visible in the video recording).

Extract 33: down down (Mus-Zi)

001	Zi	tu	[ade swimmer tu]	die dapat brape buah medal?
			that [there that]	PRO got how many
			that [there's that swimmer]	how many θ medals did he get
			[((miming swimming))]	
002→	Mus		[(die)h, ((holding up three fingers)]	
			[PRO]	
003	Zi		[/s/ /s/ °/səpu:/-°]	
004			[(1.5)]	
			[((Mus glancing at his hand and folding his third finger))]	
005	Zi		[/sə/, =]	
			[((Mus holding up two fingers))]	
006→	Mus	=ti-	[((lowering his hand to lap, mimes writing))]	ti [ge-
			[]	three
			[]	three

attempt to construct an answer; three medals. However this appears not to be the correct answer, and Zi attempts to scaffold Mus' display of knowledge with phonemic and syllabic cues (lines 3 and 5). Her projected answer appears to be the Malay word 'sepuluh' (ten). Mus' next turn response to her cueing shows him maintaining the code of Zi's projected answer. He says 'tipe' (three) in line 6. In overlap, Zi repeats the first two syllables of her target answer (line 7). Mus' rejection of Zi's cue with the English 'no no noh' (line 8) shows a divergent code selection. He produces the English negative tokens again in line 12. Mus turns to face Zi in both these instances; his answer appears to be directed towards Zi only. His choice of English words may be indicative of the participation framework at this point in the sequence, from which Ustaz is excluded.

Zi is seen to orient to Mus' code-switched turns by reintroducing her topic referent 'yang swimming swimmer tu' (the swimming one, that swimmer) (line 9) via layered code-switching. In response, Mus repeats the word 'swimming' with rising intonation, before repeating it once more with a continuative tone indexing his turn as incomplete. Zi in a latched next turn poses a tag question 'spuluhkan?' (ten isn't it?). However, following Mus' second rejection she addresses the next question in Malay to Ustaz, 'rekodkan?' (record isn't it?) (line 13). She marks the change in participation framework back to one including Ustaz by turning to look at him, before shifting the topic to 'badminton'. Although her question 'sape menang' (who won, line 14) appears to be directed to Mus, her comment 'tengok Ustaz' (look at Ustaz) alludes to Ustaz's particular interest in 'badminton'. This highlights Ustaz's re-inclusion in the participation framework. The laughter that follows hints at jocular teasing directed at this third person. Zi's reference to 'Indonesie' (lines 18 and 20) invokes Ustaz's identity as an Indonesian. This possibly explains the language preference noted in turns that are directed to Ustaz - the divergent pattern shows that Malaysian English (marked with layered switching) is used as a 'we code' for interactions between Mus and Zi, and Malay for turns directed to Ustaz. This is a noteworthy observation because Zi reported in the interview that post-stroke, Mus

and Zi use Malay at home. In using code-switching in this manner she not only accounts for Ustaz's presence but she also establishes Mus' identity as a bilingual.

Mus' single word responses in lines 17, 19 and 22 are constructed in Malay. In lines 17 and 19, he repeats the word 'baghal' (idiot/s), adding emphasis with the enclitic particle 'lah' in the second instance, and in line 21 he says 'kalah' (lost). This switching from Malay to English and back to Malay coincides with Mus' gaze shift to Ustaz, suggesting a use of code-switching to index the participation framework.

A final example of Mus code-switching to Malaysian English to construct a relevant answer to a question from Zi appears in lines 24 to 26. Zi's single word 'Malaysie' (Malaysia), marked prosodically with a rising intonation, prompts Mus to comment about their own country's performance in the Olympic Games. In asking the question in this way, she invokes their shared identity as Malaysians. In the 1.5 second pause that follows, Zi makes an iconic thumbs-down gesture. After an initial production difficulty, Mus responds to Zi's prefiguring gesture with the English word 'down'. There is no translation equivalent in Malay for giving a 'thumbs-down' when assessing something, as this physical gesture is not used in Malay interactions. In overlap, Zi repeats the same English word. In addition to confirming the earlier interpretation of English as the 'we' code for Mus and Zi, Mus' switch to English to construct this turn appears to be relevant given the iconicity of Zi's gesture in line 23. Mus' display of affiliation with Zi suggests that code-switching in this extract may be interactionally motivated by a wish to reveal competence as a bilingual.

The next example of code-switching as a means to display bilingual competence in a conversation at home between regular conversation partners comes from Tana and Rani. Tana is an English-Tamil-Malay trilingual and her preferred language for interactions at home is reported to be English. (See section 4.1.3 for interview details for Tana). In extract 34 below, Tana uses

code-switching to construct a second position turn, revealing how the conversation action of organising a relevant response can be accomplished via this resource.

Extract 34: *thiyaanam* (Tana-Rani)

001 Rani want to go to you:r sister's house or not? Vani Aunty's
 002 house?
 003 Tana o:hm, [mmm, °what°
 [((index finger pointing upwards, then holds up four fingers))]
 004 [sunday.] [noh.] •h sa↑turday go,
 [((pointing))] [((opening fifth finger))]
 005 Rani Sun [day come back.]
 006 Tana [h heh.] [↑no, no.
 [((shaking her index finger at Rani))]
 007 Rani why?
 008 Tana ((pointing downwards repeatedly with her index finger)) mmer=
 009 Rani =after all only once a week what. (only,)
 010 Tana [e- no. no.
 [((shaking her head quickly))]
 011 Rani weekends you go.
 012 Tana nno.
 013 Rani weekdays you don't go what.
 014 Tana ((holding up her index finger))wa- emm, mon- sun- a:n- one,
 015 Rani you go on [saturday,
 [((touching Tana's right shoulder))]=
 016 Tana =no no nonononono [nana NOH.
 [((swings her hand down emphatically))]
 017 Rani why?
 018 [(0.9)
 [((Tana turning to Rani))]
 019 Rani why?
 020 Tana nn no. ((lowering her head, index finger pointing forward))
 021 Rani because she's also your sister.
 022 Tana [no: ,
 [((nodding))]
 023 Rani she 's-
 024 Tana er [t t
 [((swinging hand over her right shoulder. index finger pointing.))]
 025→ *thiyanamlah.*
 meditation PRT
 meditationlah
 026 Rani there also you can *thiya* [nam.]
 medi [tate]
 there also you can meditate.
 027 Tana [no,] no.
 028 Rani why cannot *thiyanam*?
 meditate
 why cannot meditate?
 029 Tana read, read, readlah.
 030 Rani you take everything and go read read readlah.

Tana's deployment of code-switching to construct a relevant second position turn in this sequence occurs in line 25. Her conversation partner, Rani, initiates this sequence with a question 'want to go to you:r sister's house or not? Vani Aunty's house?' (lines 1-2). Tana's subsequent turn highlights her aphasic difficulties. Her haltingly produced answer over lines 3 and 4 does not reach completion and Rani's attempt at collaborative completion in line 5 is rejected with 'no, no.' (line 6). Rani seeks an explanation with the single question word 'why?' (line 7). Tana's next turn response shows her using a somewhat ambiguous gesture and cut off filler 'mmer-' (line 8). This evidently brings Tana's difficulties in dealing with the interactional demands of constructing a relevant second position turn to the surface of the interaction. Rani makes repeated attempts to persuade Tana to accept her suggestion in lines 9, and 11 but Tana continues to maintain her stand on the issue with 'no's in lines 10 and 12. Rani reiterates her argument in line 11 contrasting 'weekday' with 'weekends' that she mentioned in her prior turn. Tana's response appears to be a listing of the days of the week so Rani comes in with a suggestion 'you go on Saturday'. This suggestion is rejected with repetitions of 'no' that escalates to a final 'NOH' in a louder volume, accompanied with an emphatic gesture. Rani repeats the question word 'why' with a rising intonation in line 17 and once again in line 19 suggesting that Rani perseveres despite Tana's aphasic difficulties potentially becoming the focus of the interactional agenda.

This pattern of Rani trying to persuade, and Tana rejecting her suggestions and explanations, continues until line 23 where Tana initiates a turn in overlap. Following a non-fluent phase, Tana produces a single word answer in Tamil 'thiyaanamlah' (line 25). Her selection of the code for constructing this answer appears to be significant for the conversational action being performed by Tana's turn; to provide a justification and at the same time invoke her religious affiliation. The Tamil word 'thiyaanam' is translatable as 'meditation' and has its origin in Sanskrit, the language of Hindu religious scripts. By citing a religious activity that is important to her as a Hindu, Tana appears able to make a

stronger case for not wanting to stay overnight in her cousin's home. The hesitation that precedes her production of this word suggests that her choice of code is a deliberate one. This is consistent with Bhat and Chengappa's (2005) observation about dispreference markers that precede code-switching behaviours. The deliberateness displayed in adopting the contrasting code for her answer enables Tana to highlight her identity as a competent bilingual.

Rani's next turn response (line 26) incorporates Tana's code-switched answer, thus confirming her acceptance of the term whilst rejecting Tana's suggestion that she cannot meditate at her sister's house explaining that 'there also you can thiyaanam'. Again Tana responds with 'no, no' (line 27). Tana's subsequent response to Rani's question 'why cannot thiyaanam?' (line 28) confirms her code-switched answer to be relevant in this sequential locus. The meaning potential of the word 'thiyaanam' is revealed when Tana repeats the word 'read' three times (line 29). Her self-repeats appear to invoke the repeated nature or duration of the act of reading that is involved in her 'thiyaanam'. This repeated act is not a meaning that is represented by the English word 'meditation'. Thus, Tana's use of code-switching is relevant for construction of her answer as it addresses the semantic gap that exists between the preferred language of the interaction in the sequence, i.e. English, and Tamil, her other language. This is similar to the concept of *mot juste* in Gafaranga's (2000) report of code-switching in non-aphasic speakers. Code-switching in this extract accomplishes the local action of organising a sequentially relevant next turn and at the same time displays Tana's identity as a competent bilingual despite her aphasic difficulties.

The final extract in this section is taken from Zin and Tony, to illustrate a slight deviation from the patterns discussed thus far. Here a less familiar conversation partner, Tony, is seen to use code-switching to shift topic from a potentially problematic one initiated by Zin. In this stretch of talk both Tony and Zin continue their conversation while enjoying the cakes and coffee that Tony's wife has served them. As the pace of the conversation slows, Zin takes the opportunity to look

requests clarification (line 7), which in turn overlaps with the rest of Zin's turn, 'kan' (isn't it?) (line 8). The question tag is formulated with a contracted form of the Malay word 'bukan', packaged with a rising intonation. Zin then makes an attempt to clarify his question by specifying the location of the glass structure. He swings his hand from left to right to point out the structure that extends above the bar as he says 'around the: ah,' but he is unable to complete this turn. The elongated final vowel of 'the' followed by the filler 'ah', delivered with a continuative intonation signals Zin's difficulties in completing the turn.

As Zin's final phrase in English is disrupted, Tony self-selects to construct his own turn with 'tempat tidur atas' (bedrooms are upstairs) accompanied with gestures for sleeping. Tony then adds the phrase 'tiga bilik' (three rooms) while holding up three fingers. Tony's choice of Malay following Zin's incomplete turn in English is significant in that it marks a change in code and in the topic. Tony's interactional motivation for providing this information at this point in the conversation is, however, unclear. He may be moving the conversation past Zin's aphasic problems and onto something else house-related. Or Zin's gesture of pointing upwards could have been interpreted by Tony as an indication for directing the discussion to include the upper floor of the house.

Alternatively, Tony's switch to Malay could have been targeted to terminate Zin's topic proffer about the 'bar'. Tony may be adhering to cultural sensitivity since in Zin's Muslim culture, alcohol is a taboo subject and therefore the discussion about the 'bar' may take them down a dispreferred conversational path. Tony's use of code-switching to index topic change resembles switches that are used to draw attention away from a dispreferred action or topic in bilingual interactions documented in Li Wei (1998).

Although this sequence of turns looks like Tony and Zin are talking at cross purposes, Zin does not make any attempt to return to his topic. He merely says 'oh.' and 'bawah' (down/downstairs) which is an antonym for Tony's 'atas'

(up/upstairs). He adds an acknowledgement 'okay' and then seeks clarification with a repeat of the last word in Tony's turn. Tony repeats the Malay word for three to confirm that there are three rooms. From Tony's turn in line 11 to line 13 the conversation appears to have switched to Malay. Zin's 'okay' could belong either to the Malay or English code. In the closure to this sequence Tony switches back to English to invite Zin to eat and Zin again responds with 'okay'.

It is interesting to note that in line 16, the topic transition is once again organised via code-switching. By using code-switching in this manner, Tony is ascribing an identity to Zin that appears to be related to his ethnicity or religious affiliation. It is not a direct comment about this identity but a switch in the code that invokes Zin's identity as a Malay Muslim. In ascribing Zin a cultural identity in this manner, Zin's identity as language impaired appears to be obscured. The non-aphasic conversation partner's use of code-switching to locally manage conversation in this manner suggests that this is a typical occurrence, and the PWA will recognise the meaning potential of the code-switch. Thus, Zin's competence as a bilingual is highlighted.

In summary, the extracts in this section reveal that these bilingual PWAs use code-switching to organise their first and second position turns to be sequentially relevant. The switches are seen to topicalise a referent, to index identity such as religious affiliation, to display education status, and to accommodate for changing participant constellations in conversation. These functions have been well documented for bilinguals engaged in typical (non-aphasic) interactions across a number of different language pairs. Sequential analysis shows conversation partners orienting to code-switches in the PWA's turns. It is also evident from the conversation partners' turns that code-switching is deployed by them as a regular organisational resource in these partnerships. The language of interaction for Zin's conversation with a familiar CP is seen to move from conversational Malay to the educated variety of that language. His insertional code-switching appears to invoke his educated status. His sister Ain also inserts English words and phrases when

constructing turns, suggesting that she is using the fused lect of the educated variety. In this way, episode external factors such as the education status are brought about in the sequence (Li Wei, 2002). In the Mus-Zi conversational partnership too, the conversation partner is seen to construct recipient designed turns to align with the PWA's language preference. Although it is possible that a PWA may produce a code-switched word because it is preferentially available (for example Zin's English workplace words), the lack of either self or other repair to locate a translation equivalent in these instances, suggests that the code-switch is interactionally relevant.

In all these instances, the preference for the same language of interaction appears to be maintained. This finding is important because it provides evidence that code-switching can be used to organise the natural conversation of PWAs, despite much focus in the bilingual aphasia literature on the aphasic deficit of pathological switching. The interactional motivation for using code-switching for organising turns may be attributed to the potential for aphasic difficulties to be kept off the interactional surface when the focus is on the PWA accomplishing a display of bilingual competence. The next section discusses another feature of code-switching in these conversations, namely as a resource for organising repair.

7.2 CODE-SWITCHING AS A RESOURCE FOR REPAIR ORGANISATION

In the data analysed in this section, the bilingual participants are seen to use code-switching to organise repair in their turns. A contrasting code is used to identify a trouble source. Invariably the repairable appears to be related to aphasic difficulties. All the extracts in this section are from the PWAs' conversation outside the home, and primarily from Zin's conversation with his friend Tony. Sequential analysis of code-switching in these instances reveals the actions of either initiating the repair or resolving the trouble is accomplished with this resource. This shows the interactional motivation for deploying code-switching as a resource for repair organisation to be the accomplishment of

repair before it becomes a noticeable incident alluding to the PWA's identity as language impaired.

Both the observational and interview data revealed that post-stroke, Zin's opportunities for conversing in English, the other language in his repertoire, are mostly restricted to his interactions at the NASAM centre in Melaka³³. Zin attends the weekly physiotherapy sessions organised at this centre and whenever the centre is closed, Tony volunteers to organise group exercise sessions in his home. Zin identified Tony as someone he converses with in English because, although Tony is able to use Malay, he is not proficient. This intergenerational difference among Malaysians of Tony's and Zin's respective age groups is typical. (See section 1.1.1 for details about linguistic diversity in Malaysia). In the Mus-Alan conversation partnership, English language is their shared preferred language of interaction. However, code-switching from English to Malay is sometimes observed. It was not possible to record the third PWA in this study, Tana, outside the home.

Sequential analysis of code-switching deployed in conversations of the Zin-Tony and Mus-Alan partnerships demonstrates a link with repair organisation. In some instances, a contrasting code is used to identify a trouble source or to accomplish the actions of either initiating the repair and/or resolving the trouble. In others, the chosen code itself appears to be a trouble source, and repair involves attempts to change the code. Invariably the repairable appears to be related to aphasic difficulties. The interactional motivation for deploying code-switching as a resource for repair organisation appears to be the accomplishment of repair before it becomes a noticeable incident. In this way, the PWA's identity as language impaired does not become the focus of the interaction.

³³ Melaka is a two-hour drive away from the capital city of Malaysia where Zin used to work. He moved here to live with his family. Zin's workplace language was English.

The first extract is taken from Zin and Tony's conversation, and shows code-switching to be a resource for organising self-initiated self-repair in the PWA's turn. Prior to this sequence, while they are having their tea, Zin looks at the photographs displayed on the wall of Tony's house. He then turns to Tony to initiate a sequence about the individuals in the photographs.

Extract 36: gambar. bukan, pictures (Zin-Tony)

001→ Zin ((raising his hand with palm open, turns to Tony)) *gambar*.
pictures
pictures

002→ (bu)kan, pictures.
NEG
no, pictures.

003 Tony yeah.

004 [(1.9
((chewing his food))]

005 Zin ((holding index finger up)) [e:rm, (1.0) a:m, (1.3)
((looking away from & back at Tony))]

006 the: son or *nih* daughter?
this
the: son or this daughter?

007 Tony where?

008 Zin ((pointing at photos on the wall)) *nih*.
this
this.

009 Tony ((pointing to the right side of the wall)) all these a: *cucu*.
grandchildren
all these a: grandchildren.

010 Zin *cucu* eh? oh *cucu*.
grandchildren TAG grandchildren
grandchildren is it? oh grandchildren.

Zin introduces his topic referent with a single Malay word 'gambar' (pictures, line 1). He then initiates repair with the single word 'bukan' (no). The continuative intonation of the word 'bukan', marked with a comma in the transcript, projects more to come. Zin completes this turn with the English word 'pictures' which is a translation equivalent of the Malay word 'gambar'. By replacing the Malay word with the English word, Zin identifies the contrasting code of the first word to be the trouble source. Wilkinson, et al. (2007) observe a similar pattern in an English native speaker with aphasia, whereby the PWA produces a word with general meaning and then substitutes it with a word with more specific meaning. The authors suggest that this format of turn construction can be represented as 'X, not X, Y' where the error ('X') is located ('not X') before being replaced (with 'Y'). They

postulate that maintaining the progressivity of a turn may account for a PWA's interactional motivation to use this pattern of replacement for self-repair. The general meaning word produced first may function as a self-cue for the PWA or may provide an opportunity for self-initiated other repair by a collaborating conversation partner (Wilkinson et al., 2007). Zin's repair pattern seen here can be expressed as X_1 NEG, X_2 , where X_1 is a lexical item in language 1 and X_2 is the equivalent in language 2. By switching from the language of the interaction i.e. English to Malay, Zin organises his self-initiated self-repair to be accomplished post-positionally. He successfully replaces the Malay word with the English equivalent. The interactional motivation for code-switching here may be related to preferential availability of the word in his home language. So this word may be used as a self-cue to retrieve the relevant next word. The local action of self-repair accomplished in this turn allows Zin to compensate for his word finding difficulty by means of code-switching. The interactional motivation for Zin to use code-switching to organise repair appears to be related to progressivity i.e. the next item is produced in a timely manner. Using code-switching to produce what is available first suggests Zin is actively engaged in resolving the trouble by switching to his home language. His self-initiated repair enables him to keep his aphasic difficulties off the interactional surface. Such a display of bilingual competence obscures his identity as language impaired.

Tony's next turn response 'yeah.' (line 3) shows him orienting to Zin's prior turn as unproblematic. After a 1.9 second pause (where both Tony and Zin continue enjoying their tea time treats), Zin indicates gesturally that he will take the floor again. A non-fluent phase follows before Zin shift his gaze back to Tony as he produces a noun phrase 'the: son' followed by the conjunction 'or' to signal an alternative and then inserts the single Malay word 'nih' (this) before finishing with 'daughter', delivered with a rising intonation (line 6). Zin's question can be glossed as asking about Tony's relationship to the people in the photographs. The Malay word 'nih' (this) functions as a proximal deictic marker; Zin responds to Tony's repair initiation 'where?' (line 7) by pointing to the photographs on the

However, after Zin's acknowledgement in line 3, Tony initiates repair, using a code-switch to organise the repair sequence, one of clarification. He switches to Malay to first produce the negative marker 'bukan' (not), the same marker that Zin uses repeatedly (see for example, Extract 36 above). Tony then replaces 'father' with 'bishop', switching back to English to implement the repair with a more accurate term of reference.

After Zin's acknowledgment of bishop, Tony makes one more clarification with the repeated code-switched word 'ketua' (leader, line 6) despite Zin's display of understanding. This code-switched word appears to translate the English term 'bishop' by referring to a rank or status in the Christian ministry but is not an exact match in terms of translation equivalents. Tony's switch to Malay here may be tied to his perception about Zin's lack of familiarity with the hierarchical system in the sociocultural practices associated with Tony's religion. It is also possible that Tony's is trying to emphasise the difference between bishops and fathers and the notion of 'leadership position' can only be captured with the Malay word 'ketua' (leader). Both behaviours suggest Tony's use of code-switching to organise repair may be an affiliative move because Malay is Zin's 'we code'. It is likely that Tony is accommodating to Zin's lack of familiarity with the socio-cultural practices associated with Tony's religion.

The next extract was first analysed in Chapter 5, to illustrate how a PWA's topic-comment turn can be disrupted when the first action of establishment of a mutually recognised topic referent runs into trouble. Here, the focus of analysis is the use of code-switching in the repair sequence that ensues. The extract continues from Zin and Tony's discussion of the opening ceremony of the Olympic Games, which was to take place in China later that evening.

Extract 7: event (Zin-Tony)

001→ Zin ʃah, (0.6) *ape nameh*, ʃChina,
what ø ø name
 ah, what's the name, China,
 L((Zin holds mid distance gaze, Tony looks down))J

002 Tony a:h,

003→ Zin China, [(2.4) a:hmm,
 L((Zin holds mid distance gaze, Tony looks at Zin))]

004→ Zin ʃ (*pertunjukan*) ʃ
performance
performance
 L ((lowers his head and then smiles))J

005→ Tony yeahlah, China hostlah.

006 Zin a::h *nih* a:h,=
this
 a: h this a:h=

007 Tony =Beijing. Beijing.

008 Zin Beijing, a:h, ah-((smiling))

009→ Tony *jadi tuan rumah?*=
beø ø host
 is the host?

010→ Zin =/e/vent, e- e, e:vent ʃ[°]peh[°]. ʃ a:h ʃ (°acare apeh°)ʃ
what event what
what. a:h event,what
 L((smiling))J L((lowering head))J

011 [(3.6)
 L((Zin looks down, index finger on his lips))]

012 Zin [erm, (0.8)] [event event
 L((looking down))] [L((rotates his wrist twice))]

013 Tony yeah, ye [ah.]

014 Zin [e] ven(t). a:, a::pe namehʃe:rm, ʃ
what ø ø name
a:, what's the name erm,
 L((lowering his head))J

015 Tony what they good?=
 016 Zin ((looking up at Tony)) [=an-]
 017 Tony [they] good for what?
 018→ Zin yes. yes. yes. yes. ((nodding))
 019 Tony what are they good?
 020 Zin ah.
 021 Tony a [a:] china good for what?
 022 Zin [a-]
 023→ Zin [e:rmmm,] [(0.7) a-eCRObatic.]
L((mid distance gaze)) [L((turning to Tony, moving his hand))]
 024 Tony acroba^tic. ah. (*three syllables*)
 L ((pointing with index finger at Zin, holding up his thumb))]

In line 1, Zin produces the Malay phrase 'ape nameh' (what's the name), after an initial turn holding particle 'ah' and a 0.6 second pause. This formulaic phrase is a word search marker that recurs in Zin's home conversation in Malay. Zuraidah (2007) notes this phrase, and permutations of it, as an example of a formulaic expression used as a parenthetical in the conversations

of typical Malay speakers. Parentheses, or side comments, exemplify discourse related code-switching (Auer, 1984b, 1995). In this instance, the code-switched formulaic expression which is also a word search marker indexes a pre-positioned repair initiation. Zin completes his turn with a location reference, 'China', delivered with a distinctive English pronunciation. At this point, Tony displays orientation to Zin's unfolding turn with a go ahead signal, 'a:h,' (line 2). Zin's repeat of the topic referent 'China' in line 3 earns him a 2.4 second turn space during which he holds a middle distance gaze, indicating a solitary word search. He then produces a filler 'a:hmm' and the just-audible Malay word 'pertunjukan' (performance, line 4). This code-switch to Malay during a word search resembles the replacement strategy discussed in Extract 36. With the preceding non-fluent phase potentially exposing Zin's aphasic difficulties, Tony's quick response with a confirmatory 'yeahlah' is notable. Tony then offers a version of Zin's prior contribution, saying 'China hostlah' (line 5). This structurally simplified Malaysian English turn approximately conveys the meaning, 'yes, China is the host'. The appended pragmatic particle 'lah' functions to emphasise or soften a claim (Gupta, 1992), and in this instance Tony appears to imply obviousness and thus downplays the repair. Tony's reformulation confirms that the preferred code for the interaction up to this point is English (or Malaysian English).

Zin attempts a restart in line 6 with fillers and the proximal deictic marker 'nih' (this), projecting a noun to follow. Tony takes a latched turn and says 'Beijing', the town where the Olympic Games will take place (line 7). This contribution may be to assist Zin's construction of the double subject (a feature of topic-prominent languages). Zin displays acceptance in line 8 with a repeat of the word 'Beijing'. The continuative intonation of his delivery indexes his attempt to extend the turn, but he abandons it with a smile after producing another series of fillers. At this point, Zin's trouble in accomplishing the first action of establishing a mutually recognised topic referent comes to the interactional surface. Tony then produces a try marked Malay utterance 'jadi tuan rumah' (is

the host), a phrase that is a translation of his turn in line 5, 'China hostlah'. This pattern of code-switching is similar to Auer's (1984b, 1998) documentation of reiteration as a discourse-related function of code-switching. Here, it may also be participant-related code-switching, as it locates the code of Tony's turn in line 5 to be problematic for Zin. The switch to Malay is participant designed to accommodate what the less familiar conversation partner perceives to be Zin's preferred code. Repair organisation here involves repair of the code.

Zin does not respond to either the English (line 5) or Malay (line 9) version and goes on to introduce 'event' (line 10). He self-repairs his pronunciation of this word before lowering his tone and switching to Malay, producing '(a)peh' (what, line 9). This code-switched single word may be an elliptical form of the formulaic phrase 'ape name'. Interestingly, Zin's quieter production of the word 'acare' (event) reveals his use of code switching in the face of a word finding difficulty. The non-verbal aspect of this turn where Zin holds his head low and places his index finger on his lips fits Goodwin's (1987) description of a "thinking face" during a word search. This provides further evidence that code-switching with translation equivalents in Malay may be a self-cueing strategy to cope with troubles in formulating a turn in English. Tony appears to treat 'event' as a relevant next item, posing the question 'what they good' (line 15). This can be glossed as 'what are the events that China is good at?'. The sequence continues with Tony varying the structure to produce a more grammatically accurate form of his question which Zin eventually answers in line 23.

This extract shows how code-switching by a PWA to organise repair of aphasic difficulties may be (mis)interpreted by the conversation partner as a display of the PWA's language preference in general. Zin's use of a code-switched formulaic expression (ape nameh) to initiate self-repair accomplishes two actions, the action of maintaining his turn while he is searching for a word, and the action of thinking aloud. For Zin, this formulaic metalinguistic comment produced in his first language (Malay) creates an air of competence around his use of Malay despite his aphasia. Although this may suggest to a less familiar

014→ Zin [oldest one forty
 ((holding up four fingers))]

015 Zin ((looking up at Tony)) o::h.

016→ Tony *yang tua punya empat puluh.* ʔ
 the one oldest PRO forty
 the oldest one forty
 L((turning to his plate)) J

017 Zin ((holding up his thumb)) *satu, dua, tiga, empat eh?*
 one two three four TAG
 one, two, three, four is it?
 L((counting gesture)) J

018 Tony =yeah. *empat.* (0.7) *tiga perempuan satu jantan.*
 four three females one male
 =yeah. four. three girls one male.

019 Zin o:h. okay.ah. ((turning away from Tony))

020→ Tony *tiga pe(r)mpuan, satu laki-laki.*
 three girls one boy.
 three girls, one boy

021 Zin ((turning to look at Tony)) [emmm.]
 ((nodding))]

Zin begins his turn in line 1 with the filler ‘a:h’ followed by a formulaic metalinguistic comment ‘*ape ni-*’ (what is this) similar to the one discussed in Extract 5. A filler and a 0.8 second pause follow. Having held a mid distance gaze throughout this initial phase of his turn, indicating a solitary word search (Goodwin and Goodwin, 1986), Zin then turns to Tony to establish mutual gaze and produces the English determiner ‘the’, projecting a noun or a noun phrase to follow. He then introduces the topic of his talk with ‘daughter or the son’, produced with continuative intonation (marked with a comma in the transcript). In response, Tony looks up at Zin and produces ‘mmm’, a passing turn that signals a ‘go ahead’ (line 3). Having established the topic of his talk in this way, Zin completes his turn with the comment ‘age’, produced twice with rising intonation (line 4). Thus Zin’s first position topic-comment turn here began with a Malay metalinguistic comment, and continued with an English noun phrase and comment, packaged with a questioning tone. In response, Tony uses code-switching to seek confirmation of his candidate understanding of Zin’s prior turn with the Malay word ‘ke(r)ja:?’ (work, line 5). The choice of ‘work’ appears to be coherent with Zin’s topic, because in the preceding turns they discussed Tony’s married children. So ‘work’ would be a likely topic but the choice of code, Malay, may not be the preferred code for Zin in the local sequential environment.

Following Tony's repair initiation, Zin again repeats the word 'age' twice (line 6) and in overlap Tony goes on to query whether Zin is asking about his daughter (line 7). With Zin's confirmation, Tony proceeds to provide the information that Zin seeks (lines 9-16). During this sequence of turns, Tony switches between English and Malay and even produces spontaneous translations of his own English utterances as if his turns are design not only to provide answers to Zin's question, but also to negotiate with him the code for the present interaction. Tony also uses gestures to represent visually the information he is producing verbally. It is possible that Tony's choice of divergent code to construct his turns may be related to Zin's use of the Malay formulaic expression 'ape ni' amidst the non-fluent phase of turn construction in line 1. Thus, Zin appears to be using code-switching to signal a self-directed word search, i.e. to repair a problematic turn, and yet Tony appears to interpret this as a switch to Zin's preferred language.

The negotiation of the code over lines 11-16 leads to the adoption of Malay for turns that follow. For example, Zin counts in Malay in order to formulate his turn in line 17. Tony confirms that he has four children and goes on to clarify that he has three daughters and a son using the word 'jantan', which is usually reserved for referring to male animals, and is also more common in the colloquial variety of Malay. Despite Zin's acknowledgement, Tony repairs the word, replacing it with 'lelaki', the more appropriate gender reference for humans. The adoption of Malay results in Tony's difficulties in that language coming to the surface of the interaction.

The analysis now shifts to investigate code-switching as a means of organising repair in Mus' conversation with his friend Alan. Like Zin and Tony, in this less familiar partnership, the preferred language of interaction is English. Prior to this sequence, Alan has been asking questions about Mus' plans for the rest of day; here he shifts the topic to tasks that Mus has already completed that

morning. Alan uses shared knowledge about Mus' activities at the NASAM Centre to formulate a closed, known-answer question.

Extract 39: sikit little (Mus-Alan)

```
001 Alan SO today, did you do any exercise?
002→Mus exercise, ɾ /sik/- a::hh, ɾ ɾ sikit ɾ
                                little
                                exercise, /sik/- a::h, a little.
                                L((pinching his index finger and thumb together))J L((waving))J
003→Alan sikit only. oh. today you only did ss- ss- little exercise.
                                little
                                a little only.
004 Mus ah. ex(er)cise.
```

In this short sequence, lines 1 and 2 constitute a question and answer adjacency pair. Mus' second pair part answer is constructed with a repeated keyword from Alan's prior turn; a routine turn construction strategy for him (discussed in Chapter 6). Aided by the continuative prosodic packaging of the repeated word 'exercise', which suggests more to come, Mus incrementally adds a single syllable 'sik' which is cut-off and followed by a turn holding 'a::hh'. This suggests he is having difficulties in producing the word that is due next in this unfolding turn. Such pre-positioned repair initiation is common in typical word search sequences (Schegloff, 1979). Mus' gesture during the search phase may be interpreted as an attempt to represent visually what he knows to be the relevant next item. Pinching his index finger and thumb together he appears to convey the semantic equivalent of something small. He follows up with a turn holding 'a::hh' before finally producing the Malay word 'sikit' (little) as a comment on the topic of exercise. The cut-off syllable 'sik' may have been the first part of the same Malay word, and that his repair initiation may be an attempt at repairing the code.

In the next turn, Alan repeats the Malay word 'sikit' and adds a qualifying adjective 'only' (line 3). This appears to display acknowledgement of his hearing of Mus' answer, but is not until he subsequently says 'oh' that he displays full understanding. He then offers a fully grammatical version of Mus' turn ('today

you only did...little exercise'). At line 4, Mus displays agreement with 'ah.' and a repeat of 'exercise', the last word of Alan's turn. In this sequence, Alan subtly repairs the grammar and the code by replacing the Malay word 'sikit' with an English translation equivalent 'little'.

It is interesting to note that this is the only instance of self-initiated-other-repair of the code in these datasets. One possible explanation is that Mus 'invites' it in some way or at least leaves Alan with an opening to repair the trouble source. It may be occasioned by Mus' repair initiation, which appears to identify the code of the Malay word he produced in line 2 to be a trouble source. While Mus' cut-off production of the first syllable alludes to a difficulty, his gesture provides a visual representation of the word he is trying to produce. Since the Malay word that he produces in full following this conveys the same meaning as that of his gestural representation, yet the cut-off syllable indexes trouble, this suggests that that the *code* of the word is the trouble source, and not its meaning. Mus production of the Malay word provides an opportunity for the conversation partner to use a replacement strategy. This is in line with Wilkinson et al.'s (2007) suggestion that a PWA's use of a replacement strategy is interactionally motivated, as the approximate word that is produced first can function as a cue to invite a conversation partner to collaborate.

Alan also uses code-switching to organise repair, as seen in this next extract. Alan and Mus have been discussing Mus' plans for the rest of the day, and here Alan initiates a sequence inquiring about Mus' dinner plans.

Extract 40: rumah house (Mus-Alan)

```
001 Alan and, what about dinner tonight?
002 Mus dinner, [(tonight,) a::h, tch (5.0) tch.
                [(flicking his wrist, swings his hand to the left & bringing it
                back towards Alan points with his index finger, points to the
                left again & then scratches his neck.))]
003 Alan you going [somewhere?
                    [(opening his hand, pointing to Mus))]
004 Mus a:h somewhere [somewhere. ]
```

005 Alan L o::h, Jyou going out.
 006 Mus a:h.
 007 Alan oh. where?
 008 Mus a:h, [Dr. Ismail.
 [*((swinging his index finger to the left))*]
 009 Alan o:h Tun Dr Ismai:l. [friend's house?
 [*((pointing briefly at Mus))*]
 010 Mus no:h. nonoh. [outside. outside.
 [*((making circular movement with his hand))*]
 011 Alan outside.
 012 [(2.5)
 [*((Both Alan and Mus looking at each other))*]
 013→ Alan (*((pointing briefly to Mus))*) rumah? err house or shop?
 house
 (at) home?
 014 Mus [a:h, a:::m, a:m.
 [*((pointing with index finger, holds up open palm))*]
 015 [*tch °a:hh°*,
 [*((lowering his hand and placing hand on lap))*]
 016 Alan you are not sure whether you are going to eat in a
 017 restaurant?
 018 Mus restaurant. restaurant.

In line 1, Alan asks Mus 'and what about dinner tonight'. Mus' answer begins with a repeat of key words from Alan's turn before he signals difficulties in completing his turn, producing gesture during a 5 second pause. In response, Alan reformulates the question as a yes-no question. Again, Mus repeats part of Alan's question as his answer (line 4) displaying both hearing and understanding this his partner's question. Having established that Mus is going out, in line 7, Alan produces a single question word 'where'. Mus then constructs a relevant next turn on his own. He says 'Dr. Ismail' an elliptical reference to 'Taman Tun Dr. Ismail where he lives. After saying 'Tun Dr. Ismail' to display recognition of this place referent, Alan offers a try-marked candidate answer 'friend's house' (line 9). Mus rejects this, adding 'outside. outside.'. Alan acknowledges 'outside'. However a 2.5 second pause follows, during which Alan and Mus look at each other, and the repair appears to stall.

The turn of interest occurs in line 13 when, in his attempt to provide a candidate answer to help Mus specify where he will be having dinner, Alan produces the Malay word 'rumah' (house). He then produces a filler before saying the English

translation equivalent 'house' and appending an alternative answer 'shop'. Mus continues to have severe difficulties in constructing his answer (line 14-15) and Alan resumes questioning in English. In line 16, Alan offers a possible explanation for Mus' difficulty in answering his question, 'you are not sure whether you are going to eat in a restaurant?'. Mus' repeat of restaurant appears to resolve the trouble. He identifies the word 'restaurant' as a more specific referent compared to 'shop' (line 13). It is noteworthy that after producing the single word 'rumah' in Malay, which could be seen as Mus' 'we code' based on his ethnicity, Alan quickly self-repairs with a translation equivalent in English and continues with his turn. Alan appears to treat Mus difficulties to be related to his aphasia and not the choice of language for interaction. While it is evident that the conversation partner also uses code-switching to organise self-repair, code-switching does not ascribe a language related identity to the PWA.

In summary, the extracts analysed in this section show that the use of code-switching to organise repair is related to word finding difficulties. Code-switching is usually deployed pre-positionally by the PWA to index trouble. In Extract 36, the PWA used a code-switched word as a self-cue and repair was accomplished when the word was produced in the preferred code post-positionally, via a replacement strategy. A conversation partner can also implement repair in the next turn. As seen in Extract 37, self-initiated other repair is accomplished in second position, and involves repair of the code.

A PWA's self-initiated repair can take a long time to be resolved, and in this situation a conversation partner may participate in trouble resolution. As seen in Extract 38, the conversation partner's other repair may target the code if a PWA's initiation of repair via a code-switched word search marker is interpreted as a preference for a contrasting code. The conversation partner may then attempt to use code-switching to format a candidate understanding. In this case, repair may not be successfully implemented. Extract 39 shows that other

initiated repair can be organised with code-switching when the conversation partner orients to the code as problematic. In this instance, the conversation partner may negotiate the code in an elaborate way; i.e. producing the answer in one code and displaying recipient design by translating the answer into what is perceived to be the PWA's preferred code. For the Zin-Tony partnership, it is possible to attribute this to Zin's BNT score; his naming ability in his home language is better than his other language. When completing the narrative task in English, Zin is seen using code-switched Malay hesitation devices more often than content words. For, Mus despite a low BNT naming score, he is seen using code-switching only once in the narrative task in English. This possibly explains why Alan repairs his code-switched word in his conversation with Mus in English. The patterns of code-switching as resource for organising repair observed in these conversations concur with Gafaranga's (2012) observation about code-switching for repair organisation by typical bilinguals.

7.3 SUMMARY

Sequential analysis of code-switching in the participants' turns reveals two clear patterns of use: as an organisational resource for displaying knowledge and bilingual competence, and as resource for repair organisation. Section 7.1 presented examples that illustrate how a PWA's use of code-switching in first and second position turns can accomplish a display of bilingual competence. The conversation partners are shown to orient to this PWA use of code-switching to organise turns, and they themselves are seen to use the same strategy. In first position turns, code-switching can be used for topicalising a referent consistent with Auer's (1984b) finding. Code-switching used in this manner may appear to have a discourse-related function but it can also accomplish participant-related switching. A PWA's use of code-switching to organise a relevant turn is followed by the conversation partner's adoption of the language variety where insertional code-switching is a regular feature. The regular conversation partner treats the use of this resource as indexing language preference. The preference for the new code may

be related to sociolinguistic factors such as status which are brought about in a particular stretch of talk (Li Wei, 2002). For example, for the Zin-Ain conversational partnership, a code-switched topic referent introduced by Zin results in Ain switching the language of the interaction to the educated variety, where she inserts English words and loan words in her turns. In the Mus-Zi partnership, Zi appears to switch to English or use insertional switches to construct recipient-designed turns as Mus' preferred language of interaction is English, while she is more proficient in Malay.

In second position turns, a PWA's single word answer may be constructed in a code that contrasts with the established preferred language of interaction. This behaviour is seen to be a purposeful display of knowledge, which both presents a relevant answer, and a relevant code for the answer, especially when there is a semantic gap in the two languages in the bilingual's repertoire. In these positions too, code-switching may have both discourse-related and participant-related functions. For example, in Mus' conversation at home, code-switching in second position is used to index the changing constellation of participation when a third person joins them. Mus is seen to use code-switching to organise a turn that aligns with his conversation partner, and thus to display bilingual competence.

In both first and second positions, a PWA's insertional switches, i.e. using single words from the other language, may be indicative of the word form that is preferentially available to the PWA at that point in time. For example, Zin's use of an English word to introduce a work-related topic may be due to English being the language of his former work-place. While it is not possible to conclude this with certainty, evidence from the conversation partner's next turn suggests this form of code-switching is not problematic. The conversation partners also deploy code switching as a turn organisation resource, suggesting this to be a typical pattern of organising turns-at-talk in these partnerships. Thus, the code-switching by PWAs documented here is not likely to be due to difficulties with language control,

referred to as pathological switching in the literature on bilingual aphasia. This issue will be discussed further in Chapter 8.

In section 7.2, the occurrence of code-switching as a resource for organising repair was examined. Initiation of self-repair in the PWA's turn via code-switching was seen to accomplish self-initiated self-repair, and self-initiated other-repair. The use of code-switching for repair is observed mostly in Zin's conversation with Tony, with a few examples in Mus' conversation with Alan. Zin's haltingly produced turns were often completed with code-switched words or phrases, which were then replaced with a lexical equivalent in the preferred language of interaction. Thus the trouble source was attributable to aphasic word finding difficulties. This pattern is not dissimilar to the replacement strategy used by monolinguals with aphasia reported by Wilkinson, et al. (2007), whereby a general meaning word was produced first and then repaired with a more specific one postpositionally. For Zin it appears that the Malay word may be preferentially available. Producing it appears to earn him the turn space to then produce the specific form in the preferred language of interaction, English. Zin's use of code-switching to organise repair in this instance enables him to maintain progressivity of his turn and at the same time accomplish a display of bilingual competence. The preference for self-repair noted in typical (non-aphasic) conversation suggests another interactional motivation for this use of code switching. Zin's conversation partner's use of code-switching further suggests that the use of this resource to organise repair may be participant-related. Tony is seen switching to English when he has difficulties in constructing turns in Malay, which he treats as Zin's 'we code'. Thus code-switching as a resource for organising repair enables both the PWA and his less familiar partner to compensate for difficulties in producing the next relevant item. The same pattern is observed in the Mus-Alan partnership. So, for a bilingual PWA, code-switching to organise repair is a useful resource for adapting to aphasia as it provides opportunities to appear interactionally competent, and also competent as a bilingual speaker.

Another recurring pattern in Zin's use of code-switching to organise repair is the use of code-switched phrases to signal word search. In his conversation with Tony, he

uses formulaic expressions in Malay where the language of interaction is English. The conversation partner resorts to resolving the trouble quickly in these instances; the code-switch is treated a problematic. A negotiation or renegotiation of the preferred language of interaction follows. The self-initiated other repairs that follow often result in repair of the code as well. The difference between discourse-related and participant-related code-switching becomes evident here. The PWA switches to his home language to signal a self-directed word search, i.e., a discourse-related function, however the conversation partner treats this as display of language preference, i.e. a participant-related code-switch. This pattern is a key feature in the Zin-Tony partnership.

In summary, a comparison across the bilingual speakers in this study reveals recurrent patterns relating to the display of bilingual knowledge via the organisational resource of code-switching. All three bilingual PWAs and their conversation partners are seen using code-switching as an organisational resource in their conversations at home. Zin also uses the same resource in his conversation with a less familiar partner. The direction of the switch is from the mutually established preferred language of interaction to the other language in the bilingual's repertoire. Mutual establishment of language preference indicates familiarity between the conversational partners. In the less familiar partnership of Zin-Tony, code-switching to organise repair is a common occurrence. Zin organises self-repair via code-switching as this allows him to revert back to the preferred language of interaction to implement the repair. His use of code-switching for formulaic expressions that signal word search or function as metalinguistic comments are sometimes treated by his conversation partner as an indication of Zin's preference for his home language. It is not entirely clear if Tony associates ethnicity and the location of his home in the Malay village with his language preference but he is often seen treating Zin's code-switched repair initiations which do not progress to quick resolution of trouble as indexing his language preference. Tony' repeated spontaneous translations of his answers suggests that the code of the interaction is still being negotiated. In the interview, Tony expressed the view that, because Zin is

from the 'kampung' (Malay village), his 'English is not good'. Both the lack of familiarity between these interactional partners and the mismatch in the level of proficiency in the language of interaction in this partnership could be contributing factors. This mismatch was initially identified as creating the opportunity for Zin to use his other language in conversations outside his home. However, Zin's interactional motivation to use code-switching to organise repair as a means for adapting to aphasia in his conversation with Tony can result in his bilingual identity being obscured. Post-onset, Zin has had a limited opportunity for using English, his later acquired language, although this was the first language to return after his stroke. Such loss of opportunities may have resulted in language attrition which makes his attempts at constructing turns at talk in his other language more difficult. Episode external factors such as these are not assumed priori but are seen to be brought about in the PWAs' conversations (Li Wei, 2002).

For the Mus-Zi partnership, Zi is seen adopting English as the preferred language for interaction with Mus. She uses the lectal variety of Malaysian English and layered switching is opted for in the presence of a third person who is a Malay speaker. Zi creates opportunities for Mus to display his competence as a bilingual although his turns are all second position turns. In Mus' conversation with Alan, code-switching is used to organise repair. Insertions in Malay are followed by a display of dispreference. The less familiar conversation partner then implements the repair. Although Alan is also seen using code-switching to organise self-repair, other-repair of trouble in Mus' turn is dealt with quickly. This is consistent with Klippi's (1996) observation about familiarity and dispreference for repair.

For Tana, code-switching as a turn organisational resource is not problematic with a regular conversation partner. She is not seen using code switching as resource for organising repair. This suggests that familiarity may have a role to play in the way code-switching is deployed and how identity is brought about in conversations between familiar partners. It was not possible to collect data with a less familiar partner because Tana has a limited opportunity for interactions outside the home.

8 Discussion and Implications

8.0 INTRODUCTION

The main findings of this study will be summarised in section 8.1, followed by a discussion of theoretical and clinical implications of the findings in Section 8.2. Section 8.3 reports on the limitations of the study and the challenges faced while recommendations for future work in this area are provided in Section 8.4.

8.1 SUMMARY OF MAIN FINDINGS

The turn construction resources of topic-comment structure, collaborative construction and repetition are deployed by the PWAs in this study in conversation with a regular conversation partner in their home environment. The same resources also recur in their conversations with a less familiar conversation partner from outside the home with whom they reportedly use a language other than the home language. Thus these resources appear to cross the linguistic boundaries of the languages in the repertoire of these Malaysian bilinguals. This study documents the use of topic-comment structure in Malay-Malaysian English PWAs' conversations for the first time. They produce a single word to introduce a topic, and follow this with a comment tied to that topic. This appears to be an effective resource for these PWAs and their mutually adapting conversation partners. In first position turns (a particular challenge for PWAs) this resource is seen to accomplish various conversational actions that include topic proffer and requesting. This study also hypothesises, again for the first time, that topic-comment structure appears to be useful for constructing *second* position turns, but this claim needs to be substantiated with additional data. Occurrence of topic-comment structure in the talk of the non-phasic conversation partners documented in this study suggests that this is a resource deployed in the conversations of these bilinguals, and not one that

arises solely as a result of aphasia. The reasons for this will be discussed in Section 8.2.1, below.

Collaborative construction and repetition are used to construct turns that accomplish a display of knowledge in the conversations of these bilingual PWAs. There is evidence that these resources are deployed in both languages of the PWAs. Additionally, the non-aphasic conversation partners appear to use known-answer questions to create opportunities for PWAs to display knowledge via collaborative completions and repetition. Often, these do not entail a successful accomplishment of the targeted outcome as trouble arises due to aphasia, and dispreference for known-answer questions sequences is displayed. Familiarity between the partners appears to affect the outcome of known-answer question sequences in different ways. Issues of familiarity will be discussed below.

Given that societal bilingualism is the norm in the Malaysian population, code-switching is found to be an organisational resource for displaying competence as a bilingual, and an adaptive resource for organising repair in the bilingual PWA's conversations. This pattern is observed in conversations with a regular conversation partner in the home environment. With a less familiar conversation partner from outside the home, and with whom the PWA reportedly uses a language other than the home language, a similar pattern of code-switching is noted, since the speakers share the same linguistic repertoire. A display of bilingual competence is accomplished via code-switching because by deploying this resource, the PWA not only demonstrates knowing what is relevant for the next turn, but also in what language the relevant next turn can be constructed. PWAs are seen using this resource in a discourse-related manner to topicalise a referent or to address a change in participant constellation. In second position turns, code-switching serves as resource for constructing answers that not only show grammatical fittedness to the question, but also language or code appropriacy.

Sequential analysis shows these accomplishments to be meaningful as the non-aphasic conversation partner orients to them by adopting the switched-to code, or by continuing without treating it as a repairable item. It is evident that the conversation partners use code-switching in the same manner to construct their turns. This highlights the fact that the PWA is treated as a competent participant in these bilingual interactions. When trouble arises in a PWA turn, code-switching can also be used as an adaptive resource for organising repair. This resource is effectively deployed to initiate and also implement repair. In conversations with less familiar partners, quick resolution of the trouble becomes a priority and in some instances code-switching itself can be oriented to as a repairable.

The relationship between familiarity and interactional adaptations achieved by using the resources discussed above is a complex one. In these data, it appears to vary for each partnership. For instance, topic-comment turns used in conversation with a less familiar partner may not progress to completion because the lack of shared knowledge between the interlocutors can make the establishment of a mutually recognised referent problematic. This might be a predicted implication of limited familiarity. On the other hand, the availability of shared knowledge between familiar partnerships may lead a regular conversation partner to disrupt a PWA's haltingly produced turn before it reaches completion, gaining entry into the PWA's turn and derailing the intended conversational action. As a result, it is difficult to conclude from these data that familiarity between conversation partners always leads to a positive outcome for PWA turn construction.

Conversely, a lack of shared knowledge in less familiar partnerships can have a positive effect, creating opportunities for a PWA to accomplish a display of knowledge that he or she has privileged access to. In less familiar partnerships, there are reduced opportunities for initiation of known-answer question sequences, as the basis for these is shared knowledge. This appears to be beneficial, given the dispreferred nature of such sequences. It has also been

observed that familiarity between partners influences the repair trajectory, with less familiar partners opting for a quick resolution of repair. As a result of this, some resources appear to be less effective for a PWA's turn construction. For example, when a less familiar partner orients to code-switches used by a PWA to initiate a self-repair as a trouble source, he or she may switch code to implement other-repair. This can be problematic because the PWA may have intended the code-switch to mark a solitary search and not to signal difficulties in the preferred code of the interaction. When the conversation partner implements the repair by adopting the code used to organise the repair, the PWA's identity as a bilingual may become obscured.

In summary, the main findings of this study are as follows:

1. The turn construction resources of topic-comment structure, co-construction and repetition are deployed by PWAs in conversation with regular and less familiar conversation partners; they appear to cross the linguistic boundaries of the languages in the repertoire of these Malaysian bilinguals.
2. Code-switching is found to be an organisational resource for displaying competence as a bilingual and an adaptive resource for organising repair.
3. The relationship between familiarity and interactional adaptations is a complex one which appears to vary for each partnership.

The theoretical and clinical implications of these findings are dealt with in the next section.

8.2 IMPLICATIONS

Bilingual aphasia research has primarily been concerned with drawing inferences about the bilingual brain from observations of breakdown in the linguistic system. A

secondary aim of this line of inquiry targets the translation of knowledge about bilinguals with aphasia into intervention practices. The findings of this study will now be compared against the theoretical accounts of bilingual aphasia reviewed in Chapter 2 (Section 8.2.1), while Section 8.2.2 addresses the clinical implications of the findings in the light of CA studies of aphasia (detailed in Chapter 3).

8.2.1 Theoretical implications

Following the dynamic perspective proposed by Pitres (1895), implications drawn from recovery patterns concerning the dissociation between languages were taken to be reflective not of a damaged system, but one that is inhibited. On this basis, two key and complementary theoretical frameworks on representation and processing have been formulated. Paradis' (2004) neurolinguistic theory of bilingualism, and Green's (1986,1998) language control framework, reviewed in Chapter 2, both attempt to account for how multiple languages are represented and processed in the same brain. In this section, the main findings of this study will be discussed in the light of these theoretical frameworks. However, first, it is important to discuss the potential influence of language repertoire on the findings concerning turn construction resources, particularly topic-comment structure.

This study shows topic-comment structure to be an effective turn construction resource for adapting to aphasia as a Malaysian bilingual speaker. This is argued to be due to the enhanced environment for this structure provided by the Malay language. Spoken Malay being a topic-prominent language (Koh, 1990; Mashudi Kader, 2003), makes introducing a single word to represent a topic, and then following up with a comment related to that topic, an effective means of formulating a turn. The additional Malay linguistic feature of non-obligatory copula (*ialah*) (Asmah Omar, 1968; 1993) adds to the utility of topic-comment structure. As these data have shown, this resource is also present in the turns of the non-aphasic conversation partners, confirming it as a feature of Malay conversations.

Given this linguistic environment, it is not surprising that Malaysian bilingual PWAs also make use of topic comment structure as a means of taking a turn in a conversation when speaking in English, albeit a local indigenised variety. Wilkinson et al. (2003) and Beeke et al. (2003; 2007a) have documented a pattern of turn construction by English speaking monolingual PWAs involving topic-comment structure. In the subject-prominent English language, this is seen as an interactional adaptation. The authors argue that omitted grammatical items in such turns - often the obligatory copula - are not oriented to as problematic by the non-aphasic conversation partner because both partners are mutually adapting to aphasia. However, in the present study, the English language spoken by the Malaysian population is an indigenised variety where copula dropping is a common feature (Baskaran, 1987, 2005; Kirkpatrick, 2011). The non-aphasic conversation partners' orientation to this as unproblematic, and the occurrence of a similar pattern in their own turns, confirms this to be a common practice. Thus, conversations in the English language in the linguistically diverse Malaysian population may also provide an enhanced environment for deploying topic-comment structure.

The fact that the turn construction resources of topic-comment structure, co-construction and repetition cross the linguistic boundaries of languages in the repertoire of these Malaysian bilingual PWAs prompts a comparison with studies that report dissociations between languages in the repertoire of bilinguals. Green's (1986, 1998) language control model suggests that elements of one language must be at a lower threshold of activation to make it preferentially available compared to the other. It might then be expected that the bilingual PWAs in this study would show differences in the resources used for turn construction across languages. A convergence in the patterns of structural resources deployed in these data suggests an alignment instead with Paradis' neurolinguistic theory. According to Paradis (2004), when implicit linguistic competence is compromised as in aphasia, explicit metalinguistic knowledge, pragmatic abilities and motivation can be used to compensate. Conversations of these Malay-English bilinguals reveal structural

resources deployed across languages in pragmatically appropriate ways and this may indeed suggest a reliance on explicit metalinguistic knowledge. The motivation to employ compensatory strategies in this instance is not a psychological construct but an interactional one; the motivation to appear competent despite aphasia. It is displayed in the unfolding sequence by mutually adapting conversational partners.

This study's finding that code-switching is both an organisational resource for displaying competence as a bilingual, and an adaptive resource for organising repair, also has implications for our understanding of the control mechanisms proposed in Green's (1998) language control framework. Firstly, this model treats the languages of the bilinguals as separate entities; the coming together of two systems in instances such as code-switching is not taken into consideration, although it is later addressed in Green and Abutalebi's (2013) adaptive control hypothesis. The findings of the current study reveal that even when dealing with a linguistic impairment, PWAs are able to control the resources and select the relevant next lexical items in the unfolding turn or sequence. This suggests that the immersion of Malaysian bilinguals in "dense codeswitching contexts" (Green, 2013) may result in adaptive control processes that remain strong in Malaysian PWAs.

These PWAs are seen to use code-switching to organise turns in the same manner as those listed in Auer (1995). For instance, in these data code-switching is used to topicalise a referent before adding a comment about it. This displays the bilingual competence of a PWA in selecting the appropriate form to address the lexical gap or "mot juste" (Gafaranga, 2000) in the languages he or she can speak. The non-aphasic conversation partner's orientation to this practice and his or her own use of such patterns in turn construction reveals this to be demonstrably relevant. Additionally, code-switching noted in these data sets resemble the layered switching reported for the indigenised variety of Linghala-French discussed in Meeuwis and Blommaert (1998). Suppression or inhibition of the other language is not always needed, i.e. if code-switching is a routine practice as it is in the Malaysian population. As conversation data in the present study reveal, some

expressions are more commonly used in code-switched form (e.g. the word 'salary' in the Zin-Ain conversation data) or are routinely used in discussing certain topics (e.g. 'thiyaanam' in the Tana-Rani conversation data). By being linked to the context of interaction and topics, these lexical items may be activated first.

Often there is a tendency to treat all occurrence of code-switching in PWAs' speech as pathological switching by mere association with the aphasia. In the data set analysed here, code-switching is seen to occur in word search sequences to mark self-directed searching, much like Goodwin's (1987) documentation of gaze shift used to organise the participatory framework in such sequences. Another word search repair strategy that has been observed in this study is that of producing a code-switched item first and then replacing it with a translation equivalent. This is similar to Wilkinson et al.'s (2007) observation of the 'X, not X but Y' replacement strategy used by monolingual English speakers with aphasia in repair sequences. For the bilingual PWA, the code-switched items may be produced first because of preferential availability of items in that language. In other words, a lowered activation threshold may have resulted in a particular item becoming available and production of that item then activates the related item in the other language (i.e. language used for turn construction up to that point in the conversation). This explanation may show alignment with Green's (1986) idea that less resources are needed to activate items in one language than the other but most importantly, this is a display of control. Additionally, it is not oriented to as a trouble source by the conversation partner.

Bhat and Chengappa (2005) identify code-switching in their data as non-pathological on the basis of pauses and hesitations that precede its occurrence. The data in this study shows that in the home conversations of Malay speaking PWAs, there is an apparent lack of dispreference markers such as pauses before or after code-switching. One possible interpretation for this is that code-switching is a preferred (in the CA sense) resource for turn construction in these contexts. A specific code-switched lexical item may be more easily accessible because

preference in this sense means that they are used repeatedly in this manner. In contrast to this, pauses and hesitations were noticeable in the conversation of the PWA who used English as her home language. A parallel can be drawn with Bhat and Chengappa's (2005) explanation that mixing of words from English in Kannada conversations of their participants was treated as "acceptable" because of the higher status of English in the Indian bilingual communities. Likewise, for the English speaking bilingual PWA from Malaysia, the dispreference markers that signal the switch to the other language (Tamil, in this case) may be interpreted to be linked to the status of the two languages in the community. However, as Li Wei (2002) succinctly argues episode external elements such as status are brought about in the sequence. Therefore, it is only via sequential analysis of turns-at-talk that ecologically valid understanding about how and why code-switching is used by these PWAs can be arrived at.

Code-switching in repair sequences seen in these data is an adaptive resource and is not to be equated with pathological switching attributable to a lack of control as discussed in Fabbro et al. (2000) or a violation of grammatical constraints referred to in Hyltenstam (1995). Support for this interpretation is found in Munoz et al.'s (1999) argument that pathological switching cannot be identified by relying solely on the notion of appropriateness according to the language-specific roles assigned to conversation partners. This study's findings show that in conversations with less familiar partners, there appears to be a preference for quick resolution of troubles even when repair is organised by means of switching to the PWA's dominant language. In some instances, the conversation partners also implement repair of the code itself. Code-switching may thus appear not to be a preferred resource in these conversational contexts outside the home of the Malay speaking PWAs. The higher status of the English language in this bilingual society may be a contributing factor as well. It can then be postulated that these represent the dual language context referred to in Green and Abutalebi (2013). There is a greater demand on the control process here language specific roles appears to be clearly demarcated for both conversation partners in dual language contexts. A PWA's

strategic use of code-switching may thus appear inappropriate and can be interpreted as a display of lack of control. However, they are seen to organise repair via code-switching to be a self-directed strategy and this shows it to be a deliberate and strategic use of code-switching as an adaptive resource. The lack of familiarity between the partners in conversation outside the PWAs' home becomes an even more complex issue given that the divergence in the pattern of code-switching in the different contexts. This reinforces the importance of analysing the code-switching within the sequence of turns where they occur in order to assess the effectiveness of this adaptive resource.

The patterns of code-switching documented in this study suggest that there may be a continuum from code-switching in typical bilingual interactions to pathological switching described in studies such as Abutalebi et al. (2000) and those reviewed in Luk et al.(2012) where a PWA is aware of a code switch being divergent from the language of the current interaction. Some patterns documented in the present study appear to be closer to typical code-switching and others occupy the mid ground in Auer's (1999) continuum from Code-switching to Language Mixing to Fused lects. There is also switching that tends to be along what Baskaran (1994) identified as the lectal cline of the non-native variety of Malaysian English. Switching between the Malaysian English variety and the educated variety of Malay can also occur. This is similar to Meeuwis and Blommaert's (1998) description of layered switching between indigenised language varieties. So it appears that, as noted in Green and Abutalebi (2013), the dense code-switching context in which these bilingual PWAs interact allows for strategic adaptation to aphasia that is similar to behaviours observed by Bhat and Chengappa (2005) and Goral et al. (2006).

8.2.2 Clinical Implications

This investigation of the conversations of selected Malaysian bilingual PWAs has identified effective deployment of turn construction resources, and revealed insights into code switching behaviour and the implementation of repair. Having

explored questions concerning what, how and why particular resources recur in the conversations of these PWAs, the relevant next question is how to systematically apply this knowledge in a clinical environment. At present, clinical management of PWAs in Malaysia is often limited to the duration of their acute admission to hospital. After a PWA returns to his or her home, although follow-ups in Speech and Language Therapy units can be available, they are not well received for various reasons. Non-governmental organisations such as the National Stroke Association of Malaysia (NASAM) provide much needed support for individual PWAs and their family. Speech therapy services for acquired language disorders are only now being established (see Koran, 2013 for a comprehensive discussion of this issue). It is essential that in planning future directions for support services and developing intervention programmes, the realities that bilingual PWAs need to adapt to are accounted for. As such, the most significant contribution from this study will come from channeling the insights gained from these Malaysian bilingual PWAs into intervention practices and support services.

One approach to intervention where analysis of real-time naturally occurring conversation is adopted as the starting point is 'interaction-focused' or conversation therapy (Wilkinson 2010; Wilkinson & Wielaert, 2012). This approach aims to raise awareness of how conversations work, how they work for that particular PWA and his or her conversation partner, and to support the dyad to decide what behaviours they want to change by introducing new strategies. Video feedback is seen as key to raising a dyad's awareness; throughout the therapy they watch and comment on short excerpts from their conversations, facilitated by the speech and language therapist. SPPARC (Supporting Partners of People with Aphasia in Relationships and Conversation, Lock, et al., 2001) and Better Conversations with Aphasia (Beeke, Sirman, Beckley, Maxim, Edwards, Swinburn and Best, 2013) are two prime examples of this approach. Both are underpinned by findings from CA studies of monolingual English speaking PWAs, and whilst the basic principles of raising awareness in PWAs and their CPs using video feedback are applicable to the Malaysian population, the findings of this study suggest

certain adaptations in terms of the conversational behaviours that might form the focus of therapy.

The fact that the same turn construction resource is found to recur in conversations both in and outside the PWAs' homes entails that intervention needs to take into account the utility of the resources across linguistic boundaries and also to look at how different conversation partners may affect the outcome. For example, Zin's use of topic-comment resources is seen to be effective in his conversation with his sister at home and to a certain extent in his conversation with his friend, Tony. Close scrutiny of Zin's conversation outside the home shows that the opportunity for Zin to complete such a turn can be compromised by his word finding difficulties. By reviewing Zin's video recorded conversation with his conversation partners, awareness about strategies that support his participation in conversation can be developed. Providing sufficient turn space for Zin to complete his turns may become a mutually shared intervention goal with his conversation partners and signaling turn holding more efficiently will become a target for Zin. In this manner, the use of topic-comment structure across Zin's languages can be encouraged.

Findings concerning resources used for displays of PWA knowledge highlight additional ways in which interaction-focused intervention can tap into otherwise hidden aspects of aphasic difficulties. A PWA's display of knowledge accomplished via collaborative completion and repetition appears to produce a desired outcome when it enables him or her to claim ownership of that knowledge. This is in contrast to the display of knowledge that is scaffolded by conversation partners in known-answer questions. Evidently, known-answer questions are used by conversation partners to encourage a PWA's participation; when the PWA displays difficulties in constructing a second pair part in such sequences, the conversation partner is able to assist. The specificity of the relevant next item set up by the conversation partner may provide them with an advantage for cueing the PWA when trouble arises. However, the patterns observed in this study reveal a dispreference for displays of knowledge accomplished by means of such tight scaffolding. In terms of

intervention, video recording might lead to a mutual goal being established for both partners to work on reducing dependency on known-answer questions.

Beeke et al. (2013) report a similar use of known-answer question by the conversation partner of an English speaking PWA. They explain that although the PWA did not display dispreference overtly, in a subsequent interview he expressed negative emotions towards such occurrences. Based on this evidence, Beeke and colleagues assert the advantages of conversation-based interventions that can identify and resolve problems that arise by explicitly discussing them with the speakers. Regardless of the languages spoken by PWAs, there is obviously something very powerful about the pull for conversation partners of PWAs to take on a pedagogic role, even when this is unwelcome and/or makes talking almost impossible for a PWA. The data in this study show the use of known-answer questions to be a recurrent pattern in the Mus-Zi conversation partnership. It is possible that a conversation partner may not be aware that known-answer questions create additional pressure for a PWA to produce the targeted answer. By drawing Zi's attention to Mus' downgraded participation in these sequences, she could be made aware of how these reduce opportunities for him. Evidence of Mus' more enthusiastic participation in his conversation with Alan, his less familiar partner, can be used to encourage the partnership to adopt strategies that prove to be effective in conversation outside the home, where lack of shared knowledge makes using known-answer question a less viable option.

In conversations outside the home where displays of knowledge are necessitated because of a lack of shared information between a PWA and a less familiar conversation partner, there is a reduced opportunity for asking known-answer questions. Here, the analysis not only reveals the utility of resources that PWAs deploy for displaying their knowledge, but it also showcases the effectiveness of these resources. It would be therapeutically useful to discuss examples of successful deployment of such resources with a regular conversation partner, to raise his or her awareness of the range of capabilities of their family member with

aphasia. This in turn may lead the familiar conversation partner to adopt some of the interactional behaviours of the less familiar partner, instead of relying on known-answer questions.

Additionally, the unique opportunity for displays of knowledge in conversations outside the home emphasises the clinical importance of maintaining these avenues of interaction as a way of ensuring a bilingual PWA has opportunities for using their other language. This would be particularly relevant for conversation partnerships like Tana-Rani, where Tana's interactions are mostly restricted to the home environment. Evidently, some of her topic-comment turns are disrupted before reaching completion and also her opportunity to participate is tightly scaffolded by known-answer questions because her sister is able to exploit their shared background for both purposes. Either planning an interaction-focused intervention for both Tana and Rani or encouraging Tana's participation in interactions at the support centre should be explored further.

The findings discussed thus far deal with supporting the bilingual PWA by treating their languages as separate entities. Evidence of code-switching used as resource for organising their turns reveal that accomplishing a display of bilingual competence is an important interactional motivation for these PWAs. Their ability to use the two distinct linguistic resources in their repertoire suggests that although their aphasic difficulties can affect interaction, it may not affect their ability to control language selection. Based on a study that combined a CA methodology and executive function measures of bilinguals from the linguistically diverse African society, Penn et al. (2010) advocate a bilingual approach to intervention for PWAs with better cognitive control. Kong et al.'s (2014) finding concerning convergence in lesions that affect language control and executive functions appears to support Penn et al.'s therapeutic suggestion. However, it also implies caution is needed when implementing bilingual interventions to exploit resources such as code-switching in cases where executive function appears to be compromised. Interactional motivation to accomplish a display of bilingual competence noted in

the conversations of PWAs in this study confirms that, for some, a bilingual approach to intervention is the way forward.

The advantages of adopting an interaction approach to intervention have already been established but to date, there is no reported study on the use of a bilingual approach in interaction-focused intervention. It is suggested that a bilingual interaction focused intervention would adopt the same principles as programmes such as SPPARC (Lock, et al., 2001) and Better Conversations with Aphasia (Beeke et al. 2013). A review of recorded naturally-occurring interaction would serve as the initial step in identifying mutually shared intervention goals for a PWA and his or her conversation partner. Specific bilingual behaviours like code-switching might be expected to appear in the conversation data and the utility of these could be evaluated using the CA methodology which ensures the ecological validity of the assessment. This study and Chengappa and Bhat (2005) suggest that positive code switching strategies may be developed intuitively by PWAs in order to cope with interactional demands in linguistically diverse societies, and it would be important to look for evidence of this. For others it may be possible to incorporate Ansaldo et al.'s (2010) SBBT intervention programme to train the use of code-switching as a strategy for dealing with word finding difficulties. A decision about effective use of interactional resources can be made during the SLT session in a consultative manner taking into account the perspectives of both the PWA and his or her conversation partners. Mutually agreed intervention goals can be adopted to exploit the availability of these additional resources.

One example of developing intervention goals in this manner can be drawn from Zin's use of code-switching for organising repair in his conversation with Tony. It was observed that when Zin produced a code-switched metalinguistic expression to organise self-repair, since the repair sequences tended to be long, his less familiar conversation partner opted for a quick resolution of trouble. The

conversation partner's repair strategy in these cases involve repairing the code of the interaction as well. This had a negative outcome for Zin as his bilingual identity become obscured. As dispreference for this is evident from the recording, this issue could be taken up in an intervention session so that Zin and his regular conversation partner could identify strategies for Zin to use code-switching more effectively in his conversations outside the home. Tony's tendency to repair the code of interaction in response to Zin's code-switched repairs highlights the possible pitfalls of the SBTT intervention programme (Ansaldo et al. 2010). While bilingual PWAs can be trained to use code-switching strategically for dealing with word finding difficulties, their conversation partners, especially the less familiar ones, must orient to it as such for it to be effective. Interaction-based intervention can provide the interface to ensure that the goals of SBTT are achieved by making conversation partners aware of this strategic adaptation.

Another alternative that becomes evident here is the incorporation of strategies into volunteer training programmes at day care centres such as the one where Zin and Tony meet on a regular basis. Collaborations between mutually adapting conversation partners and the professionals involved in clinical interventions will have far reaching consequences for PWAs who need to integrate back into their bilingual communities via the social networks that evolve from the centres that provide support for them.

8.3 STUDY LIMITATIONS AND CHALLENGES

The emergent patterns of turn construction resources in the conversations of the three bilingual PWAs studied here offer useful insights into the way bilinguals in this population adapt to aphasia. However, the small number of participants and the core of only five sets of conversation data may be seen as a limitation. But therein lies the strength of the methodology. The in-depth analysis made possible by focusing on this data set is argued to be particularly suited for an exploratory

study where the phenomenon being investigated has yet to be addressed in that particular population.

As research into language disorders in Malaysia is a new discipline, the lack of standardised test materials is a limitation and a challenge at the same time. The adaptation of locally available materials for the story telling task comes with an inherent language bias. The story is essentially embedded in the culture of the society. Participants may have had considerable exposure to it in Malay as it is a folktale commonly told in the Malay household, or during Malay language lessons in schools. Thus participants may have found it easier to retell the story in Malay, as compared to in English. Additionally, although the mBNT features culture-specific items, there may be some items that the participants are only able to name in their home language. The English equivalent may not feature regularly in their daily interactions. Given these challenges, the findings from these tests were used to gauge the participants' language profile, not to accurately measure the severity of their aphasia.

Participant reports of language use were not always borne out in the conversation data – their home conversations were not entirely in the particular language(s) that they reported using in the interview. Data collection revealed the home language was often a mix of the different languages used in that environment. The cultural practice of having visitors drop in unannounced was another challenge that had to be dealt with. In some cases, these unplanned additions to the data turned out to be as revealing as the conversation of the targeted partnership. Conversations outside the home were initially targeted for investigation of a PWA's use of a language other than that used at home, but brought into focus the issue of familiarity between conversation partners. This permitted familiarity to be explored as and when it appeared relevant to individual sequences in the interactions, but data collection was not designed to permit a systematic comparison of turn construction resources across levels of familiarity. Recruiting bilingual PWAs as participants was a significant challenge in this study. Despite the researcher's

experience as a communication support volunteer with the UK Stroke Association, developing trusting relationship with the attendees at the NASAM day care centres proved to be a difficult task. Out of the six participants who were successfully recruited with assistance from the administrators at their respective day care centres, only data from three of them have been analysed here. The other three data set could not be used for various reasons. In one partnership, the wife of the PWA opted to withdraw participation due to personal problems in their home. A dysarthria in one PWA affected the intelligibility of the recorded conversation. For another partnership, initial attempt at analysing the data revealed that because the conversation partner was not engaging in the interaction with the PWA, the data did not appear authentic. As service provision for and research into acquired disorders in the Malaysian linguistically diverse population is only in its infancy at present, challenges such as these are expected to prevail but research efforts must continue.

8.4 FUTURE DIRECTIONS

The discussion of limitations and challenges in the preceding section enables charting of future plans for research in this area. A potential first step in that direction would be to further develop the methodology trialled in this study. Firstly, a systematic protocol for documenting background information about participants would need to be established. Materials used for language sampling would need to be tested with a wider population to fine-tune the different aspects and to improve their reliability. This in itself should be a priority in the research agenda for the Malaysian population with aphasia. Secondly, the system for translation and validation of the translated parts of the conversational data, developed in an ad hoc manner to suit the needs arising from the data sets of the present study, needs formalising. The involvement of an expert informant improved the reliability of the translation but the system of verification and translation should be formalised further to ensure subtle features of linguistic impairment are not lost in translation.

Once these methodological issues have been dealt with, the next steps in the research agenda can begin. A key future task will be corpus building in an effort to document the conversational language of Malaysian bilinguals with and without aphasia. This will make a significant contribution to both the practical aspects of coping with aphasia, and to theory-building based on recurrent patterns observed across different dyads. For example, more data on the use of topic-comment structure in second position turns will lead to a more conclusive finding about the utility of this resource to PWAs for answering questions. Natural conversations between the conversation partners of PWA and other non-aphasic speakers would be important to record to provide evidence about the specificity of conversation partners' adaptations to a PWA. Since cross-linguistic similarities in adaptation have been observed, the establishment of a large Malaysian aphasic conversation corpus would make possible interdisciplinary collaborative research on aphasic conversation, and the development of a conversation partner training programme for the Malaysian population, taking the lead from existing programmes such as SPPARC (Lock, et al. 2001) and Better Conversations with Aphasia (Beeke, et al. 2013). Conversation support volunteer training at Day Care Centres such as those run by NASAM could then consider adopting this approach. These endeavours, although specifically designed to cater for the Malaysian population, may find applications in bilingual communities elsewhere. Thus as mentioned in Koran (2013), with regards to research on aphasia in Malaysia:

“... current focus of research appears to be geared towards meeting the needs of the local population but these initial explorations can be extended to include collaborations that transcend not only disciplinary but also national boundaries. With globalisation placing a greater premium on bilingualism, the quest for improved understanding through bilingual aphasia studies in populations where bilingualism is the norm should become a key part of the international research agenda.”

(Koran, 2013, p.7)

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Appendix 1(a)

INFORMATION SHEET FOR PARTICIPANTS IN RESEARCH STUDIES



A

You will be given a copy of this Information Sheet.

Title of Project: Conversations of adults with aphasia in a linguistically diverse population

This study has been approved by the UCL Research Ethics Committee [Project ID Number]:

Name, Address and Contact Details of Investigators: **Ms. Leela Koran, telephone: +4402084465419**

We would like to invite you to participate in this research project. You should take part only if you want to do so. If you choose not to participate, there will not be any disadvantages to you.

Please read the following information very carefully. You can discuss with your family, relatives, friends, administrators at your Day Care Centre or even your doctors before you make your decision. Please ask us if you have any questions. We can provide any additional information that you may need.

Thank you for taking time to read this information sheet.

What is the aim of this study?

This study will look at people who have aphasia (language difficulties following stroke) and their conversation partners in their daily conversations. The main focus will be on adjustments you and your conversation partner/s make in conversations.

This research will help us understand how people with aphasia and their families overcome communication problems.

What we find from this study will be used to improve support programmes and awareness campaigns organised for the Malaysian society.

This project will NOT provide speech therapy for you. However, by participating in this study, you can help to improve the existing support services for people with aphasia.

Why have I been chosen?

We feel that you are suitable to participate in this research because we have observed your activities at the Day Care Centre. The administrators at your Day Care Centre have also helped us to make this decision.

Do I have to participate in this study?

Only you can make the decision to participate or not.

If you decide to participate, we will give you this information sheet to keep. We will also ask you to sign a consent form.

If you agree to participate, you can still withdraw from this project at any point. You will not be asked to give reasons for withdrawing.

Your decision will not affect services that are available for you now.

Your involvement in this project will not interfere with any language intervention that you are undergoing now or in the future.

What will happen to me if I take part?

If you take part in this study, we will videotape your conversations with the closest member/s of your family.

Firstly, you will inform the administrator at your Day Care Centre about your decision to participate. The administrator informs us about your decision. Then, we make arrangements to visit you at home. During the first visit, the researcher (Ms Leela Koran) will answer any questions that you may have about this project.

If you agree to continue with this research, you will sign the consent form. If you agree, the researcher will observe your interactions at home. We will also talk to you and your family member/s and ask a few questions.

The first visit will take less than an hour. You then choose a suitable date and time for the next visit. In the second visit, your conversations with your family member/s will be videotaped. If you feel disturbed by anything during the visits, you should let the researcher know about it. We will discuss the matter together and find a solution.

You have the right to withdraw from this project at any time

What benefits will I gain from participating in this study?

You can ask to watch the recordings that have been made. This will give you and your family a chance to look at and think about how you communicate in your home environment.

With your permission, the video and/or other information gathered from the visits can also be given to the administrators at your Day Care Centre to help plan further steps in support services at the Centre.

This project will NOT provide you with speech therapy.

It will help to improve existing intervention programmes in Malaysia.

What difficulties will I face from taking part in this project?

You and your family will not face any difficulties. Your participation will not affect any intervention or

support services that are available to you at present.

Will information about me kept confidential?

Yes. All written information gathered from this study will be kept safely. You and your family will always be protected.

Short clips from the video recording and transcriptions from the recordings will be used in teaching and also in presentations in academic contexts only. Audio and video recordings will be kept in a locked room and in a password protected computer. These will only be used by responsible individuals from the Department of Human Communication Science at the University College London for further research and teaching.

Your name will not be appear in the video material or any publications. If you agree to participate, your family and the administrator/s at your Day Care Centre will be informed.

If you decide to withdraw, all the written records and video materials will be destroyed.

What will be done with the findings of this study?

This study will end on 24 September 2011. Findings from this study may be published in academic journals. We will inform you in writing at the beginning of 2012 about the developments of this project.

Reminder: **Your name and personal information will not be used in any publications nor on the video. A pseudonym (false name) will be used to refer to data pertaining to you and your conversation partner.**

Who is organising this study?

This project comes under the Department of Human Communication Science at University College London.

Who has reviewed this study?

The Ethics Committee at the University College London reviews all studies involving humans as subjects before they are carried out. This proposal has been reviewed by the UCL Ethics Committee.

Who should I get in touch with if I have any questions or problems?

You may contact Leela Koran at 044 020 8446 5419 (London) or 06 2634482 (Malaysia).

Or Dr. Ray Wilkinson at 044 020 7679 4234 (London).

Thank you for participating in this study.

ALL DATA COLLECTED WILL BE KEPT ACCORDING TO DATA PROTECTION ACT 1998.

IMPORTANT STEPS IN THIS RESEARCH

Home Visit 1



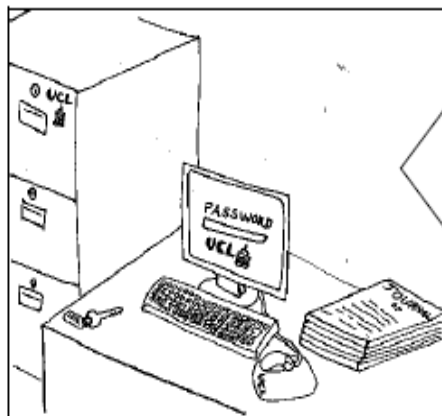
- Discuss the research & the consent form
- Choose date for next visit

Home Visit 2



- Videotape conversation

Data Protection Measures



- Recorded materials will be kept in Password protected computers and locked cabinets at University College London

INFORMATION SHEET FOR PARTICIPANTS IN RESEARCH STUDIES



B

You will be given a copy of this Information Sheet.

Title of Project: Conversations of adults with aphasia in a linguistically diverse population

This study has been approved by the UCL Research
Ethics Committee [Project ID Number]:

Name, Address and Contact Details of Investigators: **Ms. Leela Koran, telephone: +4402084465419**

We would like to invite you to participate in this research project.
You should take part only if you want to do so.
If you choose not to participate, there will not be any disadvantages to you.

Please read the following information very carefully. You can discuss with your family, relatives, friends, administrators at your conversation partner's Day Care Centre or even his or her doctors before you make your decision.

Please ask us if you have any questions. We can provide any additional information that you may need.

Thank you for taking time to read this information sheet.

What is the aim of this study?

This study will look at people who have aphasia (language difficulties following stroke) and their conversation partners in their daily conversations. The main focus will be on adjustments you and your conversation partner make in conversations.

This research will help us understand how people with aphasia and their families overcome communication problems.

What we find from this study will be used to improve support programmes and awareness campaigns organised for the Malaysian society.

This project will NOT provide speech therapy.

However, by participating in this study you can help to improve the existing support services for people with aphasia.

Why have I been chosen?

We feel that you and your conversation partner are suitable to participate in this research because we

have observed his/her activities at the Day Care Centre. The administrators at the Day Care Centre have also helped us to make this decision.

Do I have to participate in this study?

Only you and your conversation partner can make the decision to participate or not.

If you decide to participate, we will give you this information sheet to keep. We will also ask you to sign a consent form.

If you agree to participate, you can still withdraw from this project at any point. You will not be asked to give reasons for withdrawing.

Your decision will not affect services that are available for you and your family now.

Your involvement in this project will not interfere with any language intervention that your conversation partner is undergoing now or in the future.

What will happen to me if I take part? (Please refer to the diagram in the next page).

If you take part in this study, we will videotape your conversations with your conversation partner who has aphasia.

Firstly, you will inform the administrator at the Day Care Centre about your decision to participate. The administrator informs us about your decision. Then, we make arrangements to visit you at home. During the first visit, the researcher (Ms Leela Koran) will answer any questions that you may have about this project.

If you agree to continue with this research, you will sign the consent form. If you agree, the researcher will observe your conversation partner's interactions at home. We will also talk to you and your family member/s and ask a few questions.

The first visit will take less than an hour. You then choose a suitable date and time for the next visit. In the second visit, your conversation partner's conversations with you will be videotaped. If you or your conversation partner feel disturbed by anything during the visits, you should let the researcher know about it. We will discuss the matter together and find a solution.

You have the right to withdraw from this project at any time

What benefits will I gain from participating in this study?

You can ask to watch the recordings that have been made. This will give you and your family a chance to look at and think about how you communicate with your conversation partner who has aphasia in your home environment.

With your permission, the video and/or other information gathered from the visits can also be given to the administrators at the Day Care Centre to help plan further steps in support services at the Centre.

This project will NOT provide speech therapy.

It will help to improve existing intervention programmes in Malaysia.

What difficulties will I face from taking part in this project?

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Will information about me kept confidential?

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Short clips from the video recording and transcriptions from the recordings will be used in teaching and also in presentations in academic contexts only. Audio and video recordings will be kept in a locked room and in a password protected computer. These will only be used by responsible individuals from the Department of Human Communication Science at the University College London for further research and teaching.

Your name will not be appear in the video material or any publications. If you agree to participate, your family and the administrator/s at your Day Care Centre will be informed.

If you decide to withdraw, all the written records and video materials will be destroyed.

What will be done with the findings of this study?

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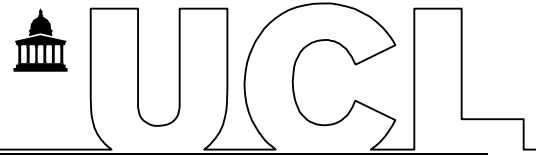
Or Dr. Ray Wilkinson at 044 020 7679 4234 (London).

Thank you for participating in this study.

ALL DATA COLLECTED WILL BE KEPT ACCORDING TO DATA PROTECTION ACT 1998.

Appendix 1(b)

LEMBARAN MAKLUMAT UNTUK PESERTA KAJIAN



A

Anda akan diberi satu salinan Lembaran Maklumat ini.

Tajuk Projek Perbualan Individu yang mengalami Afasia di dalam satu komuniti berbilang bahasa.
(*Conversations of adults with aphasia in a linguistically diverse population*)

Kajian ini telah mendapat persetujuan jawatankuasa
Etika Penyelidikan UCL (Nombor Rujukan Projek) **1293/001**

Nama dan Maklumat untuk menghubungi Puan Leela Koran, No. Telefon: +4402084465419
Penyelidik:

Kami ingin menjemput tuan/puan untuk menyertai projek penyelidikan ini.
Anda boleh mengambil bahagian hanya jika anda mahu berbuat demikian.
Jika anda memilih untuk tidak mengambil bahagian, keputusan ini tidak akan merugikan anda.

Sila baca maklumat berikut dengan teliti. Anda boleh berbincang dengan keluarga, saudara-mara, rakan-rakan, pentadbir di Pusat Harian atau doktor anda mengenai perkara ini.
Sila ajukan sebarang pertanyaan kepada kami. Kami bersedia memberikan sebarang maklumat tambahan jika diperlukan.

Terima kasih kerana sudi meluangkan masa.

Apakah tujuan penyelidikan ini?

Penyelidikan ini akan mengkaji perbualan harian individu yang mengalami afasia (masalah bahasa berikutan dengan strok) dan pasangan perbualannya. Tumpuan utama adalah pada penyesuaian yang dilakukan oleh kedua-dua pihak yang terlibat dalam perbualan tersebut.

Kajian ini akan membantu kita memahami bagaimana individu-individu yang mengalami afasia dan keluarga mereka mengatasi masalah berkomunikasi.
Maklumat dari kajian ini akan digunakan untuk menambahbaik program-program sokongan dan kempen kesedaran masyarakat yang dianjurkan untuk masyarakat di Malaysia.

Projek ini TIDAK akan menyediakan pemulihan bahasa untuk anda.
Walaupun, jika anda mengambil bahagian, anda akan menyumbang kepada usaha memperbaiki perkhidmatan sokongan yang sedia ada.

Mengapa saya dipilih?

Kami merasakan anda sesuai untuk menyertai kajian ini kerana kami telah memerhatikan aktiviti anda di Pusat Harian anda. Pentadbir di Pusat Harian anda juga telah membantu kami membuat pilihan ini

Haruskah saya mengambil bahagian?

Anda sahaja yang dapat menentukan samada mahu atau tidak menyertai kajian ini.

Jika anda membuat keputusan untuk mengambil bahagian, kami akan memberi borang maklumat ini untuk disimpan. Kami juga akan meminta anda menandatangani borang persetujuan (*consent*).

Jika anda bersetuju untuk mengambil bahagian, anda masih berhak menarik diri pada mana-mana waktu. Anda tidak akan diminta memberi sebab mengapa menarik diri.

Keputusan anda langsung tidak akan menjejaskan perkhidmatan yang anda sedang terima sekarang. Penglibatan anda dalam kajian ini juga tidak akan mengganggu sebarang pemulihan yang sedang anda jalani atau akan jalani kelak.

Apakah akan berlaku jika saya mengambil bahagian?

Jika anda mengambil bahagian dalam kajian ini, kami akan melakukan rakaman video perbualan anda dengan keluarga yang terdekat bagi anda.

Pertamanya, anda akan memberitahu pentadbir di Pusat Harian anda mengenai keputusan anda untuk mengambil bahagian. Pentadbir Pusat Harian akan menghubungi kami. Kemudian, kami akan membuat persediaan untuk melawat anda di rumah. Semasa lawatan pertama, penyelidik (Puan Leela Koran) akan menjawab sebarang pertanyaan yang anda kemukakan mengenai projek ini.

Jika anda setuju untuk terus terlibat dalam penyelidikan ini, anda akan menandatangani borang persetujuan. Anda berhak menarik diri dari penyelidikan pada sebarang waktu. Jika anda bersetuju, penyelidik akan memerhatikan pergaulan anda dirumah. Kami juga akan berbual dengan anda dan ahli keluarga anda serta mengajukan beberapa soalan. Lawatan pertama akan mengambil masa kurang dari satu jam.

Di akhir lawatan pertama, kami akan memasang alat rakaman video di rumah anda. Kami akan menunjukkan salah seorang ahli keluarga anda cara menggunakan alat ini. Anda akan memilih hari dan waktu yang sesuai untuk berbual dengan seseorang yang anda pilih. Perbualan ini akan dirakam.

Seterusnya anda akan memberitahu kami bila kami boleh melawat anda dirumah sekali lagi. Dalam lawatan kedua, kami akan mengambil rakaman tersebut dan berbincang sedikit dengan anda dan keluarga.

Jika anda rasa terganggu mengenai apa-apa hal semasa lawatan-lawatan ini, anda harus memberitahu penyelidik. Kita boleh berbincang bersama mengenai perkara tersebut dan mencari penyelesaian.

Anda berhak menarik diri dari projek ini pada bila-bila masa.

Apakah faedah yang mungkin saya perolehi dari penglibatan dalam projek ini?

Anda boleh meminta untuk menonton rakaman yang telah dibuat. Ini akan memberi anda dan keluarga peluang untuk melihat dan memikirkan bagaimana anda berkomunikasi di dalam rumah anda. Dengan persetujuan anda, pita video dan/atau maklumat lain yang diperolehi boleh disampaikan kepada

pentadbir di Pusat Harian anda untuk membantu merancang langkah selanjutnya dalam perkhidmatan sokongan yang disediakan.

Projek ini tidak akan menyediakan pemulihan bahasa untuk anda. Ia akan menyumbang kepada penambahbaikan program-program yang sedia ada di Malaysia.

Apakah masalah yang mungkin saya hadapi dari penglibatan dalam projek ini?

Anda dan keluarga anda tidak akan menghadapi sebarang masalah. Penglibatan anda tidak akan menjejaskan sebarang pemulihan dan perkhidmatan sokongan yang sedang anda terima.

Adakah maklumat mengenai saya dan penglibatan saya dalam projek ini akan dilindungi?

Ya. Segala maklumat bertulis yang dikumpul dalam kajian ini akan disimpan dengan cara yang selamat. Anda dan keluarga akan sentiasa dilindungi.

Sedutan pendek dari rakaman video dan transkripsi (rekod bertulis) dari rakaman ini akan digunakan dalam pengajaran dan juga untuk pembentangan dalam konteks akademik sahaja. Rakaman audio dan video akan disimpan di pejabat berkunci. Kesemua ini hanya akan digunakan oleh mereka yang bertanggungjawab dari Human Communication Science Department, University College London untuk kajian lanjut dan pengajaran.

Nama anda tidak akan digunakan dalam sebarang penerbitan. Jika anda bersetuju untuk mengambil bahagian, keluarga anda dan pentadbir di Pusat Harian anda akan diberitahu.

Jika anda membuat keputusan untuk menarik diri, segala rekod dalam bentuk bertulis dan rakaman akan dilupuskan.

Apa akan dilakukan dengan hasil kajian?

Kajian ini akan tamat pada 24 September 2011. Dapatan dari kajian ini mungkin akan diterbitkan dalam jurnal akademik. Kami akan memberitahu secara bertulis pada awal tahun 2012 mengenai sebarang perkembangan dalam projek ini.

Peringatan : Nama anda dan maklumat peribadi anda tidak akan digunakan dalam sebarang penerbitan. Nama palsu akan digunakan untuk merujuk kepada data berhubung dengan anda dan rakan perbualan anda.

Siapa yang mengendalikan/ menguruskan kajian ini?

Projek penyelidikan ini adalah dibawah kelolaan Human Communication Science Department, University College London.

Siapa telah menilai kajian ini?

Kesemua kajian yang melibatkan manusia sebagai subjek dinilai oleh Jawatankuasa Etika di University College London sebelum dijalankan. Kajian ini telah dinilai oleh Jawatankuasa Etika Penyelidikan UCL.

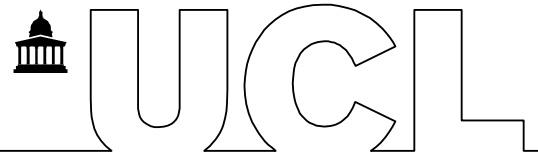
Siapakah harus dihubungi jika ada sebarang pertanyaan atau masalah?

Anda boleh menghubungi Leela Koran di 044 020 8446 5419 (London) atau 06 2634482 (Malaysia). Atau Dr. Ray Wilkinson di 044 020 7679 4234.

Terima kasih kerana mengambil bahagian dalam kajian ini.

KESEMUA DATA YANG DIKUMPUL AKAN DISIMPAN MENGIKUT AKTA PERLINDUNGAN DATA 1998.

LEMBARAN MAKLUMAT UNTUK PESERTA KAJIAN



B

Anda akan diberi satu salinan Lembaran Maklumat ini.

Tajuk Projek Perbualan Individu yang mengalami Afasia di dalam satu komuniti berbilang bahasa.
(*Conversations of adults with aphasia in a linguistically diverse population*)

Kajian ini telah mendapat persetujuan jawatankuasa
Etika Penyelidikan UCL (Nombor Rujukan Projek) **1293/001**

Nama dan Maklumat untuk menghubungi Puan Leela Koran, No. Telefon: +4402084465419
Penyelidik:

Kami ingin menjemput tuan/puan untuk menyertai projek penyelidikan ini.
Anda boleh mengambil bahagian hanya jika anda mahu berbuat demikian.
Jika anda memilih untuk tidak mengambil bahagian, keputusan ini tidak akan merugikan anda.

Sila baca maklumat berikut dengan teliti. Anda boleh berbincang dengan keluarga, saudara-mara, rakan-rakan, pentadbir di Pusat Harian pasangan perbualan anda atau doctor beliau mengenai perkara ini. Sila ajukan sebarang pertanyaan kepada kami. Kami bersedia memberikan sebarang maklumat tambahan jika diperlukan.

Terima kasih kerana sudi meluangkan masa.

Apakah tujuan penyelidikan ini?

Penyelidikan ini akan mengkaji perbualan harian individu yang mengalami afasia (masalah bahasa berikutan dengan strok) dan pasangan perbualannya. Tumpuan utama adalah pada penyesuaian yang dilakukan oleh kedua-dua pihak yang terlibat dalam perbualan tersebut.

Kajian ini akan membantu kita memahami bagaimana individu-individu yang mengalami afasia dan keluarga mereka mengatasi masalah berkomunikasi.
Maklumat dari kajian ini akan digunakan untuk menambahbaik program-program sokongan dan kempen kesedaran masyarakat yang dianjurkan untuk masyarakat di Malaysia.

Projek ini TIDAK akan menyediakan pemulihan bahasa.
Walaupun, jika anda mengambil bahagian, anda akan menyumbang kepada usaha memperbaiki perkhidmatan sokongan yang sedia ada.

Mengapa saya dipilih?

Kami merasakan anda dan pasangan perbualan anda sesuai untuk menyertai kajian ini kerana kami telah memerhatikan aktiviti di Pusat Harian. Pentadbir di Pusat Harian anda juga telah membantu kami.

Haruskah saya mengambil bahagian?

Anda dan pasangan perbualan anda sahaja yang dapat menentukan samada mahu atau tidak menyertai kajian ini.

Jika anda membuat keputusan untuk mengambil bahagian, kami akan memberi borang maklumat ini untuk disimpan. Kami juga akan meminta anda menandatangani borang persetujuan (*consent*).

Jika anda bersetuju untuk mengambil bahagian, anda masih berhak menarik diri pada mana-mana waktu. Anda tidak akan diminta memberi sebab mengapa menarik diri.

Keputusan anda langsung tidak akan menjejaskan perkhidmatan yang anda dan keluarga sedang terima sekarang. Penglibatan anda dalam kajian ini juga tidak akan mengganggu sebarang pemulihan yang sedang jalani oleh pasangan perbualan anda atau yang akan jalani kelak.

Apakah akan berlaku jika saya mengambil bahagian?

Jika anda mengambil bahagian dalam kajian ini, kami akan melakukan rakaman video perbualan anda dengan pasangan perbualan anda yang mengalami afasia.

Pertamanya, anda akan memberitahu pentadbir di Pusat Harian mengenai keputusan anda untuk mengambil bahagian. Pentadbir Pusat Harian akan menghubungi kami. Kemudian, kami akan membuat persediaan untuk melawat anda di rumah. Semasa lawatan pertama, penyelidik (Puan Leela Koran) akan menjawab sebarang pertanyaan yang anda kemukakan mengenai projek ini.

Jika anda setuju untuk terus terlibat dalam penyelidikan ini, anda akan menandatangani borang persetujuan. Anda berhak menarik diri dari penyelidikan pada sebarang waktu. Jika anda bersetuju, penyelidik akan memerhatikan pergaulan anda dirumah. Kami juga akan berbual dengan anda dan ahli keluarga anda serta mengajukan beberapa soalan. Lawatan pertama akan mengambil masa kurang dari satu jam.

Di akhir lawatan pertama, kami akan memasang alat rakaman video di rumah anda. Kami akan menunjukkan salah seorang ahli keluarga anda cara menggunakan alat ini. Pasangan perbualan anda akan memilih hari dan waktu yang sesuai untuk berbual dengan anda. Perbualan ini akan dirakam.

Seterusnya anda akan memberitahu kami bila kami boleh melawat anda dirumah sekali lagi. Dalam lawatan kedua, kami akan mengambil rakaman tersebut dan berbincang sedikit dengan anda dan keluarga.

Jika anda atau pasangan perbualan anda rasa terganggu mengenai apa-apa hal semasa lawatan-lawatan ini, anda harus memberitahu penyelidik. Kita boleh berbincang bersama mengenai perkara tersebut dan mencari penyelesaian.

Anda berhak menarik diri dari projek ini pada bila-bila masa.

Apakah faedah yang mungkin saya perolehi dari penglibatan dalam projek ini?

Anda boleh meminta untuk menonton rakaman yang telah dibuat. Ini akan memberi anda dan keluarga peluang untuk melihat dan memikirkan bagaimana anda berkomunikasi dengan pasangan perbualan anda yang mengalami afasia, di dalam rumah anda.

Dengan persetujuan anda, pita video dan/atau maklumat lain yang diperolehi boleh disampaikan kepada pentadbir di Pusat Harian anda untuk membantu merancang langkah selanjutnya dalam perkhidmatan sokongan yang disediakan.

Projek ini tidak akan menyediakan pemulihan bahasa.
Ia akan menyumbang kepada penambahbaikan program-program yang sediaada di Malaysia.

Apakah masalah yang mungkin saya hadapi dari penglibatan dalam projek ini?

Anda dan keluarga anda tidak akan menghadapi sebarang masalah. Penglibatan anda tidak akan menjejaskan sebarang pemulihan dan perkhidmatan sokongan yang sedang anda terima.

Adakah maklumat mengenai saya dan penglibatan saya dalam projek ini akan dilindungi?

Ya. Segala maklumat bertulis yang dikumpul dalam kajian ini akan disimpan dengan cara yang selamat. Anda dan keluarga akan sentiasa dilindungi.
Sedutan pendek dari rakaman video dan transkripsi (rekod bertulis) dari rakaman ini akan digunakan dalam pengajaran dan juga untuk pembentangan dalam konteks akademik sahaja. Rakaman audio dan video akan disimpan di pejabat berkunci. Kesemua ini hanya akan digunakan oleh mereka yang bertanggungjawab dari Human Communication Science Department, University College London untuk kajian lanjut dan pengajaran.
Nama anda tidak akan digunakan dalam sebarang penerbitan. Jika anda bersetuju untuk mengambil bahagian, keluarga anda dan pentadbir di Pusat Harian anda akan diberitahu.
Jika anda membuat keputusan untuk menarik diri, segala rekod dalam bentuk bertulis dan rakaman akan dilupuskan.

Apa akan dilakukan dengan hasil kajian?

Kajian ini akan tamat pada 24 September 2011. Dapatan dari kajian ini mungkin akan diterbitkan dalam jurnal akademik. Kami akan memberitahu secara bertulis pada awal tahun 2012 mengenai sebarang perkembangan dalam projek ini.
Peringatan : **Nama anda dan maklumat peribadi anda tidak akan digunakan dalam sebarang penerbitan. Nama palsu akan digunakan untuk merujuk kepada data berhubung dengan anda dan rakan perbualan anda.**

Siapa yang mengendalikan/ menguruskan kajian ini?

Projek penyelidikan ini adalah dibawah kelolaan Human Communication Science Department, University College London.

Siapa telah menilai kajian ini?

Kesemua kajian yang melibatkan manusia sebagai subjek dinilai oleh Jawatankuasa Etika di University College London sebelum dijalankan. Kajian ini telah dinilai oleh Jawatankuasa Etika Penyelidikan UCL.

Siapakah harus dihubungi jika ada sebarang pertanyaan atau masalah?

Anda boleh menghubungi Leela Koran di 044 020 8446 5419 (London) atau 06 2634482 (Malaysia).
Atau Dr. Ray Wilkinson di 044 020 7679 4234.

Terima kasih kerana mengambil bahagian dalam kajian ini.

KESEMUA DATA YANG DIKUMPUL AKAN DISIMPAN MENGIKUT AKTA PERLINDUNGAN DATA 1998.

Appendix 2 (a)

Informed consent form for participants in research studies

(This form is to be completed independently by the participant after reading the Information Sheet and/or having listened to an explanation about the research.)

Title of Project: Conversations of adults with aphasia in a linguistically diverse population

This study has been approved by the UCL Research
Ethics Committee [Project ID Number]: 1293/001

Participant's Statement:

Please read the following questions and tick yes or no.

1. Have you read the information sheet for this project or has the project been explained to you verbally? Yes No
2. Have you had a chance to ask questions about this project? Yes No
3. Have you received sufficient information about this project? Yes No
4. Are you clear that you can withdraw from this project:
 - a) at any point in time Yes No
 - b) without giving any reasons Yes No
 - c) without affecting the services provided for you? Yes No
5. Are you aware that your personal information will be protected and used following the Data Protection Act 1998? Yes No
6. Do you agree to participate in this study which will involve video recording of your conversations with your family member/s? Yes No

Signed by:

Date:

Researcher's Statement:

I
confirm that I have explained clearly the objectives of this study to the participants and have clarified any foreseeable problems or benefits.

Signed by:

Date:

Appendix 2 (b)

Borang Persetujuan secara sedar untuk Peserta dalam Penyelidikan

(Borang ini harus diisi oleh peserta sendiri setelah membaca Lembaran Maklumat dan/ atau telah mendengar penerangan mengenai kajian ini.)

Tajuk Projek: Perbualan orang dewasa yang mengalami Afasia di dalam satu komuniti yang menggunakan berbilang bahasa.

Kajian in sudah diluluskan oleh Jawatankuasa Etika UCL 1293/001
[Nombor Projek]:

Kenyataan Peserta:

Sila baca soalan-soalan berikut dan tandakan “ya” atau “tidak”

- | | | | | |
|--|--------------------------|-----------|--------------------------|--------------|
| 1. Sudahkah anda membaca borang maklumat projek ini atau adakah projek ini sudah diterangkan kepada anda secara lisan? | <input type="checkbox"/> | Ya | <input type="checkbox"/> | Tidak |
| 2. Sudahkah anda mendapat peluang bertanya mengenai projek ini? | <input type="checkbox"/> | Ya | <input type="checkbox"/> | Tidak |
| 3. Sudahkah anda menerima maklumat yang mencukupi mengenai projek ini? | <input type="checkbox"/> | Ya | <input type="checkbox"/> | Tidak |
| 4. Adakah anda jelas bahawa anda boleh menarik diri dari projek ini: | <input type="checkbox"/> | Ya | <input type="checkbox"/> | Tidak |
| a) pada bila-bila masa | <input type="checkbox"/> | Ya | <input type="checkbox"/> | Tidak |
| b) tanpa memberikan sebarang alasan | <input type="checkbox"/> | Ya | <input type="checkbox"/> | Tidak |
| c) tanpa apa-apa gangguan pada perkhidmatan yang disediakan untuk anda? | <input type="checkbox"/> | Ya | <input type="checkbox"/> | Tidak |
| 5. Adakah anda sedar bahawa maklumat peribadi anda akan dijaga dan digunakan mengikut Akta Perlindungan Data 1998? | <input type="checkbox"/> | Ya | <input type="checkbox"/> | Tidak |
| 6. Adakah anda bersetuju untuk mengambil bahagian dalam penyelidikan ini? | <input type="checkbox"/> | Ya | <input type="checkbox"/> | Tidak |

Ditandatangani oleh:

Tarikh::

Kenyataan Penyelidik:

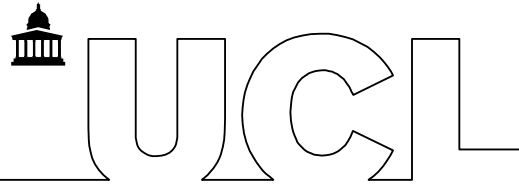
Saya
mengesahkan bahawa saya telah menerangkan dengan jelas tujuan kajian ini kepada peserta dan menjelaskan sebarang masalah atau faedah yang dapat dijangka.

Ditandatangani oleh:

Tarikh::

Appendix 3

LANGUAGE AND COMMUNICATION
Division of Psychology and Language
Sciences



Persetujuan untuk menyimpan dan menggunakan data di masa depan.

Tajuk Projek: Perbualan orang dewasa yang mengalami Afasia di dalam satu komuniti yang menggunakan berbilang bahasa.

Kajian in sudah diluluskan oleh Jawatankuasa Etika UCL
[Nombor Projek]: 1293/001

Nama, Alamat dan Maklumat Kontak Penyelidik: **Puan Leela Koran**
telefon: +4402084465419

Nama Rujukan Peserta:

TERIMA KASIH KERANA MENGAMBIL BAHAGIAN DALAM PROJEK PENYELIDIKAN INI.
Sila baca soalan-soalan berikut dan tandakan "ya" atau "tidak"

1. Saya bersetuju rakaman video saya disimpan di dalam arkib
UCL CAVA di www.ucl.ac.uk/lscava

SAMADA 1a) sepanjang masa Perpustakaan UCL wujud bagi tujuan kajian afasia di masa depan. Ya Tidak

Saya tahu bahawa pengkaji di masa depan akan menandatangani kontrak untuk menjamin kerahsiaan, hak dan kehormatan, serta akan menggunakan video-video ini dengan cara yang bertanggungjawab.

1b) sehingga Spetember 2012. Selepas itu ianya akan dimusnahkan. Ya Tidak

2. Saya tahu bahawa muka saya tidak akan dikaburkan dalam video-video ini sebab para pengkaji perlu melihat mata dan ekspresi muka saya. Saya tahu ini bermakna saya mungkin boleh dikecam tetapi saya faham ianya mungkin tidak berlaku. Ya Tidak

3. Saya setuju klip video saya boleh ditonton oleh para akademik dan pelajar semasa aktiviti pengajaran atau oleh pengkaji lain di dalam persidangan. Ya Tidak

4. Saya tahu bahawa apabila ahli projek ini menulis atau bercakap mengenai video saya, nama sebenar saya tidak akan digunakan. Ya Tidak

Nama Individu dengan Afasia

Tandatangan

Tarikh

Nama Individu yang mendapatkan persetujuan

Tandatangan

Tarikh

Appendix 4

LANGUAGE AND COMMUNICATION
Division of Psychology and Language
Sciences



Consent for retaining the names mentioned in the DATA

Title of Project:	Conversations of adults with aphasia in a linguistically diverse population	
This study has been approved by the UCL Research Ethics Committee [Project ID Number]:	1293/001	
Name, Address and Contact Details of Investigators:	Ms. Leela Koran, telephone: +4402084465419	
Participant Identification Name:		
<hr/>		
We have reviewed the video recording of our conversation made on _____ and agree that the names mentioned in the recording can be used in publications and presentations based on this data. We know that others may recognise us in these but we understand it is unlikely.		
_____ Name of Person with Aphasia	_____ Signature	_____ Date
_____ Name of Conversation Partner	_____ Signature	_____ Date
_____ Name of Person taking consent	_____ Signature	_____ Date

Appendix 5

Interview Schedule

*I am going to ask you some questions about yourself, your family and about your communication.
(Each section will end with a recap and intro to next section- explain some of the questions may be a repetition)*

Background: About Self, Family and Friends

- 1) How old are you?
- 2) Where do you live?
- 3) Who do you live with? / Who lives with you?
- 4) Can you tell me more about your family?
 - a) Spouse
 - b) Children
 - c) Grandchildren
 - d) Siblings and other members of the extended family? And where do they live? What kind of work do they do?
- 5) Is there anyone else living with you?
- 6) Who do you spend most of your time with?
- 7) How often do you see the other people you mentioned? And where?
- 8) What language/s do you speak at home? In other places?
- 9) What languages do the other members of your family speak?
- 10) What about friends? Do you spend time with them often? Where?
- 11) What languages do you use when you are with your friend/s?
- 12) Besides all these people we have talked about, is there anyone else that you talk to? (Neighbours, Carers at the centre, additional daily help).

Activities and Routine

- 1) What do you do everyday? Is it the same everyday? What about weekends?
- 2) Do you go out much? Where do you go? Who takes you? What do you do?
- 3) When you take part in these activities, do you find communicating a problem?
- 4) Can you tell me more about what you find difficult when you communicate with other people? in your family / outside the family?
- 5) Which of these problems do you find most frustrating?

Case history:

- 1) How long have you had this problem? (to ask about ONSET – without mentioning STROKE?)
- 2) When did it happen? Would you like to talk about it?
- 3) What other problems do you have since this happened?
 - a. Problems with movement? On the Left side of your body or the Right?
 - b. Sight?
 - c. Hearing?
- 4) What kind of treatment did you get? (in the hospital, after being discharged)
- 5) What happened after you were discharged from the hospital? Who did you live with? Did you have any other support? How did you cope with the changes?

- 6) Did you work before this happened? Can you tell me more about your work? (What it involved? How many years? Where? What qualifications?)
- 7) What languages did you speak at work?
- 8) Were you still living at home when you first started working? If you moved to a new place, what language was used there (in the neighbourhood) then?
- 9) Where did you go to school? What was school like?
- 10) What language/s were used in school?

Language: Acquisition, Use (Domains and Dominance)

- 1) Can you tell me about your childhood? Where did you live, your siblings, your friends?
- 2) What language/s were spoken in your home when you were young?
- 3) What language/s did you speak at home when you were young?
- 4) What kind of games (in your neighbourhood) did you play when you were young? What language/s did your friends speak when they played with you?
- 5) At what age did you go to school? What language/s was/ were used in the classroom? Most often?
- 6) What language did your friends speak when they played with you outside the classroom?
- 7) What language did you use most when you were a child? Did that change when you were an adolescent?
- 8) What language/s did you use at work? With whom (subordinate/ superiors)?
- 9) When you got married, what language/s did you spouse speak? Did that change after marriage?
- 10) When you had a family, what language/s did you speak to your children?
- 11) Was any other language/s spoken in your home? To the children? Did that change as they grew up?
- 12) As an adult, what language/s did you use with your friends either from work, the neighbourhood, or from your childhood?
- 13) How many languages did you use in your communication before your stroke? Which one of these would you say you used most often?
- 14) Did that change after the stroke? In what ways?
- 15) Which language do you use most now?

Appendix 6

TRANSCRIPTION NOTATIONS

Transcription notations used here combines those from Hutchby and Wooffit (2008) and Beeke et al., (2003). Some of these notations have been adapted to account for utterances in languages other than English.

(0.5)	The number in brackets indicates a time gap in tenths of a second.
(.)	A dot enclosed in a bracket indicates a pause in the talk of less than one tenth of a second.
=	The 'equals' sign marks where there is no interval between adjacent utterances.
[A large left-hand bracket links an ongoing utterance with an overlapping utterance or non-verbal action at the point where the overlap/simultaneous non-verbal action begins.
]	A large right-hand bracket marks where overlapping utterances/simultaneous non-verbal actions stop overlapping.
.hh	A dot before an 'h' indicates speaker in-breath. The more the h's the longer the breath.
(())	A description enclosed in a double bracket indicates a non-verbal activity. Alternatively, double brackets may enclose the transcriber's comments on contextual or other features.
soun-	A dash indicates the sharp cut-off of the prior word or sound.
sou::nd	Colons indicate that the speaker has stretched the preceding sound or letter. The more colons the greater the extent of the stretching.
!	Exclamation marks are used to indicate an animated or emphatic tone.
Heh	Indicates discernible aspiration or laughter (the more hs the longer the aspiration/laughter).
fu(h)n	An h in single brackets marks discernible aspiration or laughter <i>within</i> a word in an utterance.
H	Discernible inhalation (the more 'h's the longer the inhalation).
<i>Ape</i>	Italicized text represents words or phrases in languages other than English.
What	Text in grey coloured font placed below italicized text represents translation in English.
[<i>yes</i> ((nods))	Italicized text in double brackets represents a gloss or description of some non-verbal aspect of the talk, and is linked to simultaneous talk with large brackets (see above).
(guess)	The words within a single bracket indicate that the transcriber's best guess at an unclear utterance.
/dɔd/	Paraphasias and cut-offs of syllables in languages other than English are transcribed between slashes, using an IPA font.
word.	A full stop indicates a stopping fall in tone. It does not necessarily indicate the grammatical end of a sentence.
word,	A comma indicates 'continuing' intonations.
word?	A question mark indicates a rising inflection. It does not necessarily indicate a question.

↑↓	Pointed arrows indicate a marked falling or rising intonational shift. They are placed immediately before the onset of the shift.
<u>Stress</u>	Underlined fragments indicate speaker emphasis.
CAPITALS	Words in capitals mark a section of speech noticeably louder than the surrounding talk.
° °	The degree signs are used to indicate that the talk they encompass is spoken noticeably quieter than the surrounding talk.
> <	Inward chevrons indicate that the talk they encompass was produced noticeably quicker than the surrounding talk.
< >	Outward chevrons indicate that the talk they encompass was produced noticeably slower than the surrounding talk.
→	Arrows in the left margin point to specific parts of an extract discussed in the analysis.

Appendix 7(a)

TRANSCRIPT OF ZIN'S STORY TELLING IN ENGLISH

001 R today, you are going to tell a story. I have six pictures
002 here. this is the first, second,
003 Zin c(r)ocodile,
004 R yeah, ((*pointing*)) third and fourth. yeah crocodile. and. this
005 is the fifth and the sixth picture.
006 Zin ah, okay. okay.
007 R you look at the pictures for a while and then you can start
008 with the first picture.
009 Zin mm, (2.7) °okayh.
010 R okay?
011 Zin mm. ((*nodding*))
012 R okay.start with the first picture.
013 Zin °hmm.° ((*looking at first picture*)) crocodile,
014 R mhm.
015 Zin m, (5.4) ((*sits with his arms folded, looking at the picture*)) er the er
016 the crawl. ((*drops his hand to resting position, laughing*))
017 R okay. next,
018 Zin ((*laughs*)) err, help help.
019 R okay. what's this? ((*pointing to the picture*))
020 Zin ah. man,
021 R this is a man. yeah.
022 Zin man.ah, ((*nodding*))
023 R yes. what is this?
024 Zin ah, erm (6.5) °pokok fall° tumbang? ((*laughs*))
tree fell
025 R okay. say it in English. what do we call pokok in English?
tree
026 Zin the tree,
027 R yes,
028 Zin fall. ((*drops his hand to the table*))
029 R okay. on what?
030 Zin on the, (2.1) ah, °ah,° the, ah, c(r)ocodile,
031 R ((*nodding*)) yes.
032 Zin ahm, er, (1.0) ((*covering his mouth with his hand*)) °terhempap°
stuck
033 erm, (6.3)ah, a: apeh, ah pokok, er,erm a tree,
what tree
034 R mhm, ((*nodding*))
035 Zin fall down. ((*dropping his hand to the table*))
036 R mhm. ((*nodding*))
037 Zin ah, ah. erm (6.9) ((*shifting gaze to R*)) erm tak tau, ((*laughs*))
don't know
038 R its okay. and what about what's happening((*pointing*))here ?
039 Zin a: ah a man,
040 R mhm.
041 Zin a: ah, er, er ape nih, erm erm a man,
what (is) this
042 R mhm. ((*nodding*))
043 Zin ah, °berjalan.° erm er, ah, crossing. crossing,
walking
044 R okay,
045 Zin ah, help. help.

046 R okay,
047 Zin a:, a man, er, crocodile,
048 R mhm,
049 Zin er, e:rm,
050 R who said help help?
051 Zin *ape(h)*?
what
052 R who said help help?
053 Zin erm, *nih* ((*pointing to picture*)) man.
This
054 R the man said help help? why did the man say help?
055 Zin erm, er because,
056 R mhm,
057 Zin a:h the, tree, ah fall down.
058 R okay.
059 Zin the crocodile,
060 R mhm.
061 Zin er, ah ((*dropping his hand to the table*)) *jatuh*. ((*laughing, covers*
fell
062 his mouth))a:h *terhempa(s)*.((*laughing*)).
crashed
063 R the crocodile is,
064 Zin ah?
065 R crocodile is=
066 Zin crocodile ah, ((*shaking his head*)
067 R stuck?
068 Zin STUck. stuck.((*laughing*)
069 R yeah. where is it stuck?
070 Zin on, the er ,erm on the (ne)ck.
071 R ((*pointing to the picture*)) what is this?
072 Zin a tree,
073 R yes. so, the crocodile is stuck under the,
074 Zin ah man.eh *bukan* on the err, crocodile.
not
075 R stuck under the,
076 Zin under the (0.7) erm,
077 R under the tree?
078 Zin under the tree. ((*laughs*)
079 R yes. okay, and what is happening in this picture ((*pointing*)).
080 Zin ahm, a man,
081 R mhm,
082 Zin erm, (0.8)oh, a c(r)ocodile. c(r)ocodile.
083 R mhm,
084 Zin crying,
085 R okay
086 Zin crying because
087 R mhm,
089 Zin on the er er, *ape name*, a tree,
what(is the) name
090 R mhm,
091 Zin fall down.((*dropping his hand to the table*)
092 R okay. the tree fell on the crocodile here and the crocodile is
093 crying. right.
094 Zin m. crying.
095 R ((*pointing to the next frame*)) and what is happening here?
096 Zin er man?
097 R mhm,

098 Zin a:h, (3.2)er the tree,
 099 R mhm,
 100 Zin e:r (3.4)crocodile.(2.2)erm erm the man,
 101 R mhm,
 102 Zin er catch the,(1.4) tree,
 103 R mhm,
 104 Zin eh the tree and (2.2) of the,(1.4) on the left.
 105 R okay,
 106 Zin okay.
 107 R right,
 108 Zin and ah ah, on the crocodile,
 109 R mhm,
 110 Zin m, (7.2) (*indefinite hand gestures*)
 111 R (*(pointing to the picture)*) you can talk about this here?
 112 Zin erm, crocodile
 113 R mhm,
 114 Zin man er, into the,
 115 R m?
 116 Zin ermh.
 117 R what is this? what is the crocodile doing?
 118 Zin and the- oh,okay okay.and the catch.
 119 R mhm,
 120 Zin the ah,crocodile,
 121 R the crocodile,
 122 Zin and the man.
 123 R the crocodile caught,
 124 Zin catch the man.
 125 R the man's
 126 Zin leg. (*laughs*)
 127 R okay. bit the man's leg. yeah. then, what is happening here?
 128 Zin and the man,
 129 R mhm,
 130 Zin crying,
 131 R okay,
 132 Zin the,(be)cause the man erh, catch the,
 133 R mhm,
 134 Zin er leg
 135 R mhm,
 136 Zin of, erm,
 137 R who caught the leg?
 138 Zin catch the c(r)ocodile. (*laughs*)
 139 R who caught the leg?
 140 Zin ah?
 141 R who caught the leg? this is the man, right?
 142 Zin ah.
 143 R so, who caught the leg? who bit his leg?
 144 Zin the crocodile.
 145 R okay. say it again. try again
 146 Zin the man,
 147 R the man or the crocodile?
 148 Zin ah the (cro)codile, crocodile.
 149 R mhm,
 150 Zin catch the leg into the er a man.
 151 R catch the man's leg.
 152 Zin leg.
 153 R okay.

207 Zin yes. yes. yes.
 208 R okay. right. and then?
 209 Zin and then and (2.4) ah,the erm, ah crocodile,
 210 R mhm,
 211 Zin crocodile to
 212 R mhm,
 213 Zin er er,*letak semule,*
 put it back
 214 R so,they put it back on the crocodile, and what are they
 215 doing here?
 216 Zin the, ah man .
 217 R mhm,
 218 Zin erm, (4.5)and er man and the kancil,
 219 R mhm,
 220 Zin ah (1.4)*selamat.*((*laughs*))
 (are) safe
 221 R okay. you try. try.
 222 Zin er and,
 223 R the man and the kancil,
 224 Zin er,
 225 R the crocodile ((*pointing*))here. what are they doing? they are,
 226 Zin erm (2.1)catch the,
 227 R are they catching anything? they left- they put the er tree
 228 back on the crocodile, right?
 229 Zin okay.
 230 R and,
 231 Zin the man
 232 R and the,
 233 Zin er ah, Kancil to get away
 234 R that's right. they got away. they went away. that is right.
 235 yeah. yeah.
 236 Zin ((*laughing*))okay.
 237 R okay. this is the kind of story you tell children, right?
 238 Zin okay.okay. aha.
 239 R what do we say about these animals?
 240 Zin **ah, Kancil. Kancil.**
 241 R Kancil, is what kind of animal? what kind of animal is he?
 242 Zin ah, erm erm (1.4) clever.
 243 R clever. what about this one? this this, one.
 244 Zin c(r)ocodile
 245 R m.what kind of animal is he?
 246 Zin *jahat.*
 bad
 247 R what is that?
 248 Zin ah,*jahat,* angry? *bukan* ahm, ah, erm, (2.6) mean. mean.
 bad no
 249 R mean.yes. he is not a good guy, yeah?
 250 Zin yes. yes.
 251 R this is this the clever one and this is the mean one.
 252 Zin ah yes yes.
 253 R if we say what is the moral of this story,
 254 Zin ah.
 255 R can you, can you tell me? what is the moral of this story?
 256 Zin man
 257 R yes,
 258 Zin and the crocodile,

259 R yeah, what did the man do for the crocodile?
260 Zin erm, (3.5)er, the tr- tree,
261 R m?
262 Zin into the tree,
263 R m, he carried the tree away, right?
264 Zin okay. yes. yes.
265 R why did he do that? to,
266 Zin catch,
267 R is it to catch the crocodile?
268 Zin m. bukan.
no.
269 R no.
270 Zin ah, crocodile,
271 R mhm, okay, go back to the-
272 Zin catch the-
273 R yes, the crocodile caught his leg, right? what did you say
274 here? what was the crocodile saying?
275 Zin erm, cry the, .
276 R crying. what was he saying?
277 Zin er erm, the tree,
278 R mhm,
279 Zin catch,
280 R the tree fell on it,
281 Zin ah yes. yes.
282 R so what did the crocodile say?
283 Zin ah, help help.
284 R so, the crocodile asked for help. what did the man do? he,
285 Zin erm erm, c(r)ocod- erm the tree,
286 R mhm,
287 Zin erm ah, (1.6) (X) away
288 R he took away the tree.
289 Zin yes.yes.
290 R so, he actually helped the crocodile, right?
291 Zin yes. yes.
292 R the crocodile asked for help, he helped.
293 Zin yes. yes.
294 R what did the crocodile do? what did he do?
295 Zin erm but the, cat-, ahm, the leg.
296 R mhm,
297 Zin on to, the c(r)ocodile
298 R m?
299 Zin yes.
300 R so, the crocodile bit,
301 Zin okay. bit. bit.
302 R the crocodile bit him back, yeah?
303 Zin yes.yes.
305 R so, the moral of the story is,
306 Zin yes.yes.
307 R when somebody helps you, you,
308 Zin ah erm ni nih ah er er, apeh (4.3) ape nameh,
this this what what (is the) name,
309 R the man helped the crocodile but the crocodile,
310 Zin a:hm, terima kasih. ((laughs))
thank you.
311 R what is terima kasih in English?
thank you
312 Zin ah, ah, ape ni ah, thank you.

what (is) this

313 R so, the crocodile didn't say thank you, yeah?
314 Zin yes. yes. ((laughs))
315 R crocodile was not being grateful?
316 Zin yes.
317 R okay, Zin. thank you so much.
318 Zin okay. ((laughing))

Appendix 7(b)

TRANSCRIPT OF ZIN'S STORY TELLING IN MALAY

001 R *kalau, Zin nak cerita. pasal kancil dengan buaye nih,*
if you want to tell a story about (the) mousedeer and this crocodile,
002 Zin ah.
003 R *kancil, orang dan buaye?*
mousedeer man and crocodile
004 Zin okay. *buaye*
crocodile
005 R *ye?*
right?
006 Zin *buaye. buaye.*
crocodile crocodile
007 R *macam mane ceritanya?*
how does the story go?
008 Zin ((looking down at the picture)) *bersiar-siar,*
walking about
009 R mhm,
010 Zin *hmm. a:h, ternampak,*
(suddenly) saw
011 R *mhm, siapa bersiar-siar?=
who (was) walking about*
012 Zin =ah, tum- ah, ahm a tree er *ni apeh?*
what (is) this
013 Zin ah *pokok,*
tree
014 R mhm.
015 Zin *terjatuh.*
has fallen
016 R okay.
017 Zin *tibe-tibe, erm, ahm, po- ah buaye,*
suddenly (the) crocodile
018 R mhm.
019 Zin *aduh aduh,*
(groaning noise)
020 R mm.
021 Zin *ape name, ((sound in the background)) (XXX) (XXX) ah nih,*
what (is the) name this
022 (5.9) ((looking at the picture)) (X) *(tibe) lelaki.*
arrived (a) man
023 R mm.
024 Zin *yang ternampak.*
who saw

025 R mhm.

026 Zin (XXX) *sakit*
(in) pain

027 R okay.

028 Zin *tibe-tibe, ah lelaki.*
suddenly (the) man

029 R mhm.

030 Zin *ah, (bukan) buaye,*
no the crocodile

031 R mhm.

032 Zin *menangis=*
(was) crying

033 R =m.

034 Zin *kerana a:h, sakit,*
because (of) pain

035 R =okay.

036 Zin *yang teramat sangat*
that was extreme

037 R oka:y.

038 Zin *okay, ((laughing))*

039 R *gambar ini*
this picture

040 Zin *ah, ah lelaki, ah,*
(the) man

041 R m.

042 Zin *ambil*
took

043 R m.

044 Zin *pokok yang terjatuh,*
(the) tree that has fallen

045 R m.

046 Zin *ah, angkat yang err, angkat (0.8) di sini.*
carried the one carried to here

047 R mhm.

048 Zin *tibe-tibe buaye, men, err ape nameh, cengkam. (ceng)kam,*
suddenly (the) crocodile what (is the) name grab grab

049 R *mencengkam eh?*
grabbed

050 Zin *mencengkam, lelaki itu.*
grabbed that man

051 R *ye. di mane die mencengkam?*
yes where did he grab (the) man

052 Zin *ah, the, nih erm ah, ape, ah ni. (2.5) ka-*
this what this (first syllable of 'kaki')

053 R *ye.*
right.

054 Zin *kaki. kaki.*
leg. leg

055 R *ye. okay.*
yes.

056 Zin *okay. ah tibe-tibe ah, berjalan Sang Kancil.*
suddenly Mr Mousedeer came walking

057 R mhm.

058 Zin *ah, (.) ah, afeh, tibe tibe lelaki,*
what, suddenly (the) man

059 R mhm,

060 Zin *ter- ah, bua- buaye itu,*
that crocodile

061 R mhm,
062 Zin *menangkap.*
caught

063 R mm,.
064 Zin *dan (1.5) a:h, buaye itu- eh, lelaki itu*
and that crocodile that man

065 R m,
066 Zin *mena- menanggung sakit. (.h)*
(first two syllables and three syllables of jargon) pain

067 R mm okayh
068 Zin •h hhh. ((*laughing*))
069 R ((*pointing to the next frame*)) ah *ni, nih,*
this this

070 Zin h ah, lela- ah, per- ah, *Sa:ng Kancil*
Mr. Mousedeer

071 R mhm,
072 Zin *ternampak,*
(suddenly) saw

073 R okay,
074 Zin ah, (X X) *tibe- ah, keadaan yang a:hm, menanggung sakit?*
suddenly the condition of (three syllables of jargon) pain

075 R okay.
076 Zin ah ((*laughs*))
077 R o:kay, *nih?*
this

078 Zin *tibe-tibe, ah, ah, lela- ah, Sang Kancil pun satu ide.*
suddenly, (first two syllable of 'lelaki') Mr Mousedeer also (had) an idea

079 R okay ((*nodding*))
080 Zin ah ah, err ah, er, *lelaki, ah, ah, a:pe nameh, erm bukan*

081 *lelaki, pokok yang terjatuh ah, ah, (die) buaye, atas ah*
(the) man, (the) tree that had fallen he (the) crocodile on

082 R mhm,
083 Zin *di atas, (dropping his hand to the table) a:h pelepah yang erh*
on (the) frond that

084 R *pelepah ke kayu?*
frond or tree trunk

085 Zin *kayu. kayu. ((laughing))*
tree trunk tree trunk

086 R =hhh, *kalau pelepah tak sakit tuh.*
if (it is a) frond, that (will) not be painful

087 Zin (heh hh) ah *ape nameh. lela- lak- perem- croc- ah ni, buaye,*
what (is the) name this crocodile

089 R mhm,
090 Zin *angkat kerana ahm, ah buaye,*
carried because crocodile

091 R *kejap, perlahan-lahan.*
hold on. (do this) slowly

092 Zin a:h.
093 R okay, *siapa, siapa yang angkat?*
who who carried

094 Zin ah *nih the man. lelaki nih. err, cro-*
this this man

095 R *balik dari Sang Kancil dapat satu ide,*
go back to Mr Mousedeer had an idea,

096 Zin *ide,*
idea

097 R *die suruh,*
he told,

098 Zin *suruh lelaki itu.*
told that man

099 R *mhm,*

100 Zin *ah, semule,*
again

101 R *m.*

102 Zin *ah ahm, ah ahm, pokok,*
(the tree)

103 R *ye, ((nodding))*
yes,

104 Zin *ah, ah (2.8) semule kayu,*
again (the) tree trunk

105 R *mhm.*

106 Zin *m, buaye itu.*
that crocodile

107 R *((nodding)) okay. letak semule kayu atas buaye, ye? okayh.*
put back the tree trunk on the crocodile, right?

108 Zin *eh ((laughing))*

109 R *kemudian,*
and then,

110 Zin *lepas itu, err err ahm er, Sang Kancil,*
after that Mr Mousedeer

111 R *mhm,*

112 Zin *err, a, a:h, nih, (a)peh, lelaki itu, ah, ape nameh, (2.2)*
this what that man what (is the) name

113 *berjaye,*
succeeded

113 R *mhm.*

114 Zin *keluarkan,*
(in) removing (the)

115 R *((nodding)) mhm.*

116 Zin *kaki, leg*

117 R *okay,*

118 Zin *yang, tersebut.*
(that was mentioned earlier)

119 R *okay.*

120 Zin *ah, ah buaye,*
(the) crocodile,

121 R *mhm,*

122 Zin *kenape, Sang Kancil, ape ni, lela- a:h buaye,*
why Mr Mousedeer what (is) this crocodile

123 R *mhm?*

124 Zin *a:hm sa- ah, Sang Kancil, erm, letak atas ah, pohon,*
Mr Mousedeer placed on (the) (the) trunk

125 R *mhm,*

126 Zin *kayu.*
(of the) tree

127 R *okay,*

128 Zin *er, Sang Kancil itu*
that Mr. Mousedeer,

129 R *mhm,*

130 Zin ah a:h (1.1) *berpade-pade*.
(part of an idiomatic expression)

131 R okay=

132 Zin =(XXX), *sangat sekali ke apeh?*
(part of an idiomatic expression) or what?

133 R o:h. *buat baik berpade-pade*,
(part of an idiomatic expression)

134 Zin yes.

135 R *buat jahat*,
(part of an idiomatic expression)

136 Zin *sa- se se apeh?*
what?

137 R *jangan*,
(part of an idiomatic expression) don't

138 Zin *sekali*.
(part of an idiomatic expression) ever

139 R ((nodding)) ah.

140 Zin ah ((laughs))

141 R *itu moral cerita inilah*.
that is the moral of this storylah.

142 Zin ah. yes

143 R oh, *kancil ni nasihatkan buayelah?*
this mousedeer is advising the crocodile.

144 Zin ah. yes yes.

145 R oh, okay. ((putting away the papers)) *terima kasih*. °
thank you.

146 Zin ah, okay.

Appendix 7(c)

TRANSCRIPT OF MUS' STORY TELLING IN ENGLISH

001 R we are going do a bit of storytelling today. do you tell your
002 grandson stories?

003 Mus ha:h. ((looking at the pictures))

004 R this is the story of

005 Mus (cro)codile.

006 R crocodile yeah?

007 Mus crocodile.

008 R crocodile and who?

009 Mus c(r)codile,

010 R mhm

011 Mus and

012 R mhm,

013 erh, (2.9) ((turning to R)) ah,

014 R the,

015 Mus *bomoh*. ah, no.
shaman

069 Mus erhh, ((*straightening his body slightly*)) erm,
070 R tail.
071 Mus tail. tail.
072 R you said it just now, yeah.
073 Mus ah. tail.
074 R so, the tree fell on the,
075 Mus crocodile,
076 R /t/, /ei/, ((*exaggerated pronunciation*))
077 Mus tail.
078 R yeah. the tree fell on the crocodile's tail a:nd what's
079 happening in the second picture?
080 Mus crocodile,
081 R mhm.
082 Mus °ah°, ((*tracing with his index finger*)) (1.5) °ahhh, pu(ny)a °
his
083 R mhm,
084 Mus ah, ((*moves his hand away*))
085 R ((*pointing to the picture*)) what is this?
086 Mus ((*touching the picture*)) crocodile TEARS.
087 R that's right.
089 Mus tears.
090 R mhm. the crocodile's got tears.crocodile is /kr/,
091 Mus cro(c)odile TEARS.
092 R yeah. he's got tears so the crocodile is /kra:/,
093 Mus CRYING.
094 R crying. ah, okay. then, who's this?▯
095 Mus ah, (1.2)ah, ((*touching different parts of the picture*)) (1.1)°ah.°
096 R m,
097 Mus man,
098 R ahah. ((*nodding*))
099 Mus ahmmm, (1.3)
100 R man,
101 Mus pu(ny)a
his
102 R mhm,
103 Mus °ah° ((*looking down, his index finger on the picture*)) (1.4)
104 R he is coming to,
105 Mus HELP.
106 R right.
107 Mus ha:h.
108 R coming to help the, the,
109 Mus ((*touching the picture briefly*)) crocodile.
110 R crocodile. because the crocodile has got the,
111 Mus tears.
112 R tree,
113 Mus ah. tear. tear. tear.
114 R tree, on his,
115 Mus ah.
116 R tail.
117 Mus (t)ail.
118 R yeah. he has come to help and what is happening here?
119 Mus m, ((*looking intently at the picture*)) (2.4)▯
120 R ((*pointing to picture*)) what's he doing? what's the man doing?
121 Mus ah, ((*flipping the page*)) (1.3)▯
122 R just now we saw, the crocodile. then, ((*shifting through the pages*))
123 we saw the crocodile with the tree on his tail,
124 Mus ah.

125 R the man is coming to help. what is he doing((*pointing to the*
126 *picture*))to help?
127 Mus help,
128 R mhm, he,
129 Mus help, ah, (3.4) °ah°,
130 R /ka/,
131 Mus CARRY,
132 R mhm.
133 Mus the, (2.4) erh, a:h.
134 R the,
135 Mus c(r)oc, odile, m,
136 R not the crocodile,
137 Mus not (croco)dile,
138 R he is carrying the, /tr/,
139 Mus T(R)EE. TREE.
140 R yes, he carried the tree off to help the crocodile. what's
141 happening next?
142 Mus m. ((*moving his hand to another part of the picture*)) (1.1)
143 R this one? what is this?
144 Mus A:H.
145 R m?
146 Mus ah, (4.9)
147 R is this a good crocodile?
148 Mus NO:,NO.
149 R no. what he is then?
150 Mus a:h hh. ((*looking at the picture*))
151 R he is a /b/,
152 Mus bad
153 R mhm.((*nodding*))
154 Mus crocodile.
155 R what did he do?
156 Mus ah, crocodile,((*looking at the picture*))
157 R mhm, crocodile, /b/,
158 Mus BITE.
159 R yeah. ((*nodding*))
160 Mus bite.
161 R bite what?
162 Mus ah, bite,
163 R m?
164 Mus h, ((*pointing*)) (1.0) his tongue.
165 R ((*pointing to the picture*)) bite his tongue?
166 Mus noh.
167 R no.
168 Mus noh.
169 R that's the crocodile's tongue we see here but what is he
170 biting? biting the, /l/, /l/,
171 Mus /l/- erh.
172 R yeah. /l/,
173 Mus ((*looking at R*)) (1.0)
174 R /l/,/e/,
175 Mus ((*looking down at the picture and back to R*)) (1.3)
176 R the man's /l/,
177 Mus LEG.
178 R yeah. bite- the crocodile bit the man's leg. yeah? okay. so
179 what's happening in this picture? who's coming?
180 Mus ((*pointing to the top corner of the picture*)) (1.7)

181 R mhm. who's he?
182 Mus ah, (3.0) tch.
183 R /s/,
184 Mus ahhh,
185 R /s/,
186 Mus a:h.
187 R yeah. starts with /s/,
188 Mus sing- erm,
189 R SAng,
190 Mus SANG, kun- ah,
191 R sang,
192 Mus kun- ah.
193 R /ka:/
194 Mus ka,
195 R Sang Ka:n=
196 Mus =KanCIL.
197 R yes, Sang Kancil. what kind of animal is this Sang Kancil?
198 Mus ah, (1.6) ah s(tr)- strong.
199 R is this a strong animal?
200 Mus no, noh. ah,
201 R he is a /k/, /l/,
202 Mus (cl)ever clever.
203 R clever animal yeah. Sang Kancil, what is he doing now?
204 Mus ah, (1.2) ((pointing to the picture))
205 R mhm,
206 Mus Sang Kancil, ((pointing to the picture))
207 R mhm, he is looking at this.((pointing)) he is looking at the,
208 Mus crocodile,
209 R crocodile. what is the crocodile doing?
210 Mus ah, (0.8) ((pointing to the picture)) ah,
211 R /b/,
212 Mus ah,
213 R /b/,
214 Mus erh,
215 R ((touching to the picture)) the crocodile,
216 Mus BITE
217 R bit the,
218 Mus hm,
219 R /m/,
220 Mus erh, (2.4)
221 R man,
222 Mus (d)on. erh ((shaking his head))
223 R the man's /l/,
224 Mus leg.
225 R yeah. the crocodile's biting the man's leg and the Sang Kancil
226 is looking at the them.
227 Mus a:h.
228 R he walked over to them. what is happening in the next picture?
229 Sang Kancil, tells the man to,
230 Mus wait,ah.
231 R mhm,
232 Mus ah, (4.6) ((tapping the picture)) ah,
233 R yeah?
234 Mus ah, (1.0)
235 R put
236 Mus ah?((looking at R))

237 R put
238 Mus put
239 R mhm,
240 Mus it
241 R back
242 Mus o(ri)ginal.
243 R m? ori- oh, put it back like original. right. put back like
244 like original. like originally it was. yeah?
245 Mus ah. ((*nodding*))
246 R okay.so that they,they,
247 Mus erh,
248 R you want to say it again? put it,
249 Mus o(gi)ginal.
250 R okay, put it back like original and,
251 Mus ah, (3.6) ((*touching different parts of the picture*)) ah.
252 R mhm,
253 Mus erh,
254 R the man and,
255 Mus (m)an, ah.
256 R mhm,the man and ka: ,
257 Mus (J)ANcil.
258 R ahah.the man and kancil,
259 Mus ah,
260 R the man and kancil,
261 Mus ((*pointing*)) (1.9) ((*laughing rotates his wrist*))
262 R laugh. yeah. and what did they do to the crocodile,
263 Mus (cro) codile pu(ny)a ah,
his
264 R mhm,
265 Mus crocodile, ah, ah, (2.3) ((*shifting gaze to R*))
266 R /l/,
267 Mus leave alone.((*rotating his wrist*)).
268 R leave him alone. and then they are laughing, aren't they?
269 Mus ah.
270 R right. that's right. they laugh and go away.
271 Mus ah.
272 R what is this story about?
273 Mus hm.(2.0) ((*looking at the picture*))
274 R what is this story about?
275 Mus about,
276 R mhm,
277 Mus crocodile,
278 R mhm,
279 Mus tears,
280 R mhm,
280 Mus pu(ny)a (xxx).
his
281 R yes?
282 Mus one, BITE.
283 R mhm,
284 Mus er, bite.
285 R mhm,
286 Mus crocodile,
287 R mhm,
288 Mus tears.
289 R yeah. and then this man helped the crocodile,
290 Mus help crocodile, tears,

290 R mhm,
 291 Mus bite.
 292 R yes. bit him again.
 293 Mus a:h.
 294 R that crocodile is a bad crocodile?
 295 Mus a:h.
 296 R you tell your grandson this story about the bad crocodile?
 297 Mus /k/- /k/- crocodile.
 298 R yes. this kind of the story we always say the moral of is
 299 the story is,
 300 Mus hm.
 301 R when,
 302 Mus erh, (1.5) ((*looking at R*))
 303 R when, some-
 304 Mus ah, crocodile,
 305 R m,
 306 Mus bite,
 307 R mhm,
 308 Mus ah ((*pointing to the picture*))
 309 R the man.
 310 Mus crocodile, tears.
 311 R that's right.
 312 Mus a:h.
 313 R the crocodile had tears so the man helped the him but the
 314 crocodile was a bad crocodile because he bit the man.
 315 Mus ah.
 316 R so the moral of the story is,
 317 Mus ((*looking down at the picture*)) a:h, (1.2) ((*shifting gaze to R*))
 318 R you don't help bad people?
 319 Mus a:h ((*laughs*))
 311 R is that right? do you agree?
 321 Mus a:h. ah.
 322 R okay, *Encik* Mus. thank you so much.
 Mr.
 323 Mus o:kay.

Appendix 7(d)

TRANSCRIPT OF MUS' STORY TELLING IN MALAY

001 R *kite bercerite sedikit dalam bahasa Melayu hari ini.*
 we (are going to) tell a story in Malay today

002 Mus *m?*

003 R *bercerite dalam bahasa Melayu, boleh?*
 tell a story in Malay, can (we)?

004 Mus *ermh, tak tau:.* ((*rotating his wrist*))
 don't know

005 R *tak tau? ini kite lihat semalam dalam English, crocodile story*
 don't know? this, we did this in English yesterday,

006 *dalam Bahasa Melayu crocodile kita panggil,*
 in Malay we call

007 Mus °bahasa Melayu, ° (1.5) ((holding mid distance gaze))
 Malay

008 R bu:,
 (first syllable of 'buaye)

009 Mus ((M turning to look at R))ah?

010 R °hmm.°=bu::, a:, bua, /j/, ye?
 crocodile

011 Mus =ah. buaye. ((swinging his hand above his head))
 crocodile

012 R yang ini?
 this one

013 Mus ah, ((pointing the picture))

014 R yeah, crocodile buaye. yang ini?
 crocodile. this one

015 Mus ah,

016 R po:,
 (the first syllable of 'pokok')

017 Mus /ti:/,

018 R tree. dalam English, tree. kita panggil po:,
 in we call (first syllable of 'polok')

019 Mus buay- ah,
 (first syllable of 'buaya')

020 R tak, po
 no (first syllable of 'polok')

021 Mus KOK
 (last syllable of 'polok')

022 R pokok. ah. ape jadi dengan pokok kat sini?
 yes. tree. what happened to the tree right here?

023 Mus ah, ((tracing the picture)) (5.4) ((holding mid distance gaze))

024 R pokok ja:,
 tree (first syllable of 'jatuh')

025 Mus hm, ((looking at the picture)) (4.5)

026 R pokok ja:, jat-,
 tree (first syllable of 'jatuh')

027 Mus JATUH.
 fall

028 R ah. jatuh atas?
 fell on?

029 Mus jatuh,
 fell,

030 R mhm,

031 Mus atas, (6.0) ((looking at the picture))
 on

032 R ((pointing)) yang ni, ni ape?
 this one, what is this?

033 Mus ahh, (5.7) ((looking at the picture and then holding a mid-distance gaze))

034 R atas?
 on

035 Mus pokok
 tree

036 R ah. pokok. pokok jatuh atas
 (the) tree tree fell on

037 Mus atas,
 on

038 R e:?
(first syllable of 'ekor')

039 Mus ekor.
tail.

040 R ah. ekor sape?
whose tail

041 Mus ekor, ah, (2.8) ((touching the picture)) ah,
tail

042 R m. siapa tu?
who is that?

043 Mus ahh. (1.1) ((turning to R))

044 R bu:,
(first syllable of 'buaye')

045 Mus buaye.
crocodile

046 R ah. die jatuh atas ekor buaye ye? ah, gambar nombor due,
it fell on (the) crocodile's tail, right? (the) second picture

047 Mus due,
second,

048 R emh?

049 Mus buaye,
crocodile

050 R mhm

051 Mus jatuh. ar- noh.
fall

052 R no?

053 Mus buaye, erm (3.3) ((looking down)) NANGis
crocodile (is) crying

054 R ah. buaya nangis. yah. buaya nangis.mintak,
(the) crocodile (is) crying. Yes. (the) crocodile (is) crying asking (for)

055 Mus tolong.
help

056 R mintak tolong daripade?.
asking (for) help from?

057 Mus ah kawan
friend

058 R kawan die. ni kawan die ke?
his friend this (is) his friend, is it?

059 Mus kawa:n. ((rotating his hand))
friend

060 R kawan. ah kawanlah. oranglah.
friend just a friend. the man lah

061 Mus ah.

062 R orang. minta tolong daripade kawan ni. lepas tu ape jadi? ape
(the) man asked (for) help from this friend. after that what happened? what

063 orang tu buat?
(did) that man do?

064 Mus buat,
do

065 R m?

066 Mus pu(ny)e pu(ny)e ((tapping on the picture)) (1.9)
his his

067 R ang,
(first syllable of 'angkat')

068 Mus arh, ((touching the picture)) (3.4) h,

069 R orang ni ang,
this man (first syllable of 'angkat')

070 Mus ah, (1.1) ((leaning forward))

071 R *ni* ((pointing)) *tangan die buat ape ni?*
 this his hand, what (is it) doing here?

072 Mus °*pu(nya)* °
 his

073 R *ang, ang-*
 (first syllable of 'angkat')

074 Mus *hm, ((looking at picture)) (2.8)*

075 R *angkat tak?*
 carry(ing), isn't (it)

076 Mus *angkat.*
 carry(ing),

077 R *ah.*

078 Mus *angkat.*
 carry(ing),

079 R *die angkat ape tu?*
 What is he carrying there?

080 Mus *angkat (1.5) ah, pu((ny)e tch,*
 (carry(ing) his

081 R *po:,*
 (first syllable of 'pokok')

082 Mus *pokok. pokok.*
 tree tree.

083 R *a:h. orang ni angkat pokok. die((touching the picture)*
 this man (is) carrying (the) tree. he

084 *buat ape ni?*
 what is he doing here?

085 Mus *a:h.*

086 R *ah?*

087 Mus *punye,*
 his

089 R *ah?*

090 Mus °*pokok punye* °,
 the tree's

091 R *m? dah angkatkan pokok, die, die, ((tapping on the picture))*
 (he) has carried (the) tree, he he,

092 Mus *gigit.*
 bit

093 R *ah die gigit. die gigit ape?*
 he bit. what did he bite?

094 Mus *gigit, ah, tok, ah, no no noh*
 bit (last syllable of 'pokok')

095 R *no?.*

096 Mus *noh. ah,((shifting gaze to R))*

097 R *ka:,*
 (first syllable of 'kaki')

098 Mus *ki.*
 (last syllable of 'kaki')

099 R *ah.*

100 Mus *kaki.*
 leg.

101 R *kaki. die gigit kaki orang ni, ye? orang tolong digigitnye*
 leg. he bit this man's leg, right? (the) man help (but he) bit his

102 *kaki pulak.*
 leg (in return)

103 Mus *ah.*

104 R *ye? buaye baik ke?*
(the) crocodile, is he good?

105 Mus *baik. BAI- eh, no, no, noh.*
good (first syllable of 'baik')

106 R *tak baik?*
not good?

107 Mus *ahh, (1.9) ah, (1.5) ((leaning back))*

108 R *ja: ,*
(first syllable of 'jahat')

109 Mus *ah ((leaning forward)) jahat. jahat.*
bad. bad (or evil)

110 R *ah, buaye ni jahat, ye?. orang tolong die tak berterima kasih.*
this crocodile (is) bad, right? (the) man helped him but (was) not grateful

111 *die gigit pulak.*
he bit him back.

112 Mus *ah.*

113 R *lepas tu sape datang?*
after that who came?

113 Mus *ni, ((pointing to the picture))*
this

114 R *m? sape?*
Who?

115 Mus *kancil.*
(the) mousedeer.

116 R *ah. kancil,*
(the) mousedeer.

117 Mus *kancil. sh- ah- erm,*
(the) mousedeer.

118 R *kancil datang buat ape?*
(the) mousedeer.came to do what?

119 Mus *kancil,*
(the) mousedeer.

120 R *erm?*

121 Mus *kancil, ((looking at the picture)) ((1.7)) erm, (1.4) tolong.*
(the) mousedeer. Helped

122 R *tolong. okay. ni buaye jahat.*
Helped this crocodile (is) bad.

123 Mus *a:h.*

124 R *kancil?*
(the) mousedeer.

125 Mus *BAik.*
good

126 R *baik?*
good

127 Mus *ah.*

128 R *lagi, lagi ape kite kate? kancil,*
what else what else do we say? mousedeer,

129 Mus *kancil?*
Mousedeer?

130 R *kancil selalu kite kate ape? die (0.8) cer,*
(the) mousedeer, we usually say what? he (first syllable of 'cerdik')

131 Mus *dik.*
(last syllable of 'cerdik')

132 R *kancil yang cerdik datang tolong, ye?*
the clever mousedeer came to help, did he?

133 Mus *ah.*

134 R *macam mane kancil tolong?*
how did (the) mousedeer help?

135 Mus *ah,*

136 R *kancil suruh die, suruh orang tu,*
(the) mousedeer told him, told that man (to)

137 Mus *a:h, (2.1) ah. (1.3) ((tracing part of the picture))*

138 R *pokok tu,*
that tree

139 Mus *pokok,*
tree

140 R *aha:h.*

141 Mus *erm ni, (2.1) ni:h,*
this this

142 R *ape?*
what?

143 Mus *ah, (1.5)*

144 R *le,*
(first syllable of 'letak')

145 Mus *(1.7) arh?*

146 R *le:?*
(first syllable of 'letak')

147 Mus *erh,*

148 R *le, tak. letak,*
placed placed

149 Mus *ah, ah, b(u) aye,*
crocodile

150 R *m?*

151 Mus *tch.*

152 R *kancil suruh orang tu letak,*
(the) mousedeer told that man to put,

153 Mus *pokok.*
(the) tree

154 R *a:h. letak pokok kat mane?*
put (the) tree where?

155 Mus *pokok,*
(the) tree

156 R *m,*

157 Mus *(tum)ba (ng)*
(fell)

158 R *m,*

159 Mus *er, hutan ha:h.*
(the) jungle

160 R *dalam hutan ni. die suruh letak pokok tu balik atas,*
in this jungle. he told (him) (to) put that three back on,

161 Mus *pokok,*
(the) tree

162 R *ah, pokok ni ((pointing)) letak balik atas ape?*
this tree put (it) back on what?

163 Mus *ah? ((looking at R))*

164 R *atas bu:*
on (first syllable of 'buaye')

165 Mus *a:h, erm, bu:rung eh, no no.*
bird

166 R *bu:a,*
(first syllable of 'buaye')

167 Mus ah (1.3) *bua(h)*,
(first syllable of 'buaye')

168 R *ye?*
(last syllable of 'buaye')

169 Mus m?

170 R *buaye?*
crocodile?

171 Mus *buaye. buaye.*
crocodile. crocodile.

172 R ah.

173 Mus *buaye.*
crocodile.

174 R *die suruh letak balik atas*
he told (him) to put it back on

175 Mus *buaye,*
crocodile?

176 R *buaye. ni? dah nak habis dah cerita.*
this crocodile? (we) are almost done with the story

177 Mus ah.

178 R *ape die orang buat?*
what are they doing?

179 Mus *die punya ah, bua- eh ni ((pointing)) nih.*
they (his) (first syllable of 'buaya') this this

180 R *kancil,*
(the) mousedeer

181 Mus *kancil,*
(the) mousedeer

182 R *dengan orang, erm*
and the man,

183 Mus *orang, a:h, buaye, punya, ah*
(the) man crocodile his

184 R *tu ((pointing)) buaye ni,*
(that this crocodile

185 Mus ah?

186 R *buaye kene hempap?*
(the) crocodile has been stuck (under)

187 Mus *hempap. hempap a:h.*
stuck stuck

188 R *ah, kene hempap semule, ye lepas tu die, ape die*
has been stuck again, right. After that he, what did

189 *orang buat?*
they do?

Mus a:h, .

190 R *ting,*
(first syllable of 'tinggal')

191 Mus *tingga- ah kan.*
(first two syllable of 'tinggalkan')

192 R *tinggalkan.*
left

193 Mus *tinggal.*
leave

194 R *tinggalkan siapa?*
left who?

195 Mus *tinggal*
leave

196 R *tinggalkan die ((pointing to picture))*
left him

197 Mus *tinggal a: h pu(ny)e* ((pointing to the picture of the crocodile))
 leave hiz

198 *buaye.*
 crocodile

199 R *ah. tinggalkan buaye. lepas tu die orang ni.*
 Left (the) crocodile. after that these two

200 Mus *erm, (XX), (8.1)* tch.
 ((looking at the picture, shifting gaze))

201 R *mereka berdue ni,*
 they both

202 Mus *ah, (2.4)* ((looking at R, frowning))

203 R *gem-*
 (first syllable of 'gembire')

204 Mus *biri bire- ah, tch. bila ah-*
 (last two syllable of 'gembire')

205 R *re? gem,bi=*
 (last syllable of 'gembire') (first two syllable of 'gembire')

206 Mus *bire.*
 (last syllable of 'gembire')

207 R *ah, pulang dengan gembirelah.okay?*
 (returned (home) happily

208 Mus *ah.*

209 R *dah penat?*
 (are you) tired (already)?

210 Mus *a:h.*

211 R *balik nanti cerita dengan cucu ye, cerita ni?*
 when you get home, tell this story to your grandson, will you?

212 Mus *ah. boleh.*
 (sure) can.

213 R *boleh? okay. terima kasih.*
 can? thank you.

Appendix 7(e)

TRANSCRIPT OF TANA'S STORY TELLING IN ENGLISH

001 R I am going to show you some pictures from a local folk story.
 002 take a look at these and then we can start, okay?
 003 Tana m.
 004 R this is picture number one, ((spreading the pages on the table))
 005 two, three, four, five and six.
 006 Tana ah, ahm, ((looking at the first picture))
 007 R do you know this story?
 008 Tana a:hm.
 009 R you can start when you are ready.
 010 Tana ahm, mmm, mmm, that er m, that er: f noh. that
 011 ((taps on the table, fingers held like a claw)) no.
 012 R do you want me to help you?
 013 Tana ((nodding)) a:hm.
 014 R /kr/, /kr/
 015 Tana a:h,/ kok/ /kokedail/
 016 R yes. ((nodding))

017 Tana crocodile, ((pointing to the back and then at the picture) ahm, ((laughs))
 018 R yes crocodile. what is the crocodile doing?
 019 Tana /s/, /s/ wait- erm, the crocodile, sleep ((lowers her hand, palm
 020 facing down)) erm
 021 R okay.
 022 Tana okay, erm, (2.2) ((looking at the picture and then shifting gaze to R))
 023 R what is this? ((pointing to the picture))
 024 Tana a:h, ((moving her hand back and forth, sawing motion)) pa:lám. ((laughs))
 bridge
 025 R pa::lám? this not a pa:lám. this is a, look at this.
 bridge bridge
 026 Tana erm,
 027 R /tr/,
 028 Tana ch? ((looking at R))
 029 R /tr/,
 030 Tana tree.
 031 R ah. the tree. what happened to the tree?
 032 Tana erm, cross er that that tree,
 033 R yes,
 034 Tana /f/ fall down.
 035 R yes. the tree fell down on the,
 036 Tana the the a:p, th:at man,
 037 R mhm,
 038 Tana o:, (3.3) ((swinging her hand to the back)) o:v ʌ(7.5) ((pointing
 039 to the picture))the man,
 040 R mhm,
 041 Tana a:h,the man,
 042 R m,
 043 Tana a:hm, (6.5) ((tracing the drawing on the paper)) crocodile,
 044 R mhm.
 045 Tana falling.
 046 R mhm.
 047 Tana that man, erm, / l/ man STAND, ing, ((touching her own chest))
 048 R m,
 049 Tana erm, ((brings her right hand close to her chest)) crocodile,
 050 al(rea)dy, dead. ((flicks her wrist, spreading out her fingers))
 051 R okay. then what happens next?
 052 Tana a::h, ((tracing part of the picture with her index finger)) the the
 053 R crocodile,
 054 Tana crocodile, erm, (1.9) that tree, there. ah.
 055 R okay.
 056 Tana a:h, the /s/ crocodile and (placing hand on her abdomen
 057 and then on her back) /s/ /s/ /s/,
 058 R the tree is on the crocodile?
 059 Tana a:h.
 060 R okay.
 061 Tana yes.
 062 R okay, what is the crocodile doing?
 063 Tana pain.((laughs))
 064 R pain. that is right. the crocodile is in pain. so, the
 065 Tana a:h, erm ((touching her chest)) sad. ah.
 066 R okay. then ((pointing to picture)) this one?
 067 Tana the man is (2.2) ((turning her open palm over))oh dear. ah
 068 R right. the man says oh dear.
 069 Tana a:h.
 070 R and then, ((turning the page)) the next picture. here.

071 after he says oh dear,
 072 Tana ah,
 073 R what does he do? in this picture?
 074 Tana owh, oh that,
 075 R mhm,
 076 Tana a:h, crocodile is er,
 077 R what does that the man do?
 078 Tana a:h no, the /l/ leg,
 079 R m?
 080 Tana hurting.
 081 R yes.
 082 Tana there.
 083 R yes,
 084 Tana croc- noh. man leg
 085 R mhm,
 086 Tana o:, (2.0) paining.
 087 R pain. okay
 089 Tana ah.
 090 R what does the man do with the tree?
 091 Tana a:hm tree, (1.4) the (1.5) tree is,
 092 R mhm,
 093 Tana a:hm, that tree,
 094 R mhm,
 095 Tana there.
 096 R m?
 097 Tana the,
 098 R man,
 099 Tana that man,
 100 R mhm,
 101 Tana this crocodile is /i:/ ((opening and closing her hand and
 102 then making a fist)) ah.
 103 R what is he doing.
 104 Tana ((making a fist)) biting. a::h.
 105 R the crocodile bit his leg.
 106 Tana ah.
 107 R before that. what did the man do? what is he doing here?
 108 Tana ahm, erm a fo(rk) eh no, the tree,
 109 R mhm.
 110 Tana /i:/ (2.8) eik, ((raising her right hand and dropping it on her chest))
 111 jatuh. ((laughs))
 fell
 112 R okay. the tree, fell on the crocodile, right?
 113 Tana a:h.
 114 R so what did the man do with the tree?
 115 Tana the tree,
 116 R mhm,
 117 Tana the erm (1.2) tree,
 118 R the tree was on the crocodile's tail. what did the man do?
 119 Tana tree jatuh.
 fell
 120 R what did the man do?
 121 Tana the tree ((pointing))there
 122 R what did he do to the tree?
 123 Tana er er the ((moving her hand in a circular movement)) /f/ (mo)ve
 124 R remove?
 125 Tana remove.
 126 R right. he removed the tree

127 Tana a:h.
128 R and then,the crocodile,
129 Tana erm bite him.
130 R yes.this crocodile, is he good or bad?
131 Tana noh. he he (1.4) *busuk*.
idiomatic expression (busuk hati = evil or wicked)
132 R yes.okay. what about what is happening here?
133 Tana the,
134 R the crocodile is,
135 Tana the there the erm (1.4) bite erh,
136 R mhm,
137 Tana m, leg ah
138 R mhm,
139 Tana there erm, (3.4) ((*pointing to the picture*))
140 R who is this?
141 Tana erm,there, (8.5) ((*pointing to the picture, turning away*))erm hm,
142 R can you remember?
143 Tana yes (3.5) ((*pinching her thumb and index finger, rotates her wrist*))
144 R can you write for me the name?
145 Tana ahm.
146 R i get you some papers. you write for me?
147 Tana okay.
148 R wait yeah, (2.5) ((*taking a piece of paper*))here.
149 Tana ah, (18.4) ((*scribbling on the paper*))
150 R can you remember the name of this animal?
151 Tana ah, animal, a:h that er,
152 R can you remember, remember what we call this one?
153 Tana a:h ?
154 R starts with what letter?
155 Tana aha:h (9.7) ((*bringing her index finger and thumb together*))
156 R it is a small animal?
157 Tana animal. arh (XXX) no.
158 R /kan/, /kan/
159 Tana a:h?
160 R /kan/
161 Tana KANcil.ah. ((*dropping her hand to the table*))
162 R yes.
163 Tana Kancil.
164 R in English? what do we call it?
165 Tana erm, ah,
166 R /m/, mou-
167 Tana mouse deer
168 R mousedeer
169 Tana mousedeer.
170 R okay, the mousedeer came and,
171 Tana eh?
172 R this crocodile is bad, right?
173 Tana a:h?
174 R the crocodile is bad,
175 Tana a:h, *busuk orang*
idiomatic expression (busuk hati = evil or wicked person)
176 R what about this one?
177 Tana erm?
178 R this one is,
179 Tana erm what animal?
180 R the kancil is,

181 Tana erm, (2.8) *illei* ((dropping her hand to the table, laughing))
no

182 R he is not bad?

183 Tana a:hm

184 R what is he?

185 Tana yeah.ah, kancil, ah no(h).

186 R what is he?

187 Tana one friend.

188 R friendly one.okay.

189 Tana ah friendly.

190 R now the kancil has come

191 Tana ah,

192 R and what is happening here.

193 Tana oh,erm erm (2.4) bite

194 R biting the

195 Tana biting erm, (3.4) busuk punya orang.
idiomatic expression (evil or wicked person)

196 R m,

197 Tana a:h, (2.5) that

198 R kancil,

199 Tana Kancil, ah dear, ah, friendly person.

200 R okay,

201 Tana ah,

202 R so, this is a friendly one so he is,

203 Tana that bus-

204 R tell, tells him to do what?

205 Tana bite the person (gestures beating)

206 R beat? is he beating?

207 Tana beating.

208 R a:h?

209 Tana noh.

210 R what is he doing with the tree?

211 Tana a: ah, beating lah.

212 R you think he is beating?

213 Tana ah.

214 R not putting it back? put it back?

215 Tana noh. noh.

216 R beating?

217 Tana yeah.

218 R so, the kancil told him to beat it?

219 Tana yeah.

220 R what happens next?

221 Tana ah, ahm. friendly person.

222 R okay. so what happened what happened to the,

223 Tana mouse,

224 R crocodile,

225 Tana crocodile. crocodile *malu*.

226 R so, they leave the tree,

227 Tana ah. ((pointing to the picture))

228 R on the

229 Tana ah, ah,

230 R put it back. so the crocodile?

231 Tana go(h) ((dismissive gesture))

232 R they go away?

233 Tana ah. away.

234 R so what can we learn from this story.

235 Tana ah, there er, (3.3) ahm

236 R what is the moral of the story?
237 Tana ah.
238 R so what can we learn from this story?
239 Tana the man is ,
240 R mhm,
241 Tana leg, the the what (2.4) ((*pointing to the picture*))
242 R crocodile?
243 Tana ah, crocodile ah that ((*tapping on the picture*))
244 R the tail?
245 Tana crocodile
246 R mhm,
247 Tana that((*pointing*))
248 R the tail?
249 Tana went down.
250 R went down?
251 Tana no(h)
252 R no?
253 Tana crocodile is ((*pointing to the picture*))
254 R under the tree.
255 Tana the, er under the tree,
256 R so this man,
257 Tana man,
258 R helped didn't he?,
259 Tana ah help.
260 R this man helped.
261 Tana the the man helped, there. ((*pointing*))
262 R mhm, then, what happened?
263 Tana erm,
264 R the(h) crocodile,
265 Tana bite the person no(h).
266 R then,
267 Tana crocodile biting the person
268 R who helped him. then, then the,
269 Tana ah,
270 R then the kancil? g
271 Tana kancil,
272 R came.
273 Tana kancil came, (2.8) ((*pointing*)) the kancil came, crocodile
274 R right. kancil saw the crocodile biting
275 Tana e:r, biting the person. ah, there. emm,
276 R mhm,
277 Tana that er crocodile,
278 R kancil?
279 Tana kancil.
280 R beat the,
281 Tana crocodile.
282 R mhm,
283 Tana crocodile, ah (1.5) ((*pointing*)) a:hm,
284 R the kancil told the man to beat the crocodile?
285 Tana m.the (1.4) ((*pointing*)) the man, (2.2) ((*pointing*)) nice, man.
286 R mhm
287 Tana the kancil erm kancil very nice.(0.8) ((*pointing*)) that,
288 R mhm, ((*pointing*)) this one?
289 Tana *busuk orang*.
idiomatic expression (evil or wicked person)
290 R oh?
291 Tana ah.

292 R the crocodile is bad. because this man helped but he bit him.
293 Tana a:h there (*pointing at the picture*)
294 R so, the crocodile is not nice.
295 Tana ah. (*laughing*)
296 R okay. thank you.
297 Tana okayh.

Appendix 8

TRANSCRIPT OF CONVERSATION BETWEEN ZIN AND AIN

- 001 Ain *ape nih, Bang Zin tak nak tanya ape-ape ke Bang?*
what ø this TOA NEG want ø ask anything TAG TOA
 what is this, Bang Zin don't you want to ask anything or not Bang?
- 002 Zin [(0.8)
 ((looking down at the newspaper))]
- 003 Zin [erm ah ni a- *interview interview*,]=
this interview interview
 erm ah this a- *interview interview*]=
 ((shifting gaze from the newspaper to **Ain**))]
- 004 Ain = [a:h?
 ((nodding))]
- 005 Zin *mecamaneh?*
how ø ø?
 how was it?
- 006 Ain a:h, *tak tau(:l)ah nak cakap heh*] hh.
ø NEG know PRT ø want to say
 a:h, (I) don't knowlah what ø to say. heh hh]
- 007 Zin]
 heh HEH.
- 008 Ain *i:tu tunggualah, result die.*
that ø waitPRT ø PRO
 that we waitlah, for the result.
- 009 Zin °hmm.°=
- 010 Ain =*Tapi, ah, orang tu cakap*, m-hmm-]
but PRO that say
- 011 Zin]
 ah per- *sediaan. persediaan.*
preparation, preparation
 ah preparation, preparation.
- 012 Ain ((turning to zin)) *persediaan?=
 preparation
 preparation?*
- 013 Zin =/butf/- *bace buku ke ape?*
readø bookø or what?
 /butf/- reading books or what?
- 014 Ain ah. (single syllable) *memanglah, bace buku*, [tap-] ah *tapi*
of coursePRT ø readø bookø bu- but
 ah. of courselah, I read books [bu-] ah but
 -hmm.]
- 015 Zin]
- 016 Ain *yang bace tu, ah macam pelan induk pembangunan tu tak, tak*
PRO ø read that like ø plan master development that NEG NEG
 the ones that I read like the development masterplan didn't didn't
- 017 *keluar. die tanye pasal isu semase,*
come out PRO ask ø about issueø current
 come out. he/she asked about current issues,
- 018 Zin mmm.
- 019 Ain *dia kate bace tak, awak bace tak suratkhobar, di(e) kate.*
PRO say read NEG PRO read NEG newspaper PRO say he/she said did
 you read or not, did you read the newspaper, he/she said.
- 020 *pas tu orang cakap* [lah-]
after that PRO say PRT
- 021 Zin]
 after that I saidlah [HEHhh] hhh.
- 022 Ain ah, *hari ini saye tak sempat bace. ra:h se malam saye bace*]
day this PRO NEG have time to read yesterday PRO read
 ah, today I didn't get to read. ah, yesterday I read]

023 Zin L^h HEhh[↓] L^heh.[↓]

024 Ain *mukesurat depan a*ⱱje.ⱱ
page front only
the front page only

025 Zin L^heh[↓] hehh hmm.

026 Ain *pas tu orang cakaplah, die kate okay kalau awak bace*
after that PRO sayPRT PRO say okay if PRO read
after that I saidlah, he/she said okay, if you read

027 Ain *die kate, ape yang ah, awak ni: ape(h), ape yang isu smase*
PRO say what the one PRO this what what the one issue current
he/she said what is the one ah, you this, what, what is the one current issue

028 Ain *yang awak bace? pas tu, orang cakaplah, ape ni, MRR two, kan*
the one PRO read after that PRO sayPRT what that NEG TAG
the one that you read? after that I said, what is this, MRR two, isn't it

029 Ain ⱱMRR two? ⱱ

030 Zin yes yes. yes.
L ((nodding))[↓]

031 Ain *yang pasal,=*
the one about
the one about,=

032 Zin =mhm.

033 Ain *tu kan. beam, retak* ⱱtu ka:n.ⱱ
that NEG TAG crack that NEG TAG
that isn't it? the beam that cracked isn't it?

034 Zin L^hretak[↓] retak.ⱱretak mm. aha:h[↓]
crack crack crack
cracked cracked cracked

035 Ain L^hah. crack tu. [↓]
that
ah. that cracked (one)

036 Ain *pas tu, a:: ape ni, orang cakap, die kate okay. selain tu*
after that what this PRO say PRO say okay besides that
after that what is this I said, he/she said okay. besides that
ape lagi isu semasa.
what other issue current
what are the other current issues.

038 Zin Azhar?

039 Ain ah, ⱱtulah tak ingat Azha::r. ⱱ
thatlah NEG remember
Ah, that's itlah, (I) didn't remember Azha::r.
((turning away from Zin))

040 Zin L^heh hhh [↓]

041 Ain *pas tu, orang cakappasal a:, Sharifah A*ⱱziz nak letak jawatan,ⱱ

042 Zin L^{HEH} h hah. (du)aha:h. a:h.[↓]

043 Ain *berape? Bang Zin ingat?*
how many TOA remember
how many? (do) you remember?

044 Zin (single syllable) a:h?

045 Ain *die nak letak ja*ⱱwatan,ⱱ
PRO want resign
she wants to resign (from her position),

046 Zin L^h ah, [↓] bula:nh,
month
ah, (the) month (of)

047 (1.5)
((turning his face away from Ain))

048 Ain ta:hun brape die cakap (t)u?
year how many PRO say that
which year did she say?

049 [(1.2)
((Zin holding mid distance gaze and facing Ain))]

050 Ain die nak letak jawatan.
PRO want resign
she wants to resign (from her position),

051 Zin bulan, [satu dua tiga emh-] [0.8]
month [one two three
the month (is)one two three emh-
-((looking down))] [((lifting his head, mid distance gaze))]

052 [eNAM. a::m.]
six
six
L ((shifting gaze to Ain)) J

053 Ain die ade mention. [dia ade mention bulan?]]
PRO have mention PRO have month
did she mention. did she mention the month?

054 Zin yes, yes. yes.yes. ah a:h.
L ((nodding)) J

055 [a- sat-(0.6) Januari, Febuari, Mac, April, Mei(h)]]
one- January, February, March, April, May(h)
a- one- January, February, March, April, May(h)
L((looking down at his hand)) J

056 [Julai. Julai.] [Julai. hah.]
July. July. July.
July. July. July, hah.
L((looking up, shifts gaze to Ain)) J

057 Ain July, two thousand
July, hah. two thousand?

058 Zin due ribu::, ah, [°(sa)tu,° (°Ja)nuari-° hmm hh ap-]
two thousand one January
two thousand, ah, °one°, January hmm h hap-
L ((looking down, then holding mid distance gaze)) J

059 [(1.4)
((Zin looking down))]

060 Ain due ribu,=
two thousand
two thousand,=

061 Zin =eNAM [nam.]
six [six
=six [six
((tracing the figure nine with his index finger))]

061 Ain EH? ((leaning away from Zin))

062 Zin apeh? [mm,=]
what
what?
L ((wiping his nose briefly)) J

63 Ain =bukan. tbalik tbalik.
NEG upside down upside down
NO. upside down upside down.

064 Zin tbalik?
upside down
upside down?

065 Ain ah. *due ribu semilan.*=
two thousand nine
two thousand nine.=

066 Zin =ah. yes [yes. yes]yes . [°ahah °.
((nodding)) [((looking down at the newspaper))]

067 Ain L_a:h. J

068 Ain ah. *orang cakap yang tu jelah. pas tu die kate ah, okay die*
PRO say the one that only. after that PRO say PRO
ah. I said that is itlah. After that he/she said ah, okay he/ she one

069 Ain *kate ah, ape ape lagi isu semase? pas tu orang cakap,*
say what what other issue current after that PRO
said ah, what what are the other current issues? After that I said

070 Ain *ah,ntah saya ingat yang itu aje. sebab saya ingat m, ah,*
don't know PRO remember the one that only. Because PRO remember
ah, (I) don't know, I remember only that. because I remember m, ah,

071 Ain *ade gambar besar Sharifah Majid denganh heh hhh.*
got picture big with
there was a big photograph of Sharifah Majid with heh hhh.

072 Zin =h yang bukan. *die+kan pegang tangan kan?]*
the one that+NEG TAG PRO+NEG TAG hold hand+ NEG TAG
=.h that one isn't it. she was holding hands, wasn't she?

073 L_ahah J_ahah.

074 Ain a:h yang tu [jelah.]
the one that onlylah
a:h that's it onlylah.

075 Zin L_{nga}: J_n nih apeh, Rash- Rashidah.
with this what
with this what, Rash- Rashidah.

076 Ain ah, Ra [shi-.]

077 Zin [Ra]shidAH. ah [a:h]

078 Ain [ah]Rashidah.

079 [(0.9)
[((Both Zin and Ain looking at the newspaper.))]

080 Ain yang tu jelah.
the one that onlylah
that's it onlylah.

081 [(1.2)
[((Both Zin and Ain looking at the newspaper.))]

082 Zin hmm.

083 Ain yang lain tak ingat (a)hh.
the one other NEG remember
the others (I) don't remember (a)hh.

084 [(1.6)
[((Both Zin and Ain looking at the newspaper.))]

085 *pas tu die kate, a:h, ape ni, okay, a:h, a:h ye, ape lagi die*
after that PRO say what this yes what more PRO
after that he/she said, a:h, what is this, okay, a:h, a:h yes what else he/she

086 *kate yang awak nak tanye: a: [h, (die oranglah,)]*
say that PRO want ask PRO
said that you want to ask a:h, those peoplelah,

087 Zin L_{ni} perempuan atau le_Jlaki?
this female or male
this (was it) a woman or a man?

Ain a:h nih, sorang perempuan sorang lelaki.
this one+person female one+person male
this, one was a woman (and) one (more) was a man.
((looking up at the ceiling and then at Zin))

089 Zin o:h. =((nodding, then looking down at the newspaper))

090 Ain =mh.

- 091 [(1.2)]
 ((looking down at newspaper))]
- 092 Zin cikGU ke apeh?
 teacher or what
 teachers or what?
- 093 Ain rase macam, lecture:r.=
 idiomatic expression lecturer
 I think lecturers.=
- 094 Zin lecturer.
 lecturer
 lecturers.
- 095 Ain ataupun, orang yang orang pengurusann pengambilan.
 or PRO that PRO management intakelah
 or, those people that those intake management peoplelah.
- 096 pengurusann pengambilan a:ɾ guru- ɾ
 management intake teacher
 teachers' intake management-
- 097 Zin ɿpengambilɿan apeh?
 intake what
 what intake?
- Ain ah, pengambilan gurulah.
 intake teacherlah
 teachers' intakelah.
- 099 Zin °ohh°=
- 100 Ain =ma:ktabkan macam dia orang ade, a:h,
 college+NEGTAG like PRO have
 college isn't like they have a:h.
- 101 jawat- ah ape bahagian pengambilan guru?
 post what section intake teacher
 post- ah, what (is this) teacher intake section.
- 102 Zin mmm,
- 103 Ain ah, bahagian tu agaknya kot? yang interviu guru-guru.
 section that I think PRT the one interview teachers
 ah, that section I think perhaps the ones who interview teachers.
- 104 Zin AH, selepas itu?
 after that
 after that?
- 105 Ain lepas nɿi: , ɿ ah, tunggu results ajela ɿh. ɿ
 after this wait onlylah
 after this, ah, (we) wait (for) the results onlylah.
- 106 Zin ɿa:h° ɿ ɿa- ɿ
- 107 yelah./ən/- /ən/terviu((shaking his head gently))ss- dah sudahlah?
 yeslah interview over overlah
 yeslah /ən/- /ən/-terview
 is over. is overlah?
- 108 Ain ɿah. dah sudah. ɿ
 over over
 ah. over. (it is) over
 ɿ((nodding)) ɿ
- 109 Zin lepas itu, er nih. blajarh?
 after that this study
 after that, er this. study?
- 110 Ain ɿa:h. ɿ blajar stahun.
 study one year
 the studies (training) will be for a year.
 ɿ((nodding))ɿ
- 111 Zin o:h, okayh.
- 112 Ain °mhm.°=

- 113 Zin *macam nih. ape name:h* ʔ*dekat nih,* ʔ
 like this what ∅ ∅ name
 like this. what's the name(h)
 L((swinging his hand to the left,)) J
- 114 ʔ*a:h nih Batu Pahat.* ʔ
 this
 a:h this Batu Pahat.
 L((touching his nose)) J
- 115 Ain *a:h.*
- 116 Zin *macamane?*
 how ∅ ∅
 how (is that one)?
- 117 Ain *Batu Pa:hat tuh, a:h DPLI.*
 that ∅
Batu Pa:hat that (one) a:h DPLI
- 118 Zin °KPLI°,
- 119 Ain *D.*
- 120 Zin *DPLI ʔyeh?ʔ*
 TAG
 DPLI is it ?
- 121 Ain L **AH.** J *diploma, pendidika::n DP, D- diploma pengambilan,*
 diploma education diploma intake
 ah. diploma, (in) education DP, D- diploma
- 122 *lepasan ijazah. diploʔma, pengambilan lepasan ʔ ijazah.*
 post degree diploma intake post degree
 post graduate intake. intake (for) post-graduate diploma
- 123 [(1.7)
 L((mid distance gaze and mouth movements, Zin looks attentively at Ain)) J]
- 124 Zin *o:h ha:h, yes yes. ha:ah.*
- 125 Ain *die tu untuk sekolah menengah.*
 PRO that for school∅ secondary
 that one is for secondary schools.
- 126 Zin °hmm.°
- 127 Ain *atau pun kolej.*
 or also college
 or ∅ college.
- 128 Zin *kol- kolej?*
 college
 col- college?
- 129 Ain *ah. ((nodding)) kolej pun kite boleh gune.*
 college also PRO can use
 ah. college also we can use (also applicable for college)
- 130 Zin °o::h.°
- 131 Ain *D P L I tu,*
 that
 DPLI that (one),
- 132 Zin *o:h.(.) atau ʔpun, e- ni::ʔ diplomalah dup- /dup/loma?=*
 or also this diplomalah
 o:h. (.) or e- this diplomalah dup- /dup/loma?
- 133 Ain L **yang KPLI nih,** J
 PRO this
 the KPLI one
- 134 *ah, diploma. dia memang am(b)ik diploma. dua-dua am(b)ik*
 diploma PRO actually take∅ diploma both take
 ah, diploma. it (this programme) actually confers a diploma. both confer
- 135 *diploma. dua-dua ambik diploma pendidikan. tapi, beze die,*
 diploma∅ both take diploma∅ education but difference PRO
 diplomas both confer diplomas in education but the difference (is)

207 Zin ((moving closer to Ain)) *ape name?*
what ∅ ∅ name
what's the name?

208 Ain Kings

209 Zin King?

210 Ain Kings Hotel.

211 Zin mm. °*ta(k) (t)au.*°
NEG know
mm. °(I) don't know. °

212 Ain *die depan, aah, depan tu, depan Pantai.*
PRO ∅ in front ∅ in front that in front ∅
it's in front of aah, in front that, in front of Pantai.

213 Zin Pantai?=
214 Ain =ah. *hospital Bang Zin* ꞑtu, ꞑ
hospital TOA that
=ah. your hospital (that hospital of yours)

215 Zin ꞑMelakelah?ꞑ

216 Ain ah. *hospital Bang Zin,*
hospital TOA
ah. your hospital,

217 Zin °mm,°

218 Ain *kan? kan die ade simpangꞑkan?ꞑsimpang empat.*
NEG TAG NEG TAG PRO got junction NEG TAG junction
isn't it, isn't it there is a junction, isn't it? a junction.

219 Zin ((nodding)) ꞑmm. ꞑ

220 Zin hmm.

221 Ain *kalau kite,*
if we
if we,

222 Zin Mahkotelah?

223 Ain ah?

224 Zin Mahkote.

225 Ain *bukan Mahkote. Pantai.*
NEG
Not Mahkota. Pantai (Hospital)

226 Zin Pa:ntai? ah yes.=

227 Ain =ah *yang itu, ah kalau kita daripada rumah kite, daripada*
PRO that if we ∅ from house PRO from
=ah that (is the) one, ah if we are (coming) from our house, from

228 Bukit Katil,

229 Zin aah, Ayer Keroh.

230 Ain aah. *daripade* ꞑAyer-ꞑ
from
aah. from

231 Zin ꞑAyer ꞑ Keroh, Ayer Keroh.

232 Ain ꞑ*kalau daripada Ayer Keroh,* ꞑ
if from
if (we are coming) from Ayer Keroh,
ꞑ((looking up and back to Zin with hand under her chin))ꞑ

233 Zin a:h.

234 Ain aah kalau daripada Ayer Keroh,
if from
aah if (we are coming) from Ayer Keroh,

235 Zin °ah a:h.°

236 Ain *Bang Zin p(u)nya hospital, kat mana kalau daripada Ayer Keroh?*
TOA POSS hospital ∅∅ near where if from
your hospital would be where if (we come) from Ayer Keroh,

237 Zin °Ayer Keroh, °ꞑ(1.5) ꞑ°hmm° ꞑmik- mane(h)? ꞑ
where
where(h)?

┌ ((mid distance gaze))┐ ┌((moving closer to Ain))┐

238 Ain ha:h.

239 Zin *apeh?*
 what
 what (h)?

240 Ain *macam* [a:hm (three syllables)]
 like
 like
 ┌ ((Ain getting up)) ┐

241 [(8.3)
 ((Ain walks towards the desk behind Zin, picks up a paper & a pen.))]

242 ((walking towards Zin)) *macam ni:*,
 like this
 like this,

243 [(2.3)]

244 Ain *ni kan simpang, simpang empatkan?*
 this NEG TAG junction, junction NEG TAG
 this isn't it, (a) junction, junction isn't it?

245 [(3.1)
 ((leaning towards the paper, Zin looks down, his hand held over his mouth))]

246 Zin [*ni apeh?*]
 this ∅ what
 what is this?
 ┌ ((covering his mouth with his hand)) ┐

247 Ain *simpang.*
 junction
 junction.

248 [(1.0)
 ((Zin looking down at the paper.))]

249 Zin [*maneh?*]
 where
 where (h)?
 ┌ ((Zin's hand covering his mouth)) ┐

250 Ain *nih Bang Zin punya,* [(0.8)]] hospital.
 hospital
 hospital
 this TOA PRO
 this your,
 ┌ ((Zin & Ain looking down at the paper)) ┐

251 Zin *hospital?*
 hospital
 hospital?

252 Ain *hospital PANTai=*
 hospital
 PANTai hospital=

253 Zin = [*em hmm hm.*]
 [((nodding))]

254 Ain *kan? betul?*
 NEG TAG right
 isn't it? right?

255 Zin *betul.* [er hm mm.°]
 right
 right.
 ┌ ((moving his hand away from his mouth)) ┐

256 Ain *die tepi jalan aje kan?*
 PRO beside road just NEG TAG
 it is just beside the road, isn't it?

257 Zin mm. mhm.

258 Ain ah. *ni depan ni je.*
 this in front \emptyset this just
 ah. this (it is) just in front of this.

259 Zin ah. yes. \uparrow betul. hm. \uparrow
 right
 ah. yes. (that's) right. hm.
 \downarrow ((straightening his posture)) \downarrow

260 Ain \uparrow Bang Zin \uparrow prasan?=
 TOA remember
 (do) you remember?=
 261 Zin = \downarrow yelah \downarrow
 yeslah
 yeslah.

262 Zin = ade ade. HHH \uparrow hehhh. \uparrow
 got got
 there is there is.

263 Ain \downarrow a:h kan? \downarrow
 NEG TAG
 a:h isn't it?

264 die hotel die \uparrow bu \uparrow KAN satu bangunan.=
 PRO hotel PRO \emptyset NEG one building
 that hotel it is not a single building.=
 265 Zin \downarrow ah ah. \downarrow

266 Zin =ah. yes yes=
 267 Ain =DIE •h tepi tepi ni \uparrow ade banyak \uparrow kedai-kedai lain kan?
 PRO besides besides this got a lot \emptyset shops other NEG TAG
 besides besides this there are a lot of other shops, aren't there?
 268 Zin \downarrow mmm. \downarrow

269 Zin a::h,=
 270 Ain =ah. die kat tepi ni \uparrow (simpang.) \uparrow
 PRO near beside this junction
 =ah. it is next to this junction

271 Zin \downarrow Madam \downarrow King eh?

272 Ain eh! buKAN.
 NEG
 eh! no.

273 $\left[\begin{array}{l} (1.0) \\ ((Zin holding mid distance gaze. Ain looking down)) \end{array} \right]$

274 Zin ape?
 what
 what?

275 Ain Ki:ngs \uparrow Hotel. \uparrow
 ((looking down, appear to be writing))
 276 Zin \downarrow Hotel. \downarrow eh? $\left[\begin{array}{l} \text{mm.} \\ \text{mm} \end{array} \right]$

277 Ain
 278 Zin $\left[\begin{array}{l} \text{mmm. Erm. (single syllable)} \\ ((Zin leaning forward to look at Ain's drawing on the paper)) \end{array} \right]$

279 Ain ah King ah. btul \uparrow btul. \uparrow mm. mhm
 right right
 right right

280 Zin \downarrow ah. ($^{\circ}$ mhm. $^{\circ}$) \downarrow

281 Ain ni da(r)i mane Bang Zin?
 this from where TOA
 this from where, Bang Zin?

282 Zin a:h, a:h, JPJ. hahh hah.

283 Ain JP- ʃah. betul. (single syllable) JPJ. ʃda(r)ipade,
right from
 JP- ah. right. (single syllable) JPJ (RTD). from,

284 Ain L hah hehhh. J

285 Zin [JPJ.

286 Ain [hehhh.]•h.

287 Zin ʃkalau kite ke depan ni, ade ape? ʃ
if PRO to ø front ø this, there what ø
if we go to the front of this, what is there?
 L ((looking down and pointing to the map)) J

288 Ain ((lifting his head) ʃ ah, ʃape name mm, ʃ
ah, whatø ø name
what's the name
 L ((looking down)) J L ((downward gaze)) J

289 Zin Bang Zin slalu ʃjalan kat si(ni.)ʃ
TOA used to go near here
(you) used to go here

290 Ain Lape nameh, Jem e- nih. ah factory.
whatø ø name this
what's the name, em e- this. ah factory

291 Zin ah, ʃah a:h.ah. factory ape?ʃ
what
 ah, ah a:h.ah. what factory?

292 Ain LHEH hhh heh heh J ah, [(1.6)
((mid distance gaze))]

293 Zin mmh ni ape nameh ʃ (2.4) a:m, mmmmm ape, ʃ
this, whatø ø name what
mmh, this, what's the name (2.4) a:m mmm what
 L ((mid distance gaze)) J

294 Ain mm?

295 Zin mm, ʃ (1.4) ʃ balak, mm bukan bukan ape nameh
timber, NEG NEG whatø ø name
timber,mm no no what's the name
 L ((mid distance gaze)) J

296 [(1.2) err,
((mid distance gaze))]

297 Ain makanan. makanan.
foodstuff foodstuff
foodstuff. foodstuff.

298 Zin ah nih. ah ni Mag- Maggi- Ma:m- Ma:mee. Mamee.
this this
 ah this. ah this Mag- Maggi- Ma:m- Ma:mee. Mamee.

299 Ain ah.=

300 Zin = hehh heh.heh heh.

301 Ain ah. Maggi:?

302 Zin TA:k. bukan. Ma:mee.
NEG NEG
NO. not. Ma:mee.

303 Ain °Ma:mee.°

304 Zin MA:mee. EH heh.

305 Ain mm, Ma:mee.

306 Zin Ma:mee Ma:mee.

307 Ain emm. m.

040 Tony [yes yes.]
 041 Zin [yeah]okay.
 042 [(1.0)
 [((Tony smooths the table cloth. Zin looks at him))]
 043 Zin [ah, (0.6) ape nameh,]China,
 what ø ø name
 ah, what's the name, China,
 L((Zin holds mid distance gaze, Tony looks down))J
 044 Tony a:h,
 045 Zin China, [(2.4)] a:hmm,
 L((Zin holds mid distance gaze, Tony looks at Zin))J
 046 Zin [(pertunjukan)]
 performance
 performance
 L ((lowers his head and then smiles))J
 047 Tony yeahlah, China hostlah.
 048 Zin a::h nih a:h,=
 this
 a: h this a:h=
 049 Tony =Beijing. Beijing.
 050 Zin Beijing, a:h, ah-
 051 Tony jadi tuan rumah?=
 beø ø host
 is the host?
 052 Zin =/e/vent, e- e, e:vent [°peh°.] a:h [(°acare apeh°)]
 what event what
 what. a:h event, what
 L((smiling))J L ((lowering head))J
 053 [(3.6)
 [((Zin looks down, index finger on his lips))]
 054 Zin [erm, (0.8)] [event event
 [((looking down))] [((rotates his wrist twice))]
 055 Tony yeah, ye [ah.]
 056 Zin [e]ven(t). a:, a::pe nameh [e:rm,]
 what ø ø name
 a:, what's the name erm,
 L((lowering his head))J
 057 Tony what they good?=
 058 Zin ((looking up at Tony)) [=an-]
 059 Tony [they] good for what?
 060 Zin yes. yes. yes. yes. ((nodding))
 061 Tony what are they good?
 062 Zin ah.
 063 Tony a [a:] china good for what?
 064 Zin [a-]
 065 Zin [e:rmmm,] [(0.7) a-eCRObatic.
 [((mid distance gaze))] [((turning to Tony, moving his hand))]
 066 Tony acroba [tic. ah. (three syllables)
 [((pointing with index finger at Zin, holding up his thumb))]
 067 Tony Acroba [tic. ah. (three syllables)]
 ((pointing at Zin, then holds up his thumb)) J
 068 Zin [heh HEH he] acrobatic. okay.
 069 Tony very good. [world number one eh.]
 [((holds his thumb up))]
 070 [(1.1)
 [((Zin holds a mid distance gaze))]
 071 Zin ah, [ye.] a::m,
 [((quick nod))]

072 Tony [badminton a(l)soh?
 [((gestures playing badminton))]

073 Zin yes. yes.

074 Tony Lin Dan. Lin Dan.

075 Zin ah?

076 Tony Lin Dan.=

077 Zin =ye(s) Lin Dan. [aha:h.]

078 Tony [bad]minton,

079 Zin ah. okay,

080 Tony a:h,

081 Zin a:pe name,

082 Tony acrobatic.

083 Zin [ni, ape name nih, ɿ °emmm,° (1.0) a:-
 this, what's name this
 this, this what's the name
 L((looking down)) J

084 Tony basketball. ((gestures boucing a ball))

085 Zin basketball. okay. okay.

086 Tony basketball.

087 Zin a:pe name,
 what's name
 what's the name

088 Tony acrobatic.

089 Zin [ni, ape nameh,ɿ [MEɳari. ɿ a, me°na-°
 this what name dancing dancing
 this what's the name DANcing dancing
 L((looking down))J L((turning to Tony))J

090 Tony yeah. menari=
 dancing
 yeah. dancing

091 Zin =danCING. [DANcing.]

092 Tony [dancing.] a:h.((looks out of the window))

093 Zin ah yes.

094 Tony ((turning back from the window)) dancing,

095 [(1.9)
 L((both Zin and Tony holding mid distance gaze))]

096 Tony ((turning to Zin)) china, everything goodlah.

097 Zin a::h.

098 Tony a:h?

099 Zin mm.

100 Tony china ev(er)ything good.

101 Zin okay.

102 [(1.5)
 L((Both Zin & Tony turn to look as Fran brings a tray food & drinks))]

103 Fran okay, come.

104 Zin okay. thank you. a:h.

105 [(5.3)
 L((Zin watches as Fran places the plates and mugs on the table))]

106 Tony at least he knows how to appreciate. he come on(l)y he said

107 house nice.

108 Zin hahh [•hehh]

109 Tony [he said] the house nice.

110 Fran a::h.

112 Zin ah. ye. ah [a:h.ɿ
 yes
 ah.yes. ah a:h.

113 Tony [ah? J

114 Fran °mhm mhm°

115 Tony you *suka, rumah?*
 like house
 you like, (the) house?

116 Zin um mm.

117 Tony *boleh?*
 can?
 can?

118 Zin mmm *cantik* emm.
 beautiful
 mmm beautiful emm.

119 Tony *boleh eh?*
 can TAG
 can is it?

120 Zin mmm.

121 Zin *ini, ((pointing to the front)) bar? b r ar?*]
 this
 this, bar? bar?

123 Tony *Lah] yeah bar.*

124 Zin okay. a::h. ((nodding slightly))

125 [(7.5)
 [((Zin looks towards the bar while Tony eats))]

126 Tony [(three syllables, looking at Fran)]

127 Zin [glass] ((pointing, then raising his hand))

128 Tony [ah?]

129 Zin [kan?]
 NEG TAG
 isn't it?

130 Zin [around the: ah,
 [((swinging hand from left to right twice, rests index finger on lips))]

131 Tony *tempat tidur atas. r ((gestures sleeping, holds up three fingers))]*
 bedroomø upø
 bedrooms upstairs

132 Zin *Loh. bawah.]*
 down
 down (stairs)

133 Tony *tiga bilik.*
 three roomø
 three rooms

134 Zin okay. r (1.0) *] ((turning to Tony)) bilik?*
 roomø
 rooms?
 L ((Zin holding mid distance gaze))]

135 Tony *tigah. r (°tiga.°]*
 three three
 three three
 L ((holding up three fingers))]

136 Zin ah. okay. okay.

137 Fran *ma:kan r makan.]*
 eat eat
 eat eat
 L ((Zin turning the slice of cake over while looking at it.))]

138 Tony (*skarang*) *makan. lain bulan puasa* (already).
 now eat ø ø ø next month fasting
 eat now (you will be) fasting next month.

139 Fran [lagi- YEahhh.
 [((Zin brings the cake to his mouth, stops and lowers his hand))]

140 Zin ((turning to Tony)) *ini, halal?*
 this halal?
 (is) this halal?

141 Tony emm. °halallah.°

halallah
 emm. halallah.
 142 [(2.7)
 [((Zin and Tony continue eating))]
 143 Tony ((looking at Zin)) nowadays ah, everything halallah.
 halallah
 halallah.
 144 ((pointing at Zin's plate)) Tesco.
 145 Zin mmm. ((chewing his food)) okay(h). ((nodding)) mm.
 146 [(9.1)
 [((Zin looking around while chewing. Tony is eating his slice of cake))]
 147 Zin ((raising his open palm, turns to Tony)) gambar. (bu)kan, pictures.
 picturesø NEG
 pictures. no, pictures.
 148 Tony yeah.
 149 [(1.9
 [((chewing his food))]
 150 Zin ((holding index finger up)) [e:rm, (1.0) a:m, (1.3)
 [((looking away from & back at Tony))]
 151 the: son or nih daughter?
 this
 the: son or this daughter?
 152 Tony where?
 153 Zin ((pointing at photos on the wall)) nih.
 this
 this.
 154 Tony ((pointing to the right side of the wall)) all these a: cucu.
 grandchildren
 all these a: grandchildren.
 154 Zin cucu eh? oh cucu.
 grandchildren TAG grandchildren
 grandchildren is it? oh grandchildren.
 155 Tony ((pointing to left side of the wall)) there all childre- all
 156 Zin children. there married.
 157 Tony a:h. okay.
 158 Zin after you see.
 159 Tony ((leaning back in his chair)) emhm.
 160 [(1.9)
 [((looking at the photos on the wall))]
 161 Tony sana semua kahwin (pu)nya a: sama suami.
 There all married poss with husband
 (over) there are all the married ones a: with (their) husband(s)
 162 Zin yeah.
 163 Tony ((pointing to the right)) ini suma cucu.
 this all grandchild
 all these (are) grandchildren.
 164 Zin o:h. a:, a, the ni rkan, ah, (1.0) father father. ¶ hehhh.
 this NEG TAG
 this isn't it
 L((pointing to the back over his shoulder)) J
 165 Tony yeah, father.
 166 Zin ah, yes. (.) ah.
 167 Tony bukan father, bishop.
 NEG
 not father, bishop.
 168 Zin bi- a- bishop bishop ah bishop.
 169 Tony ketua. ¶ketua.¶
 leader leader
 leader leader.
 170 Fran ((opening the front door)) Lpur J posely open op- ah close this
 171 or what?

172 Tony ((looking at Fran)) yeah purposely. ne(ver)= mind ne(v)er mind.
173 it's okaylah.
174 [(4.8)
[((Zin looks around while Tony drinks his coffee))]

175 Tony ((looking up, side glances at Fran)) not hot lah your coffee:.
176 Zin [(3.4)
[((Zin continues to look around and slowly turns to Tony))]

177 Tony [a:h, ape ni-, a:h, (0.8)] [the: mm [(1.1) °am er °]
what ø ø this
a:h, what's this,
L((holding mid distance gaze))] L((mutual gaze))] L((gaze withdrawal))]

178 Zin a:-, daughter or the [son, (1.3)
179 Tony [((looking up at Zin))] [°mmm, °]
[((nods))]

180 Zin [age?] [age?
L((holding mutual gaze))] [((holding up his open palm))]

181 Tony ke(r)ja:?
work
work?

182 Zin age. [age.]
183 Tony [daugh]ter ah?
184 Zin [emm.
[((nods emphatically))]

185 Tony [a::h daughte::r, (1.5)] from [twenty eight,
L((holding mid distance gaze))] [((gestures writing in the air))]

186 Zin a:h, ((holding up his mug, looking at Tony))
187 Zin [twenty ei-, dua puluh lapan,]
twenty ei-, twenty eight,
L((holding mutual gaze))]

188 Tony [okay,
[((nods))]

189 Zin [tiga puluh,] [((lowering two fingers)) tiga puluh lima,
thirty thirty five
thirty, thirty five,
L((holds up three fingers))]

190 Tony [oldest one forty
L((holding up four fingers))]

191 Zin ((looking up at Tony)) o::h.
192 Tony yang tua punya [mpat puluh.]
the one old POSS PRO forty
the oldest one forty
L((turning to his plate))]

193 Zin ((holding up his thumb)) satu, [dua, tiga, empat] eh?=
one two three four
one, two, three, four eh?
L((counting gesture))]

194 Tony =yeah. mpat. (0.7) tiga pempuan satu jantan.
four three femalesø one male
=yeah. four. three girls one male.

195 Zin o:h. okay.ah. ((turning away from Tony))
196 Tony tiga pe(r)mpuan, satu laki-laki.
three girlsø one boy.
three girls, one boy

197 Zin ((turning to look at Tony) [emmm.]
[((nodding))]

198 [(3.0)
[((Tony continues to eat, Zin holds mid distance gaze and then holds up
his thumb, looks at his hand))]

199 Zin ɾ due, tige ɾ ɾ tige daughter, ɾ
 L((counting, looking at his fingers)) ɾ L((looking at Tony)) ɾ
 200 Tony mm
 201 Zin [three daughters, ɾsatu ɾ
 L((holding up three fingers)) ɾ one
 one
 ((holding up one finger))
 202 Tony L one ɾson.
 203 Tony son, in KL.
 204 Zin KL, eh? [aa:h.
 L((nodding))]]
 205 Tony computer engineer.
 206 Zin en, gi, neer.
 207 Tony computer ((turning to point at the computer behind him)) engineer.
 208 Zin [a::h.] [a:hm,
 L((nodding)) L((turning away from and back to Tony))] university,
 209 Tony [mmh.
 L((nodding))]]
 210 Zin a: [when when? ah. [ah, a:m
 L((moving his cupped hand)) L((tilts head and looks away))]]
 211 [°Australia° ((moves hand to his mouth)) °ermh° =
 L((turning palm up and down))]]
 212 Zin =university,
 213 Tony [AH.=
 L((turning to Tony))]]
 214 Zin =Au:strialia.
 215 Tony Australia, [(1.0)°Australia, hah (o)kayh.°
 L((turning away, mid distance gaze, finger on his lips))]]
 216 Zin [(1.7)
 L((Zin holding mid distance gaze, Tony eating))]]
 217 Tony ((turning to Tony) ah, Melbourne ke peh?
 or what
 ah, Melbourne or what?
 218 Zin a:h [(1.6) ((turning to Zin)) yeah. [Melbourne.]
 L((mid distance gaze)) L((nodding))]]
 219 Tony Melbourne yeh? o:h, okay okayh. ((looking away from Tony))
 TAG
 Melbourne is it?
 220 Zin I [got one brother] Melbourne.
 L((moving extended index finger up and back to self))]]
 221 Zin a::h. ((looking at Tony, finger on his cheek))
 223 Tony I got one [brother,] stay in Melbourne.
 L((touching own chest))]]
 224 Zin [prestigious.]
 L((smiling))]]
 225 yeah. same lah
 226 Tony mmm. ((nodding, reaches for his mug.))
 227 [(7.1)
 L((Both Zin and Tony drinking from their mugs))]]
 228 Zin a:m, am, the ah apeh,
 what
 a:m, am, the ah what,
 229 [(3.1)
 L((noise from vehicle passing by))]]

- 230 Zin *ape nameh*, daught, daughter, daugh- daughter, a: *ape nih*,
what ∅ ∅name what ∅ this
what's the name what's this,
- 231 university,
- 232 Tony *noh. daughter all not not- university, tapi tak kerja.*
- 234 Zin o:h. okay.
- 235 Tony *suma tak kerja. suma, suami ((gesture for money)) banyak*
all not work(ing) all husband a lot of
all of them are not working, (their) husband(s)(have) a lot of
- 236 *waꞑng. suma tak kerja.ꞑ*
money all not work(ing)
money. All (of them are) not working.
- 237 Zin ʌHEH HHH ʌhh hh •hh. er, a:, *ni mercedes hah*
- 238 [hhh hhh.
- 239 Tony [ah yeah. *goyang kaki suma.*]
idiomatic expression
- 240 Zin hh hh •h.
- 241 [(10.9)
((Zin is drinking from his mug& looking around. Tony eats & drinks))]
- 242 Zin ((mid distance gaze))a:h ni, a:h, computer, ꞑ computer, ꞑ
this
a:h this a:h, computer, ʌ((pointing)) ʌ
- 243 Tony eh, you know computer [this.
((pointing to the computer behind him))]
- 244 Zin you knowh?
- 245 Tony ye:s.(nods)
- 246 Zin you know a:h?
- 247 Tony emm.
- 248 house got.
- 249 Zin yes. yes.
- 250 Tony got ah?=
 =aa:h,
- 251 Zin =aa:h,
- 252 ꞑ ada ꞑ email? got email also ah?
got
got,email?
- 253 ʌa:, ʌa:m,tak- ah. ade ꞑadeh ahah. ꞑ
NEG got got
no- ah. got got ahah.ah,
- 254 Tony ʌadalah . (two syllables)ʌ habis,
gotlah then
gotlah.(two syllables)then
- 255 Zin sometime *bila free boleh tengoklah.*
when ∅ ∅ can lookPRT
sometimes when you are free, you can looklah.
- 256 Tony yes. yes.=
- 257 Zin =*boleh tengok macam-macam* ah?
can look all sorts ∅ ∅
can look at all sorts of things ah ?
- 258 Tony ꞑa:, *ape name.* ꞑBayah *nih. ape*
what ∅ ∅ name this what
a:, what's the name this what
 ʌ((touching his forehead))ʌ
- 259 Zin [the:, ʌahmm mm, ∅
((looking up at Tony))ʌ] ʌ((covering his mouth))ʌ]

260 Zin [yang, bungsu. bungsu.]
the youngest youngest
the youngest youngest
L((maintaining mutual gaze))]

261 Tony ah bungsu-]
youngest
ah youngest

262 Zin [heh] heh.

263 Tony a: bungsu ah?
youngest
a: youngest ah?

264 Zin a: yes. [Baya. Baya.]
L((pointing to his left))]

265 Tony Baya: ? =

266 Zin =ah. °ah. °

267 Tony (siapa?) (three syllables)
who
who

268 Zin [ni-] a- ni e- nih, ape name:, e- ni, (1.1) °a: ° (0.5)]
this this this what ø ø name this
this a- this e- this what's the name e- this a:
L((pointing))] L((averting gaze))]

269 Zin [°mmm° (1.3) °er: °]
L((covering his mouth))]

270 [(2.2)
L((Zin maintaining thinking face))]

271 Tony you mnya se- [you (pu)nya sedara ah?]
POSS POSS PRO relative
your your relative ah?
L((pointing at Zin))]

272 Zin [hehhh] [buka:n.] [a- adik adik.]
NEG younger sister
hehhh no. younger sister younger sister.
L((shaking his head))] L((dismissing gesture))] L((dog barking noise))]

273 Tony adi- o:h? =

274 Zin =yang bungsu hehhh.
the one youngest
the youngest one

275 Tony o:h bungsu ah?
youngest
o:h youngest ah?

276 Zin ((smiling)) [a:h.]
L((nodding))]

277 Tony ((turning to Fran)) eh bungsu means what ah?
youngest

278 Zin [(0.6)
L((Zin and Tony looking at Fran))]

279 Fran the:: the: [youngest] one.
280 Tony [(single syllable)]

281 [ah. y -]
282 Tony [((turning to Zin))] oh, the youngest one ah?

283 Zin [ah yes yes] =
L((dog barking noise in the background))]

284 Fran =o:h. ((nodding))

285 Zin ah a:h. mm.

286 Fran [i on this but i don't don('t) put on the the volume.]
L((Zin & Tony turning to look at Fran, dog barking in the background))]

287 Zin (single syllable)

288 Tony ʔ5.2) ʔ
 ((motorcycle noise followed by dog barking in the background))
 L((Tony and Zin drinking from their mugs)) ʔ

289 Tony ((turning to Fran)) eh you put the volume ((pointing forward))
 290 (two syllable) that one.

291 Fran yeah. i knowh. i- i- ((Fran reaching for something under the table))
 292 [(7.6)
 L(((motorbike sound)))]

293 Tony ((pointing at the cake on Zin's plate)) dengan tangan makan ambik.
 with hand eat take
 take it with (your) hand and eat

294 Zin yes yes. °mhmh°

295 Fran (two syllables)

296 Zin [(3.5)
 L((Zin eating the cake, dog barking sound continues))] ʔ

297 Tony mak, ada baik?
 mother is well
 (your) mother is (she doing) well?

298 Zin ah ʔbai:k. mhm.(0.5) ʔ
 fine
 fine
 L((Zin cutting the slice of cake)) ʔ

299 Zin ʔni: ape nih, m °ape nameh ah, °ʔ kaki sakit hhh.
 this what this what name leg pain
 this what is this what is the name (she has) leg pain,
 L((sound from the television)) ʔ

300 Fran o:h. ʔkaki ah. ((nodding)) ʔ
 leg
 o:h leg ah.

301 Zin ʔer::mm, ʔ hh.

302 Tony kaki sakit ah?
 leg pain
 leg pain ah?

303 Zin a:::h, ((looking at Tony))

304 Tony tapi (l)u p(u)nya mak berapa umur? bukan tua, muda.
 but you (possessive pronoun) mother how many old? Not old, young.
 But your mother how old is she? (she is) not old, (she is) young.

305 Zin ((moving closer to Tony)) apeh?
 what?
 what (is that)?

306 Fran (y)u mya mak.
 you (possessive pronoun) mother
 your mother.

307 Zin tue. ((nods))
 old
 (she is) old.

308 Fran berapa brapa umʔur? ʔ
 how many how many age
 how how old (is she)?

309 Tony |brapa umur? |
 how many age
 how old (is she)?

310 Zin L((raises his hand)) ʔ L((folding his thumb in)) °satu,
 one,

311 ((counting gesture, looking down)) dua, tiga, empat, lima:, ʔenam. °ʔ
 two, three, four, five six

312 Tony Lanam ʔ
 six

313 Zin ((raising his head)) enam puluh.=

sixty

314 Tony =*anam puluh lebih* a:h.=
sixty plus

315 Fran =*sudah anam puluh?* mother?a:h.
already sixty
 = she is already sixty?

316 Tony *betul?*
right?
(is that) right?

317 Zin ((*looking at his plate*)) e:rh.

318 Fran *aiyah. saye ingat lagi, muda lagi.*
I thought still young still
I thought (she is) still young

319 Tony a- *anam puluh tak tualah=*
sixty not old
sixty (is) not oldlah

320 Zin =emhm.

321 Fran heh heh heh.

322 Zin hhm.

323 Tony *tua, tujuh puluh lebih, lapan puluh lebih, tua* a:h. *anam*
old seventy plus eighty plus old sixty
old (would be) seventy plus, (or) eighty plus, (that is) old a:h sixty

324 Tony *puluh baru baru start.*
just just
just just starting (or getting there)

325 Zin mm mm mm [(1.5) mm°.
((chewing))]

326 Fran *baru start ah dia cakap*
just he says
just starting ah he says.

327 Zin °ahm.°

328 Zin a:m, *nih* (0.9)a:mm (0.5)°mm° (1.7)*darah tinggi.*
this high blood pressure

329 Tony o:nh *darah tinggi* ah ((*nodding*)).
high blood pressure

330 Zin mm.

331 Fran o:h er-

332 Tony ah. ((*nodding*)) *darah ting[gi- ɲ*
high blood pressure

333 Fran [tapi] *itu saja kan?*
but that only isn't it?
but only that (is her complaints) isn't it?

334 Zin ((*looking at Fran*)) a:h.

335 Tony *lain tak adah.*
nothing else

336 Zin emm, *tak adeh.*
Nothing else.

337 [(2.8)
((Both Zin and Tony continue eating and drinking))]

338 Tony ei, ((*putting down his mug, turning to Zin*))Azhar Arrifin, *ape macam?*
what like?
what (is he) like?

339 Zin mmhm. ((*smiling*))

340 Fran ah *amacam* ah?
what like?
what (is he) like ah?

341 [(1.4)
((Fran walks in front of the camera))]

342 Zin emmmmm.(0.2)*entah le tak tau.* heh hh, [hoh ahoh ɲ
who knows don't know
who knows, (I) don't know

343 Fran L ° a:h h h h J
 344 Tony [(5.9)
 [((Zin & Tony turn to look at the television.))]
 345 Tony dia amik election dia mesti menang mnyalah?
 he takes election he sure win possible pronoun
 (if) he stands for election, he is sure to win.
 346 Zin a:h.
 347 Tony ah? mesti menang ah?
 sure win
 ah? sure to win ah?
 348 Fran betul lah.
 right lah
 (that's) right.
 349 Tony Permatang Tau- Pe:matang Pau-
 350 Zin Permatang Pauh=
 351 Tony =Pauh. ((nodding)) a:m.
 352 Zin m. ((looking down)) m.
 353 [(3.3)
 [((Both Zin and Tony continue eating))]
 354 Fran actually, if he win ah, susah.
 difficult
 (it would be) difficult.
 355 Zin a::h. betul betul betul.
 right right right
 (that's) right. (that's) right. (that's) right.
 356 Tony is it?
 357 Zin yes.
 358 Fran ye:ah?
 359 Zin hm.
 360 [(0.8)
 [((Zin chewing, Tony looking at Fran, puts out his hand))]
 361 Fran TM NET,
 362 Zin [(1.6)
 [((Both Zin and Tony looking in Fran's direction))]
 363 Fran Razif,
 364 [(1.0)
 [((Both Zin and Tony continue looking at Fran))]
 365 Tony yye: [ah.]
 366 Zin [Razif] [or-]
 367 Fran [Ra-] Razif ah, don('t) know lah [susah lah.]
 difficult lah
 368 Zin L heh heh J a:h.
 369 Fran tentu fight lah.=
 sure
 sure (to) fight lah.
 370 Tony =eh (three syllable) my my statement.
 371 Fran TM net. TM. TM.
 372 Tony ((arm stretched out in Fran's direction)) ah, put it ah. put it ah.
 373 put it lah.
 374 Fran ((turning to Zin)) (d)ia dia masuk ah, susah.
 he he comes in ah, difficult
 (if) he he comes in ah, (it would be) difficult.
 375 Zin mhm. ((nods))
 376 Fran dia sudah masuk banyak korek korek korek. orang mya nama.

he already in a lot of digging digging digging people's name.
(when) he is already in, there will be a lot of digging up dirt about others.

377 Zin a: aa:h ((nodding)) m, mmm. betul. °mmhm° ((nodding))
right
(that's) right.

378 [(1.0
[((Tony looking at the television. Zin continuing to chew))]]

379 Fran okayh. no- they=they don't charge that=that ten dollars
380 anymore.
381 Tony ((turning to Fran)) ah.
382 Fran [yeah.
[((Tony turning away from Fran. Zin reaching for his mug))]]

383 [(0.9)
[((Zin and Tony continue to drink and eat))]]

384 Fran cancel good. [(1.5) okayh.
[((Zin drinking from his mug))]]

385 [(7.1)
[((Zin putting down the mug and turning to the television))]]

386 Zin rancangan ape? (two syllable?) a: ni:h ((turning to Fran))
programme what
what programme (is this)?.

387 Tony ((pointing to the television screen)) sev-. seven.

388 Zin a:hm,
389 Fran seven.
390 Zin (rancangan) seve:n.
(programme)
(programme) seven. .

391 Tony a:h [Cina punya program.] a:.
China (possessive pronoun) programme
Chinese programme..

392 Zin [((three syllables))] a: Taiwan?
393 Tony a:h this one, ah. yeah. Taiwan.
394 Zin Taiwan ye?
is it
Taiwan, is it?.

395 Tony ah. betul.
right
(that's) right.

396 Zin mmm.
397 Fran Taiwan.
398 Tony mm.
399 Zin eh heh hah hah.
400 Tony ini, a: yang pnya ((gesture for repetition))
this, the one that
this (is) a: the one that

401 Zin [heh heh]
402 Tony [berikut] berikut pnya. bersambung sambung pnya.
sequels sequels (possessive pronoun) continuous (poss pronoun)
(is a) sequel (the ones that are) continuous. .

403 Zin [ye::] sambung sambung sambung itulah
continue continue continue thatlah
It is a continuous (programme) that (is what it is)

404 Tony Lerm.]
405 Zin [(5.1)
[((Zin watches the television))]]

406 Tony ((turning to Zin)) apa ti vi you suka? suka tengok?
what like like to watch
what tv programme (do) you like? like to watch?

407 Zin a:h, ah the: Firm. hah hhh hhh.

408 Tony o:h the Firm ah?
409 Zin ah.
410 Tony now they start ah?=*((pointing towards the television))*.
411 Zin =a:h, yes. yes. aa:h.
412 Tony very good. (1.0)say, the Firm like what you know,like the
413 Apprentice.
414 Zin Apprentice. [yes yes.]
415 Tony Apprentice, [samelah.]
416 Zin Apentice. ah Aprentice.*((smiling turns to look at the tv))*.
417 Tony yeah.

Appendix 10

TRANSCRIPT OF CONVERSATION BETWEEN MUS AND ZI

001 Zi what name you want to put to your granddaughter °eh hhhh°?
 002 Mus so(h), [do:n(t) kno:w
 L((rotates his wrist with palm open))]

003 Zi trylah. you think.
 004 [(1.3)
 ((Mus shifting gaze away from Zi, Zi continues to look at him))]

005 Zi your, the name that you t(h)ink, is nice for her.
 006 [(1.9)
 ((Mus looking up, moves his mouth but speech is not audible))]

007 Zi your sisters' name, be(r)apa?
 how many
 your sisters' name, how many?

008 Mus a:h, [adidah,
 L((holding up his thumb))]

009 Zi ((nodding)) ah.
 010 [Adi°na°, Marina,
 L((holding up his thumb and then, extending his index finger))] =

011 Zi =Marina(h), very good.
 012 Mus [Ta:ti.
 L((extending the third finger, turning to Zi))]

013 Zi Ta:ti. OK,
 014 Mus [°a:hm (ap),
 L((extending his fourth finger, shifts gaze away from and back to Zi.))]

015 Zi Adinah, Marina, Tati. lagi satu? °nice name. °
 more one
 one more

016 Mus Ma:rin- ahmm,
 017 Zi /e/,
 018 Mus a::h,
 019 Zi [°e/]
 020 Mus e: dah
 L((holding up four fingers, lowering his hand))]

021 Zi edah. and your elder SISTER?
 022 Mus ((raising his hand again)) elder SISTER, [°a:h°,
 L((pointing upwards))]

023 Zi °Za°,
 024 Mus [Zainab.
 L((index finger, pointing forward))]

025 Zi yeah,
 026 Mus °hah°.
 027 Zi nice name eh ? ((sniffling))
 028 Zi if we can put er, your mother's name also very nice.
 029 Mus °ah°
 030 Zi wha(t) IS your mother's name?
 031 Mus °a: °h, [((moves mouth as if to form words))]
 032 Zi [°Sa°,
 033 Mus °a:h°h, ((raises his hand, with index finger pointing))
 034 Zi Sa:h, ss Sa, le,

035 Mus [LEHAH.
 ((brings his fingers together, opens palm, drops hand to his lap.))]

036 Zi ((nodding)) say that again. sss, =

037 Mus =leh HAH. ((placing his hand on his lap))

038 Zi Ssa,

039 Mus ((looking at Zi)) le, hah.

040 Zi ((nodding)) ha:h. Saleha, and then your great grandmother,
 041 that turkish lady?
 [((Mus rotating his wrist, opening palm, drops his hand onto his lap.))]

042 Roh, gayah, ha:=

043 Mus = °Han-° Hanim.

044 Zi (I think) we can do like (this). Saleha, plus Hanim is, name is
 045 Saleha Hanim. nice name eh? you, t(h)ink they like the name?
 046 do you t(h)ink, Eti n Rozaidi like the name? their daughter
 047 to be named tha(t)? ((sniffing))
 048 [(1.3)
 ((Mus raising his hand, extends his index fingers))]

049 Mus o:, (d)o, nroh. (three syllables)]
 ((shaking his head, and waving his index finger))

050 Zi L OHOH HEH HEH, heh, heh hh.] . hh

051 Zi okay, we t(h)in(k) of somet(h)ing else. d you have any idea?

052 [(1.1)
 ((Mus shifting his gaze and opening his mouth))]

053 Zi what name you like to put?

054 Mus °a:h h h m°, ((shifting gaze away from and back to Zi))

055 [(1.1)
 ((Mus holding mid distance gaze))]

056 Zi ((straightening her posture)) Zu:laiKAH?

057 Mus a: [:h.] ((smiling, holding up his index finger briefly))]

058 Zi [akh-] [no, no, NO NO:h.

059 Mus you(h) ah. ((holding up his index finger in front of Zi))

060 Zi .hhh i'm jealous, heh, h hh, heh heh.

061 Mus [ha::h hah hah]

062 Zi okay. what name you t(h)ink?

063 [(0.9)
 ((Mus looking at Zi and smiling))]

064 Mus a:h °(pe:)°,
 what
 a:h °what°,

065 Zi not Sofiah Basir, no.

066 Mus no. noh.

067 Zi trylah to remember what name?

068 [(2.0)
 ((Mus looking up and holding mid distance gaze))]

069 Mus (m)as [e:h],

070 Zi [WHAT's] Mak long's (pu)nya s name ah?
 TOA POSS
 WHAT's (your) eldest aunt's name ah?

071 [(0.9)
 ((Mus looking up, holding mid distance gaze))]

072 Zi Mak long's name.
 TOA
 eldest aunt's name.

073 [(1.0)
 ((Mus shifts his gaze away from Zi as she continues to look at him))]

074 Zi hah,

075 [(2.0)
 ((Mus opens his mouth, sound not audible))]

116 [(1.7)
 ((Mus and Zi looking at the book together))]

117 Zi Tasqirah, ((sniffing)) oKAY, kita,
 we
 oKAY, we,

118 [(1.6)
 ((Zi looking towards the door of the house, Mus turning forward))]

119 Zi ((turning to Mus)) papa tak ingat? you don't remember any name?
 TOM NEG remember?
 you don't remember?

120 your old frie:nd, COUsins', name ke?
 TAG
 your old friend or COUsins'?

121 [(2.0)
 ((Mus turning to look at Zi))]

122 Zi (three syllables) °(don't remember?)°

123 Mus (re)memberh, [(4.2)
 ((looking up, raises his index finger, .))]

124 ((dropping his hand onto his lap))tch.

125 Zi you, have er, (.)sister, Zainab dah ade. Zainab, and you
 already have
 you, have et, already have a sister named zainab.,

126 have er , [Garimah.
 ((Mus turning to look towards the entrance of the house))]

127 Adina, Tat=

128 Mus = [(two syllables)] a: [hhh,
 ((Mus turning to Zi))] [(pointing towards the door)]

129 Zi [(5.9)
 ((Zi holds index finger to her lips, then moves her lips, inaudible))]

130 so, ((looks down at the book)) I think [we(h),
 ((hesitating tone))]

131 Ustaz ((from a distance)) asalamualaikum.
 (Muslim) greeting in Arabic language

132 Mus [((turning towards the direction of the sound, raises his hand))] (mu)al°ai°kum salam
 (Muslim) greeting in Arabic language

133 Zi L(mu)alaikumSA J LAM.
 (Muslim) greeting in Arabic language

134 Ustaz NGAji ke?
 reciting the Quran TAG
 reciting the Quran are you?

135 Zi [tak. tengah dok rekod.]
 NEG now PRT recording
 no we are now recording
 L((Zi and Mus pointing to the camera)) J

136 masuk masuk. ada o(r)ang buat er projek sikit,
 come in, come in there is PRO doing project little
 come in, come in. there is someone doing a small project

137 takpelah. (duduk) selesai sekejap, ye?
 NEG (sit) finish short while TAG
 it is all right. will finish in a short while, ok ?

138 Ustaz °oh°

139 Zi tak pelah, (d) selesai sekejap, ye(h)?
 IO ø finish short while TAG she want
 it is alright, it will finish in a short while, ok? she wants to

140 dia nak selesai stengah jam eh?
 PRO FUT finish half an hour TAG
 (it will) finish in half an hour, okay?

141 Ustaz [((pointing towards Mus)) (two syllables)]

142 Mus L((reaches out to shake hand with Ustaz)) J

143 Zi nak tengok En)cik Musan. *macamana die bercakap.*
want see TOA how PRO talk
 (she) wants to see Encik Musan. how he talks.

144 Ustaz okay, okayh.

145 Zi *silalah duduk °u°staz. mungkin Ustaz boleh bantu jugak.
 duduklah°.*
please sit down TOM. may be PRO can help also. sitlah.

146 *ni, dia kat atas, heh heh. e:r, lagi:, lagilima b(e)las minit.*
this PRO is upstairs. more more fifteen minutes
 he/she is upstairs, heh heh. e:r, more(still), fifteen more minutes.

147 Mus °ah°. ((pointing at ustaz)) [((tapping the seat next to him))]

148 Zi *tengah pikir nama baby.*]
are thinking names baby
 (we) are thinking of baby names

149 *takpelah, Ustaz (du)duk.*
it is all right, TOM sit
 it is all right, you (can) sit (have a seat).

150 Ustaz *tak pa(h).*
it is all right.
 it is all right.

151 Zi *ustaz, d(u)duk. ((looking at ustaz)) nak tanya nama ni ha(h),*
TOA sit. want ask name this
 Ustaz, (please) sit. (I) want to look for names, here.

152 *duk pilih.saya bagi tau: Cik Muthan. ((turning to Mus)) name,*
are choosing. I telling/inform TOA name
 we are) choosing. I was telling Encik Musan.

153 *apeh? (.) Sa,*
what?
 what (is the) name? Sa,

154 Mus leHAH.

155 Zi Salehah.

156 Ustaz SaleHAH?

157 Zi Salehah Hanim.]

158 Ustaz [Solehlah.]

159 Zi Solehah sedap. ((nodding)).]
nice.
 solehah is nice. Salehah,

160 Ustaz Lanak yang solehahlah. J
child who is righteouslah
 a righteous childlah,

161 Zi Solehah is,

162 Ustaz perempuan?
girl?
 (is it a) girl?

163 Zi it is his mother's name. mak- mother die punye name.ss-
mother PRO POSS name
 his mother's name

164 Solehah Onn. so, now, ek- nak tambah yang tepi tuh. second
want to add the one side that

165 name tuh. a:h, Rogayah Hanim. er, name tha(t) Turkish lady tu,
name that
 that Turkish lady's name.

166 in the family (two syllables). so, kalau s- Solehah Hanim,
if
 if

167 nice ye? sedapkan?
TAG? nice NEG TAG
 nice is it? nice isn't it?

168 Zi sebut Pa., kuat-kuat. (single syllable) suara Pa nanti nak
say TOA. loudly voice TOA then want to
say, Pa. (speak) loudly. your voice, then/so that it has to

169 masuk dalam tu. Sole:h,
go in that
to be recorded in that. Soleh,

170 Mus leha, HaNIM.
((turning to Ustaz))

171 Zi atau pun ade name lain yang pa ade?
or else have name others that TOA have
or is there any other name that you have (in mind)?

172 Mus °a:h.° [(2.1)
[((shaking his head briefly, flicking his wrist.))]]

173 Zi cuba ingat. name adik be(r)adik dia, ((glancing at Ustaz))
try remember name siblings PRO
try to remember. his sibling's names.

174 die ingat.
PRO remembers
he remembers

175 Mus [2.1) tch.
[((urning away from Zi))]

176 [(1.8)
[((Mus is holding mid distance gaze and Zi is looking at him))]]

177 Zi tak ingat?
NEG remember
(you)don't remember?

178 Mus ((turns to face Zi, shakes his head and flicks his wrist.)) °no:h.°

179 Zi name kawan-kawan [lame, makwe- makwe lama ke?]
name friends old or girlfriends old or
old friends' names, or old girlfriends' names?
[((child screaming noise. Mus turning to Zi))]

180 Ustaz hah, [hah, hah.]
181 Zi [neh neh neh.]

182 Mus cuba, cuba.
try try
try, try.

183 Zi ahh, ((Mus smiling, turns away from Zi)) itu mesti ingat punya.
that must remember PRT

184 Zi [Azeram, mungkin tak sedaplah.]
may be NEG nice PRT
may be (is) not nicelah
[((child screaming noise in the background))]

185 dia o(r)ang ada pilih Azirah, Az- apeh, Anis Azirah.
PRO what
they have chosen Azirah. Az-, what, Anis Azirah.

186 tak taulah. be- sekarang konon kita nak ,
NEG know now, as if we want
don't knowlah. now, we want are pretending to,

187 Mus nak try to ape, tolong,=
to what, help
to try to what, help,

188 Zi =re(me)mber.
189 A:H. remember.

190 Zi [(1.5)
[((Mus holding mid distance gaze))]

191 (you have) to talk.

192 [(3.7)
[((Mus holding mid distance gaze, twiddling his fingers))]

- 221 Mus a:pe:h, (punye),
what POSS
what, (his)
- 222 Zi yelah. Papa beri name Abas, tapi sebab ini pempuan, (.)
yeslah. TOA gave name but because this girl
yes. you gave Abas (his) name, but because this (is a) girl,
- 223 name pe(re)mampuan, eh?
name girl
(has to be) a girl's name, eh?
- 224 Zi [(9.6)
[((Mus holding mid distance gaze and then yawning))]
- 225 Mus hhh nampak tau awak menguap ah. cakap astafirullah al azim.
see know PRO yawning say
hhh can (be seen), (you) know you (are) yawning. say
- 226 Zi °astafirullah al [azim°]
religious phrase in Arabic language
- 227 Mus [azim.] (pause/ mouth movement?)
- 228 [(3.9)
[((Both hold mid distance gaze, Zi looks down at the book on her lap))]
- 229 Zi ((Zi looking up at Mus)) tadi makan ape? tadi?
- 230 Mus makanh. [(1.1) a:h,]
eat
eat
L((pointing with his index finger towards the back))]
- 231 Zi Kuey,
- 232 Mus t TEOW. ((index finger pointing backwards))
- 233 Zi Kuey Teow, ((nods her head))
- 234 Mus [KuEY.]
- 235 Zi [Kung] Fu. ((nods head again))
- 236 Mus ah.
- 237 Zi ((nodding)) Kuey Teow (two syllables). siape masak?
who cook ø
who cooked(it)?
- 238 Mus ((briefly shifting gaze away from Zi)) [a:hh.
[((pointing at Zi))]
- 239 Zi name saye ape? ((tone, almost teasing))
name ø PRO what
what (is) my name?
- 240 Mus name , Ziram.
name
name, Ziram
- 241 Zi Aziram. heh hhh. bagus. sebab die nak tengok Pah macamane
good because PRO want see TOA how
Aziram.heh hhh.(very) good. because (they) want to see how
- 242 Papa keluarkan perkataan, (two syllables) cakap (macam tu).
TOA produce word say like that
you produce words say (like that)words
- 243 Zi habis, dalam Kuey Teow tu ade ape?
then in that was what
(and) then, what was in that Kuey Teow?
- 244 [(2.0)
[((Mus raises his hand))]
- 245 Zi [fish,
- 246 Mus [((brings all his fingers together))] [ball.
[((holds hand shape))]
- 247 Zi [fish ball, say-]
(first syllable of the word sayur, vegetable.)
L((Mus lowers his hand))]
- 248 Mus ((waves his hand and shakes his head)) no noh.

249 Zi vegetables, and fish, ((lip spreading as if to form the sound /k/))
250 Mus [CAke.
[((spreading his fingers, drops hand to lap))]
251 Zi fish cake. and egg.
252 Mus °egg. °
253 Zi you enjoy?
254 Mus ah ((tilting his head)) °enjoy. °
255 Zi °kuat sikit cakap°
louder a little speak
speak a little louder.
256 Mus °enjoy. °
257 Zi enjoy your [food ?
258 Mus [((clears his throat))]
259 [(4.6)
[((Zi looking at Mus while Mus looks down and then back to her))]
260 Zi (three syllables) you, sleep well last night?
261 Mus well, °well°.
262 [(2.1)
263 [((Mus holding mid distance gaze while Zi looks at him))]
264 Zi y- how's your, tu. your new medicine tu bagus? ubat.
265 die o(r)ang trykan susu ba(r)u [tu.
PRO milk new that
they tried that new milk. [((Mus turns to visitor))]
266 jadi, apeh, (.) tch. ade side effects (i)nilah, die rase
so, what ø be this PRT PRO felt
so, what, there was side effects. thislah. he felt
267 penat semalam.
tired last night
tired last night.
268 Mus ((looking at Ustaz)) pe_rNAT, pe (D)AT
tired tired
tired, tired
[((swings hand to right & back to sofa))]
269 hah=
270 Ustaz =ngantuk? [ngantuk yeh?
sleepy TAG
sleepy, are you?
271 Zi [ngantuk dan penat.]
sleepy and tired
sleepy and tired
272 [ah, ah. ah, pu(nye,)
POSS PRO
[ah, ah. ah, its
[((holds his hand in a grip, flicks wrist, drops hand back to his lap))]
273 Mus tch.
274 Zi ((looking at Mus)) susu awal lembu, die panggil. mahal.
milk first cow PRO call expensive
they call it cow's first milk. expensive
275 seratus lapan puluh, setin kecil.
one hundred eighty ø one small can
one hundred and eighty, (for) one small can.
276 satu scoop campur dengan seratus two syllables) air, eh?
one mix with a hundred water
one scoop mix with a hundred (two syllables) water, eh?
277 ah, Ba (ng) ?
TOA
ah dear?

278 Mus ((nods gently))

279 Zi goncang, ape Pa rase, ade perubahan? sihat sikit ke,
shake what TOA feel any changes? well little TAG
shake, what do you feel, any changes? feeling a little better, are you?

280 rasenya? penat ke?
feeling? tired TAG?
are you tired?

281 Mus oh, peNAT, ((moves hand horizontally)) penat. °penat.°
tired tired tired
oh, tired .tired. ° tired. °
[((Zi nods))]

282 Zi tired, ye?
TAG
tired, are you?

283 Mus ha::h.

284 Zi are you sleepy?

285 Mus ahm, ((looking up and back to Zi))

286 Zi not salah.

289 Mus no:, no.

290 Zi you are watching tv all the time. TV, tengok citer ape?
watch story what

291 Mus TV(h) cite:r,
story
tv programme,

292 Zi skarang tengah apeh, dekat Beijing?
now what in
what is going on in Beijing now?

293 Mus [a:hh ,
[((hand raised, pointing with index finger to his left))]

294 Zi o:,

295 Mus OlymPIC

296 Zi oh. siape menang? ((nodding))

297 [(2.7)
[((touching his ears, holding up two fingers, flicking wrist))]
((holding two fingers up again, dropping his hand onto lap)) o, no,

298 Mus no noh

299 Zi siape LEAding ska(r)ang?
who ø now
who is leading now?

300 Zi ah, [leading, CHIna.
[((waving his open palm and then holding up his index finger))]

301 Mus second?

302 Zi °a:h,°

303 Mus [((turning left and touching her cheek with left hand))] °a-°

304 Zi Am(b)eriCA.

305 Mus wow. very good. r America menang. 7
ø winø
America is winning.

306 Zi tu [ade swimmer tu die dapat brape buah medal?
that [there that] PRO got how many
that [there's that swimmer] how many ø medals did he get
[((miming swimming))]

307 Mus [(die)h, ((holding up three fingers))]
PRO
he

308 Zi [/s/ /s/ °/səpu:/-°]

310 [(1.5)
 [((Mus glancing at his hand and folding his third finger))]

311 Zi [/sə/,=
 [((Mus holding up two fingers))]

312 Mus =ti- [((lowering his hand to lap, mimes writing))] ti [ge-
 [/sə/-] [three
 three
 /sə/] /pu/=

313 Zi
 314 Mus = [(n)o, no noh.]
 [((turning to Zi))]

315 Zi yang swimming, swimmer tu.
 the one that
 the swimming one, that swimmer.

316 Mus Ah. [tch. swimming? ah swimming,
 [((looking down, touching his lap with index finger))]]=

317 Zi =spuluhkan?
 ten TAG
 =ten isn't it?

318 Mus [(n)o:: no: no.]
 [((turning to Zi))]

319 Zi [rekodkan?
 record TAG
 record isn't it?
 ((Zi turning to Ustaz))]

320 Zi [a:, badminton siapa menang? tengok Ustaz. badminton.]
 who won look at
 a:, badminton who won? look at Ustaz. badminton
 [((Zi turning to Mus, both of them holding mutual gaze))]

321 Mus [a::hh.
 [((turning away from Zi, swings his hand in a dismissive gesture))]

322 Zi heh [heh hh.]

323 Mus [baghal.]
 idiotø
 idiots.

324 Zi Indonesie pun bungkus. heh heh.
 also IE
 Indonesia also lost. heh heh.

325 Mus baghal (hah).]
 idiotø
 idiots [hah.]

326 Zi [heh ye? Indonesie pun bungkus ye?
 TAG also IE TAG
 heh. is it? Indonesia also lost did they?

327 Mus [kalah hah.]
 lost
 lost hah.
 [((Mus holding mid distance gaze))]

328 Zi kalah. Malaysie?.
 lost
 lost. Malaysia?

329 [(1.5)
 [((Zi points her thumb downwards))]

330 Mus [(count)
 [((repeating thumbs down gesture))] [down.]

331 Zi [down.]
 [((Mus & Zi doing the thumbs down))]

332 Mus down.

Appendix 11

TRANSCRIPT OF CONVERSATION BETWEEN MUS AND ALAN

001 Alan how did you come here this morning?
002 Mus °ah, ° [(0.9)] BU:s.
 [((pointing to the left and then to the back))]
003 ei [nono noh.] taxi.taxi.
 [((shaking his index finger))]
004 Alan oh taxi?
005 Mus a::h.
006 Alan so, there is no mobility today?
007 Mus ↑no::h.
008 Alan o: [:h,]
009 Mus [a:::]h.
010 Alan (and then no) mobility?
011 Mus a::h.
012 Alan (two syllables) but the taxi still brought you here.
013 Mus [°ah. °]
 [((rotating his open palm))]
014 Alan so it's nice that you are in NASAM today,
015 Mus a:h h h h.
016 Alan because you are going to have another three days holiday=
017 Mus =a:h.
018 Alan so what you going to do during the holiday.
019 Mus holiday•h, [tch. ahh,] noh, [nono]
 [((shaking his head))] [((rotating his wrist))]
020 tch no.
021 Alan what you going to do?
022 Mus °ah ° ((placing palm on his ear)) se:leep, [sleep sleep.]
023 Alan [sleep, sleep, sleep.]
024 Mus heh he hehh.
025 Alan sleep, watch television?
026 Mus °noh ° ((bringing his index finger and thumb together)) si- ah,
027 television, [sleep, sleep, sleep.] [ha:hh.]
 [((rotating his wrist))] [((pinching gesture))]
028 Alan little bit of television?
029 Mus a:hh.
030 Alan and sleep?
031 Mus yeah.
032 Ala [(that's not)] very good. [you must] do exercise right?
 [((shaking his head))] [a:h]
033 Mus [a:h]
034 Mus [ha::h] [(1.3)] tch.
 [((dropping hand to lap))] [((turning his open palm upwards))]
035 Ala what about the NASAM funfair?
036 Mus •h (NASAM) fun- [/p/air,] a::h,
 [((shifting gaze away from Alan))]
037 Alan [you] know when is the: NASAM funfair?
 [((Mus looking at Alan))]
038 Mus [a:h.] [funfair.]
 [((pointing to the left))] [((shaking his index finger))]
039 Alan ah. when?

040 Mus a: [hm
 [((mid distance gaze))] [(5.9)
 [((looking at his hand and counting))]]

041 [ni a:h, tch ah,
 [((holding his right index finger with his left hand))]]

042 Alan what day?

043 Mus ((lip rounding, not audible)) a::hh, [°m ah°
 [((turning towards Alan slowly))]]

044 Alan is it Monday, Tuesday, Wednesday [day?
 [((counting gesture))]]

045 Mus ((holds up his open palm)) Thursday ((waving his hand)) Friday,
 046 Saturday, Mon- a: nono no. SUNda:y [Sunday.
 [((index finger extended))]
 [Su:nday.]]

047 Alan
 048 very good. so NASAM funfair is on Sunday,
 049 Mus a:h.
 050 Alan d you know where is the funfair?
 051 Mus a:h, ((pointing to the back)) [ahmh, °a:hm° tch h.]
 [((pointing forward))]]

052 [(0.9)
 [((dropping his hand onto his lap, maintaining downward gaze))]]

053 Alan Taman,
 054 Mus Taman ((rounding his lips, index finger pointing to the back))
 055 a:h, ((waving his hand)) tch. ((dropping it back to his lap))

056 Alan Tama:n Jaya?
 057 Mus Jaya: Jaya.=
 058 Alan =Taman Jaya. so will Muthana be coming for the funfair?
 059 Mus [ah funfair. [definitely.
 [((pointing to the back))] [((moving his index finger emphatically))]]

060 Alan definitely. very good. who you coming with?
 061 Mus ah, [daughter,
 [((holding up his thumb))]]

062 Alan em. ((nods))

063 [(3.2)
 [((Mus maintaining mid distance gaze as he extends his index finger. Alan
 looking at Mus))]]

064 Alan coming with your daughter,
 065 [(2.1)
 [((Mus pointing to his left while Alan looks at him attentively))]]

066 Mus [a:hm, tch.ah.
 [((pointing to the left))]]

067 [(5.3)
 [((touching his nose and then dropping his hand to his lap))]]

068 Mus ((holding up his thumb)) °(i:)°
 069 Alan your wi:fe?
 070 Mus [Wife wife [wi]fe
 [((moving his thumb))]]

071 Alan [wi]fe
 072 Mus wife.
 073 Alan (wife) and, your grand daughter?
 074 Mus noh no [no::.
 075 Alan [no:,] too small.
 076 Mus yeah small.
 077 Alan small. very good
 078 Alan what time you [coming
 [((turning to the left and then back to Mus))]]

079 to the funfair?
 [((moving his hand downwards))]

080 Mus a:h, °(fun)°(p)air, [(3.0)
 [((looking down, scratching behind his left ear))] [((counting gesture))]

081 ((holding up three fingers)) three e- ° a:h°tch er,
 082 [(7.5)
 [((holds up three fingers, right thumb touching the left, looks at Alan))]

083 Alan what time?
 084 [(3.1)
 [((Mus moves his mouth, raises his hand and then rotates his wrist))]

085 Alan d you know, do you know what time the funfair start?
 [((Mus continues rotating his hand and moving his mouth))]

086 Mus funfair, start, a:hh, (3.5)
 [((holding up three fingers))]

087 Alan not at eight o'clock, funfair start at ten o'clock.]
 [((shaking his head))] [((ten fingers))]

088 Mus A:H. funFAIR.
 [((holding up his open palm))]

089 Alan ((nodding))but you must be there by nine o'clock.
 [((points at Mus))]

090 Mus O'CLOCK

091 A:H. ah.

092 Alan =yeah.] so what time [you] must come?
 [((nodding))] [((pointing at Mus))]

093 [(1.5)
 [((Mus holding up three fingers, then opening fourth. Alan looks at him))]

094 Mus a:h, [(0.5)
 [((Mus holding his hand up and moving it to his left))]

095 Alan yeah. how you say it?
 [((moves his hand repeatedly to himself, then to Mus))]

096 [(2.0)
 [((Mus lowers his hand and, opens his mouth but is inaudible))]

097 Mus tch. a:°hh°, ((shifts gaze away from Alan))

098 Alan se ven, eight,]

099 Mus [ven, eight,] nine, [NINE.
 [((pointing downwards emphatically))]

100 o'clock

101 Alan [nine] o'clock. nine o'clock, you must be there.

102 Mus a:h.
 103 [((nodding))]

104 Alan so, are you going to take care of the stall?]
 [((moving his open palm towards Mus))]

105 Mus stall, ep, ap, a: e- a:m,
 [((raising his index finger and moving it in a circle))]

106 [(5.4)
 [((Mus drops his hand to his lap, holds mid distance gaze, raises his eyebrows briefly, opens his mouth, exhaling shifts gaze to Alan))]

107 Alan going to take care of your stall?] are you going to sell
 [((moving his hand towards Mus))]

108 some things?

109 Mus sel- ah, selling [selling selling.
 [((making circular motions with his palm twice))]

110 Alan what are you- what is your stall selling?

111 Mus °aah m tch° [(5.5)] [tch. (1.5)
 [((mid distance gaze))] [((shaking his head))]

112 Alan are you going to sell Nasi Lemak?

113 Mus [↑no, no, no=
 [((rotating his hand and then places hand on his lap))]

114 Alan no? no Nasi Lemak. ↑cakes?

115 Mus ↑aah [cake, cake.] [(s)mall, small, ball.
 [((index finger extended))] [(index finger & thumb making a circle)]]

116 Alan small ball.

117 Mus no.↓no. ((bringing his thumb and index finger close)) °small°

118 Alan round, round cake?

119 Mus ↑hah.

120 Alan cupcake?

121 Mus HAH. (cr)up cake.

122 Alan very good. a:h, er, you are bringing the cake?

124 Mus I bringing the cake.

125 Alan ((nodding))you are bringing the cake. ((nodding repeatedly))

126 ((pointing)) together with your wife?

127 Mus WIfE. wife.

128 Alan is your wife baking the cake? or, buying the cake?

129 Mus ((pointing to the side)) buying the cake.

130 Alan buying the cake.

131 Mus cake.

132 Alan okay, good. so, today, what is your plan? after

133 [you finish with NASAM to°day.°
 [((moving his hand towards Mus))]

134 Mus [today,
 [((turning his palm up))]

135 Alan after you finish this exercise now. (three syllables)

136 Mus nohh, [(7.0)
 [((turning his hand repeatedly))]

137 Alan [no plans?
 [((holding up open palm to Mus))]

138 Mus [plan, a:h.
 [((turning his palm up and then dropping hand to lap))]

139 Alan so how you going home afterwards?

140 Mus afterward, ahm, tch, a:hh

141 [(2.4)
 [((turning his palm up & down again, shift gaze away from Alan))]

142 Alan [you walk home?
 [((pointing with his thumb to the back))]

143 Mus [NO. no no no:h. no no.
 [((turning his hand, moving his hand to point to the back))]

144 Alan how you go home?

145 Mus ((swinging his hand to the left)) taxi. taxi.

146 Alan [TAXI:.] how much is the taxi fare
 [((nodding))]

147 [from Taman Tun to NASAM?
 [((pointing with his index finger))]

148 Mus °a:hh°,

149 [(4.3)
 [((looks down at his hands and holds up five fingers of his left hand
 touches the left thumb with his right thumb))]

150 Alan say, how many dollars.

151 Mus °how [(ma)ny° dollars,
 [((shifting gaze away from Alan))]

152 Alan is it one dollar?

153 Mus [a no no no.
 [((waving his hand))]

154 Alan then how many?
156 [(2.1)
((Mus shifting gaze))]
157 Alan never mind. count. [one,
((holding up his thumb))]]
158 Mus [one two three four five six seven
((looking down, moves his fingers as he touches them one by one))]]
159 °eight nine, ° [TEN.
((looking up at Alan))]]
160 Alan ten dollars?
161 Mus a:h.
162 Alan o:h, okay. quite expensive ah?
163 Mus [a:h
((nodding))]]
164 Alan [when you go back] is another ten dollars.
((pointing briefly to the back))]]
165 Mus a:h.
166 Alan so [ten dollar plus ten dollars how many dollars?
((moving index finger left to right, then holds up two fingers))]]
167 ((holding up two fingers)) twenty dollars.
168 [twe::nty dollars.] so, your
((moving his two fingers and then pointing at Mus briefly))]
taxi today is twenty dollars. Taman Tun to NASAM and NASAM
Taman Tun. So, what are you going to do for lunch today?
169 Mus lunch today, [tch, •h=
((holding mid distance gaze))]]
170 Alan =are you eating at [home? or outside?
((pointing to the left with his palm and then
flipping his hand over to the right))]]
171 [(2.9)
((Mus holding mid distance gaze, raises his thumb))]]
172 Mus ((holding up his index finger)) °a:h, °
173 [(9.7)
((Mus lowers his hand, moves it to his right, lowers his gaze, drops
his hand to his lap, moves his mouth but sound is not audible))]]
174 Mus ((raising his index finger and then holding up his thumb)) home home.
175 Alan o:h you are eating at home. who is cooking?
176 Mus cooking, ((turning his hand)) no::.
177 Alan nobody cooking.
178 Mus noh hhh.
179 Alan you have a maid at [home?
((pointing towards Mus with his open palm))]]
180 Mus ah, [mai:d,
((turning his hand, then pointing to the left with his hand))]]
181 Alan no maid?
182 Mus ah [maid,
((pointing at Alan))]] [maid.
((shaking his index finger))]]
183 Alan oh, you have a maid. so the maid is [cooking.
((gestures cooking))]]
184 Mus ha :h.
185 Alan so you are eating at home.
186 Mus [°a:h. °
((nodding slightly))]]
187 Alan not outside?
188 Mus [(1.5)
((Mus shaking his head, moving his mouth to form the word 'no'.))]]

189 Alan and, what about dinner tonight?
190 Mus dinner, [(tonight,) a::h, tch (5.0) tch.
 [((turning his hand, moving the hand to his left, bringing back
 towards Alan and pointing his index finger, moving index
 finger to point to the left again, scratching his neck))]]
191 Alan you going [somewhere?
 [((opening his hand, pointing to Mus))]]
192 Mus a:h somewhere [somewhere.]
193 Alan o::h,]you going out.
194 Mus a:h.
195 Alan oh. where?
196 Mus a:h, [Dr. Ismail.
 [((swinging his hand, index finger pointing to the left))]]
197 Alan o:h Tun Dr Ismai:l. [friend's house?
 [((pointing briefly at Mus))]]
198 Mus no:h. nonoh. [outside. outside.
 [((making circular movement with his hand))]]
199 Alan outside.
200 [(2.5)
 [((Both Alan and Mus looking at each other))]]
201 Alan ((pointing briefly to Mus)) rumah? or house or shop?
 house
 (at) home?
202 Mus [a:h, a::m, a:m.
 [((pointing with index finger, holds up open palm))]]
203 [tch °a:hh°,
 [((lowering his hand and placing hand on lap))]]
204 Alan you are not sure whether are you are going to eat in a
205 restaurant?
206 Mus restaurant. res-restaurant.
207 Alan [resta:ra:nt.] o::h, so your dinner is in a
208 restaurant.
209 Mus a:h.
210 Alan very good. is it er, [Malay restaurant? or,
 [((moving his open palm towards Mus))]]
211 Mus [er, no. nono,
 [((raising his index finger and looking at his hand))]]
212 [Mamak restaurant.
 [((holding up his fourth finger))]]
213 Alan Mamak restau:ra:nt.
214 Mus hahh hah hhh. ah.
215 Alan d you know the name of the restaurant?
216 Mus °a:h,° Mamak restaurant, ha::h [tch,
 [((turning his palm up))]]
217 Alan is it Jasimah?
218 Mus no noh no=
219 Alan =you know Jasimah?
220 Mus a:h. [(single syllable) Jasimah.]
 [((waving his hand))]]
221 [(2.9)
 [((Mus pointing his index finger while maintaining mid distance gaze))]]
222 Mus tch.
223 [(2.1)
 [((Mus turning his wrist and then dropping his hand to his lap))]]
224 Alan you can't remember.
225 Mus ((shaking his head)) re-member.]
226 Alan [cannot] remember, never mind.

APPENDIX 12

TRANSCRIPT OF CONVERSATION BETWEEN TANA AND RANI

- 001 Rani /na/ ipe ravikke /ma/- milo venumma? mailo?
now night want TAG milo
 /na/ now night /ma/- want milo, do you? milo?
- 002 Tana [mm milo,=
 [((shaking her head))]
- 003 Rani =vendham.
want NEG
 = don't want
- 004 Tana [ille:i e noh. ʔ ʔ o== ʔ
NEG
 no, e noh.
 [((shaking her head))] [((nodding, points with her index finger))]
- 005 Rani =vallapallam va:ngaile (neh)?
banana buy NEG TAG
 (we) didn't buy bananas, did we?
- 006 Tana ah. [(ny)ah.
 [((nodding slightly))]
- 007 Rani ah but erh.
- 008 Tana a:h. ah. ye↑ah.
- 009 Rani avalovum chaapetha fulla irukatha? padutha piraku
all that eat TAG full TAG be TAG lie down after
 If you eat all that, won't you be too full? Would you
- 010 tu:nga mudiyuma?
sleep able TAG
 be able to sleep?
- 011 Tana h:hhh [(three syllables) no::. ʔ
(swinging her hand forward, index finger extended)]
- 012 Rani [can sleep or not?]
- 013 Tana [nnahh. (1.0)] [mm sleepʔ [emmm,
 [((looking at Rani))] [moving her hand to self, rotating her wrist))]]
- 014 Rani you don't sleep at night?
- 015 Tana nn[ʊ]
- 016 Rani [bu]t every time I enter your room, I see you
 snoring.=
- 017 Tana =no [↑NO:.
 [((shaking her left hand at Rani.))]]
- 019 Rani then?
- 020 Tana [at ↑times got.
 [((moving her hand held in supine position from chest level in a
 semi circle))]]
- 021 er er at time [(1.5)
 [((raising her hand up and down before swinging
 it to the left))]]
- 022 Tana [what er mmm what urine?
 [((pointing with index finger towards the back))]]
- 023 Rani that yeslah.that is twice a day.
- 024 Tana a::h.
- 025 Rani er twice a night.

026 Tana yyeah.
027 Rani twice a night you can get it ?
028 Tana [ah.
[((nodding))]
029 Rani that is ok what.=
030 Tana =a:h.
031 Rani not too ba:d.
032 Tana mmm.
033 Rani a:h?
034 Tana yeah. ((nodding))
035 Rani ah. but I- I see you snoring?
036 Tana [no:h.
[((moving her head down and up again))]
037 Rani mornings when I [come-
038 Tana [AT time]•hhh snore.
[((swings hand at chest level))]
039 [(1.8)
[((raises her head, points upwards and swings hand to the left))]
040 °what° err the mm, ((pointing to the left))what thatt erm
041 [↑urine.
[((fingers curled, palm facing upward and then turned over.))]
[(1.6)
[((looking up, brings her hand close to her own forehead))]
042 [ff quietly will erh.
[((swings hand backwards and drops it on her seat))]
043 Rani will come?
044 Tana a- hh hhhh hhh.
045 Rani [quie(h)tly will come.] [(0.5)
[((Tana looking down))]
046 Rani you don't expect your [urine to make noise and come,]
[((Tana covering her eyes))]
047 isn't it?
048 [(0.7)
[((Tana holding her head and laughing quietly))]
049 Rani ahh?
050 [(1.1)
[((Tana drops her hand onto her lap, her body shaking))]
051 Tana ((lifting her head)) hh hhh (chuckles)
052 Rani ah?
053 Tana a:h, ((turning slightly to face Rani))YES. ((nodding))
054 Rani want to go to you:r sister's house or not? Vani Aunty's
055 house?
056 Tana o:hm, [mmm, °what°
[((pointing upwards with index finger,holds up four fingers))]
057 [sunday.] [noh.] •h sa↑turday go,
[((index finger held up)) ((opening the fifth finger))]
058 Rani sun[day come back.]
059 Tana [hh heh.] [↑no, no.
[((shaking her index finger at Rani))]
060 Rani why?
061 Tana ((pointing downwards repeatedly with her index finger)) mmer==
062 Rani =after all only once a week what. only,-
063 Tana [e- no. no.
[((Shaking her head quickly))]
064 Rani weekends you go.
065 Tana nno.
066 Rani weekdays you don't go [what.]

067 Tana ((holding up her index finger)) L wa- emm, J mon- sun- a:n- one,
068 Rani you go on [saturday,
[((touching Tana's right shoulder))] =

069 Tana =no no nonononononana [NOH.
[((swings her hand down emphatically))]

070 Rani why?
071 [(0.9)
[((Tana glances at Rani))]

072 Rani why?
073 Tana nn no. ((lowering her head, index finger pointing forward))
074 Rani because she's also your sister.
075 Tana [no: ,
[((nodding))]

076 Rani she's-]
077 Tana er t t
L ((swinging hand over her right shoulder.index finger pointing.)) J

078 *thiyanamlah.*
meditation PRT
meditationlah

079 Rani there also you can *thiya* [nam.]
meditate
there also you can meditate.

080 Tana Lno, J no.
081 Rani why cannot *thiyanam*?
meditate
why cannot meditate?

082 Tana read, read, readlah.
083 Rani you take everything and go read read readlah.
084 Rani want to go to you:r sister's house or not? Vani Aunty's
085 house?
086 Tana o:hm, [mmm, °what°
[((pointing upwards with index finger, then holds up four fingers))]

087 [sunday.
[((index finger held up))] [noh.
[((opening the fifth finger))] •h
088 sa↑turday go,
089 Rani sun-day come back.]
090 Tana [hh heh.] [↑no, no.
[((shaking her index finger at Rani))]

091 Rani why?
092 Tana ((pointing downwards repeatedly with her index finger)) mmer==
093 Rani =after all only once a week what. only,
094 Tana [e- no. no.
[((shaking her head quickly))]

095 Rani weekends you go.
096 Tana nno.
097 Rani weekdays you don't go [what.]
098 Tana ((holding up her index finger)) [wa- emm,] mon- sun- a:n- one,
099 Rani you go on [saturday,
[((touching Tana's right shoulder))] =

100 Tana =no no nonononono [nana NOH.]
((swings her hand down emphatically))]
101 Rani Lwhy?]
102 Tana [no no no. f f f-]
[((shaking her hand at Rani))]

103 [ek- one two three four] [five. thatt books and all.]
 [((holds up her hand & counting))] [((moving open palm))]

104 Rani I'll take all the things [and put in the-]
 105 Tana nononoh °nono°
 [((shaking her head))]

106 Rani take- give me all the books. I'll carry and
 107 [(take for) you.]
 108 Tani [nononoh nono]
 109 noh.
 110 Rani why?
 111 Tana [no nno:h. I-]
 [((shaking her head))]

112 Rani that day [you] went and stayed the weekend with
 [((pointing to Tana))]

113 Shantini when Shantini was down here from America?
 114 Tana [A↑merica::, o-, o- where once in a wayla:h.]
 [((moves head backwards, index finger pointing, dropping hand to seat))]

115 Rani yeahlah. [this a(l)so] this also once in a way what?
 116 Tana [e:h hemmm]
 117 Tana a:h. tt ((shaking her head)) at time •h once in a waylah.
 118 [(2.1)
 [((holding mid distance gaze and shifting gaze to Rani))]

119 Rani yes ah?
 120 Tana ye:s.
 121 Rani mmm.
 122 Tana america, fa(h)away.
 123 Rani faraway?
 124 Tana he:h. ((nodding))
 125 Rani so [if I go to America, can or not?]
 126 Tana [hhheh] ah. ((nodding))

127 Rani I go for a holiday? [I go and stay-]
 128 Tana [((nodding)) holi-]
 129 Rani I go and stay there for good, [can?]
 130 Tana [no no] no no
 131 Rani why I cannot?
 132 Tana no:h.=
 133 Rani =that's not fair, isn't it?
 134 Tana no noh.
 135 [(1.3)
 [((Tana holding mid distance gaze, Rani looks at her))]

136 Tana ((index finger extended)) one month, ah. [o:. ouo,
 [((swinging her arm upwards))]

137 Rani I can goh?
 138 Tana [mm ovve-]
 [((Tana holding up her open palm, then lowers it on to her lap))]

139 [okayh.]
 [((holding up her extended index finger))]

140 Rani [if I go,] you want to come?
 141 Tana [(two syllables) a:h.]
 142 Tana [nnoh.]
 [((shaking her head))]

143 Rani if I go for more than a month?
 144 Tana emm, oka:y.
 145 Rani ca:n ah?
 146 Tana ah. ((nodding)) ah.
 147 Rani how you'll go to Stroke Centre then?

148 Tana ahh.° ((nodding her head slightly))

149 Rani how will you go to Stroke Centre?

150 Tana hehh hh. ((points at Rani & taps her left leg once & raises her arm))

151 [my man?
[((index finger pointing up))]]

152 Rani your MAN?

153 Tana [hh heh heh heh.
[((Tana looking up, extended arm held in position & then lowered))]]

154 Rani who's your man? [°hehhhhh°]

155 Tana [hhh hah,] Rajan? h [hhhhh
[((pointing upwards))]]

156 Rani oh hoh. Rajan.

157 [but you see when we go, we both go(h).]
[((touching Tana's right hand))]

158 Tana [↑o:h. I see:.]=
[((mid distance gaze))]

159 Rani =a:h.

160 Tana a:hh. okay lah. [°h ↑WALKlah.]
[((swings her hand forward.))]

161 Rani walkh? = ((mocking tone of voice))

162 Tana =A:H.

163 Rani [o::h?
[((tilting head slightly))]]

164 Tana [ya:h =
[((looking at Rani))]]

165 Rani =o:h, o[ka:y] ((turning away from Tana))

166 Tana [ha:h] o[ka:y.]

167 Rani [ne] VER mind. my son will send you: , =

168 Tana = a: [h.]

169 Rani [and] from there you walk backlah.

170 Tana [ye↑ah.
[((nodding emphatically))]]

171 Rani can a:h?

172 Tana [okay. okay.]
[((nodding twice))]]

173 Rani o: pu:hh.

174 Tana a:h.

175 Rani [e:mh? (ye:)ah]
[((titling her head))]]

176 Tana a:h, yeah, yes e-

177 Rani by the time you cross the road, a car will come from

178 either that side and knock you, =

179 Tana =n n [o.]

180 Rani [or] come from this side and knock you.]
[nono] no noh. =

181 Tana

182 Rani = and then you trip and fall, who is going to [ge-]

183 Tana [no:,]

184 Rani get you up?

185 Tana no lah. one thing, [(the o:) kk-]
[((open palm held up facing Rani))]

186 Rani [ei, one thing,] like that day

187 [((pointing to the back))] you fell down in your room?

188 Tana no: . =

189 Rani =you couldn't even get up.

190 Tana a: p- tch, a: av, rthat, kattre:, ┘
bed
└ ((leaning forward, moving left hand down))┘

191 what e:r, [knock me or, evve,] Ran [jeet or,
((tapping her knee))] ((swinging her hand))]

192 Rani or my- my grandchildren pushed you down?
193 Tana hehhh heh. heh.
194 Rani ah?
195 Tana [occasionallylah.
((raises her hand and drops it down to her lap))]

196 Rani ne(ver) mind [lah.]
197 Tana [a:h.]
198 Rani fall and get up onlylah.
199 Tana ↑yeahh. Hah he-

200 Rani [but that day you fell down] from the chair also you
((pointing to the her left))]

201 couldn't get up.=
202 Tana =um mmm mmm [tch.
((shaking her head))]

203 Rani hemh. [villanthavan mi:saiila mann padavillai.]
idiomatic expression

204 Tana └ ((swings her hand)) hahh. ┘ heheh. he,
205 Rani eh?
206 Tana [yeah.
((nodding her head slightly))]

207 Rani e[mh,]
208 Tana [ye] ah
209 Rani you wan(t) anything for tea or not?
210 Tana [↑yeahh.
((moving her head from side to side))]

211 Rani what d you want?
212 Tana mmm, mmm- ((making a semicircle shape with her thumb and index finger))
213 currypuff.
214 Rani Currypuff, how many you wan(t). five, ten?
215 Tana no. vvv ((looking at her hand, holding up three fingers, then two))
216 °one, ° two enough. ((drops her hand to the sofa))
217 Rani two enough. vade?
218 Tana vade, [e:: mmm,
((looking to her left, then holding mid distance gaze))]

219 ((holding up index finger))one enough.
220 Rani vade one, currypuff two. then you want dinner also.
221 after eating these things you cannot eat anything
222 [what?
223 Tana [heheh] heh. no lah.=
224 Rani = can?
225 Tana [can.
((moving her head from side to side))] can.

226 Rani ce[:h.] fantastic ah?
227 Tana [e-]
228 [currypuff,
((head bent forward and up again))] [ev mm,=
((looking at her hand))]

229 Rani three [also can?
((Tana looking at Rani))]

230 Tana nno:, hheh e- currypuff, two lah.
231 Rani ((yawning)) currypuff two, vade one.
232 Tana [yeah] ((nodding))
233 Rani [you sure] you don wane eat four wha- currypuffs ah?=-

258 Tana [=no. no. nono.] wwah- [e- vv-
 ((shaking her head)) ((holding up two fingers, averted gaze))]

235 Rani you take [plain tea.
 236 Tana [two curry puffs,] two emmme=
 237 Rani vade.
 238 Tana vade, o:o currypuff, ↑two.
 239 Rani popiah?
 240 Tana ah?
 241 Rani popiah?
 242 Tana ↑a:h. ye: [s.
 ((nodding))]

243 Rani [po]piah, you wan(t) how many? five?
 244 Tana [ah,] two enough lah. ((two fingers held up))
 245 Rani ne mind lah.
 246 Tana no no no.=
 247 Rani =five lah. I'll give you five.
 248 Tana hehhh heh heh h [eh.]
 249 Rani [why?]
 250 Tana ah?
 251 Rani cannot?
 252 Tana o:v, [(0.7)
 ((moving her head slightly away and then back to Rani))]

253 [can.
 ((nodding))]

254 Rani can a:h?
 255 Tana okm- [offv-
 ((tracing circles with her index finger, then pointing upwards))]

256 Rani then you don't have [dinnerlah.
 ((Tana turning to Rani, lowers her hand))]

257 Tana [nah.
 ((nodding))]

258 Rani eh?
 259 Tana yeah.
 260 Rani [okay, okay.
 ((shaking her head))]

261 Tana mmm.
 262 Rani want t go to Mrs Ra- Ramanathan's house or not?
 263 Tana [yeah.
 ((tilting her head))]

264 Rani want to go? =
 265 Tana =yeah. yeah yeah.
 266 Rani yes a:?
 267 Tana yeah.
 268 Rani why Seetha was supposed to come, Seetha never came.
 269 what happened?
 270 [(1.2)
 ((Tana holds mid distance gaze))]

271 Rani Aarthi was supposed to come, Aarthi never came. Seetha
 272 was supposed to come.
 273 Tana nno:h. [a:h, Aarthi,
 ((raising her hand, points upwards with index finger))]

274 [e:rr=
 ((moves her hand forward, holding up an open palm))]

275 Rani =looking after [her daughter?]
 276 Tana [a:h, daugh]ter, and sa:, son. noh. that,
 277 e- (1.2) (the::,)
 278 Rani grandchildren.

279 Tana ah.
 280 Rani emmm. okay.
 282 Tana ah.
 283 Rani so that's why she doesn't have ti^{me.}_{erh,}]^{timelah.}]
 284 Tana]_{((nodding))}
 285 [(1.1)
 286 Rani]_{((nodding))}] uhma: whatt e, what about your other relatives?
 287 Tana mm? (who?)
 288 Rani other relatives won't come [ah?]
 289 Tana [ye:]s.
 290 Rani (two syllables) come ah?
 291 Tana ah.
 292 Rani [tch.]
 293 Tana [hmm.]
 294 Rani only thing I don't have the time a:h?
 295 Tana [(no) lah. umhm,
]_{((turning her palm upwards, pointing up, drops hand to the seat.))}] =
 296 Rani okay, tomorrow you have to go the fanfare, isn't it?
 297 Tana nno:, [day after tomorrow.
]_{((moving extended index finger in a semicircle above her head))}]
 298 Rani tomorrow is sat- oh Sunday [ah?]
 299 Tana [yeah] Sunday.
 300 Rani not on Saturday?
 301 Tana a:h. Sa^{turday,}]
 302 Rani [okay] okay. *((turning to Tana))* how many tickets have
 303 you got so far?
 304 [(2.5)
]_{((Tana looking in distance, Rani looking at her))}]
 305 Tana *((holding up four fingers and moving her hand))* [o: no .]
]_{((waving))}]
 306 Rani that day I gave you thirty dollars,
 307 Tana [a:h, thirty dollars,] [uvv one more.]^{forty}
]_{((holding up three fingers))}]_{((holding up four fingers))}]
 308 dollars.
 309 Rani you bought forty?
 310 Tana nno^{h.}]
 311 Rani [then] you took ten dollars and went=
 312 Tana =a:h. forty dollars mmm ffo:e-, tthree- emm, forty er-,
 313 got. mmm,=
 314 Rani =must buy another ten dollars?
 315 Tana [noh.] take. take^{away}]
]_{((shaking her hand))}]_{((drops her hand on the sofa))}]
 316 Rani oh. thirty tickcets- but you got thirty dollars ticket, isn-
 317 thirty dollars worth of tickets?
 318 Tana no::. [hahhh]
 319 Rani [where is] the ticket?
 320 Tana nno:, *((shaking her hand in front of Rani))*
 321 Rani that day I gave you thirty dollars?
 322 Tana that_u money, e-, e::m [thirty dollars,
]_{((holding up three fingers))}]
 323 [wwone more, forty] dollars. the stroke centre.
]_{((holding up four fingers))}]
 324 Rani mmm-
 325 Tana ev vu-, [yes,]
]_{((swinging her hand back above her head))}]

376 Rani why? one more for what?
377 Tana a:, thatt, that,
378 Rani one more for what?
379 Tana myself er- er-
380 Rani you want to buy things?
381 Tana a:.
382 Rani okay, we'll ask your brother-in-law [later,] give her a
383 Tana [heh heh hhh]
384 ten dollars to go and buy tickets [and
385 Tana [heh heh hhh]
386 Rani I gave you for the donation.
387 Tana a: okay lah.
388 Rani can, isn't it?
389 Tana ye- =
390 Rani =okay.go and ask. when your brother-in-law gets up [and comes,]
391 Tana [heh hhh]
392 Rani you tell him,
393 Rani you are a rich, tell him, you are a rich man. you claim to be
394 a *jamindar*,
zamindar (land lord)
395 Tana hehhh heh.
396 Rani correct or not?
397 Tana ahm.
398 Rani ehm?
399 Tana yeah.
400 Rani a:,
401 Tana yeah.
402 Rani *vereh?*
what else?
what else (do you want to talk about)?
403 Tana ahm.
404 Rani mm.