

**Communication participation of adult aided communicators
with cerebral palsy; a discourse analytic approach.**

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Abstract

The field of augmentative and alternative communication (AAC) has evolved since the 1970s, consequently there now exists a group of adults with cerebral palsy (CP), in the UK, who are life-time users of AAC prescribed as an intervention for their complex communication impairments.

Ten adults, aged between 20-55 years, participated in conversations about their unique life experiences and aspirations, using AAC, including voice output communication aids (VOCAs). The ability and opportunity to interact and communicate personal accounts has significance for conceptualizing outcomes of intervention. Clinical practice informed this research project. A qualitative research design was employed to explore questions about the extent to which adult aided communicators talk about their lives, aspirations and opinions; the past life experiences participants talk about and finally how they talk about their quality of life. Conversational-styled, semi-structured interviewing using literature-guided questions yielded rich interactional data. A discourse analytical approach to the 34 interviews was taken.

Findings identified a number of ordinary interactional features and discourses. Aided communicators used multimodal communication to interact and converse, positioning through their contributions as assertive speakers and engaged recipients.

Interactional turns were managed with participants using unaided communication signals as conversational continuers. Participants demonstrated how to manage others who speak on their behalf. Examples of interactional repair were noted when participants pre-empted breakdown. Managing novel utterances was a feature with unexpected responses challenging the listener's position.

Participants constructed VOCA-mediated utterances to share long-term memories, worries, satisfaction with life, and aspirations. Aspirations included community ambitions and creating fulfilling daily lives. Some participants expressed frustration but balanced this against a position of contentment. Some participants also demonstrated personal responsibility and positioned themselves through their talk as contributors to communities.

Recommendations for clinical practice are suggested that include the provision of adult clinical services and interaction focused intervention for adult aided communicators with cerebral palsy.

Key words

Adult; cerebral palsy; aided communication; AAC; conversation; communicative competence; interaction; qualitative

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Glossary of Terms

VOCA – voice output communicate aid

SGD – speech generating device. This is the American preferred term, recognised by the Medical Insurance Companies who purchase devices in America.

SLT – speech and language therapist/therapy (the protected professional title in the United Kingdom). Alternative titles are speech pathologist (Australia) and speech-language pathologist in USA.

CP – cerebral palsy

AAC – augmentative and alternative communication

ACS – augmentative communication systems

ISAAC – the International Society of Augmentative and Alternative Communication, formed in 1980s.

The terms natural speaker and aided communicator are preferred and recommended by von Tetzchner & Basil (2011).

The medical term cerebral palsy is used instead of the umbrella term lifelong developmental disabilities.

Person-centred terms are used. I have chosen to use the term communication impairment, in alignment with the International Classification of Functioning Disability and Health (WHO, 2002) and not Complex Communication Need (CCN) for reasons as discussed in von Tetzchner & Basil (2011).

The masculine pronominal forms have been used where appropriate, throughout this thesis, for ease of reading.

Transcription conventions

Author's own (novel), von Tetzchner & Basil (2011) and Jefferson (1989 cited in ten Have, 2007) – where appropriate.

Anonymity

Every effort has been made to anonymise all data gathered. Participants chose whether to select a pseudonym for themselves, or not. All place names, names of schools, people and other people involved in the interviews have either been anonymised by removing, giving a generic title, recording as (*name*) or typing "CXXX" for example.

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And to Kate, Tim & Jon who one day will follow

As Captain Oates is alleged to have said, “...I may be some time.”

Chapter 1 Introduction and Background Literature

1.1 Introduction

The purpose of this thesis is to offer a contribution to the knowledge about how adults with cerebral palsy who use augmentative and alternative communication (AAC) systems interact in conversations, talking primarily about themselves and their lives. Adult aided communication has received little attention in the research for a variety of reasons; one of which has been the absence of older aided communicators. The limited literature attests that children with severe physical disabilities (mainly cerebral palsy) and complex communication impairments (requiring AAC) vary widely (von Tetzchner & Oxley, 2014). For some aided communicators with a developing repertoire of communicative abilities, conversations can be slow (Clarke & Wilkinson, 2013), challenged by alterations in time and timing, linguistically and pragmatically limited (Binger, Maguire-Marshall & Kent-Walsh, 2011) and with adults positioning them in passive roles (Pennington & McConachie, 2001). It is therefore important to understanding the longer-term communication and real-life outcomes and experiences of this group as adults. By investigating how talk (content and processes) happens in adult interpersonal interaction, it is possible and vital to add to the knowledge about the natural history of communication skills (Johnson, Beitchman & Brownlie, 2010) and AAC as intervention.

When a person cannot use their natural speech as their primary mode of communicating, AAC interventions are recommended principally by speech and language therapists (SLT) to enhance the individual's communication and subsequent participation in "valued activities and experiences of everyday life" (p.201, Light & McNaughton, 2012; Beukelman & Mirenda, 2013). Achieving the most favourable and effective interpersonal interaction is one of the ultimate goals of leading human lives (Schiffrin, 1994) and for people who use AAC, it is no different. Being a flexible and efficient communication participant, who is confident and successful across a range of different contexts (Smith & Murray, 2011), should be the long term goal for all communicators. For some adult aided communicators, this goal is not functionally possible.

The unique participant group in my research project is based in England, and not represented in the mainstream literature because for many people with expressive communication impairments, their communication can be hard to understand or limited. A skilled conversation partner is essential but it has been reported that some researchers are unable to listen effectively (Lloyd, Gatherer & Kalsy, 2006) when participating in qualitative projects. Whilst my goal has been to contribute an authentic representation of interaction, this could not be achieved without factoring in the components of communication participation specifically the construction of self. Adult aided communicators are still a heterogeneous group in terms of their cognitive, linguistic and pragmatic functioning (Collins, Markova & Murphy, 1997), so it was anticipated that some analytical approaches to the spoken and non-spoken communication of natural speakers who have a history of successful communication experience would require adaptation.

AAC can be used by adults who have acquired cognitive and communication impairments (Beukelman, Fager, Ball & Dietz, 2007). These include aphasia and motor speech disorders that accompany the medical diagnoses of Motor Neurone Disease (Bloch & Wilkinson, 2013), Alzheimer's Disease (Fried-Oken, Rowland, Daniels, Dixon, Fuller, Mills, Noethe, Small, Still & Oken, 2012) and cerebrovascular events (Beeke, Beckley, Best, Johnson, Edwards & Maxim, 2013; Hough & Johnson, 2009). However, these adults have had a history of typical development and of natural speaking and participation. Although their communication proficiency is therefore significantly different and not comparable with adults with cerebral palsy, it is anticipated that some aspects of their functioning might serve as useful reference points. The *unique* experiences of the participants in my group has led to making them the focus of my research.

Williams, Krezman & McNaughton (2008) describe one of the benefits of access to AAC as being "fundamental to the expression of self-determination and the exploration of options for a full and rich life" (p.198). If this position is accepted by the speech and language therapy profession, what exactly is (or should be) our response? Do we just focus on attainment of skills and technological solutions

(Beukelman & Mirenda, 2013; Shadden, 2005) or do we address the more complex issue of how users of AAC participate and functionally communicate in their chosen communities (Balandin, 2011)? Balandin (2011) reports that adults with lifelong disabilities rarely seek speech and language therapy services (if available) and if they do, input is likely to be narrow, for example, the provision and purchase of current voice output communication aids (VOCAs) or for episodic interventions (Balandin, 2002). Smith & Connolly (2008) suggest that access to services for their participants was also limited and felt that the situation was a “worrying scenario” emphasizing that services needed to be available across the lifespan (p.268). Baxter, Enderby, Evans & Judge (2012b) comment that in the United Kingdom, services are still of a postcode lottery existence. Knowledge about everyday or just ordinary conversations would inform interventions offered by SLTs that would affect the everyday practice, if that is also what is desired by consumers.

Furthermore, due to the development of the AAC field over the past 40 years, clinical practice and research has to date unsurprisingly concentrated on how children with cerebral palsy develop their communication and interaction with familiar and unfamiliar peers and adults. Whilst this is critically important, my research project in adopting a qualitative design, shifts away from the focus on children as developing communicators, to identifying how adults with cerebral palsy use AAC to participate in conversations and interactions within a specific social context.

1.2 Thesis structure

Chapter one includes a review of the literature and theoretical areas explored in order to help locate my research within the wider body of knowledge, of which there is little. Chapter two describes the qualitative research design in terms of the participant recruitment and retention, consent and interview process, highlighting some of the necessary practical adaptations. Chapter three introduces the analytic approaches adopted, including the transcription and coding processes and procedures. Markers of quality appraisal and reflexivity have been integrated. Chapter four focuses on the ten participants in terms of their background information and communication profiles. Chapters five and six present a detailed and systematic

analysis of the participants' involvement in interactional exchanges to answer my research questions. Chapter seven is a discussion of the main findings that revolve around communication participation and satisfaction with life. Implications for clinical practice and future research are presented in the final chapter.

1.3 Literature review and theoretical influences

Several sources of information and theories have influenced the development and execution of my research and these are illustrated in Figure 1.



Figure 1: Research project influences

In the following section, each aspect will be addressed to outline the current knowledge bases and in particular, what is not known, as it relates to the clinical practice of SLT.

Whilst literature exists concerning AAC and its use with the developmental age group and also with adult acquired neurological conditions, the literature related to the field of cerebral palsy and adulthood is relatively limited. As a starting point for this project, a search strategy was identified (Table 1) based upon the influencing areas (Figure 1). Data bases were initially searched in July 2012 and the database Discovery was then used from January 2014 using the same keywords. Reference lists cited by research published in peer-reviewed journals were followed up by hand. Text books on qualitative research methods, AAC and conversation, communication, and discourse were also accessed.

Table 1: Search strategy

Keywords: adults, cerebral palsy, AAC, aided communicators, interaction, conversation, outcomes

Electronic databases searched: ERIC, Academic Search Prime, Medline, Communication and Mass media, Google scholar, PsychInfo, Discovery

Main journals:

American Journal of Speech-Language Pathology
Augmentative and Alternative Communication
Communication Disorders Quarterly
Developmental Medicine and Child Neurology
Disability and Society
Disability and Rehabilitation
Disability and Rehabilitation Assistive Technology
Discourse Studies
International Journal of Language and Communication Disorders
International Journal of Speech-Language Pathology
Journal of Clinical Practice in Speech Language Pathology
Journal of Interactional Research in Communication Disorders
Language, Speech and Hearing Services in Schools
Qualitative Health Research
Research on Language and Social Interaction

Search dates: 2002 to 2014

Inclusion: English language

Exclusion: research conducted with participants diagnosed with autism continuum disorders and learning/cognitive or intellectual impairments

The search results have been used to inform the following chapter sections.

1.3.1 Communication participation

Communication is complex. It is also dynamic and shared. It is “more than a basic human right, it is a basic human power” (p. 28, Fried-Oken & Bersani, 2002).

Communication can be theorized from different perspectives. The interactional model moves my understanding of communication beyond the isolated roles of the participant, the message and the medium (Schiffrin, 1994). It states that *all behaviours*, whether intentional or unintentional, communicate. All behaviours whether verbal, physical or paralinguistic convey messages and are influenced by contexts. Of importance to this project, is the position that the recipient of the information is just as responsible for the communication as the initiator. The position of an ‘interactive other’ is of critical importance; how aided communicators and natural speakers, both of whom use multiple modalities to converse and manage interaction, is as illuminating as trying to judge the isolated concept of communicative competence.

For both recipients and initiators, becoming more able at communicating (including use of language) is shaped by experience and is reliant on one’s awareness and motivation as a social and cultural being (Tetnowski & Franklin, 2003). One aided communicator described communication as like a dance, “Just as a dance couldn’t possibly be a dance until people moved to it, so language doesn’t become communication until people grow to understand and express it back. It has to be a two-way exchange. This is why communicating is an action word” (p.3, Staehely in Fried-Oken & Bersani, 2002).

In summary, in this thesis I have adopted the view of the construct, *communication participation*, as how individuals engage in talk (conversation) and interaction (Kovarsky, Culatta, Franklin & Theadore, 2001). Competence is jointly generated, distributed and evaluated within interactions (Duchan, Maxwell & Kovarsky, 1999). Consequently interactional competence is a by-product of the participants’ positioning of self and other.

Conversation

In this thesis I focus on interaction within conversation situations, and necessarily include both the recipients and initiators. When natural speakers engage in conversation as 'speaker and listener', this requires considerable practice, effort, encouragement and numerous authentic experiences and opportunities over a lifetime. Two decades ago, Higginbotham & Wilkins (1999) reported that for adult aided communicators with acquired impairments, to participate in free-flowing and sequential talk with others, requires significant adjustments and compromises in order to manage the challenges. Whilst this is no different for adult aided communicators with cerebral palsy (Smith & Murray, 2011) the barriers to becoming a 'competent' or 'a successful and good' (Duchan et al, 1999) conversation partner are deeply complex. Considerable skills, personal characteristics, motivation and perseverance interlinked with managing the many external factors (Light & McNaughton, 2014) are necessary.

It is important to understand natural speakers' conversation before researching adult aided communicators' interaction. A conversation is taken to mean a "communicative interaction between two or more individuals" (p.144, von Tetzchner & Basil, 2011; ten Have, 2007). Typically it is a common, mundane and everyday social interaction that can be taken for granted, with participants sometimes not fully realising satisfactory outcomes. Utterances or turns are exchanged and co-ordinated by the conversation partners characterising its interactional nature (Tannen, 2007). Although conversation can be elaborate and complicated, Beukleman & Mirenda (2013) describe a "conversational contour" (p.21), having a somewhat predictable structure. Organising conversation as described by Beukleman & Mirenda (2013) makes the interaction procedural or sequential and often predictable in terms of providing the responses to use. Typically, a greeting or opening, initiates the social conversation, followed by an episode of small talk. Continuers, hums/hars, pauses and other message enhancers may be used to manage, shift, repair and maintain the process (Grundy, 2000). To conclude, there might be some wrapping-up comments signalling an intent to finish, followed by a farewell or closing. This conversational contour can be mapped out by a variety of behaviours both intentional and unintentional information carriers.

To participate in a conversation situation, a partner must have something to say or share, a message, a response, a memory, an interactional skill or behaviour (Beukleman & Mirenda, 2013). The linguistic conversation content usually falls into four categories; subjective ideas, objective facts, people and oneself (Tönsing & Alant, 2004). Unsurprisingly in reality, these become neither finite nor discrete categories. Conversation content requires vocabulary, morphology and syntax in order to be expressed (Light, 1997b). Aspects of conversational style such as pacing, linguistic features, humour, storytelling, and frequency and appropriacy of contributions vary according to the formality of the situation and place, from person to person, with reference to age, gender, interest and status (Fairclough, 2003; Tannen, 2005). We position ourselves with different identities in different conversational exchanges and indeed are positioned by others as different kinds of people (Bucholtz & Hall, 2005). How an aided communicator experiences and learns these variations of positions is at an interactional level and identified by taking a discourse analytical approach (Edwards & Potter, 1992; Wooffitt, 2005).

A contributor has to learn about their identity as a social communicator – with communicative intentions, speaker-listener/hearer roles (Goffman, 1981) and rules, socially based adjustments, perspectives and regulatory behaviours, all positioned through interaction (Bucholtz & Hall, 2005). These identities and their modifications need to be learnt and they underlie social or cultural knowledge or communicative competence (Schiffrin, 1994). Many factors influence intersubjectivity or interactional achievement including shared language, motivation, persistence and flexibility (Gillespie & Cornish, 2009; Light & McNaughton, 2014).

Research by Collins et al (1997), described the conversation and interactional skills of people with cerebral palsy who use AAC. However it is yet to be comprehensively established in the literature as to whether adult aided communicators with CP and their natural speaking partners, undertake interactions that are sequentially organised into successful and satisfying exchanges (Grundy, 2000). Although the conversation skills of adults with acquired communication impairments who use AAC have been reported in the literature (Bloch & Wilkinson, 2004) they too vary

according to such influencing factors as the disease, and their medical and physical status. Additionally personal and emotional factors related to individual experience will influence their use of AAC (Beukleman & Mirenda, 2013).

Communicative competence

A current challenge in the research literature and clinical practice concerns how best to describe and measure an aided communicator's communicative competence. Indeed, Lund (2014) enquires how *do* we describe a good outcome? Janice Light's model of communicative competence, first proposed in 1989, describes a person's knowledge, skills and judgements across the four domains of linguistic, operational, social and strategic competence and is commonly utilised by SLTs in clinical practice. Additionally it was suggested that aided communicators need to draw more on their motivation to communicate, their resilience, communicative confidence and have a positive attitude to their communication skills (Light & McNaughton, 2014) to achieve good and competent outcomes.

Teachman & Gibson's recent critical review (2014) of the theoretical underpinnings of communicative competence in AAC documented its development over the past forty years (the life span of AAC). However the definition of communicative competence necessarily has to include the "other half" as communication does not happen in a vacuum (Tannen, 2005). This notion is compatible with an interactional model of communication (Schiffrin, 1994).

So who should judge communicative competence or rate a person's activity and participation in social interaction? The opinion of professionals may well be at odds with that of the adult aided communicator (Enderby, 2014). The SLT for example, may believe that their input in language development might improve presenting skills. The aided communicator however may judge himself against dimensions that are important to him, for example, the number and quality of swear words he can use (Brewster, 2012) and the strength of the hearer response.

Expectations of aided communicators have undoubtedly changed over the years. SLTs now anticipate that aided communicators will be proficient and effective in participation in conversation exchanges in all situations and with all people; that they will have achieved Light's descriptions of being linguistically, operationally, strategically and socially competent (1989); that they will be able to engage in typical discourse in its purest form. However, it is not clear from the research that this has been achieved. So the clinical motivation behind my research comes from the recognised need to have more knowledge about how everyday conversations are conducted. For people who use AAC this is important not just for the adults and their conversation partners but potentially for healthcare commissioners and SLTs to inform clinical service provision of conversation-oriented interventions (Baxter et al, 2012 a/b).

1.3.2 Augmentative and alternative communication (AAC)

Many people with communication impairments benefit from using a diversity of augmentative strategies and modes of communication including signing and gestures, symbol/picture/word/letter-based devices and speech/voice output communication aids (Figure 2). AAC usage is not limited to age groups, disorders of receptive or expressive language or both, or for disorders that were acquired later in life or that are progressive and life-limiting in outcome. All natural speakers accompany their speech with nonverbal language that is modified to suit the communication partner, context and purpose of the exchange. AAC is used in the same way. The use of many components and modalities is irrefutably considered best practice (Iacono, Lyon, Johnson & West, 2013), efficient and effective (Smith & Connolly, 2008). Hodge (2007), however, rightly questions whether some aided communicators in the UK use their devices to their maximum potential because of the many barriers and challenges. Figure 2 on the following page, illustrates multimodal communication and the aided and unaided options available for communicators with different needs and preferences.

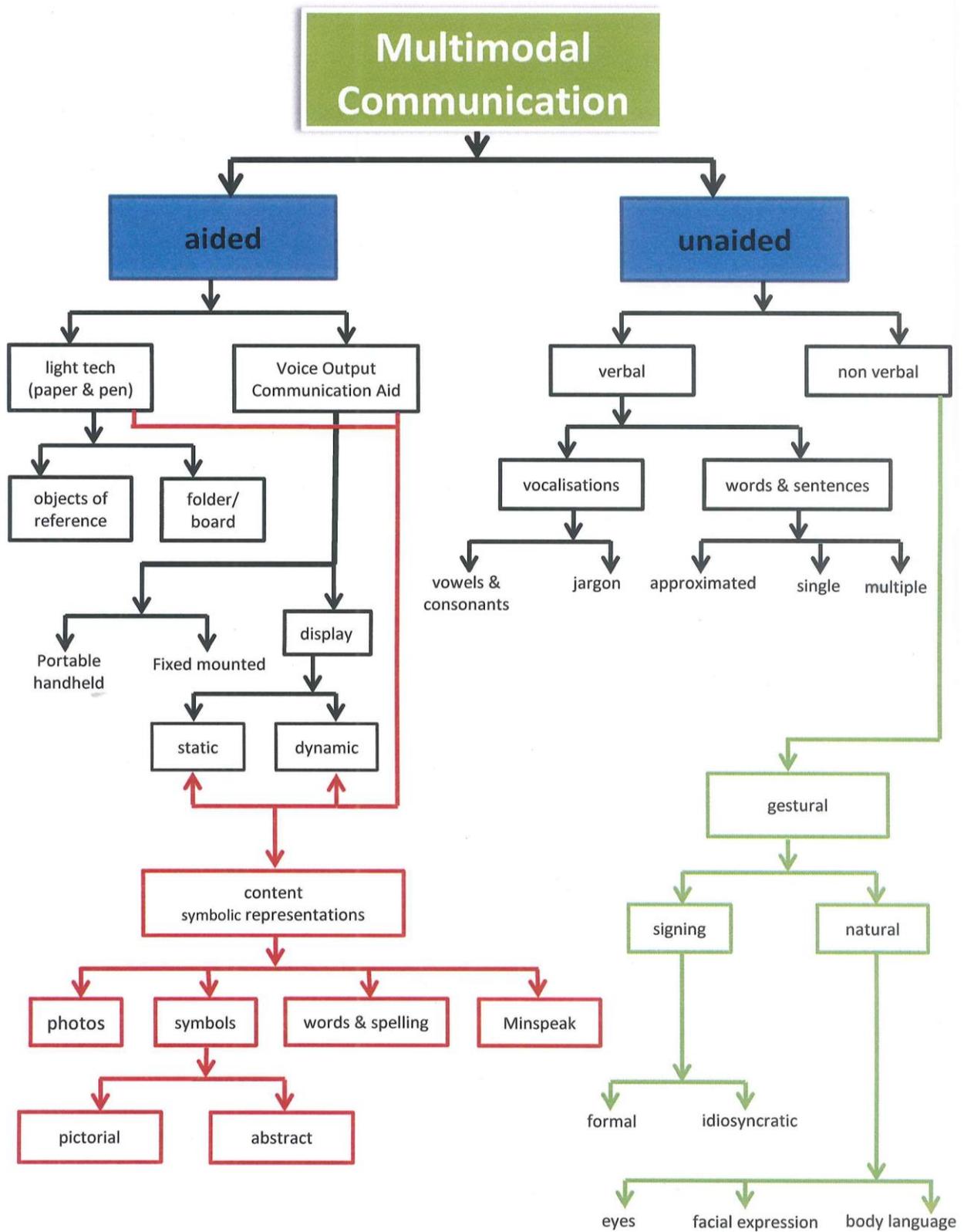


Figure 2: A flow chart illustrating multimodal (aided and unaided) communication

Assistive technological options, such as VOCAs, and described in Iacono et al (2013) are not necessarily “the be all and end all”. A contemporary challenge to the advance of aided technological solutions asserts that the communication messages are more important than the tools used (Beukelman & Mirenda, 2013) and therefore need to become a focus for research and development (O’Keefe, Kozak & Schuller, 2007; Light & McNaughton, 2012; Williams et al, 2008). Aided communicators have developed with and through historical changes from a time when AAC was considered a last resort (Light & McNaughton, 2014) but only if one possessed the necessary pre-requisite skills (Ronski & Sevcik, 2005). Now people who use AAC are ageing, they are hopefully participating and contributing to communities in employment, education and family life mediated by good communication skills.

A significant and relatively recent change in the field of AAC research is the increasing use of qualitative research methods to answer more appropriate questions concerning the nature and use of aided communication in real-life situations.

When searching the literature for studies utilizing a qualitative research design, a total of only twelve research papers conducted internationally over a twelve year period from 2002 were identified and illustrated in Table 2, but warrant closer inspection. All studies used a qualitative or mixed methods research design, where adult, life-long aided communicators with cerebral palsy were included. Studies with adult aided communicators with known-cognitive impairments were excluded. It is significant however, that some of these studies did not describe the characteristics of their participants in detail to allow for inter-study comparison. Verbatim quotations (phrases or complete utterances) or excerpts (question/answer or a short sequence) illustrate the linguistic detail and provide insights into the cognitive functioning of a total of 117 participants either talking or writing about specific topics. Whilst most of these are single snap-shots, they do not illustrate the interactional processes involved in getting to that point, nor is an in-depth exploration of the topic with the communication partner/interviewer described, which for my project is a central concern. An exception is the single case study (Hörnmeier & Renner, 2013) of Nina, a 19 year old woman conversing with her familiar partners. The analysis of her

conversation and interaction is informative and, despite only recently acquiring a VOCA and not being a lifelong user of aided communication, and in the absence of any other relevant literature, I have drawn on this work.

Table 2: Systematic review of literature employing qualitative methodologies

Year	Country	Authors	Total sample adults with AAC	Number from total with CP	Design, method & analytical approach	Data presentation
2013	Australia	Iacono et al	15	7	Qualitative/interviews/content and thematic analysis	User quotes (single sentence)
2013	Germany	Hormeyer & Renner	1	1	Conversation analysis	Extract of conversation
2011	Ireland & UK	Smith & Murray	38	38	Qualitative/thematic analysis	User quotes (single sentence)
2010	Canada	Collier et al	9	7	Qualitative/interview/thematic analysis.	User quotes
2010	Australia	Trembath et al	24	18	Qualitative/interviews/grounded theory	Question + answer
2009	Australia	Cooper et al	6	6	Qualitative /interviews/thematic analysis.	User quotes
2008	Australia	Hemsley et al	6	2	Mixed methods/focus group	User quotes
2008	Ireland	Smith & Connelly	18	18	Qualitative/ questionnaire	User quotes
2008	USA	Dattilo et al	8	8	Online focus group	Written texts as quotes
2007	Australia	Ballin & Ballandin	7	3	Qualitative /thematic analysis	Quotes from interviews
2006/7	USA	Lund & Light	7	7	Mixed methods	Single sentence quotes
2002	USA	Muller & Soto	3	3	Mixed methods /conversation analysis	Excerpts of interaction
Total			142	117		

Most studies explored the adults' spoken experience of communication and device usage, in specific contexts, for example, volunteering and paid-work (Trembath, Balandin, Stancliffe & Togher, 2010a/b) or social networks and isolation (Ballin & Balandin, 2007; Cooper, Balandin & Trembath, 2009). Other studies focused on general communication experience and device usage and used interview guides (Iacono et al, 2013), so the extent to which novel or self-generated topics of importance were created is unknown.

Dattilo, Estrella, Estrella, Light & McNaughton's (2008) participant group of eight adults from America (aged 27-44 years) with CP who used AAC were recruited because they were literate and could use IT, especially emails. This was important because they used an online focus group to explore their perceptions of leisure and recreation. The excerpts of data used to illustrate the thematic findings are interesting because they are written and not spoken, meaning that the authors of the postings had *time* to construct a complete message if desired. While this qualitative study informed an understanding of, for example, linguistic potential via written language from adult aided communicators with CP, it did not contribute to an understanding of interactional competence.

Data in the study by Collier, McGhie-Richmond & Self (2010) from the seven adults from Canada with cerebral palsy, aged 26-70 years, who used AAC, is presented as extracts. Participants trialled an intervention programme using communication assistants to support their communication needs as a third-party (proxy). Interviews were conducted to evaluate the use and benefit of communication supports with responses reported verbatim. Interestingly, data from the interviews is presented for each participant. It is therefore possible for the reader to assess how messages were constructed and delivered, mainly through spelling. Some examples of complex linguistic constructions are included as well as a comment by one participant about needing "extra time" (p.53) when communicating. One person comments that it is helpful to have a communication assistant translate their expressive communication to unfamiliar people. However the contributions of this research to my project are only by way of a similar demographic group and research design and do not

illuminate my understanding of *how* aided communicators expressed themselves despite their quotations providing a snap-shot description of their linguistic and cognitive functioning in this context.

Trembath et al's (2010a) participants with physical disabilities aged 20-60 years, are similar to my intended participants. What is novel about the interview data reported in this study is that the excerpts used to illustrate the themes, for example, 'control' (achieved through 'communication' p. 79) explicitly include both the question and the response. Features such as timings of utterance formulation are not however included. Observations regarding variation of linguistic content and utterance length are evident and some non-verbal communication is included, for example, head nod and gesturing. Hemsley, Balandin & Togher's (2008) focus group study also included the moderator's turns, so again, by default, the reader can analyse the basic interaction achieved.

Quotations from two older aided communicators were also included by Hemsley et al (2008) for example, from Nathan, "My Mother was there mostly and that helps a lot and that made things a bit easier" (p. 116). Quotations from participants are included in other studies, for example, Smith & Connelly (2008) from an unknown speaker, "people jump" (p.266), Iacono et al (2013) from Mathew, "more personal, faster" (p.397), and in Ballin et al (2007) from Michael, "some people hang up" (p.320).

The only longitudinal study was conducted by Lund & Light (2006; 2007) over a decade ago in America. The participants comprised seven young adult males, aged 19-23 years, who had cerebral palsy and who used multimodal communication systems. The participants had originally been recruited to an earlier study as pre-schoolers (Light, Collier & Parnes, 1985, I, II & III) so earlier data was available regarding their communication, language and interactional skills. The later study is significant as it is the only longitudinal study that reports on the aided communicators' discourse status, communicative functions and the linguistic complexity of their expressive communication. The main limitation however, is that interactional data is

not presented as excerpts for the readers' inspection. What is interesting is that over the intervening 15 year period, data suggested that all had achieved functional outcomes, but limited achievements in more specific language and communication areas. Video recordings of their interaction with three different but familiar communication partners led to the analysis of conversational samples. Using quantitative methods of analysis, their results suggest, for example, that for five men conversation turn distribution had become more equitable. The linguistic complexity for only two participants was described as complete and complex. This study is pivotal in the development of our understanding of how communication skills change over time (or not) and for our insight into the nature of expressive communication for this group of young men who used AAC.

Lund & Light's work builds on the only other study exploring the conversation patterns of adults from America with CP, who use AAC, conducted by Muller & Soto (2002). Three adults participated, aged 35-52 years. Their unstructured conversations with familiar natural speakers were recorded on video, accumulating one hour of data per participant. Conversation interaction was coded and analysed according to the frequency of turns (segments or units), the nature of the communicative function and of the actual turn type (repair, topic development or maintenance). An interesting aspect of this work is that the authors included "passages" of interactions to demonstrate the conversation patterns.

Muller & Soto (2002) postulated that earlier studies have shown that the use of aided communication impacts on the dynamics of communication. They reported on literature from research with children where they assume subordinate roles in conversation, and also with children where their partners assume dominant roles, ask a high number of questions and initiate topics. Additionally the interactions are characterized by repair rather than developing conversation topics. Reasons cited for this were unclear but included explanations about the variability of characteristics of partners, unequal status (teacher-pupil), cultural privileging of natural speech over aided communication and compensation of temporal communication constraints.

A qualitative research design utilizing a conversation analytical approach was adopted by Collins et al (1997), to present nine extracts of interaction between aided communicators and their speaking partners in institutional settings. This data was collected as part of a wider study of 93 people who use AAC with cerebral palsy aged 14-83, in Scotland. Although this study pre-dates the lower limit of 2002 in my literature search, to my knowledge it is one of only two papers (Hörnmeyer & Renner, 2013) to explore communication and interaction in this participant group. The authors focused specifically on the instances of closings and their components in these interactions. They also compared their findings with other studies where inequalities in interaction were present, for example, 'doctor-patient' relationships. Most closings were initiated by natural speakers and unilaterally achieved. When the aided communicators closed the interaction they were frequently misunderstood. The authors drew attention to the limitations of the settings, of the relationship inequalities and the constraints in interaction, in trying to broaden out their findings.

Sometimes results from studies with children with developmental disabilities who use AAC tend to erroneously influence our understanding of how conversation and social interaction unfolds in adults who have history and experience. Some useful but sparse work exploring interaction between children who use AAC and their caregivers exists (Clarke & Kirton, 2003; Pennington & McConachie, 2001; Sandberg & Liliedahl, 2008). Findings tend to indicate that turn-taking patterns were asymmetrical; dominated by natural speakers whose turns were longer, with more linguistic content, forcing the aided communicating child to respond whilst rarely initiating conversation.

1.3.3 Adulthood and reminiscing

Managing the critical transition from childhood to adulthood, through the invisible divisions of young adulthood, middle age and older age is seldom achieved without experiencing barriers, and challenges alongside, hopefully, many proud accomplishments, hopes and dreams (Scott, Foley, Bourke, Leonard & Girdler, 2013), enjoying the moment and having fun (King, Gibson, Mistry, Pinto, Goh, Teachman & Thompson, 2013). Adulthood can be described as a developmental stage that involves making living arrangements, formulating goals, creating

independence and pursuing social relationships (King, Cathers, Polgar, Mackinnon & Havens, 2000).

All adults need a safe place to live, to participate in meaningful activities, maintain a reliable source of income and access to services and to develop friendships and intimate relationships (McNaughton & Kennedy, 2010). As personal and social identities (Read, Moreton & Ryan, 2014) and associated roles develop, one's accepted place in the community, new goals, challenges or expectations can emerge. For many, adulthood is viewed as a time for autonomy (Roebroek, Jahnsen, Carona, Kent & Chamberlain, 2009) and independence but not alone-ness. Self-determination can be achieved. Control over actions and successes or failures in decision-making are experienced (Wehmeyer, 2005). For some, adulthood is characterised by developing social connectedness, partnering and extending the family-unit. For others a successful adult identity and life is characterised by employment; contributing to and belonging to an organisation and earning an income in return. Others find a role successfully participating in the various communities to whatever potential (Trembath et al, 2010b). For many adults with CP, however, their life experiences do not necessarily support a wide range of choices or options (Hamm & Mirenda, 2006; Milner & Kelly, 2009). Additionally, support and guidance from within their social networks might not exist or be possible.

According to the Royal College of Speech and Language Therapists' clinical guidelines for professional practice (Taylor-Goh, 2005), therapists have a role to play in working with people with communication disorders across the lifespan. This is currently not the case for many UK adults with cerebral palsy who use augmentative communication systems, (Baxter et.al, 2012a/b), and there is a paucity of literature describing research using qualitative, quantitative and mixed method designs that illustrates their communication participation and talk about perspectives of life and adulthood in the UK.

For people with CP to achieve full and successful activity and participation, community members will need to make adjustments in ways of communicating, moving, interacting, thinking and behaving. When this happens, what are the markers

of success? That people feel integrated or included; that they feel worthwhile; that they feel happy (King et al, 2013), believed in and that they have reached their potential (Rosenbaum, 2009)? How do we know when we are meaningfully engaged? The answers to these questions may indicate that a certain quality of life or subjective evaluation of well-being or of a “good life” (Scott et al, 2013) has been achieved. For some adults with cerebral palsy, not unlike their able-bodied peers, they will experience uncertainty marked by unemployment (Rackensperger, Krezman, McNaughton, Williams & D’Silva, 2005), social isolation (Cooper et al, 2009), restricted income, and a lack of meaningful purpose. Additionally challenges of physical fatigue, pain and loss of function (Roebroek et al, 2009), availability of accessible transport (Dattilo et al, 2008) and opportunities (King et al 2013) may be encountered. Having successful communication and interaction is vital and underpins a happy, good, and meaningful life.

King et al (2000), proposed that it was important to understand how adolescents with physical disabilities viewed success because having an awareness of how they define success is the first step for the rehabilitation services to help them reach their goals. Knowing what they desire is therefore important. Similarly Smith (2005) concurred that during adolescence, language learning for aided communicators needed to continue to meet the needs of the teenager’s changing identity and transition to adulthood. In 2000 the disability and rehabilitation literature did not include information about the personal views of naturally-speaking adolescents (let alone aided speakers) themselves concerning the meaning of life, (a highly personal and individual construct) hence the rationale for King’s work. Whilst these views of success are limited to a younger age group than that recruited for my project, they assist in the absence from the literature of adult-focused views about quality of life (Boucher, Dumas, Maltais & Richards, 2010), and also how they position their identities and lifestyles through interaction (Bucholtz & Hall, 2005; Davies & Harre, 1990) in a social world (Linehan & McCarthy, 2000).

Whilst it would be naïve to assume that the societally determined measures based upon accomplishments, for example, in education, job satisfaction and marriage are

still perceived and valued as indicators of a successful life, King's participants did not describe these measures in the interviews. Interestingly, King reports that the thematic findings from the semi-structured interviews with 10 young adults, aged 18-20 with CP, describe that "success means being happy" and that the three psychosocial factors related to success are *to be* (self-actualisation) *to become* (to achieve) and *to belong* (affiliation). It is the subjective evaluation of life success (Rosenbaum, 2009) that should be important in exploring outcomes.

A suggestion in Bersani & Fried-Oken (2000) by people in America who use AAC systems, propose that making one's own decisions about, for example, goal setting and self-evaluation (Wehmeyer, 2005) is only possible through self-determination (Milner & Kelly, 2009). Self-determination is discussed in Bersani & Fried-Oken with reference to how users of AAC systems strive to create their social identities. Importantly Moyson & Roeyers (2012) and Blackstone, Williams & Wilkins (2007) rightly assert that not everyone has the same desires and expectations. It is the individual that should make their own choices and create their own desires consistent with theories about how people with and without disabilities construct their views about themselves (Goodley & Runswick-Cole, 2012; Wickenden, 2011a/b; Watson, 2002). Without AAC systems however, their ability and "power to speak one's heart and mind" (p. 249, Williams, 2000) are compromised.

Adulthood is also marked by an ability to reminisce and draw on memories from our past to help us construct through language versions of our identities, our sense of self and how we got there. When present and shared, these can fuel conversations and interactions (McKeown, Clarke & Repper, 2006) demonstrating what we think and how we make sense of the experiences. Reminiscing is an ordinary and typical occurrence for human beings, particularly within familial interaction (Bietti & Castello, 2013). Talking about past experiences and unforgettable events is important to us all for different reasons at different points in our life span (Van Puyenbroeck & Maes, 2009), and particularly for those with communication impairments. As a psychological phenomenon, reminiscing in adulthood draws on the, "cognitive or social function of

memory” (p. 44, Van Puyenbroeck & Maes, 2008) and can indicate personal well-being.

In recounting personal experiences the speaker is required to draw upon personal knowledge and detail which, when contextually appropriate, can be narrated linguistically using multimodal communication skills to connect with listeners (Johnston, 2008). The availability of meaningful vocabulary is critical for successful interaction (Balandin & Iacono, 1999). Listening to aided communicators talking about their memories of the past can offer insights into their historical experiences from their perspectives, as well as any stories that can convey the true spirit of the individual. This can only be possible if their AAC systems enable them to share their memories, supported by their interaction and conversation prowess. As yet, while there are no reports in the literature of reminiscences by adult aided communicators with cerebral palsy, the work by Bietti & Castello (2013) on multimodal collaboration in remembering activities within families is valuable.

1.3.4 Cerebral palsy – a new definition

Cerebral palsy was traditionally seen as a disorder involving children only (Haak, Lenski, Hidecker, Li & Paneth, 2009). Of course we realise now, that most children with cerebral palsy grow up to become adults with cerebral palsy. Hence the recognised need for a newly crafted working definition of cerebral palsy, as presented by Rosenbaum & Rosenbloom (2012):

“Cerebral palsy (CP) describes a group of permanent disorders of the development of movement and posture, causing activity limitation that are attributed to non-progressive disturbances that occurred in the developing fetal or infant brain. The motor disorders of cerebral palsy are often accompanied by disturbances of sensation, perception, cognition, communication and behaviour, by epilepsy and by secondary musculoskeletal problems”.(p.4)

This expanded definition importantly addresses the reality that CP is permanent; that is, that children diagnosed with CP will develop as adults with CP. This statement then serves to justify the exploration of how adults with CP present; how they live and work (Jones, 2009) and most importantly, how they communicate. The effects of ageing with the neurological condition, over and above the normal wear and tear of living, may not be clear cut and established yet in the literature, despite the obvious

real-life actuality. However Rosenbaum & Rosenbloom assert that such adults have a lifetime of experience of their medical condition (Jones 2009) as opposed to those with recently acquired disorders, and are best placed to describe it. Services and expectations linked to societal roles (Stewart, 2009) therefore have to be differently constructed to take into account the differences between lifelong and acquired disorders and indeed should, at the very least, exist.

Previously, Moreton's paper (1995) on the diagnosis and classification of cerebral palsy provided a working definition and description of CP for many UK speech and language therapists. He based his work on the statement that CP is a disorder of movement and posture due to a lesion of the immature brain. However, Moreton omitted any reference to the presence of communication problems in his definition. Interestingly he cited that there was a general prevalence of 2-3 cases per 1000 live births in the UK and across the developed world, and this is still current today (Rosenbaum & Rosenbloom, 2012).

In speculating about the presentation of many adults with CP, Rosenbaum & Rosenbloom (2012) postulate that perhaps the goals of therapy and management of the childhood presentation did not take a sufficiently developmental or life-span approach. Turk (2009) reports that there are no longitudinal studies in America that document for example, the effect of early interventions on later life. Adults presenting now may *not* have functional abilities that demonstrate competence and capability and indeed, some adults may report a less than good communication history, including access to AAC, SLT and educational provision.

The notion of classifying the outward presentation of CP is interesting when a life course approach is adopted. Traditionally CP was classified according to typography, nature of motor impairment and severity. The Gross Motor Function Classification System (GMFCS) - E&R (Palisano, Rosenbaum, Bartlett & Livingston, 2007) is one of several, newly-designed classification systems that describe the performance (Haak et al, 2009) and needs of children and young adults (up to age 18). These

descriptive systems are of course not applicable to adults with CP (Haak et al, 2009). In time however, we may know whether the use of these systems may continue to report change as they did in childhood (Rosenbaum & Rosenbloom, 2012). Interestingly the adult participants with CP in the study by Read et al (2014) successfully used the GMFCS to self-describe.

The literature has yet to catch up with its representation of adults with cerebral palsy and consequently the idea is, “still rather new”, (p.169, Rosenbaum & Rosenbloom, 2012), in terms of their lives and functioning (Haak et al, 2009). How they have positioned themselves through their talk in interaction, with lifestyles is unrepresented. A lack of systematic study has given rise to the paucity of data, although studies have started to appear in the literature in the last 10-15 years (Turk, 2009). This same situation exists in terms of communication achievements in adults with cerebral palsy as indicated in Table 2 in this chapter. Almost ten years ago, Lund & Light reported that there was no research documenting the “wide-reaching and long-term outcomes of AAC interventions” (p.285), apart from their trilogy of papers. A continuation of their innovative and seminal work exploring outcomes is critical for the continued achievements and successes of people who use VOCAs.

1.3.5 Evidence based practice and research methods

An ongoing global obligation within speech and language therapy practice concerns the need to develop more robust research findings by applying current evidence to supported and skilled contexts (Roddam & Skeat, 2010). Evidence supporting good practice should be sourced, not only from the research and clinical opinion, but also from the client, identifying their own personal characteristics, values and preferences (Schlosser, 2003) within their own local context. Exploring the communication participation of adults with cerebral palsy who use VOCAs, would add to the body of qualitative evidence supporting AAC as an intervention, with implications for clinical practice.

Rautakoski (2010) discusses the need to adopt a person-centred approach, and in the world of aphasia for example, there is considerable discourse about the effectiveness of intervention and the extent to which there is agreement between the

client and SLT. Some other groups of people with acquired medical conditions such as dysarthria also engage in sharing their insights and views on their conditions, treatments and outcomes (Walshe & Miller, 2011). Recently, people who use AAC systems, have provided feedback regarding their devices and the limitations (Baxter et al, 2012; Hodge, 2007) but not with accompanying insights and views.

It is acknowledged by Rautakoski (2010) that the intention of SLT intervention is not to cure but to “improve function, reduce or limit disability and improve wellbeing” (p.108). Therefore to measure the different outcome domains we need different tools. We need impairment focussed intervention tools, and also functional measures that explore the impact on ability that has, “real life meaning to the patient” (p. 227, Skeat & Roddam, 2010). In order to discover the impact on peoples’ lives, speech and language therapists must ask and listen (Light, 1997a) and this is the intention of this project working with a hard-to-reach, under-represented (in research terms), and ‘vulnerable’ group of people.

When exploring the quality of research evidence about interventions, it is essential to acknowledge that the interventions used in SLT are by nature, complex because effective human communication is complicated. The Medical Research Council’s (MRC) complex interventions framework (2008) helps guide clinicians in developing, piloting, evaluating, reporting and implementing complicated and complex interventions (Shiell, Hawe & Gold, 2008). Complex interventions involve a number of interacting components and identify multiple dimensions of complexity (outcomes and behaviours.) This is relevant to the field of AAC which is in itself, highly complicated and multifaceted, for example, being able to account for variable experiences, memory, personality and language skills. My research project can be considered a feasibility study, (Craig, Dieppe, Macintyre, Michie, Nazareth & Petticrew, 2008) identifying how to recruit and retain a number of participants.

In the past, the main aim of research in this field, has been to quantitatively analyse the aided communication of children with their care givers in terms of counting their

turns and various communicative functions (Clarke & Kirton, 2003; Light et al, 1985; Pennington & McConachie, 2001). Whilst this helpfully established a notion that participants' contributions were asymmetrical and weighted towards the natural speaker for various reasons (Müller & Soto, 2002), this developmental situation could be alleviated through partner training.

Qualitative research designs use methods that enable the perspectives and experiences of a specific group of people about particular phenomenon to be captured principally through language, described and interpreted in a rigorous and robust manner. Although this analytical paradigm is frequently contrasted against numerical and statistical approaches, in order to fully understand the phenomenon of interaction being investigated, a qualitative method is apposite. Indeed, Balandin & Goldbart reported that in 2004, qualitative research had not been commonly used with AAC and even latterly, the field is still exploring suitable methodologies (2011) (Damico & Simmons-Mackie, 2003).

1.4 Involvement in clinical services and research

A small but significant group of adults with cerebral palsy exists in the UK, who have “grown up” using AAC. In 2007, the national organisation for people with disabilities, Scope, estimated that a population of 0.4 to 1% of the UK population benefitted from AAC (<http://www.scope.org.uk>) (Bush, Lock & Scott, 2007). The AAC community however, estimates a group of 0.6 %, or 365,000 people which include people with acquired neurological impairments. It is unclear how many of this group are adult aided speakers with CP.

As knowledge, equipment, services and technology has developed, many adults with CP have learned to use a variety of communication systems. Whilst Hodge (2007) interviewed adults about their experiences of *using* devices, the ‘expert’ participant group still has not had the opportunity to talk about their lived experiences - of growing up and their quality of life with an additional focus on how they manage this. With life, comes wisdom and experiences to share and this provides authentic

'insiders' perspectives' (Brown, Worrall, Davidson & Howe, 2010; Walshe & Miller, 2011) valuable for determining consumers or users' priorities for living (with AAC). This is a gap in the research that this project aims to fill.

If, as Light states in 1997a, "communication is the essence of human life" (p.61), SLTs have the professional skills to enable them to comprehensively evaluate communication effectiveness across such domains as technological usage, conversational interaction and efficacy in people who use VOCAs in particular (Balandin, 2011) . We can only achieve this by truly engaging our 'service users' (Roddam & Skeat, 2010) or users of AAC, in planning, evaluating interventions and the wider issues of service. Bersani & Fried-Oken (2000) firmly present the importance of adopting a, "consumer-centric point of view" (p.263). The literature includes life stories and narratives recorded from adults with learning disabilities who use speech as their main mode of communicating from the UK and other countries (Scott et al, 2013) and clear engagement between them as users and the providers of services is established. This has yet to happen for adults with cerebral palsy who use VOCAs.

An additional consideration surrounds the research conducted. Involvement in directing research is of paramount importance in so called mainstream or medical research in the UK ("INVOLVE Putting people first in research", 2012) and for people who have lifelong disabilities, participating is recognised as of critical importance but not something new, (Williams et al., 2008). The long held maxim of the disability movement has always been, "nothing about me, without me" (p. 201, Williams et al, 2008). To date, adults with CP from various Westernised countries have to some extent been represented in the literature. After the recruitment phase of my project had finished, a UK charity, Communication Matters established a national network of volunteers who were prepared to participate in communication-focused research (<http://www.communicationmatters.org.uk>), and so having access to a variety and number of volunteers will help to develop the necessary research base.

1.5 Aims of the research

The initial research questions were borne out of clinical interest in the outcomes of the transition from childhood through adulthood, and a research interest in the

emerging evidence-base about interventions. My overall research aim is to explore what happens to children with cerebral palsy who use AAC over time; as adults do they initiate and maintain conversations and about what? My primary research questions were established as:

1. To what extent can adults with cerebral palsy (CP) talk about their lives, their experiences and opinions?
2. What past life experiences do the participants talk about?
3. How do participants talk about their quality of life?

1.6 Summary

This thesis presents the clinical research carried out by myself on the social interactions and conversations exchanged with adults with cerebral palsy who use AAC. This research study is situated in a socially constructed or interpretive methodology and draws on interactional perspectives of conversation and social interaction. Their spoken discourses, augmented with some written discourses where possible, will contribute qualitative accounts of interaction, of living a good life or otherwise, and have a critical bearing when considering outcomes of intervention.

Chapter 2 Method

2.1 Introduction

My research project presents a group of 10 adults with cerebral palsy who use AAC, participating in research and talking about aspects of their lives; their past, their current life and also their aspirations for the future. The extent to which they can do this and the methods they choose are considered indicators of conversational competence and therefore by implication measures of successful intervention. I made no *a priori* assumptions about their competence and positioning. Being able to draw on my clinical experience of the client group was helpful in informing my positive “can do” yet realistic attitude to interviewing my participants. In so doing, whilst I anticipated that they would want to engage and talk about their lives and not specifically their disabilities, their devices, their barriers and limitations, we might both discover challenges to successful participation.

A qualitative research strategy was selected to investigate how adults construct their social worlds and their identities and views within and about them. How adults with CP express themselves through multimodal communication, specifically aided communication is important. As our interactive discourses drew on verbal and non-verbal forms of language, positions became evident in these ‘research contexts’. Whilst issues around the specific nature of their impairments of body structure and function, as described using the International Classification of Functioning, Disability and Health (WHO, 2002) and also duration of use and type of VOCAs are all relevant, in this project, participants’ activity and participation in real communicative exchanges were the focus. Research methods including interviewing techniques that evolved dependent on the communication abilities of the participants, were adopted. Participants were also invited to use email to add further information. Talk and the organisation of our interactional exchanges were analysed using a discursive approach, drawing on elements of conversation analysis.

This social research project is important because of a significant change in our society over the last 40 years which now includes adults with lifelong developmental

communication impairments that can talk about their lives using aided communication.

Individual medical diagnoses would mean that each participant would present with distinctive and unique characteristics; a heterogeneous population. The research design was therefore similar to a multiple case study design. When data was being analysed, the study compared features within each participant and then across all participants (Ayres, Kavanaugh & Knafel, 2003; Potter & Wetherell, 1987). A case study framework was also constructed, informed by Murray, Martin, Pennington, Marshall, Enderby & Goldbart, (2013) and Pennington, Marshall & Goldbart, (2007) to rigorously and systematically organise and create unique participant profiles that included descriptions of their background information, for example, physical presentation and AAC modes, and of their communication skills across the interviews. These detailed descriptions facilitated a deeper and more clinically relevant understanding of each participant as unique individuals in real-life contexts (Yin, 2014). This case study framework also served to describe each participant's unique behaviours, which had particular utility during the initial interviews, assisting in the development of insight and rapport. In-depth, descriptive profiles are typically considered useful to support clinical decision making in terms of intervention outcomes (Pennington et al, 2007). Adopting a case study approach was therefore considered relevant, and is for that reason outlined in detail in Chapter 4.

2.2 Consultation

At the conceptualisation phase of the project, two adults with cerebral palsy were consulted, one of whom used speech to communicate and the other, an aided communicator via email, about the feasibility and value of the project (Dattilo et al, 2008; Krogh & Lindsay, 1999). I discussed the project and the study details, and some of the initial data with them and also how they themselves talked about their past life experiences, quality of life and aspiration, and the extent to which they did this. Both adults additionally reflected on how important it would be to provide this research opportunity to aided communicators who might not have discussed these

topics before and were also aware of some of the limitations associated with this type of interaction.

2.3 Ethical considerations

This project required and achieved approval from the Ethics Committee in the University of Exeter's psychology department. The participants being recruited were all considered vulnerable due to their primary medical diagnosis (see Appendix 5). Adherence to the British Psychological Society code of ethics and conduct (2009) was stipulated by the ethics committee. The research was not conducted within the National Health Service (NHS) and I am not employed by the NHS, therefore ethical approval was not required from this organisation.

2.4 Recruitment

All participants were recruited through my professional network of specialist speech and language therapists, all of whom worked in Southern England for many years in the field of AAC. I met and spoke directly with my community of colleagues about my research project, and gave them the flyer (Appendix 1). Each meeting was followed up with an email and electronic version of the flyer to distribute amongst prospective participants who were either ex-clients of theirs or on a list of users of VOCAs. The flyers were either hand-delivered or emailed. On reading the flyer and signalling their interest, participants either emailed me directly as instructed on the flyer, or they asked a second party to do so. In effect purposive sampling methods were employed because of the nature of the research participants (Patton, 2002).

2.5 Design of the recruitment flyer, participant information sheet (PIS) & consent form

All written information for prospective participants (Appendix 2 & 3) was designed in an accessible format informed by Mencap's guidelines (2002) with modified text and the inclusion of relevant illustrations (photos, symbols), (Poncelas & Murphy, 2007; Cameron & Murphy, 2006). This was to ensure as much access as possible because

the literacy levels of each participant would not be known. The prevalence of literacy abilities, both reading and spelling (Van Balkom & Verhoeven 2010) and cognitive functioning in adult aided communicators with cerebral palsy is unknown. Given an 'over-representation' of limitations in literacy (Smith, Dahlgren & Larsson, 2009) and a lack of understanding of cognitive processing in children (Murray & Goldbart, 2009), the prevalence of difficulties was anticipated to vary widely with my prospective adult participants. To mitigate these possibilities without causing affront to the participants, the material was designed to be as accessible as possible.

2.6 Participants

Fourteen adults volunteered to participate in the project and thirteen met the inclusion criteria. Participants were required to (a) be adult (over 21), (b) have a medical diagnosis of cerebral palsy and (c) be users of a voice output communication aid (VOCA). A total of ten adults were recruited to the project, however three adults, who met the inclusion criteria were unable to be interviewed due to project time constraints. One person volunteered for the project, but was excluded on the basis of age and communication mode.

No participants were currently accessing any regular SLT service run by the NHS for language intervention, although some were on a mailing list from a local Communication Aids Centre. Two participants had access to an SLT who provided guidance on aid programming and technical support. No one was currently accessing any speech and language therapy services for people with learning disabilities.

All participants were white English and from English speaking backgrounds and are described in detail in Chapter 4. Two participants had an additional visual impairment. All had physical disabilities that required the use of a wheelchair for mobility and seating. Four participants used direct access of their VOCAs via a finger point. The others used a head or foot switch or eye gaze access to their VOCA.

No assumption was made that, as adults, the participants were either independent or skilled aided communicators. It was important in the first instance to recruit adults who matched the specific inclusion criterion and then, to explore how they communicated using their VOCA. The term aided communicators was adopted (von Tetzchner & Basil, 2011) rather than aided speakers.

It was anticipated that the minimum number of participants recruited from this relatively small and unique population, would be four, with an upper limit dictated by time available, recruits interested and accessibility. A target of at least seven was desirable based on the sample size reported in other similar studies (Cooper et al., 2009; Lund & Light, 2006, 2007). Whilst it was neither possible nor appropriate to predetermine the sample size, the over-riding aim was to achieve a rich data set (Patton, 2002). Achieving a sample of ten was significant and it is probable that this exhausted the available number of eligible adults in this geographical region.

2.7 Interview Procedure

Initial appointments were arranged with the participants within a month of receiving their contact details. I travelled to the person's place of residence to meet them, discuss the project in more depth and obtain consent. In most cases, participants were enthusiastic to engage and consented at the first meeting. Subsequent visits were arranged in real-time, directly with the participant and their diaries and/or carers when appropriate. One participant was able to manage his own diary via texting. It was clearly established that I would be concluding my contact for the research project at the last interview. The final interview with one participant, failed to happen due to their sickness. Communication via email closed our contact for this research project.

2.8 Consent process

Typically, the consent process was recorded on video and/or audio and sometimes observed by a third party, usually a carer or parent. The participant information form was read to the participant, slowly and with appropriate intonation. The participant

could see the form and followed the words with the aid of my finger tracking the words. Following this, if the participant expressed co-operation the reading of the consent form was then completed using the same method. Signatures were made by either the participant or their carer. Verbal agreement was initiated by most participants as I read through the forms. A copy of the PIS and consent form was kept by both participant and researcher.

All participants consented to participate in the project without hesitation and with significant solemnity, interest and focus. Receipt of the flyer had already explained the main outline of the project and process, and information about me. The comprehension questions were asked and responded to with immediacy (Casella & Aliotta, 2014). One participant was so eager to start talking about his growing up, I decided to let him complete the consent form at the end of the interview rather than curtail his enthusiasm. Overall, the motivation for participation was felt to be their enthusiasm to talk about themselves to a skilled conversation partner.

It was my intention to digitally record both the consent process and the interviews. For some participants the request to video the consent process felt intrusive at this stage. Once consent to participate had been obtained, I then ascertained which method of digital recording was acceptable for the interviews. On two occasions the initial interview was audio recorded only, until we were comfortable with each other. Most participants were in agreement with video and audio from the outset.

2.9 Interviews

All interviews were conducted between December 2012 and September 2013. Each participant engaged in at least 3 interviews over a period of time that was convenient to them. If participants requested that a carer or communication supporter was present, consent was verbally agreed by them and the researcher.

The interviews were semi-structured in that there was no fixed order or wording of questions in order to facilitate flexibility dependent upon the participant's unfolding skills (language, cognition and degree of engagement). An interview schedule of questions (Appendix 4) had been prepared for the project and these were of a historical, biographical and topic nature drawn from themes identified in the research literature. These questions steered the direction of the conversational style of interviewing (Brown et al, 2010). It was considered important that time was spent building rapport (or social closeness) with each participant, ergo easy conversation in a relaxed style was developed (Gaglio, Nelson & King, 2006). Between 2-3 hours was scheduled for each interview; some of the talking time for these initial interviews lasted two hours (Table 3). It was also my ambition that participants should feel in control over the course of the interviews (Corbin & Morse, 2003) and would feel able to generate conversation.

As an unfamiliar partner I was unaware of any of their information or conversational content so could not ask test-questions for which I knew the answer (Antaki, 2013). Whilst test-questions can be used appropriately by communication partners and SLTs to facilitate participation, their use can also create negative reactions and a threat to identity (Beeke et al, 2013). Test-questions are prevalent in some interactions between adults with learning disabilities and their natural-speaking carers (Brewster, 2012) and is seen as a distinctive feature of institutional talk (Cameron, 2001). It was anticipated that as this question type would not be part of my interviews, an equal status would be generated and most likely, a more authoritative status for the participants. Importantly, the participants were recognised as holding ownership of their knowledge (Antaki, 2013) and even when contested, their positions were upheld.

The scope of the interviews included perhaps 'unusual' questions or ones they might never have been asked before, particularly independently, thus challenging their engagement. I clearly asserted that if they had views which they chose to share with me, I would listen to, and record them. Additionally, if they did not want to, or could not, this was acknowledged and accepted.

A research journal was used to enter notes as the interview unfolded and later for reflection on the event (Chapter 3). At the end of each interview an appointment for the next visit was made in the participants' diary. Each participant was also told that they could email or text additional material. Addresses and phone numbers were exchanged.

All interviews were held in the participant's own home or daycentre. Participants were invited to choose where they wanted to be interviewed; some chose their bedrooms if they lived in a residential home and others chose the sitting room in their place of residence. Following each interview I transcribed the data roughly in order to help identify unanswered questions or topics for discussion at the next interview occasion. Additionally I noted instances of communication breakdown or of communication strategies that had been used or were in need of refinement. Other aspects of the interview that required modification were also noted, for example, methods of recording.

2.10 Field notes

Field notes were made for reflection and to monitor the research process during and after each interview. The following details were recorded: date & time of interview, location, appearance of participant, attendance and input of others, distractions, interruptions, influencing factors, use of signing, spelling and speech attempts (vocalisations). Reflective accounts (Patton, 2002) were also kept regarding any challenges that had occurred and the overall emotional and physical experience. Unanticipated incidents and exchanges of interest were described as potential areas for analysis.

2.11 Anonymisation of data

All participant names have been changed and a pseudonym either chosen by themselves or me has been attributed. All identifying information including their

carers/keyworkers and care managers' names have been deleted. One of the problems when working with people with complex communication impairments in a small geographical region is the possibility that they will be identified, particularly if their communication devices and modes are also described (Trembath et al, 2010a). Every attempt has therefore been made to maintain confidentiality.

2.12 Summary

Ten participants were recruited to this research project employing a qualitative research design, through the researcher's professional network. Obtaining consent was unchallenged. Retention was not a problem; indeed most participants would happily have continued with the interview process for many more occasions indicating that their experience had been interesting and fulfilling (Ison, 2009). The data set for this study comprised 34 interviews; most of which were captured on video and audio.

Chapter 3 Analytic approach

3.1 Introduction

Multimodal communication presents many challenges during the research process. Collecting conversation and interactional data from aided communicators requires much planning and organisation of time, equipment and contexts. Managing this and conducting conversation-styled interviews is also difficult. Once data had been successfully collected, a multi-staged and multi-layered analytical approach to the transcription and interpretation of these long interviews was undertaken. This presented on-going difficulties in capturing the interaction from all participants. Factors such as quantity or presence of behaviours and utterances determined the complexity and depth of data analysis possible. As a researcher I have attempted to demonstrate my objectivity by outlining in detail my analytical process and approach.

3.2 Theoretical framework

The theoretical framework underpinning my research draws on an interactional model of communication, with messages achieving actions in social life (Potter & Wetherell, 1987; Wooffit, 2005). My epistemological position is as a social constructionist researcher interested in drawing on positioning theory to explore how participants locate and frame their own identities and realities within conversations (Davies & Harre, 1990) changing from one context and event to the next. The participants' actual process of construction is seen from my perspective and influenced by my assumptions. These theoretical positions are expanded in the following sections.

3.3 Discourse analysis

In this project, I wanted to know and understand what talk (and non-talk) *did* for aided communicators. I wanted, "to examine real language that real people use in the real world" (p.10, Woods, 2006) I wanted to go beyond analysing the linguistic elements that compose their utterances. I accept that this is critically important and that aided communicators might well wish that they had access to language not available on their devices. Given they are all older users however, I wanted to know how they

used the communication strategies they had, particularly through their use of their communication aids (VOCAs) and non-verbal modalities. I wanted to know what discursive topics they constructed, for example, identities, relationships and social roles (Starks & Brown-Trinidad, 2007), and the communication strategies they employed to do so.

Communication is complex and language is integral to human existence, so for this group of communicators I assumed, not knowing what their individual limitations or capabilities might be, that they would draw upon a range of communicative repertoires, for example, vocabulary or linguistic devices such as metaphors. I wanted to know how talk led them to, “act and behave” (Georgaca & Avdi, 2012), and whether this demonstrated an ability to construct themselves through language. Do they have an ability to negotiate a way through a complex network of conventions, for example being polite, (Thomas, 1995) and expectations (Woods, 2006)?

My approach to discourse analysis (DA) has been iterative and data-driven; compelled by my analysis of the participants, the context, the language and the interaction, which are all inextricably linked (see Figure 3). I have analysed the language used in the discourse, for example the vocalisations, physical movements, words, utterances and interaction routines, but in broad terms as to what they dynamically construct as a result of their use. A loud vocalisation for example, might reflect an immediate and assertive action that serves to question the legitimacy of an interruption. Why an aided communicator would chose to use this signal over the formulation of a syntactically correct utterance that occupies minutes of time, might be a question related to understanding their positioning. Additionally, it may be important to know if such a decision regarding signal choice is dependent on context, partners or mood, for example, and whether this happens consistently.

Discourse analysis is used by a broad array of practitioners and theorists and, does not have a single definition or theoretical explanation, which can result in confusion (Cheek, 2004; Potter & Wetherell, 1987). DA cannot be reduced to a set of common-

sense procedures or a technique or series of steps (Cheek, 2004) and is usefully reflected as an analytic mentality rather than a set of formalised processes (Schenkhein, 1978). The core concerns of discourse analysis, proposed by Potter & Wetherell (1987) are that talk is action-oriented; it enables people to perform social actions and build meaning and beliefs. The constructive process is the focus of analysis and variation according to the context and purposes is important to identity (Edwards & Potter, 1992).

DA was used to search for patterns (Wood & Kroger, 2000) in the talk of the interviews; not in isolation through linguistic analysis alone but as part of interactional sequences. Identifying what knowledge and meaning was being produced through our individualised interactions with different discourses, (interviewer-interviewee; speaker-listener; male-female for example), the variability and consistency in the presence and absence of content, and of the function of this talk (Potter & Wetherell, 1987) was important. Communicators learn through constructing and exercising various discourses and positions (Wetherell, 2001; Davies & Harre, 1990). In deconstructing the interactions, it would be possible to construct a category of 'interactive other' and identify how the aided communicator positioned themselves (Willig, 1999). An identity might be ever-changing (Burman & Parker, 1993) and responsive to contextual variations. It is accepted therefore that the excerpts and analytical interpretations used in this thesis may well change with the on-going personal development of the aided communicator.

In this regard, the openness or flexibility of a discourse analytic approach is appropriate for the challenges of aided communication. The types of questions posed of the data include, "What is being said here? What is happening here? What would the outcome have been if he had said this rather than this? What activity are speakers engaged in when they said this? What are they doing by talking in this way at this time? Why am I reading the data in this way?". These are often similar to questions asked in clinical practice of many aided communicators. Why are they saying this? Do they mean this? As a conversation partner/listener one is often reflecting and trying to discover not just the meaning of a particular utterance or

behaviour (Cheek, 2004) but also how certain utterances came to be said and what were the constraints or limitations on this?

3.4 Conversation analysis

Elements of conversation analysis (CA) were used to provide a basic interpretative framework around the naturally occurring data collected from within the familiar environments of the participants. In a CA approach, conversational practices like greetings and arguing are seen to fit together in highly organised and intricate ways, and it is this degree of human interaction that might be aspirational rather than a reality for aided communicators. Additionally, CA helped to identify the subtle communication signals evident in my data, for example pauses, non-verbal interaction and gaps. Sidnell (2010) describes CA as permitting, “the interconnectedness of practices in talk-in-interaction”, (p.1), to be explored and includes a quote from Schegloff (2005), “You can’t do anything until you know everything”, which typifies my approach to the analysis of the hours of data collected.

CA promotes the use of naturally occurring data as opposed to text or formal interview in order to examine the mundane and ordinary practices of talk. Whilst these interviews were not everyday conversations (Wooffitt, 2005) they were still instances of talk with an informal style.

3.5 Organising the audio and video data

Thirty four interviews were transcribed verbatim and in their entirety. The table below details the data set collected.

Table 3: Details of Interviews conducted

Participants	Total interview time	Range of interview times	Number of interviews	Number of video recordings
Wilf	5 hours 5 mins	37 - 90 mins	5	5
Stan	5 hours 42 mins	60 - 120 mins	4	3
Brad	6 hours 19 mins	64 - 120 mins	4	3
Ellen	3 hours 26 mins	56 - 79 mins	3	3
Polly	3 hours 49 mins	52 - 89 mins	3	1
Harry	3 hours 24 mins	60 - 81 mins	3	3
Martin	3 hours 52 mins	72 - 80 mins	3	2
Jacob	4 hours 56 mins	66 - 84 mins	4	1
Ian	2 hours 26 mins	52 - 94 mins	2	1
Maisie	2 hours 11 mins	27 - 58 mins	3	3
Total	41 hours plus		34	25

There were several stages in this data handling process, similar in nature to that described in Higginbotham & Engelke (2013), termed a “three-to-four-pass process” (p.9). The first stage was a rough transcription of the audio recording, or notes from memory, before the next appointment, which was sometimes within a fortnight. The rough content was annotated with conversational contributions (Tannen, 2007), and the total timed duration of the interview indicated. Once the topic directions for the next interview had been determined, and a participant summary for feedback to the person compiled, the entire interview was transcribed in detail and with accuracy which took a significant amount of time (Clegg, Ansorge, Stackhouse & Donlan, 2012). It is estimated that each interview took at least 26 hours to transcribe, compared with just 5 - 12 hours of transcription time for a one hour typical interview with natural speakers (Mercer, 2010).

All audio and video data was downloaded onto my work laptop which has data protection software installed. Back up copies were held on the mainframe computer at work.

3.5.1 Transcription process

All of the transcription was conducted and stored as WORD™ documents.

Generic transcription process

The multi-staged process for transcription emerged from the data collected, similar in nature to the procedure outlined in Higginbotham & Engelke (2013). The steps incorporated were later based upon methods described by West (2007), Jewitt (2009) and Bezemer & Mavers (2011). Stage 1 focussed on the audio sound track alone, with no visual imagery (video). If the participant had been accompanied by a carer, parent or other staff member, their utterances were also included in the transcript. Stage 2 layered in the visual data and stage 3 was an integration of all sources of information.

Stage 1 – working with audio data

	Activity	Notes / Codes used
Step 1	Listened to entire interview from audio sound track alone	If watching from the video, I would blank out the screen
Step 2	Orthographically transcribed each utterance heard (contribution, turn) with a new line for the next or overlapping contributor	Included all sounds eg laughter, shrieks, breathing, coughing, 'um', vocalisations
Step 3	Identified mode of communication at start of utterance	Coded with descriptor VOCA, "says"
Step 4	Inserted pauses/silences/gaps	Coded with (.) or descriptor (long pause)
Step 5	Made an online assessment of irrelevant content e.g. rambling or multiple miss-hits and deleted sections	Coded with XXX or [...]
Step 6	Included any prosodic variations - volume	Coded with descriptor (loud, quiet) or arrow ↑↓
Step 7	Reviewed recording	

At stage 2, the visual data obtained on the video recordings, was incorporated or layered into the transcript created from stage 1. Any non-verbal behaviours whether they were communicative or not, for example, eye pointing or “jiggling” were described with words and inserted. Any interactional behaviours that seemed to move the conversation along, for example, vocalisations were also included. Other notable features may have been included such as changes in physical positioning or tiring, laughing, greeting and farewell.

Stage 2 – working with/ from video data

	Activity	Notes
Step 1	Watched the entire interview from video	
Step 2	Inserted non-verbal signals eg. body posture changes, eye gaze, facial expressions, head postures	Coded with descriptor (wriggling) (looks at me)
Step 3	Inserted if there had been a change in mode of communication e.g. using communication board, signing or text from screen	
Step 4	Recorded time durations of formulation times of utterances with a stop watch	Coded as FT (formulation times)
Step 5	Inserted any contextual information e.g. person enters, phone rings or if anything particular struck me as interesting or unusual	((xxx))
Step 6	Review	

At this point of the transcription, if the participant was interacting in a particularly unique way I would layer-in this behaviour. This annotation clearly illustrates the high number of communicative actions used by Wilf in this one conversational contribution.

Example of excerpt from Wilf

Line	Speaker	Transcription
01	LP	<i>Do you? Still go swimming?</i>
02	Wilf	smiles + turns to carer + saying V= ooooh + physically extends whole body ((happily))

Stage 3 - The final stage in this process was to re-read the completed transcript simultaneously with the video and audio to check the accuracy of the content. Some sections were reviewed multiple times, with what has been described as ‘unmotivated attention’, to improve the accuracy of the transcription and the natural authenticity of the interaction.

3.5.2 Annotation

A standard format of annotation was devised, and applied for all of the interviews and any additional observations made about the non-verbal and verbal interaction of each participant, as proposed by Müller & Soto (2000). Shorthand was assigned to units of information (Patton, 2002) and it was also decided to colour code significant features in the interaction (Bietti & Castello, 2013) on the transcripts to allow these separate features to “stand out”, thus helping the analysis phase, for example, identifying the number of participant turns and various patterns of eye gaze (Goodwin, 1981). This colour coding approach was also used by West (2007) and Rostvall & West (2008) in their video studies of interaction. Most colour coding has been deleted from excerpts included in this thesis. An example is included in Table 4. For more detail refer to Appendix 6.

Table 4: An example of generic coding used and additional colour coding

Content	Code devised	Colour/highlighting attributed
Vocalisations	V= vocalisations; orthographic transcription of sound eg ‘ooo’	Coded red or blue
Eye gaze/looking	((Eyeballing)) ((looks to xxx))	orange
Formulating Response on VOCA	FRonVOCA	Bold

The overall transcription notation was a combination of two conventions. It was informed from standard notations as used with conventional conversation analysis (CA) taken from Jeffersen (1989 cited in ten Have, 2007). Paralinguistic features were used by the participants such as volume and prolongation of vocalisations and

coded in text. Other features such as stress, intonation, pitch, and breath insertions are not used because of this unique (non-speaking) population and voice output communication aids do not have these features built in. Four conventions were most commonly used (Appendix 6).

Additionally, some of the conventions used with data obtained from people who use augmentative and alternative communication systems, latterly described by von Tetzchner & Basil (2011) were used in the transcriptions, where appropriate, for example, italics for natural speaker's utterances. These were included with a view to distinguishing between the different modes of communication (Appendix 6).

Some coding in the excerpts included in Chapters 5 and 6 have been modified (written in full) for ease of reading.

3.6 Interview process

Upon the start of the interview, the rough transcript of the previous interview was shown to the participant as evidence of the length and depth of the previous interview. A participant profile from the data was also shared verbally with the participants, for example, *"Your Mum described you as stubborn. What do you think about that?"* The transcript and participant profile sharing proved to be a highly effective strategy as it helped to build rapport, validated their input and provided a visual record of their "worth"; findings that complement those of Wickenden (2011a) related to representation and authorship. The summary presented also conveyed how I was "seeing them", that is, not just a person with a particular communication aid or someone with athetoid cerebral palsy but as an ordinary person. To illustrate this, the verbal summary presented to Polly on our second interview is included below. The actual pages of written transcript were presented and the extract was read out. Deliberate pausing in between each item, line or sentence was included to assess her reaction on-line. Her positive responses indicated her consent and acceptance and her laughter confirmed her position.

Line	Speaker	Transcription
01	LP	<i>There was 12 pages of our conversation [...] shall I just tell you some of the things that came across?</i>
02	Polly	<i>mhhh</i>
03→	LP	<i>From listening to our conversation, I got a strong sense of things that you like doing how much you like writing copying and colouring there's a lot about the things that define your time and interests and we talked a little bit about music and plays and productions and being with adults who like to have fun and that came from primary and then there seemed to be a bit of a blip when you were at secondary school and then you started having fun at XXX College and XXX College</i>
04	Polly	<i>mhhh + nods</i>
05→	LP	<i>There was a bit when your mum was describing you and she said you were fairly extrovert and you were certainly not shy</i>
06	Polly	<i>laughs</i>
07	LP	<i>laughs... if you would add anything more to that description?</i>
08	Polly	"no"

This summary presented Polly as a busy and creative person making a strong impact (line 03) with her personality attributes (line 05).

3.7 Analytic procedure

The manner in which the participants would converse, and how they would communicate using their augmentative communication systems was unknown. As all participants were not natural speakers due to their neurological impairments, it was anticipated that the interviews may not be substantial in quantity and perhaps even quality, given the diversity of personal experiences of people with complex communication impairments as a result of cerebral palsy (Rackensperger et al, 2005).

This contrasts sharply with experienced natural speakers, who when participating in interviews, typically offer vast quantities of data in response to minimal questioning or prompting from the interviewer (Conle, 2000). The fundamental limitation with aided communicators is the temporal dimension. On average an aided communicator talks at 1-15 words per minute compared with natural speakers 150 – 230 words per minute. Beukleman & Mirenda (2013) however, have recently qualified their estimates by stating that aided communicators access around 15 symbols a minute but this does not necessarily convert to single words. Rick Foulds (1980) cited in Fried-Oken & Bersani (2000), commented that if an aided communicator is spelling words via scanning (as Brad does), selecting, “on average, five letters per minute then they would be speaking at one word per minute” (p.18). The participants in my project *could* have been efficient communicators capable of talking at length and efficiently. It was precisely this unknown fact and challenge that provoked one of my research questions.

In order to address some of the specific challenges experienced by aided communicators concerning the availability of appropriate vocabulary (Dark & Balandin, 2007), the ability to engage in successful social interaction through topic sharing (Tonsing & Alant, 2004) and the use of communication strategies to generate and change topics (Sidnell, 2010), a multi-level analytical approach to the data was justified and illustrated in Figure 3. To address my second and third research questions the topic content of the conversations was explored to reveal what they talked about. Coding allowed me to identify the frequency and occurrence of these topics. This topic analysis is depicted in level 1 (Figure 3) and in this initial stage of the analysis, content was coded and topics identified as being present in the participants’ communicative repertoires. This procedure is outlined and discussed in detail in Chapter 6.

To address my first research question, I focused on a more specific and fine-grained analysis of the overall interaction and conversational turns created (level 2 in Figure 3). Finally level 3 was an analysis of their utterances, strategies and contributions, defined as “sentences as they occur in discourse” (p.214, Grundy, 2000) focusing on

their creation of positions and function of, for example, humour, politeness and other phenomena within the discourse. This procedure is elaborated in Chapter 5.

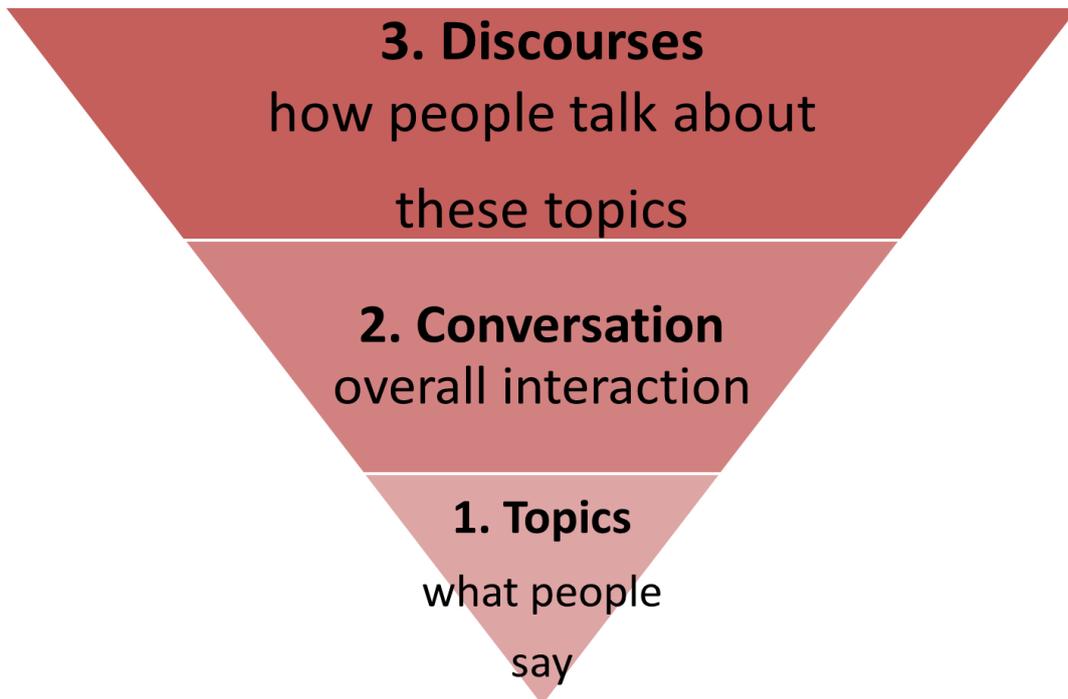


Figure 3: Analytic approach – applied discourse analysis

3.7.1 Level 1 – topics

To establish the topics discussed in the interviews I based my approach on the coding system reported by Tønning & Alant (2004). After the interviews were transcribed I reviewed each transcript and annotated the participant's utterances noting the referential frames of time, person and content (Tønning & Alant, 2004). Within the time frame I noted whether the topic referred to the past, present or future. An example of how an excerpt from a participant was coded is included below.

Table 5: Topic coding system – Stan (interview 3)

Utterance	Time	Person	Content	Other/notes
<i>“I would be better going in a special school.”</i>	Would→past Going→present	Self Object -School	Special school Better placement	Memory
<i>“Because I will need a lot of speech therapy and physiotherapy and school (name) wasn’t wheelchair friendly then.”</i>	Will→ future Wasn’t→past	Self School	Therapies Disability <i>“wheelchair friendly”</i>	Memory Reason for exclusion QOL

This category of time was referred to when exploring the participants’ presence of memories and due to the inclusion of the notes category, the recency of the memory could be ascertained. These records augmented handwritten notes.

Written stories emailed as part of the project were also analysed using this framework. These demonstrate a significantly different style (Ison, 2009) and communication ability than in face to face communication. One extract has been included in the thesis as presented in Chapter 6.

3.7.2 Level 2 - conversation and interaction analysis

Interview-type talk between natural speakers and aided communicators was analysed. The interaction between myself as the interviewer and the participants was transcribed and then analysed by producing “fine-grained accounts of how (some) recognizable phenomena are accomplished” (p.3, Higginbotham & Engelke, 2013).

Some of the typical organisational features of conversations noted by conversational analysts (ten Have 2007: Wooffitt, 2005), for example, taking turns at contributing (‘speaking’) were selected to analyse to inform how the interactions were

accomplished. Pure CA has not been used. It has informed the manner in which I viewed the transcripts taking a micro-analytical focus. Transcripts were read multiple times (with and without video-viewing) and excerpts were selected for multiple viewings when they 'stood out' or were notable in the transcripts (Higginbotham & Engelke, 2013). Although this stance is described as "loose" (p.146) by ten Have (2007), it is rigorous and was appropriate for the nature of the research questions asked in this project. When analysing specific features of interaction, for example, openings, excerpts were sourced from the group of transcripts (across and within participants) and compared for similarities and differences.

3.7.3 Level 3 - discourse analysis

On completion of the transcripts and during the multiple readings thereafter, interesting excerpts were selected to analyse in more detail by asking focused questions previously outlined in this chapter. DA is concerned with words; "with what people are doing and not doing, how they are doing it and how it is connected to the other things they are doing"(p. 136, Wood & Kroger, 2000). Aided communicators use multiple modalities, therefore more than just words were analysed. Each interview and the sequences within, were analysed to identify excerpts that exemplified the themes and phenomena of interest.

The multi-levelled analytical approach taken to the data is presented in chapters 5 and 6. Chapter 5 focuses on the interaction (Levels 2 and 3) in the interviews and separates out the content or topics explored. These are presented in Chapter 6.

3.8 Quality Appraisal

The quality of any research is judged against criteria and in qualitative research, constructivist inquiry proposes criteria to appraise the study's trustworthiness (Patton (2002) and application (Kuper, Lingard & Levinson, 2008). Debate in the literature over the criteria used exists, but the principles considered in this study include transferability or contribution, credibility and rigour (Spencer & Ritchie, 2012) By integrating questions posed by quality appraisal tools, for example in Taylor-Goh, (2005), particular and considered attention to the systematic description of the

analytical approach, analysis, presentation of excerpts and their interpretation has been applied to detail the rigour with which the project has been conducted (Tracy, 2010). The interactional nature of this project called on me to constantly reflect on the impact of my involvement. A reflexivity statement describing my influences and awareness appears in Appendix 7.

3.9 Summary

In this chapter I have discussed how I moved from collecting the interview data to transcribing and analysing the 34 interviews. Multimodal communication presents additional layers of talk that need to be transcribed and analysed. Working with the participants challenged me to draw on my interactional skills and increased my awareness of the complexities in these relationships regarding topic content and its accurate and objective representation.

Chapter 4 presents the participants. A case study framework was constructed to ensure the systematic gathering of information across the 10 participants and an example from one participant, Wilf, is provided. The communication skills including aided and unaided communication modes and their methods of access are illustrated. Some excerpts from the data are incorporated to illustrate certain features of interaction. A brief description of the participants' linguistic abilities is provided together with their physical presentation and cognitive functioning. Finally a brief description of myself (communication skills) to redress the balance is included.

Chapter 4 The participants

4.1 Introduction

It is clinically expedient to have an understanding of the participants and indeed in empirically based research there is a drive to formalise the content of case descriptions (Murray et al, 2013; Pennington et al, 2007), their demographic information, communication skills, physical presentation and personalities, the topics discussed and the contexts in which this happens, to assist ultimately with clinical decision making. In both discourse and conversation analytical approaches however, there exists a reluctance to draw on this information (Wood 2000; Wooffitt, 2005), hence the statement that this analytical approach is data driven. The nature of this clinical research project dictates that ethnographic information about the setting and the participants is necessary. Additionally, it is recognised in discourse analysis that profiles will be constructed differently under different interviewing conditions.

Table 6 presents participant details in the form of their pseudonym, age (approximate) and illustrative quotation from one of their interviews. The quote was selected as a typical example providing an initial insight into an aspect of their character or personality, hobby or interest, linguistic ability and message formulation style.

Table 6: Participants' details, topics and utterances

"name"	Age (approx.)	Illustrative quote
Wilf	40	<i>"Friday come"</i>
Stan	30	<i>"I think my dad got me into liking sport"</i>
Brad	35	<i>"I saw a fight."</i>
Ellen	20	<i>"Just a minute. I want to say something else. What time does it finish?"</i> [prestored]
Polly	30	<i>"I have got butterflies"</i>
Harry	25	<i>"Proud not see my dad Sunday."</i>
Martin	20	<i>"How do I get my ex-girlfriend to come back to me?"</i>
Jacob	50	<i>"I have take over"</i>
Ian	40	<i>"Can you come again?"</i>
Maisie	25	<i>"I'm going home this weekend"</i> [prestored]

Not all data collected has been included in the profiles and snap-shots, for example, personal or intimate information that I felt was shared between us, in confidence, which was an interesting challenge as discussed by Corbin & Morse (2003). In one example the participant asked me ***"not to say anything"***.

Snap-shot participant profiles were created from the interviews and then shared by reading aloud to the participants. This was to offer the opportunity for acceptance or rejection of how they were being presented in this project. All profiles were positively received and accepted.

4.2 Participant case study framework

In this project, a case study framework was constructed to organise the data. Two sections were devised. Part 1 contained background information and Part 2 focussed on a preliminary analysis of the participants' communication and interaction.

Table 7: Case study framework – Part 1 background information

Part 1 background information	
1	Referral route, interview location & non-interview contact
2	Interviews (date, duration, carer involvement)
3	Snap-shot account and conversation topics
4	Participant's augmentative and alternative communication modes
5	Their physical presentation
6	Their attitude and disposition

Table 8: Case study framework – Part 2 preliminary analysis of communication & interaction

Part 2 preliminary analysis of communication & interaction	
1	The participant's communication skills across all interviews <ol style="list-style-type: none">i. Yes/no responsesii. Volume markersiii. Smiling/laughingiv. Facial expressionsv. Physical posture and body movementsvi. Eye gazevii. Vocalisationsviii. Gesture
2	The participant's linguistic content
3	Summary of content plus number of turns per interview
4	Any interesting vocabulary or utterances in each interview
5	The participant's turn management, for example, pausing and speed of responses

Finally I reflected and commented on my interviewing and communication skills as these varied across each participant being responsive to each person's unique skills.

Profiles were written to convey a sense of who the participants were as adults leading active and interesting lives (Rackensperger et al, 2005). The snap-shot

accounts illustrate each participant as unique individuals with a range of interests, experiences and aspirations. It is assumed that limitations would include the vocabulary and linguistic constraints on their augmentative communication systems and whether they used an elaborator/communication assistant. Having a shared history with some of the participants did not necessarily mean that their snap-shot profile was deeper. Unknown participants shared information that also provided a depth to their profiles. An extract from Part 1 of the case study framework as it relates to Wilf, is presented, as an example. Further participant profiles are included (Appendix 9).

4.2.1 Wilf (aged 40) – participant 1

“Friday come” meaning **(on Friday will you come to my house to visit me?)**

1. Referral route, interview location & non-interview contact

Wilf’s interviews were arranged by himself and his carer directly with me. He did not have a diary to write in the appointment but seemed to keep the information in his head. We used to meet at his day centre and once he invited me to his home. On the first occasion, we talked in a quiet room with his main carer present as well as the video camera. On all other visits it was just he and I alone in usually the quiet room although once we met in the noisy dining room that was noisy. On the occasion I visited his bungalow, his Mother joined us and then his carer. The session was recorded on video despite the cramped room.

Wilf had been known to me since his late childhood, three years before he went away to boarding school. My contact with him had resumed in the last four years when I visited the day centre which he attended.

Wilf chose not to use my contact details between interviews.

2. Interviews (date, duration, carer involvement)

We met on six occasions and all six interviews were successfully recorded on video. One video has not yet been transcribed so data from just five interviews has been referred to.

Table 9: Summary of interviews with Wilf

Month	Timed duration of exchanges	Elaborator/carer present?
July (interview 1)	37 mins (video)	Yes (keyworker)
July (interview 2)	78 mins (video)	No
August (interview 3)	35 minutes [not yet transcribed]	Mother & carer
August (interview 4)	40 mins (video)	No
August (interview 5)	60 mins (video)	No
August (interview 6)	90 mins (video)	No
Total	5 hours 5 minutes (without interview 3)	

3.Snap-shot account and conversation topics

Wilf talked about his friend AXXX and her birthday. She is a lifelong friend who he says he **“love(s)”**.

He lives in his own bungalow and employs care assistants. He talked about the suburb in which he lived and of his individual carers. He maintains close contact with his family and enjoys visiting the family home. He attends church in the locality and would love to move back to his family neighbourhood to be closer to his Mother in particular.

Wilf’s interests include people, planes and travelling. He observes activity and often makes jokes about things going on. He has a sense of humour, reminisces and plans for the future.

4.3 Participants’ communication skills

“My communication aid [...] is my voice and not my Life” (Polly, via email)

Polly’s statement registered with me as profound and apposite, and can unquestionably be associated with a disability discourse (Watson, 2002). Smith and Murray (2011) also comment that “aided communication devices can obscure the visibility of people who use AAC” (p. 295). However, the communication skills used to construct all of our conversations across the interviews were diverse. Whilst it was

not expected that aided methods of communicating would dominate as the preferred mode, it was unanticipated at how well some participants controlled their elaborators/translators and when and how they used facial expressions and other unaided communication signals to emphasize their strength of feeling or opinion. An exploration of the participants' multimodal communication follows.

4.3.1 Multimodal communication

All participants are life-long users of multimodal communication. Seven participants, namely Wilf, Stan, Brad, Polly, Martin, Jacob and Ian preferred to use their VOCAs as their main mode of communication augmented by their unaided communication modes for these interviews. Ellen, Harry and Maisie chose different modes of communication. Ellen's communication aid was broken for one of our three interviews, however on our first interview she chose to use her non-verbal communication (eye gaze) as it was faster and in the final interview, her Mother acted as her spokesperson/elaborator. Harry chose to use his light technology communication board and book to augment his VOCA use. Maisie tended to use her VOCA but it caused her problems and seemed inefficient and slow. In one interview she abandoned it and used her listener-scanning book.

4.3.2 Aided communication

Table 10 describes the participants' use of aided communication in the interviews and also whether they had back-up systems for emergencies.

Table 10: Aided communication systems

	VOCA	Text/email during the project	Symbol board/book	Board used during interviews?
Wilf	●	X	Bliss board	X
Stan	●	●	Rarely/emergencies only	X
Brad	●	●	Rarely/emergencies only	X
Ellen	●	●	Used Rarely/emergencies only	●
Polly	●	●	Unknown	X
Harry	●	●	Used & frequently	●
Martin	●	●	Unknown	X
Jacob	●	●	Unknown	X
Ian	●	●	Bliss board	X
Maisie	●	●	Used & frequently	●

Key: x - not used/absent; ● - used

4.3.3 Method of access to communication devices

It is clinically useful to know the participants' method of access to the VOCA or low-tech communication system. Access can be described as through direct or indirect methods (Table 11).

Table 11: Method of access of aided communication system

	Direct (finger)	Single switch or eye gaze
Wilf	X	● (head switch)
Stan	●	X
Brad	X	● (head switch)
Ellen	X	● (eye gaze)
Polly	●	X
Harry	●	X
Martin	X	● (head switch)
Jacob	X	● (foot switch)
Ian	●	X
Maisie	X	● (head switch) auditory scanning
TOTAL	4 participants	6 participants

Key: x - not used/absent; ● - used

4.3.4 Unaided communication systems

Table 12 describes the participants' use and range of unaided communication systems during the interviews, taken from the case study framework – Part 2 communication skills.

Table 12: Unaided communication systems used during interviews

	Eye gaze	Body movement	Facial expression	Gestures/signing	Laughter	Sounds & vocalisations	Word approximation
Wilf	●	●	●	X	●	●	X
Stan	●	●	●	●	●	●	●
Brad	●	●	●	X	●	●	X
Ellen	●	●	●	X	●	●	X
Polly	●	●	●	●	●	●	?
Harry	●	●	●	●	●	●	●
Martin	●	●	●	X	●	●	X
Jacob	●	●	●	X	●	●	●
Ian	●	●	●	●	?	●	X
Maisie	●	●	●	X	●	●	X

Key: x - not used/absent; ● - used; ? – possible but not heard

This repertoire mirrors typical (of natural speakers) communicative functions but the signals replace spoken communication. Some signals were subtle and swift. Some were hesitant, conveying uncertainty in the particular context. Some participants demonstrated preferred ways of communicating with specific conversation partners as opposed to others.

Two participants, Martin and Ian, presented differently with their responses to humour. Martin was not heard to laugh in a typical manner in these interviews. He did not appear able to produce sound in a rhythmical pattern. However he most certainly laughed within his physical ability. So in the transcriptions of our interviews, recording a 'laughing pose' means a general description of when Martin is excited or happy with what has been said. He extends in his wheelchair, his arms retract even more

tightly, his head pushes against his headrest on his chair and usually his mouth is wide open or in a stretched almost smiling position. His eye contact is usually direct but he “looks like” he is laughing.

Ian described himself, “*I am funny*”, but did not look at me or smile or laugh when saying this. This may have been sarcasm or just not feeling happy at that time. In interview 1, he ‘laughed’ quietly when he recounted the fishing story and smiled at the fact that we both knew of the same primary school.

Some participants combined and sequenced modes to communicate efficiently and quickly. In the excerpt below, Harry uses a total of seven modes of expression including vocalisations, points with his finger to his communication board, uses the recipient as his speaker, uses a word approximation, looks intently, facial expression, points with his finger to a page in his communication book with the recipient again acting as speaker. Harry uses this sequential organisation of modes to express his feelings of pride in how he was coping emotionally with the bereavement of a close friend.

Excerpt 1 in Harry’s bedroom “Proud”

Line	Speaker	Transcription
01	Harry	<i>yuh</i> ...points to <u>proud</u>
02	LP	reads & says <i>proud</i>
03	Harry→	<i>me</i> + stares at his book under my arm + smiles + book brought in & opened + <i>uh</i>points to <u>time of the year</u>
04	LP	reads & says <i>time of the year</i>

Some participants combined modes (Hormeyer & Renner, 2013) possibly in an hierarchical organisation, to indicate a strength of response (line 03) which is comparable to communicators who use speech as their main mode of communication. Ellen also combines eye gaze for yes/no with directional pointing (lines 03 & 07) so recording these behaviours and their different intentions was important.

Excerpt 2 at Ellen's home "Has it gone?"

Line	Speaker	Transcription
01	Ellen	(Looks at Mum) 'you'
02	Mother	<i>Me? What?</i>
03	Ellen→	(Looks at VOCA) 'Is her email on here?'
04	Mother	<i>Email?</i>
05	Ellen→	eyebrows raise + <i>V=ah</i> ↑
06	Mother	<i>Have you not got her email address on there?</i>
07	Ellen→	(looks left) 'no'
08	Mother	<i>Why? Has it gone?</i>
09	Ellen	<i>Ah</i> ↑↑ ((loudly and strongly))
10	Mother	<i>Oh well I can put that back on for you.</i>
11	Ellen	(looks up + right) 'yes'

All participants used their bodies in various ways to provide a range of communicative purposes, for example, strength of feeling or anticipation of a funny story. Wilf, rotates his arms and extends in his chair in anticipation of speaking his reply. He also moves his legs in a cycling or rotational movement for emphasis.

In the following extract from a written presentation that Brad constructed with his keyworker, he powerfully recounts a story about his response to his parents' separation and how he used his body to signal his emotions:

I forgot to tell you that when I was fifteen my parents separated. All the emotions I had regarding not having an effective communication system for six years to express my thoughts and feelings were already being shown by me at my frustration. I did not deal with this well. I started to behave really bad, refusing food and drink as well as showers. It took two carers to get me dressed and three carers to do a transfer from one chair to another because I used to lash out at them and make my body tense putting pressure in my spine and feet. I used to throw myself on the bed and my Mum would not let me forget the screaming I used to do all night long.

Figure 4: Brad's co-constructed story

4.3.5. Utterance/linguistic content and response formulation times

The time taken to formulate a completed utterance varied between participants. In the following table the formulation times for a sample of VOCA-mediated turns (or utterances) are presented to demonstrate this variability. The terms VOCA-mediated turn/utterance are used in Pilesjo (2013) from the work conducted by Clarke & Wilkinson (2007, 2008) and adopted where appropriate throughout this thesis. Polly, Brad, Wilf and Stan were purposively selected.

Table 13: VOCA-mediated utterances and formulation times

Name	VOCA-mediated utterance	Formulation time
Polly	<i>“The other day <u>D-o-t-t-y</u> Dotty said you know (deletes) I know how ((laughing)) you think.”</i>	1 minute 28 seconds
Brad	<i>“college”</i>	53 seconds
	<i>“I do not like it”</i>	1 minute 30 seconds
	<i>“I love it”</i>	1 minute 37 seconds
Wilf	<i>“On sand Wilf angry”</i>	3 minutes 15 seconds
	<i>“no”</i>	6 - 51 seconds
	<i>“yes”</i>	11, 16, 21 and 28 seconds
	<i>“talk”</i>	1 minute 15 seconds
	<i>“Alan”</i>	2 minutes 9 seconds
Stan	<i>“I remember everything”</i>	6 seconds
	<i>“I am happier but its hard”</i>	24 seconds
	<i>“I did maths and science and I did english, geography, religion without exam.”</i>	1 minutes 46 seconds
	<i>“To get a adult point of view”.</i>	26 seconds
	<i>“Does she get iplayer?”</i>	21 seconds

Polly uses spelling in addition to selecting whole words, for example, Dotty. Wilf and Brad are head switch users. The initiation of both Wilf and Brad’s spoken responses is always longer compared with, typically, one second by natural speakers (Beukelman & Mirenda, 2013). Timings can depend on previous utterance location, emotional and physical status prior to or during formulation. A factor particularly

noticeable affecting Stan's transmission time is the time taken for thinking whilst pausing, for example:

Excerpt 4 in Stan's sitting room "Learning"

Line	Speaker	Transcription
01	Stan	<i>"because-" (5 seconds) ((thinks))</i>
02	LP	<i>mmm... why? Why was it a good thing?</i>
03	Stan	<i>"I learn more."</i>

An interesting factor affecting his conversation rate is when in composing his utterances, he changes the word selection (which → were) and spells, to create a novel word. Whilst error correction and revisions takes extra time, it obviously ensures more successful message transmission and personal satisfaction.

Excerpt 5 in Stan's sitting room "Project"

Line	Speaker	Transcription
01	Stan	<i>"Which-were-we-a-part-of-the-BBC2-computer-in-school-s-<u>P-R-O-E-U-T</u>. Were we are a part of the BBC computer in schools project?"</i>

Transmission times therefore vary according to a number of different factors for each participant and have to be factored into the organisation of the conversation.

4.4 Participants' physical presentation

Most participants have quadriplegic cerebral palsy and would possibly achieve on the Gross Motor Function Classification System – Expanded & Revised (Pallisano et al, 2007 (if applicable to adults) at level 4 or 5, where according to the general headings used, youths (up to age 18) are self-mobile with limitations and may use powered mobility as opposed to being transported in a manual wheelchair.

Table 14: Participants' CP, wheelchair control, upper limb involvement & head position

	Name of participant	Cerebral Palsy	Wheelchair control	Use of upper limbs	Head position & support
1	Wilf	quadriplegic spastic athetoid	No/dependent	No	Upright/supported
2	Stan	quadriplegic spastic athetoid	Yes/joystick	Yes	Upright/unsupported
3	Brad	quadriplegic spastic	No/dependent	No	Variable/supported
4	Ellen	quadriplegic spastic	No/dependent	No	Upright/supported
5	Polly	quadriplegic spastic athetoid	Yes/joystick	Yes	Upright/unsupported
6	Harry	quadriplegic spastic	No (see below)	Yes	Upright/unsupported
7	Martin	quadriplegic spastic	Yes (see below)	No	Upright/supported
8	Jacob	quadriplegic (unknown severity & type)	Yes/joystick	yes	Upright/unsupported
9	Ian	quadriplegic spastic athetoid	Yes/joystick	Yes	Upright/unsupported
10	Maisie	quadriplegic spastic	No/dependent	No	Upright/supported

Wilf, participant 1, like Brad, participant 3, required a headrest onto which his switch for his VOCA is adhered. Like many participants (Ellen and Maisie) Wilf's wheelchair is often slightly titled backwards for comfort and ease of access to his VOCA. Stan sits unsupported in an arm chair to which his VOCA is attached via a mounting pole. Polly, participant 5, could recline her wheelchair to an angled position for comfort and when necessary or when tired (as does Brad). Brad, participant 3, has some control over his head movements and uses a rest position (hanging his head) when he is tired. Ellen, participant 4, always has her wheelchair tilted backwards for comfort and ease of access to her VOCA. Harry, participant 6, can drive his powered wheelchair with four single switches mounted on a control panel on a tray on his chair. He prefers to be driven by his helper. Martin, participant 7, can drive his powered wheelchair using a single switch mounted behind his head, however he frequently chooses to be pushed by a helper when inside his home. He uses the same single

switch to access his VOCA. Jacob, participant 8, uses his foot on a single switch mounted on a raised wooden block in front of him to write on his desktop computer. This arrangement also serves as a portable VOCA. Martin, like Maisie has a visual impairment and Ian wears glasses.

Two participants physically controlled their positioning during some of the interviews. Polly could physically position herself in her wheelchair and she frequently moved herself to include or exclude others in the room. In two of our interviews Ian physically controlled some topics. In one instance, for example, whilst we were discussing his involvement in a drama group, Ian demonstrated control by driving to the next room to clarify with his drama teacher, a possible clash with our next interview appointment.

4.5 Cognitive functioning

The notion of cognitive referencing is debated in the field of paediatric SLT (Eadie, 2004). Cognitive performance was considered clinically significant when considering eligibility for SLT provision as it provided a possible indicator to someone's language/communicative competence (Johnson, Watson, Iacono, Bloomberg & West, 2012). Whilst the assessment of cognition in the larger group of aided communicators is challenging, expressive language, literacy skills and problem solving can be indicators. Nine of the ten participants communicated their thoughts using compound and complex sentences and demonstrated problem solving and memory skills. I neither formally assessed their cognitive function nor asked them how they would describe their ability. Brad however, chooses to self-label as 'learning disabled' in order to access any medical and therapy service he needs as these would not be provided otherwise. It was noted that he cannot read. If acquisition of literacy is considered significant then Stan, Polly, Jacob and Ian could to an extent, read and write. Anecdotal reports suggest that the type of communication device used is sometimes considered an indicator of cognitive functioning. The most commonly used high tech devices in this group were the ECO™ and Pathfinder™ devices (Polly, Stan, Wilf, Harry, Brad) which use Minspeak™. Both Ian and Jacob use a predictive spelling device/package.

4.6 Self - my profile & communication skills

My position as a researcher was complemented by my role as an SLT. I drew on some of my interests such as travelling, performing arts and sport in some conversations. Self-analysis through watching and listening to hours of video has led to a significant degree of reflection. A conversation partner's style for example, can both negatively and positively influence an interaction, whether with aided communicators or natural speakers. My conversational style included being open, friendly and 'chatty' in order to maintain the interaction. I also used explanations in different ways in order to ensure that at some point I hit the appropriate cognitive level or correct interpretation of meaning. Sometimes my use of silence was insufficient. More open questions could have elicited more in-depth conversation. Closed questions however, are important to move the conversation along and to acquire a volume of information.

4.7 Summary

The participants presented as active adults with interests who enjoyed communicating. A case study framework was compiled to systematically formalise the presentation of individuals. Background information was summarised and a preliminary analysis of their communication and interaction was embarked upon. Within this framework, multimodal communication, physical presentation and cognitive functioning was described. Profiles based on a snap shot, were crafted and presented verbally to the participants. These were positively received. My self-presentation as a conversation partner and interviewer was also considered and its impact and influence noted. It was important at this phase of the research, to regard the participants as adults with unique communication and interaction competences in order to proceed with the in-depth data analysis. This perspective is supported by the interactional model of communication adopted in my study.

Chapter 5 Analysis of interactional exchanges

5.1 Introduction

Conversations or sequences of utterances, were created with all ten participants. A number of features and discourses were identified. Topics were established, most of which were the focus of our joint attention over variable time durations (number of visits and duration of each interview) dependent on factors such as interest level, linguistic ability, questioning skills and physical stamina. Exploring how the conversation around the topics was created and organised into patterns was illuminating. It is acknowledged that alternative discourses would be explored at different times with other partners and in various settings. Although the conversation exchanges were based on an interview-styled question and answer format around lived experiences, past, current and future aspirations, it was possible and indeed preferable to develop novel topics initiated by the participants themselves and to respond to the immediate interactional context.

5.2 Research question 1 - To what extent can adults with cerebral palsy (CP) talk about their lives, their experiences and opinions?

Conversation interactions can be challenging for any speaker or recipient but particularly for some aided communicators if they are limited by life experiences, conversation partners, ideas, interests or social skills and with a lack of available and accessible vocabulary or the necessary linguistic skills. To consider communicative competence in a conversation interaction, there has to be business to talk about (Goodwin & Heritage, 1990). This thesis includes excerpts from the interviews that present differently to those obtained between natural speakers. Some excerpts included will be longer or indeed significantly shorter in linguistic content and length of utterance due to the nature of aided conversation amongst partners.

The question of how an aided communicator would engage and participate in a conversation or would allow themselves to be enabled or drawn in to a conversation by the partner(s) became important. How would they as Goffman (1957 in Sidnell, 2010) describes, create a “communion of reciprocally sustained involvement”. What

conversation skills and behaviours did the aided communicators use to achieve involvement? Additionally, what does this reveal about their identities and positioning in conversations?

Firstly, to provide conversational context, the following table (Table 15) presents the main topics covered across the series of interviews for each participant. All topics were covered by all participants apart from Maisie. In Maisie's case, her specific access and linguistic content limitations with her VOCA, restricted her participation across the interviews. The depth of the conversation engagement can be dictated by interest in the topic as well as ability to participate. This will be discussed in more detail in Chapter 6.

Table 15: Topics covered in interviews

	Others (family & friends)	Self	Experiences in education (boarding & curriculum)	I remember Places (holidays)	Current life	Aspirations
Wilf	•	•	•	•	•	•
Stan	•	•	•	•	•	•
Brad	•	•	•	•	•	•
Ellen	•	•	•	•	•	•
Polly	•	•	•	•	•	•
Harry	•	•	•	•	•	•
Martin	•	•	•	•	•	•
Jacob	•	•	•	•	•	•
Ian	•	•	•	•	•	•
Maisie	•	X	X	X	•	•

Key: x - not covered; • – covered.

In the following table (Table 16) some of the main phenomena of typical conversation (Jaworski & Coupland, 2006; ten Have, 2007) are explored. These structures of talk were explored to provide insight into the participants' knowledge and use of them. It was felt important to explore what talk was about (topic) when analysing how the interaction unfolded. In doing so, it became apparent that topics were not always evident and transitions were necessarily abrupt (Sidnell, 2010).

Topic control includes topic maintenance (sustaining and continuing) although they are essentially the same, and shifting topics. I have also included how participants managed others to speak on their behalf as a strategy to maintain the conversational flow or its interactional or dialogical nature (Noren, Samuelsson & Plejert, 2013).

Table 16: Specific interaction phenomena used by participants

	Opening & closing	Establishing the topic	Turn taking	Topic control	Problems	Novel
Wilf	x	●	x	●	x	x
Stan	x	x	●	●	●	●
Brad	●	●	x	●	●	●
Ellen	x	x	●	●	x	●
Polly	x	●	x	●	●	●
Harry	●	x	x	x	●	x
Martin	x	x	x	●	x	●
Jacob	●	x	●	x	●	●
Ian	●	●	x	●	x	x
Maisie	x	x	x	x	x	x

Key: x - not used; ● – used

5.3 Opening the interview

Most interviews began in an organic way with both parties developing a co-ordinated entry into the interaction (Hutchby & Wooffitt, 2006). The management of our verbal and non-verbal behaviours was variable and noted to be necessarily responsive to the individual contexts. There was a formality about this phase, as there was a need to set up the video camera and to explain the reasons for my visit. Typically, after welcoming, small talk (Coupland, 2003) occurred whilst I set up the camera and the participants and carers settled. Opening sequences were varied, often unpredictable and were important in establishing the “tone” of the interaction (p. 688, Riggio et al, 1981). It was noted that some but not all participants observed rules of social etiquette, for example, by offering me a drink. Most participants’ carers executed the

“would you like a cup of tea?” routine. The following five excerpts from four of the male participants, were selected to illustrate the openings and variations in the politeness routines.

Excerpt 1 at Harry’s bungalow “Would you like coffee?”

At the beginning of my second interview with Harry, I set up the video camera in his sitting room whilst waiting for him to arrive. He was heard laughing down the corridor whilst his carer wheeled him to the room. Harry began the interaction immediately by spontaneously asking me a VOCA-mediated question.

Line	Speaker	Transcription
01→	Harry	“Coffee you”
02	LP	<i>Yes thanks – that’s kind of you. Black please. [...] I’ve got a good shot of your knees ((carer goes off to kitchen))</i>
03	Harry	<i>yuh</i>
04	LP	<i>All I am filming Harry is.....((Harry interrupts/overlaps))</i>

An important feature of this opening at line 01, comes from Harry’s ability to achieve social control without using a linguistically correct utterance. There is no intonation to suggest it is a question. The two word phrase **“coffee you”** is a short-cut and is effective in its transference of meaning through its similarity to a typical question format (Coffee?) and I could draw on the context to infer meaning and the implied question. It is therefore successful. Harry ensures that I understand it is not just him requesting or demanding a coffee from his carer as in “I want coffee” or “you get me a cup of coffee” because he adds the pronoun **“you”** to indicate that he is offering *me* a drink. He takes the conversational and interactional lead with initiation of the turn and its content positions him as ‘not passive’ and in control. Additionally in line 02, my acceptance of his offer reinforces his action perhaps making him feel valued and reinforcing the chances of reciprocating later.

On this occasion, the more formal and polite version, perhaps “Would you like a cup of coffee?” is not required. Interestingly he selects to use his VOCA rather than his communication board; perhaps because he recognised that both myself and his carer were busy and therefore unable to read his selection from his board or, for this

communicative act, ‘using a voice’ was more assertive and powerful. He is positioned strongly as the active and successful agent.

Excerpt 2 at Harry’s bungalow “How are you?”

In this excerpt, Harry interrupts my joke about the direction of my camera (excerpt 1, line 04), to enquire after my health, using a politeness discourse based on health status (Hayes & Hannold, 2007) using a pre-stored phrase (excerpt 2, line 01). I momentarily pause demonstrating uncertainty about the nature of his question as a routine opening inquiry that was meant literally or not. A general, informal and polite response (line 02) follows. At line 03 Harry develops his turn by expanding and adding more personal and contextual information behind his query (line 03 and 05), and persists until I demonstrate that I am finally sharing his topic. Joint laughter follows indicating social closeness and rapport.

Line	Speaker	Transcription
01	Harry→	“How are you?”
02	LP→	(pause) <i>Not too bad thank you. I must admit I am a little bit all over the place.</i> (pause)
03	Harry→	(pause) “Dentist”
04	LP	(pause) <i>Dentist.</i>
05	Harry	<i>Yeah + you + YOU</i>
06	LP	<i>Me? You remembered? Oh. You are so thoughtful.</i> ((I had forgotten I had told him about my dental appointment.)) <i>I am such a baby.</i>
07	Harry	Laughs
08	LP	<i>Don’t laugh.</i> + Laughs + <i>I had to have two massive fillings.</i> ((Harry laughs)) <i>I had to hold my mouth open for a whole hour. I couldn’t eat anything all day</i> ((Harry laughs)) <i>Go home to bed. I was a right sook about it.</i>
09	Harry→	Laughs + “hahahaha”

Harry’s expressions of concern for my welfare elicit a polite acceptance from me and also an evaluative comment, excerpt 1 line 02 (“that’s kind of you”) and excerpt 2 line 06 (“you are so thoughtful”) perhaps acknowledges his identity as a compassionate adult. At the close of excerpt 2, Harry chooses to add some ‘double laughter’ where

he not only laughs naturally with his voice but also by pressing the particular cell on this VOCA (line 09). Neither is compassionless laughter, and it is interpreted by me as genuine and contributing impact. It also helps to reinforce his turn and his identity as a cheerful person with a sense of humour. Both sequences aid the construction of Harry in roles of speaker-initiator and empathic conversation partner. His ability to take social command when offering me a drink strengthens his powerful identity and as a person who is able to establish control.

Excerpt 3 in the day centre Ian attends “Hello Lynsey?”

Ian began our second interview by establishing conversation control by not only spontaneously greeting me in a formal manner but also establishing the topic of conversation. This is despite my obvious provision of time, space and expectation to do so, as evidenced by line 01. Noticeable however, was the lack of eye contact that usually accompanies the social greeting and question (excerpt 3, lines 02 and 04).

Line	Speaker	Transcription
01	LP	((Busying myself/siting down/expecting Ian's utt. FRonVOCA))
02	Ian→	“Hello Lynsey. How are you today?” ((Doesn't look to me))
03	LP	<i>I'm not too bad thank you. I have had a busy morning, but I'm very pleased to actually get here and have this time with you Ian. So thank you very much for all the great organisation we had setting this up, + laughs + so I really do appreciate your time. So thank you for that.</i> (pause) ((Ian FRonVOCA))
04	Ian→	Vocalised ↓↓ + “Wheres we start?” ((Doesn't look at me))

None of Ian's responses are preprogrammed. He constructs each utterance usually word by word or by using predictive spelling, which allows him to create novel utterances. To do this, requires additional effort which in this example of a routine opening inquiry demonstrates the importance he attached to it. The recipient therefore might feel more valued.

My responses as in the previous excerpts with Harry, acknowledge his enquiries with gratitude and politeness (line 03). An interesting feature in this sequence is Ian's

absence of eye contact with me after he has finished his turn which served to not include me until later in the conversation. Although he had opened the interaction with a politeness formula he had not demonstrated reciprocal eye contact. As a listener I was looking for, or certainly expecting this feedback from him.

Excerpt 4 at Jacob’s home “Sorry”

Jacob’s second interview demonstrates a contrasting opening. I entered his sitting room to see him (his carer) tidying out his cupboards having rearranged his furniture.

Line	Speaker	Transcription
01	Jacob	Turned + Looked surprised + Checked the time + <i>Vocalised. “Sorry for me”</i> + V= <i>ah</i> ((groan-like))
02	LP	<i>That’s ok</i> ((dismissive tone)). <i>I like what you have done with the furniture. Looks more useful [...social chat from me...] I wanted to ask you when did you learn to type?</i>

When spontaneously offering an apology at the opening of our contact, Jacob constructs himself as a confident speaker-initiator and, to me, as a kind and thoughtful person, aware of the impact of his behaviour on others. This discourse although restricted to three words was coupled with facial expression and vocalisation to reinforce his position and also the act of looking at the time to indicate the meaning behind his apology, that is, he had not realised that it was late and time for our meeting. My response is politely and largely dismissive as conveyed in its intonation but is nevertheless acknowledgement of his attention. I immediately move on to compliment him on his room providing validation of his activity. Jacob’s apologetic discourse positively altered the tenor of the ensuing discussion. The immediacy of his performative utterance, the apology, is at the expense of a greeting, thus cementing his positioning as kind and thoughtful.

Excerpt 5 at Brad’s home “Easter break”

The excerpt is from Brad’s third interview and serves to illustrate a more measured and casual opening introduction (compared with Ian, excerpt 3) ‘warming up’ to the interview (lines 01- 07). In Brad’s situation, a carer always opens the front door and we exchange greetings. I go into the sitting room, Brad is brought in, at which point I

initiate a greeting. He responds by lifting his head and smiling, but without a verbal greeting response. His VOCA is always fixed to his wheelchair and available for him to use. I usually genuinely compliment him on his appearance which makes him smile and seems to please him. I usually make small talk whilst setting up the video camera until we are ready to have an 'undisturbed' conversation.

Line	Speaker	Transcription
01	Brad	<i>((beeping from VOCA)) ... (pause)</i>
02	LP	<i>[that's] set that up now. We can forget about it.</i>
03	Brad	<i>muh..huh</i>
04	LP	<i>... I hope... yep.</i>
05	Brad	<i>huh</i>
06	LP	<i>Alright</i>
07	Brad	<i>vocalises</i>
08	LP→	<i>I don't think we have seen each other for about 3 weeks</i>
09	Brad	<i>looking at me + nods head + muh</i>
10	LP→	<i>...or 4 weeks. And we've had Easter as well. Did you have a good Easter break?</i>
11	Brad	<i>Nods + huh</i>
12	LP	<i>yuh... (pauses)</i>
13	Brad	<i>Vocalises + sighs... "yes" + Looks at me.</i>
14	LP	<i>mmm. I did too. It's so nice to have 4 days off work....</i>

It is not clear in line 01 if Brad was going to formulate a greeting or a question. The auditory feedback from the device suggests activation but it is not until line 13 that he contributes an utterance with his VOCA. In lines 8 and 10, I set the frame around the interaction (Tannen, 1993) which is about the passage of time and of not having seen each other, suggesting content for discussion. This marks the opening of the interview. Brad's lines indicate strength of involvement by his use of multimodal communication; he vocalises, looks, nods, and finally speaks. Although he has not asked me in line 13 if I have had a good break, I offer new information in my response in line 14. In this excerpt Brad takes the position of a listener with less communicative responsibility. His VOCA-mediated response for 'yes' (line 13) after

replying with a 'yes response' at lines 09 and 11 is notable. Perhaps he felt that his previously vocalised affirmations were not strong enough. Perhaps my pause at line 12 was interpreted by him as the expectant phrase, "It's your turn, say something" as evidenced by the sigh.

5.4 Establishing the topic

Establishing the topic or the business of the interaction in these interviews is not always lead by the speaking partner. The following five excerpts from three of the participants, Brad, Polly and Wilf were selected to illustrate both the direct and indirect routes into a topic. In excerpt 1 "We talk" and excerpt 2 "Great news", both Brad and Polly assertively control the discourse after the initial small-talk had lessened. In excerpt 3 "Spain", Wilf takes control of the discourse by making me do the communicative labour if I want the topic. In excerpt 4 "Wheres we start?" Ian quickly establishes his topic of interest. Finally in excerpt 5 "A happy man", Brad interacts by adding verbal continuers and overtly not wanting to take the speaking position.

Excerpt 1 at Brad's home "We talk"

Here, Brad changes the topic about our Easter breaks to one initiated by him in line 06. His use of unaided communication seemingly serves to politely humour me before taking over a minute to establish a new topic, which I was not anticipating. His motivation and persistence to establish his topic is evident when he takes a further period of time and turns to reinforce his original request to talk.

Line	Speaker	Transcription
01	LP	<i>Did you go away at all?</i>
02	Brad	(Looks to left) 'no'
03	LP	<i>You didn't. Are you going to go away? (pause) ((Brad looks blank)) I seem to remember when we were talking before that you were going away but maybe I misheard</i>
04	Brad	FRonVOCA... <i>huh</i>
05	LP	<i>Have I made that up? + laughs</i>
06	Brad→	Looks at me... <i>huh</i> + smiles + hangs head + FRonVOCA (pause) + “we talk” ...looks to me. ((FT 1 min 17 secs))
07	LP→	(5 sec pause) ... <i>I'm sorry I didn't catch that.</i> ((His facial expression doesn't change with disappointment or annoyance that I didn't get it))
08	Brad	FRonVOCA
09	Carer	((Door bangs & carer enters house & room)). <i>Hello.</i>
10	Brad	<i>vocalises + rocks + vocalises (only 3 x)</i>
11	X	[Omitted social exchange and chat about carer's holiday break for 3 turns whilst Brad is FR]
12	Brad→	“I want to talk with you privately” . ((FT 1 min 10 sec)) Looks at me.
13	Carer	<i>I will get out.</i> ((leaves room))

My polite apology at line 07 after a reasonable 5 second pause, indicates either my lack of understanding of his subject + verb utterance (request for action) or it signifies surprise and lack of preparedness to switch to his topic. As I had previously asked a question at line 05, I was assuming and therefore anticipating a related response. However, he changes the direction of the discourse. He persists with his topic by immediately beginning another turn at line 08, only to have an interruption occur simultaneously. He ignores this social exchange activity and continues formulating his response (line 11). 'Parallel-talk' occurs simultaneously but does not disrupt his turn. Interestingly his response at line 12 provides me with additional information above the phrase “we talk”, after realising that his short-cut request at line 06, provided insufficient information. In effect he was repairing the breakdown in our conversation irrespective of the cause, in order to set his topic. His assertive request using the personal pronoun and adverb *privately* ensures that his conversational effort cannot be ignored. Brad's direct request for a confidential discussion with me

alone is respected, and immediately acted upon, by his carer, who complies at line 13. This demonstrates Brad’s power in controlling his environment.

Excerpt 2 in Polly’s sitting room “Great news”

In this interview with Polly, she met me at her front door with her carer and immediately told me with accompanying manual signing, that her plans for the day had changed because of a health-related event. She told me this as I followed her down the corridor to her sitting room. Her carer offered me a drink as she was already making one for Polly. I sat down and whilst assembling the video camera made small talk about associated health related matters. The opening line at 01 initiates the next phase of our interaction and I constructed the statement carefully.

Line	Speaker	Transcription
01	LP	<i>You said in your email that you had some great news.</i>
02	Polly	<i>“seven - seven- [name of month]. We are moving to College about 7 [name of month].”</i>
03	Carer	<i>Are you errr is that while the building work is going on?</i>
04	Polly	<i>((Whilst drinking through a straw)) “We are a ((lots of background noise)) new building. We are having a new building.”</i>
05	LP	<i>yes you told me about the new building last time I came up and how it was going to have[...]</i>

An email sent by Polly the previous week had triggered this important topic of conversation, and the ensuing discourse beyond that illustrated in excerpt 2, persisted for 20 minutes. Using the ‘you’ and ‘your’ (second person and second person possessive) pronouns in line 01 clearly provided Polly with ownership of the topic.

Excerpt 3 in the day centre Wilf attends “Spain?”

In the final interview with Wilf, I wanted to explore his experiences of travelling and past holidays. I asked him a direct but closed question in line 01. In line 06, Wilf appeared to signal trouble in establishing the topic through unaided strategies. After his combination of facial expressions, there was a 6 second pause, providing him with an opportunity to respond again, which he rejected. These responses might

have been interpreted as his disinterest in the topic had I not offered him some solutions or options in lines 08 and 11. My options were to change topic or wait for longer, but I had invested in the interaction, demonstrating a strong orientation to progressivity.

Line	Speaker	Transcription
01	LP	[...] <i>Have you ever been to Spain?</i>
02	Wilf	Smiles + FRonVOCA+ vocalises “ no ”
03	LP	(Pauses) <i>mmm. Have you been anywhere in Europe?</i> (pause) <i>Have you been abroad at all?</i>
04	Wilf→	FRonVOCA “ yes ” ((with no facial expression)) ((FT 10 secs))
05	LP	<i>Where did you go?</i>
06	Wilf→	<i>Elongated vocalisation</i> ↓↑ + ((moans)) + frowns ((no response))
07		(6 second pause)
08	LP	<i>Do I have to guess?</i>
09	Wilf	Blinks ((is this yes?))
10		(15 sec pause)
11	LP	<i>Shall I guess....shall I name some places?</i>
12	Wilf	FRonVOCA “ yes ” ((FT 12 secs)) ((no change in facial expression - serious face))
Total interaction time – 1 min 37 secs		

A guessing sequence followed with Wilf indicating his acceptance of my strategy by offering a VOCA-mediated turn (line12). Wilf knew the answer(s) to my questions (line 05) so the next sequence became like a reverse test-question situation (Antaki, 2013). He is in the position of power as he knows the answer but also knows perhaps that he has not got access to the vocabulary (place names) to continue the topic.

Excerpt 4 in the day centre Ian attends “Wheres we start”

In this excerpt Ian responds to my open question (request for action) to remember and recount any story from his growing up years. He introduces and establishes the topic quickly. Line 03 is not only a repetition of an answer given in a previous interview, but it takes him over 4 minutes to formulate. It constructs him as a

communicator who has a memory, “things to talk about”, and a provider of information (cause and effect).

Line	Speaker	Transcription
01	Ian→	vocalised quietly “Wheres we start?” ((Doesn't look at me))
02	LP	<i>Where shall we start? Well, I would like to know if you have any stories about your growing up. So anything you can remember about your growing up that you think would be a good story to tell me. That for me would be a great place to start.</i>
03	Ian→	vocalised quietly “When I was a (?) baby I was sick and that why I am in chair” . ((FT 4 mins 4 secs. Doesn't look at me. Keeps looking at VOCA))
04	LP→	<i>Mm. Yeah. And then you went through sss... special schools didn't you?</i> + Ian looks to me
05	Ian	'nods' (yes) ((head dips to left quickly and up))

My responses often begin (line 02) with a repetition of a previous turn to feedback that I had heard him and have processed the response. The accuracy of my feedback might be mutually satisfying in that it indicates successful recipient action and establishes him as a successful speaker.

Line 03 is notable because instead of using the, perhaps more typically used, label of 'disabled' he describes that he is “in chair” (wheelchair) sounding definite and unequivocal through the use of “I am”. This single identifying feature of his disability, perhaps indicates his perception of the limits of his impairment, being solely physical.

Excerpt 5 at Brad's home “A happy man”

This excerpt illustrates a variation in how different topics are established. Here, I ask Brad a specific question, requiring him to describe or offer descriptors about his personality. What is notable in this excerpt (line 03) is how Brad uses continuers that express positive affect to encourage me and feedback that this could be a welcomed and pleasurable topic. Indeed he continues these positive signals throughout line 04.

Line	Speaker	Transcription
01	LP	<i>Brad, I spent all of yesterday listening to our interview from before...</i>
02	Brad	<i>Yuh + smiles</i>
03	LP→ and there were some of the questions that immediately sprung out at me ((Brad vocalises)) So the first....((Brad hangs head)) we talk about you first? (LP laughs) So the question I want to ask you... was how do you think you'd describe yourself? ((Brad begins FRonVOCA)) Your personality? ((Brad smiles + vocalises + laughs)) What do you think about that one? How would you describe your personality? ((Brad eyeballing me + smiling)) ((very happy))
04	Brad→	<i>vocalising FR...uh ((does he misshit?))...(82 s)... "I think - I am (? 60s)- happy- smiles + vocalises ↑ ↑(20s) man (34s) (brief glance) - Lynsey . (vocalises) ((hits switch and I think it's a miss-hit)) (brief glance) I think I am happy man Lynsey."</i> ((FT 4 mins 49 sec.))
05	LP	((stands up to check display)) <i>Did you say mad or man? Man.</i> ((sits down))
06	Brad	Looks to me + no facial expression
07	LP→	<i>Yes you do come across as happy.</i>
08	Brad	(in extension) ((seems to be trying to smile)) (flicker smiles) ((but physically challenged)). + Eye balling me.
09	LP	<i>Yes – your sense of humour.....</i>
Total interaction time - 22 minutes		

Within this discourse around his identity, to reinforce the strength of his opinion he comfortably augments his utterances with his vocalisations, facial expressions and body positions. Interestingly in line 04, rather than just taking a short-cut and describing himself (Martin & Rose, 2003) with a single adjective (happy) he takes time to construct a complete sentence that creates a powerful impact on the listener, using the "I-statements" - "I think" and "I am". These clearly state that he thinks – he has thoughts and can recollect them. The sentence culminates with him choosing to state his gender (man) as opposed to boy, bloke, gentleman or person. Choosing to use my name, which is not a common occurrence in conversations with this participant group, is another authoritative identity marker. Naming demands extra effort, providing the participant can spell or has it programmed into the device. His

multimodal response in line 08 could be in protest that I have omitted ‘man’ which he had taken time to include, conveying its importance in his topic. Alternatively he could be “eye-balling” me to elicit a particular response. Intense looking behaviour that explicitly invites a response has also been noted in Nina’s conversation (Hormeyer & Renner, 2013).

Brad laughs and smiles frequently reinforcing his positioning as a “happy man” and he continues with this established topic. In this excerpt he also uses his smile as a positive response, conversational continuer and to positively reinforce my role as a valued and willing conversation partner.

5.5 Taking turns

All discourses analysed present turn-taking, one speaker talking at a time and little over-lap (Hutchby & Wooffitt, 2006). Interspeaker coordination is achieved despite the variation in gaps in turns that are due to the nature of aided communication. Aspects of turn type, content and length can be identified.

Excerpt 1 in Stan’s sitting room “Getting old”

In many cases, turns by the aided communicators are begun *before* the speaker has finished, for example, in this excerpt selected from our discussion about quality of life and identity, Stan explains:

Line	Speaker	Transcription
01	Stan	<i>uh huuu + “ In-a-way-I am-getting-old. ((FT 28 secs)) In a way I am getting old.” ((Stan turned to me halfway thro speaking with a smile on his face)) + laughs</i>
02	LP	<i>Laughs. <i>What do you mean by that?</i> ((Stan turns to his VOCA & FR)). ((His turning to his VOCA indicates that he is ready to reply seconds before he starts pointing/formulating. He is quick)) <i>You can’t get away with just saying that.</i> ((He looks serious)) <i>You gotta explain that one a bit.</i></i>
03	Stan	<i>((smiling slightly)) “I need-to be-calmer-and-not-to-worry. I need to be calmer and not to worry.”</i>

Stan has begun physically producing his next turn before I have finished but because we have established a co-ordinated rhythm and rapport, we adjust accordingly (Hutchby & Wooffitt, 2006). The interaction did not actually require me to elaborate on the initial request in line 02. Stan’s orientation to his device substantiates this claim. My two expansions were of an informal nature and are consuming time whilst Stan finished formulating his reply. Overlap would have occurred if Stan had been replying as a natural speaker.

Excerpt 2 in Stan’s sitting room “Normal people”

In this same exchange, following excerpt 1 above, I begin by maintaining my turn, in line 01, by elaborating on his personality characteristics. Stan’s high level of motivation and communication drive triggers a signalling of his anticipation of taking the turn, by orienting away from me to his VOCA and accompanying this with intense ‘jiggling’. This demonstrates effort, or a type of emotional release or the excitement and anticipation of what he is going to say. Unfortunately jiggling also interferes with accurate finger pointing whilst he is cognitively and physically constructing his utterance.

Line	Speaker	Transcription
01	LP	[...] <i>you were always wanting to do things yourself, and to get stuck in, do it yourself</i> ((Stan smiles looking at me)) <i>you would always battle and fight</i> ((Stan says <i>mm</i> & looks to his VOCA & says <i>mmm</i> again)) <i>which is a good thing; it’s a really good characteristic</i> ((looking at his VOCA + jiggling))... <i>a good personality characteristic....</i>
02	Stan	<i>Yeah</i> (pause) “Did-you guess-which-when-I visited-Nanny-in a-the-holiday-would-I-more-a-fighter-after-holiday-because-I had-been-around-normal-people” . ((FT 2 mins 24 secs)). + jiggling + “Did you guess when I visited Nanny in a the holiday would I more a fighter after holiday + looks to me + because I had been around normal people” . ((Looks serious))

The intensity of his thoughts and motivation to ask a question in this sequence is visibly obvious and impossible to ignore, positioning him with conversational control. Stan takes over 2 minutes to construct a compound sentence with the use of the

phrase “normal people”. It is unusual to hear a person with severe physical and communication disabilities, use the label ‘normal’. Indeed Stan talks about his disability in physical terms only (like Ian), that is, of “his legs not working” (text data, received March 2013). Of interest is that he may be adding to the construction of his identity as a fighter by the social company he keeps, that is being around able-bodied people.

Excerpt 3 in Jacob’s sitting room “Getting on with people”

In this next excerpt Jacob confidently and assertively, like Stan in the “normal people” excerpt, had begun formulating his response before I had finished my long and elaborate question (Puchta & Potter, 1999).

Line	Speaker	Transcription
01	LP	<i>...but is there one thing that you are pleased you learnt about, say at 19-20, is there one thing, I am really glad (.) of that friendship I did such and such, apart from that belief that you have, your faith, is there something else you can think.. I am really glad (.) about learning that?</i>
02	Jacob	FRonVOCA ((had started before I had finished)) <i>vocalises</i> ↑↑... <i>short sounds...long</i> ↓↓ <i>vocalises...</i> “ get on with people ” ((FT 1 min))

The co-ordination or synchronicity between us ensured that I had tailed off my contribution as he began his utterance using predictive spelling. He demonstrated his motivation to communicate and his opinions by this quick response at line 02.

Excerpt 4 in Ellen’s bedroom “Ellen’s communication”

In interview 2, Ellen, her carer and I shared a conversation, despite the absence of her VOCA (being repaired), about loss, particularly the death of her grandmother. The short excerpt below focuses on her attempt to obtain bereavement counselling. To her repertoire she adds body movements and vocalisations with increased volume that position her with opinions and emotions of anger and disapproval.

Line	Speaker	Transcription
01	Carer	<i>Cos Ellen tried to get someone from Cruse... ((LP says ah yes))....((Ellen vocalises)) but they didn't have anybody ((Ellen vocalises)) they didn't feel that they had someone who could work with Ellen's communication? And ..</i>
02	LP	<i>Didn't they? ((directs Q to Ellen))</i>
03	Ellen	<i>(smiles) 'yes'</i>
04	carer	<i>We tried for a long time to get someone.</i>
05	LP	<i>Really? (.) What did you think of that? ((directs Q to Ellen))</i>
06	Ellen	<i>yuh ↑ + body tension + movt + looks to carer</i>
07	LP	<i>A bit cross about that? ((directs Q to Ellen))</i>
08	Ellen	<i>shouts + (upR) 'yes'</i>
Total interaction time – 23 seconds		

In line 01 she is clearly listening during her carer's turn, evidenced by vocalisations whilst her carer speaks. In lines 02, 05, and 07 I ask four questions, three of which offer up the turn to Ellen. She instantly acknowledges and answers these questions (lines 03, 06, 08), with intense emotional responses using volume and bodily movements during her turns. A faster pace of interactional exchange was shared in this excerpt. The emotive nature of the topic and therefore the immediacy of responses generated a faster turn taking episode in this interactional exchange.

Excerpt 5 in Ellen's bedroom "No"

During my second interview with Ellen, one of her carers temporarily joined us. The discourse concerned friendships and Ellen demonstrated one of her strategies for holding onto her turn by using her nonverbal skills and avoiding eye gaze until she was ready to proceed

Line	Speaker	Transcription
01	Carer	<i>Do you have a word in your communication book for what she thinks you are like?</i>
02	Ellen	Stills + seems to stop to think + (Long pause) + Holds her eyes still + up.
03	Ellen	(pause) (flicks eyes to left) 'no'
04	Carer	<i>Have you?</i>
05	Ellen	(UpL) 'no'

Seeking verification of a non-verbal response is not an unusual behaviour for a conversation partner (Bloch & Wilkinson, 2009). At line 04 her carer acknowledges Ellen's response by indirectly asking Ellen to verify by repeating her answer. This also validates Ellen's role as a speaker/participant.

5.6 Maintaining the topic

The nature and organisation of protracted sequences of talk is variable and problematic (Sidnell, 2010). The practices interactants employ to 'preserve or respect the topic' are explored. While it is apparent that the temporal organisation will be challenged in aided conversations, it is unknown as to how topics are formulated and also what socially constructed actions may be constructed, for example, disagreements or incongruences (Maynard, 1980). An analysis of excerpts illustrating the preservation of topics follows.

5.6.1 Sustaining a topic

The following two excerpts are longer in time (around 10 minutes) than others in this thesis. They both demonstrate how many exchanges are needed for an aided communicator to convey a view despite being as physically, cognitively, linguistically and pragmatically skilled as both Ian and Stan.

Excerpt 1 in the day centre Ian attends "I think it is rubbish"

In a 20 minute discussion about politics, Ian and I talk about voting ages. In this 9 minute excerpt, Ian positions himself as the assertive and curious speaker (line 06) and also listener. This assertive discourse presents him giving a view, (line 08) and

offering an evaluative comment (line 12) with a possible political action or consequence (line 14). By using 'I statements' in lines 08 and 14 he demonstrates unique and personal ownership (Harre & van Langenhove 1991) or a mental state. He is unequivocal about this and does not use any hedging devices like 'I think maybe' or 'I might possibly'.

Line	Speaker	Transcription
01	LP	[...] <i>I wondered if you ever follow the news to find out what the party's policies are...</i> [...]
02	Ian	shakes head "No thank you" ((FT 38 secs)) + still looking at VOCA
03	LP	Laughs <i>Is that too much too much</i> ((Ilan smiles)) <i>political information?</i>
04	Ian	smiles + nods + still looking at VOCA
05	LP	<i>I would agree with you there. Ian clears screen and turns to me [...]</i> <i>D'you know, in Australia it's compulsory to vote</i> ((if you are over 18))
06	Ian	"Why?" ((FT 16 secs)) + still looking at VOCA
07	LP	<i>Because em, I think it's because they want everybody</i> (Ian begins FR) <i>to have an opinion about the government because it's a democracy</i> [...]
08	Ian	"I think it is rubbish" . ((FT 36 secs)) + still looking at VOCA
09	LP	((Begins when Ian turns to me)) <i>You like the system that we've got,</i>
10	Ian	nods + looks at me ((atypical gaze shift – trouble?))
11	LP	[...] <i>Do you know in Scotland, they're going to lower the voting age I think it may be, sixteen.</i> (.)
12	Ian	"I think it is rubbish because them at school" . ((FT 1 min 37)) + still looking at VOCA
13	LP→	<i>Mm. I'd agree with you there. [...]</i> <i>But, it'll be interesting to see what happens in Scotland.</i> (Ian smiles and vocalises Q) <i>Cos I think</i> (LP touches Ian arm) <i>that David Cameron was also thinking about lowering the voting age.</i> ((Ian turns to VOCA))
14	Ian	"If he do it I will off him" . ((FT 1 min 11)) ((slowly turns to me))
15	LP	<i>You'll what him? Leans forwards I didn't catch it. Reads and sits down. Oh you'll off him? You'll go off him?</i>
		Total interaction time – 9 minutes 22 sec

In this excerpt I open with a reflective and gentle question “I wondered...”, that elicits a response that is polite but clear and strong. I also use the opener ‘Do you know...’ that invites him to comment (line 05 and 11), which positioning he successfully accepts. After this I noted Ian’s frequent smiling responses culminating in an instance of social closeness (line 13) where he smiles and I touch his arm. This reciprocated closeness is unusual for our conversations but perhaps it is associated with this sequence of agreement around a preferred topic.

We sustained the topic for 10 minutes by utilizing a variety of strategies. We both asked questions of each other to elicit clarification and information. Views and opinions were thus shared and equally contributed. Through this organisation we created reciprocity and we continue for a further 5 minutes.

Excerpt 2 in Stan’s sitting room “The unfriendliness in sport”

Stan is an ardent and knowledgeable sports devotee. He reflects this passion in the following 8 minute excerpt from a much longer (15 minute) discourse about the importance of sport in his life. He opens this section by asserting his opinion that sport should be ‘unfriendly’ in order to be truly competitive and is focussing on football on this occasion. He holds this view from his position as a spectator who cannot directly compete in able-bodied sport.

Line	Speaker	Transcription
01	LP	<i>uh (.) Is there anything else about sport that you (.) that is (.) important to you? [...] is there anything else?</i>
02	Stan	((thinking pause)) FRonVOCA. “The friendly unfriendly unfriendliness in sport” ((FT 21 secs))
03	LP	<i>mmmm</i>
04	Stan	“I hate” (pause)
05	LP	<i>mmmm</i>
06	Stan	“the word strange sorry. The unfriendliness in sport I hate the word sorry”.
07	LP	<i>mm (4 secs) Sorry? (.) What do you mean... you hate the word sorry?</i>
08	Stan	“In” (pause)
09	LP	<i>In?</i>
10	Stan	“sport”
11	LP	<i>(4 secs) What sort of...when might you hear this said? (3 secs) I’m not quite with you. I’m not quite sure what you mean.</i>
12	Stan	“I think if you are against”
13	LP	<i>mmmm</i>
14	Stan	“somebody-I shouldn’t- (.) you shouldn’t-be-very-friendly-to-them. I think if you are against somebody you shouldn’t be very friendly to them.”
15	LP	<i>So what... if you are supporting opposite teams? (.) opposite sides?</i>
16	Stan	“playing”
17	LP	<i>mmmm...oh the players.</i>
18	Stan	<i>Yeah</i>
19	LP	<i>[...]. Is this about sportsmanship?</i>
20	Stan	<i>Yeah. “They should be unfriendly. ((speaks display))”I think if you are against somebody you shouldn’t be very friendly to them playing they should be unfriendly.”</i>
21	LP	<i>[...] ...true competition So you are not a supporter of the gentlemanly side of sport.</i>
22	Stan	<i>No</i>
23	LP	<i>[...]Laughs Oh. (pause)That’s a very strong opinion to have.</i>
24	Stan	<i>yuh yuh. (6 sec) “I think the FA is going too friendly. I think the FA is</i>

going too friendly.”

- 25 LP *mm*
- 26 Stan (5 sec) **“What happens now in our league before every game” “they must shake the team hand** ((speaks display)) **What happens now in our league before every game they must shake the team hand.”**
- 27 LP *mmm, you don’t agree with that? You are poking your tongue out.*
- 28 Stan *No*

Total interaction time – 8 minutes 9 seconds

In referring to his moral position he unequivocally states his personal opinion which sustains this discourse. The main strategy he uses to do this, is to develop the argument from multiple perspectives, from firstly his own view (‘I hate..’), to the roles of others (‘you shouldn’t...’), at a national and organisational level (‘the FA’) and at a local operational level (‘our league’). He acts as an agent owning the emotive statement (line 06). Importantly, for a reasoned argument to unfold, he offers his rationale for this decisive opinion (line 20). He constructs himself as an informed holder of information by finally drawing on an authentic example from real life (line 26) describing this in a linguistically well-formed utterance.

Notably in this excerpt is the measured organisation of our interaction, with me as the listener and recipient of his opinion. This is not a sequence in which a debate is executed. It is simply his turn to answer my opening question. I ask questions to request more information to clarify meaning (lines 07 and 11) and his argument (line 15 and 19), offer continuers, and statements (line 21 and 23). He uses almost entirely linguistically sophisticated utterances with few instances of nonverbal behaviours. Pauses occur that reflect Stan’s need for thinking time and mine for comprehending his utterances.

Stan clearly and competently positions himself as the informed speaker. My position is as the recipient. However, in the section that follows this, our positions change as I need to clarify the scope of his assertion resulting in asking him many closed and provocative questions.

5.6.2 Continuity

Excerpt 1 in Brad's sitting room. "Judgements"

In this next excerpt from a conversation with Brad, I notice his use of paralinguistic communications as continuers. In line 02, I not only suggest asking another question (shifting the topic away from one about how happiness is engendered from hearing his parents' voices over the phone) but suggest a topic that draws on a previous discussion where he is talking about how he has learnt to read peoples' voices and non-verbal behaviours to inform his judgements. My long and extensively framed question (Puchta & Potter, 1999) (line 04) presented a transcription challenge. I have added in his comments and reactions to my turn, as they happen and not on their own lines. In this way it conveys that I still have ownership of the turn but that Brad was providing what I assumed was supportive and positive feedback about comprehension, as in "uhhu, keep going." A number of other participants signal listenership (Coupland, 2003) particularly Stan, Wilf and Ellen, creating a positive impression.

Line	Speaker	Transcription
01	Brad	<i>Groans... "yes".....eyeballs me ((is he saying yes to the previous discussion or ask me another question?)) + smiles</i>
02	LP	<i>Shall we ... ((gestures)) shall I ask you another question?</i>
03	Brad	<i>((Quick response)) + (vocalises) 'yes' + hangs head.</i>
04	LP	<i>Yeah...ok...I would be really interested to know..... (Br says ah) when you....when you are meeting someone new (Br says ah) how do you judge (Br says ah) whether to give them time? (BR says ah - he isn't looking at me) (pauses) Do you judge then according to their faces? Or their voices? Or something else. (Br groans) (pause) How do you decide (Br says ah ↑) whether to give them some (Br says ah ↑) time or whether you want to get to know them a bit better. (Long pause) (Br groan + sighs + looks at me) Hangs head ...and I know it's a silly question (Br says ah ↓ in HH position) cos it depends ...on where you are (Br says ah & lifts head) and what's going on (Br vocalises ↑ + animatedly) but generally (Br vocalises) given that (HH) you are a Master of.....(Br vocalises) in looking at peoples (Br vocalises) faces (Br begins FR) and voices.... (Br says ah ↑) What dya reckon (.) is the most important thing to use, to judge somebody on?</i>
05	Brad	<i>Groans...huh.... "face" + looks to me ((FT 47 secs)) + smiles</i>

My elaborate question composed of multiple parts in line 04 serves to help me feel more comfortable by providing him with an array of guidance and alternatives to suit his understanding and engagement. There are at least four pauses offering him the opportunity to take the turn. My pauses are either not long enough or he is rejecting the turn as he is not yet ready with his thoughts or the desire to be involved. Instances of 'head hanging' where he is possibly taking a rest, suggest this. His vocalisations with varying volume levels, type and explicitness are interpreted in that moment as positive affirmation of my conversational behaviour or agreement about the conversational content. This behaviour also signals his acceptance of my maintenance and continuation of the turn. He seems to enjoy vocalising throughout my turn to show interest, engagement and comment, demonstrating intersubjective understanding (Gillespie & Cornish, 2009).

Line 01 includes Brad "eyeballing" me which is a behaviour often used by some participants. It is indicative of participation and invites a continuation or change of topic, for example, "your turn" or "you do something now" or "you guess what I am thinking because I can't say it" or "continue". A successful response by the recipient confirms mutual understanding.

Excerpt 2 in Brad's sitting room "That's what bosses do"

Interestingly in the following 25 second exchange with myself and his carer, Brad completely controls and continues the interaction through the successful use of his repertoire of unaided communication signals. He chooses not to use his VOCA in contrast to Ian and Stan, (excerpts 1 & 2).

Line	Speaker	Transcription
01	LP	<i>Have you got plans for the rest of the afternoon?</i>
02	Brad	Hangs head (pauses for 5 secs)
03	Carer→	<i>Can you remember?</i>
04	Brad→	Smiles + turns to her+ <i>vocalises</i> ((as if to say of course you idiot)) ((LP laughs))
05	Carer	<i>Sorry I shouldn't have...+ smiles</i>
06	Brad	Eyeballs her intently + <i>shouts</i> at her
07	Carer	<i>Sorry</i> ↑
08	Brad	<i>Shouts</i> ↑ + smile
09	LP	<i>Can I interrupt here to say...</i>
10	Brad	Turns to me
11	LP	<i>...and I know it's none of my business, but</i> (turns to carer) <i>I love the way he puts you in your spot</i>
12	Brad	smiles
13	Carer	<i>Oh yeah he always....</i> ((tails off))
14	LP	<i>I mean cos that's what bosses do.</i>
15	Brad	<i>Shouts</i> ((conversational banter continues))
Total interaction time – 25 seconds		

His carer genuinely did not know what his plans were for the afternoon hence her question in line 03. He seems to interpret this as a test-question and in displaying his offence asserts himself strongly over her as 'the boss', admonishing her. Even though there is a provocative apology routine by the carer, there is also a degree of sustained banter that emphasizes his position of control and dominance. This rapidly executed interaction needed 'quick fire' utterances that would not have been possible with his VOCA.

This section from line 02 to line 15 continues for another 15 lines and serves to break the continuity of the original topic of the afternoon's activity, which is returned to at this point by a repetition of my question at line 01. These additional exchanges take a brief 20 seconds so the original topic was comfortably resumed. If Brad had used his VOCA to contribute linguistic content however, continuity of the original topic may

have been severely disrupted. The original question might have been forgotten or the topic may indeed have lost its interest value.

Excerpt 3 at the day centre Wilf attends “Peering girl”

In contrast to excerpt 2 where the continuity was interrupted and largely controlled by the participant, here the interruption originates from an external source. Wilf and I were discussing decision-making in interview 2 and how much control he felt he owned over this process. We were interrupted by a girl peering through the glass window into the room as though she was going to enter. As he was facing her, he stared at her and began shouting. We shared an animated exchange initiated and led by him. It could be that he was telling her to go away, as she was interrupting an important conversation and also protecting his privacy and our time together.

Line	Speaker	Transcription
01	LP	<i>Is it important to you that you make decisions?</i>
02	Wilf	FRonVOCA...sighs.... “yes”
03	LP	<i>Mmmm....what?</i>
		Knock on the door & girl peers through the glass. Wilf shouts throughout this encounter.
04	LP	<i>Oh that’s a little girl...mmm....she is not disturbing us.</i>
05	Wilf	<i>Shouts + vocalises....((VOCA beeping))</i>
06	LP	<i>Laughs + yes we are working....((girl goes away))</i>
07	Wilf	<i>Shouting + VOCA beeping “Sorry”</i>
08	LP	<i>That’s okay.... it isn’t but I say that because that’s polite</i>
09	Wilf	Looks at me
10	LP	<i>So with decisions Wilf, some people say they are happy to go with the flow be flexible they don’t really mind that...</i>
11	Wilf	FRonVOCA... “I’m sorry”

I speak unilaterally when I say that the girl is not bothering us (line 04) because of course she is; she is bothering Wilf, thus disturbing the continuity of the topic. His response was to shout. The meaning behind his final apology (line 11) is unclear. Wilf presents as a polite man, so he may have been apologising for either his

outburst or for girl's behaviour. Regardless of this, he presented as an assertive participant who capably managed the interaction, achieving a satisfactory outcome.

5.7 Shifting the topic

Excerpt 1 at Stan's home "Just think..."

The "Just think" discourse that follows evidences Stan's position as a confident and effective communicator. Although I had been leading a discussion about his participation in the research, he possibly had another topic on his mind as evidenced in line 10.

Line	Speaker	Transcription
01	LP	[...] <i>You like being challenged with your thinking?</i>
02	Stan	<i>Yuh</i>
03	LP	<i>Am I putting words into your mouth?</i>
04	Stan	Shakes head
05	LP	<i>No - so you are quite happy being part of a research project like this?</i>
06	Stan	<i>Yeah</i>
07	LP	<i>Yeah. That's a relief then</i>
08	Stan	<i>Yuh</i>
09	LP→	<i>mmm...</i> (long silence 10 secs)
10	Stan→	<i>"Just-think-21-year-a-go-next-Saturday-we-were-off-church-house"</i> ((returns to a previous topic)) ((FT 1 min 18 sec.))
11	LP	<i>Blimey!</i>
12	Stan	<i>Ah huh</i>

The long pause attached to line 09 could be indicative of either his reluctance to continue engaging with my topic or that he has been thinking about another topic. How long he has been thinking is unclear. His use of the reflective phrase "Just think..." invites me to share a memory with him about a specific trip. He has shifted the topic positioning himself as a confident participator. He is effective in this topic

shift because I follow his instruction to think. Nevertheless, preceding this shift, Stan has engaged appropriately and politely to my original question.

Excerpt 2 at the day centre Wilf attends “That’s very kind”

In this topic Wilf has just worked physically hard to invite me to his bungalow for the next interview to take place. This was an invitation that he initiated. The exchange had taken about 8 minutes and the finished version of his thoughts was: “Friday Friday come yes no” which precipitated a series of clarification questions to establish that he wanted me to go to his bungalow. The excerpt below occurs, 23 minutes after extending the invitation. He has brought the topic to a close, which positions him with power and control. It also affords him a sense of personal accomplishment and successful communication. After his closing, I successfully moved the conversation on by shifting topic.

Line	Speaker	Transcription
01	Carer	<i>Would you like me to phone Mum about Friday for you?</i>
02	Wilf	immed smiles + <i>huh...</i> ((looks relieved)) FRonVOCA... “thank you” ((FT 3 secs))
03	LP	<i>Ah right...that’s very kind....um...</i>
04	Carer	Chuckles
05	Wilf	looks around + smiles + V= <i>ooohhh</i> + FRonVOCA... “yes” ((FT 10 secs)) ((Wilf comes across as very genuinely polite and serious))
06	LP	<i>So what else happens in the week of Wilf, if you are four days a week here?”</i>

Shifting the topic is not possible to effect (line 03) until Wilf has politely and effectively closed his sequence. Notably, although his carer is only fulfilling her duty (line 01), by acting as the messenger, he still behaves politely not taking her actions for granted. The effect this conveys to me is that he treats his carers with respect and that in turn indicates that he is a good staff manager. Additionally this suggests positive impression management. His response (line 05) to my comment (line 03) that her actions are very kind is greeted with a serious affirmation. Wilf needs to effect the closing sequence in this manner before allowing me to take my turn to shift the topic.

Interestingly both of Wilf's VOCA-mediated responses are quick (3 and 10 seconds); in this situation adding to my impression that this was a serious conversation.

5.8 Managing others to speak on their behalf

There are occasions when participants require and permit others to speak on their behalf. The occurrence of recipient design (Sidnell, 2010) demonstrates both sensitivity to the participants and a positive strategic behaviour to prevent breakdown. The presence of this phenomenon is interesting, unique and evident in some of the interviews. Brad manages his carers by 'summoning and dismissing' them. Stan will use approximated spoken key words and volume, if his family member interprets incorrectly or deviates. Ellen looks at her Mother and uses facial expressions. Jacob's carers are summoned to elaborate then quietly leave when their role is complete. Both Polly and Harry invite or summon their carers to elaborate by vocalising or looking. Ian says, "Ask my carer" or he goes to get someone to assist.

Excerpt 1 in Polly's sitting room "I will look"

One of the participants, Polly, pre-empted her need for an elaborator because she knew of her conversational limitations and neither knew me nor the format of the interviews. She emailed me to say she was nervous about these interviews and wanted to prepare:

Hi Linsey
 I am getting nevous about metting you & talking about my life. I am just wondering if on Tues you could ask me questions rather me making a rubbish job of it! If you are able to send me a list of questions so I can think about the answers that would be really helpful.
 Polly

Figure 5: Exact copy of email from Polly

For each interview she had either her Mother or carer join us. Her Mother sat within our circle, whereas her carer sat away from us, reading a newspaper until she was required for translating or elaborating. In the excerpt, Polly initiates and demonstrates how she invites her carer to support her conversation turn.

Line	Speaker	Transcription
01	LP	<i>... um...there were three things that have come up in other interviews and I thought I would ask you as well...they were about communication. One man was telling me that... he often has other people talking for him... and he...was saying that he thought they were very rude.. in doing that...</i>
02	Polly→	uh... “What-like. What like?”
03	LP	<i>hum just sort of generally..um.. he didn't give an actual example.. to be fair...um.... he didn't give an example... people will ask him questions that he can't answer yes or no he wants to do..he wants to go swimming. ((Stops but with an expectancy about it))</i>
04	Polly	“I will-look. I will look.” ((demonstrates turning to her carer))
05	LP	<i>mm yuh I noticed you doing that when your Mum...to speak on your behalf when you wanted her to speak on.</i>
06	Carer	<i>Um..yeah...sometimes you know when to....she has the choice. It's having that bond isn't it.</i>

Polly's questioning response (line 02) surprises me as evidenced by my hesitancy and inability to provide an immediate example. She has interrupted me and in taking the turn positions herself as an active and listening partner. She takes the initiative (line 04) and demonstrates how she 'invites in' her carer. My response (line 05) serves to let her know that I had already noticed this behaviour.

In line 06 her carer expands on her role as invited elaborator and offers some insight.

Excerpt 2 in Ellen’s bedroom “Can I...”

In interview 2, through the sensitive and respectful role her carer assumes, Ellen remains in control of what is said about her and to whom. In talking about death and bereavement, Ellen accepts her carer’s offer to elaborate (line 02).

Line	Speaker	Transcription
01	Carer	<i>Yeah - Can I tell her a little bit Ellen?</i>
02	Ellen	(upR) ‘yes’
03	LP	<i>Is that OK? ((directing Q to Ellen))</i>
04	Ellen	(upR) ‘yes’
05	Carer	<i>Ellen’s grandmother died just before last Xmas (.)</i>

The carer’s use of the phrase “can I tell...” clearly states that she holds information about Ellen and that she recognises that it could be time to share it. Ellen has not initiated a request for assistance, however on this occasion, she did not have her VOCA to contribute.

Excerpt 3 in Martin’s bedroom “Do you want me...”

Martin used the VOCA-mediated responses ‘not sure’, ‘yes’ and ‘no’ in all three interviews. When he contributed these quickly, the speed gave the impression of confidence, without equivocation (McCarthy & Light, 2005). In this excerpt, however, his positive response serves to reject an offer of help and assert his independence, only to then change his mind.

Line	Speaker	Transcription
01	LP	<i>So college?</i>
02	Carer	<i>Do you want to tell Lynsey?</i>
03	Martin→	Silent + still ((no response))
04	Carer	<i>...or do you want me to tell Lynsey?</i>
05	Martin→	Silent + still ((no response))
06	Carer	<i>Do you want to tell Lynsey?</i>
07	Martin→	“yes”
08	LP	<i>Excellent. Go on then. I love hearing about people who want to go to college.</i>
09	Martin→	“no”
10	LP	<i>oh</i>
11	Carer→	<i>Shall I tell Lynsey?</i>
12	Martin→	“yes”

Martin’s use of silence and neutral facial presentation (lines 03 and 05) then a switch to VOCA-mediated responses (lines 07, 09 and 12) provokes some confusion in the recipients (carer and myself) despite our use of intended clarifying questions. What is clear here is that Martin has information to give and that he has motivated listeners, verbally expressed (line 08). Martin expresses that he wishes to tell me about college (line 07) but then issues a negative (line 09). Instead of undertaking any clarification to this response, his carer chooses to move the conversation along by offering again to tell me (line 11). The carer’s offer to provide help is phrased in a respectful manner. It may be that Martin is saying that he does want to tell me but that he does not have the necessary vocabulary. This was not said verbally or acknowledged as a possibility by the recipients. Following this we jointly succeeded in talking about college.

5.9 Interaction breakdown and repair

Hutchby & Wooffitt (2006) describe some of the many problems that can occur in conversations, for example, misunderstandings. In this section, five excerpts are presented to illustrate how attempts were made to (a) repair an interaction that has

broken down, initiated by the listener (me) and also by the speaker (participant); (b) self-initiated self-repair; (c) other-initiated self-repair and, (d) abandonment by speaker, and also by listener.

Excerpt 1 in Stan's sitting room "An adult view"

In this excerpt Stan initiates the interaction by inviting me to ask him a question, however, he uses the incorrect pronoun (yourself), resulting in a breakdown in communication, potentially losing his leading position. I attempt to repair this situation.

Line	Speaker	Transcription
01	Stan	"What question would you like to ask <u>yourself</u>?"
02	LP	<i>Give me a minute... what question would you like to ask yourself. I don't really understand. About yourself?</i>
03	Stan	<i>Yuh..(15 secs) "to get-a-adult-point-of-view. To get a adult point of view".(FT 26 secs)</i>
04	LP	<i>So do you mean if I think back, (Stan says yuh ↓) to how you were as a child and ask you something about that now (.) to get your adult point of view?</i>
05	Stan	<i>shakes head</i>
06	LP	<i>no so ok. (.) but it's not that then... but it's something about my view of you as a child</i>
07	Stan	<i>Yuh</i>
08	LP	<i>okay so um (.) ah like um your sense of humour for example?</i>
09	Stan	<i>Yuh. "I-just-thought-to help."</i>

In line 02 I adopt four conversational positions. Firstly, I indicate my lack of understanding by asking for extra processing time (a subordinate request – 'give me'). I then adopt a helping position through repetition, providing auditory feedback in the hope that he will self-correct his error. A statement of fact ensues with me expressing my lack of understanding. Finally I try to ameliorate the breakdown by presenting a shortened translation of his utterance as a question. Stan immediately confirms my repair by saying 'yes' then pauses (line 03) to try to regain control. I offer

three attempts at repair (lines 02, 04 and 06), one of which was unsuccessful (line 04 to 05). What is notable is that despite Stan making two linguistic errors, with a pronoun and the determiner 'a' (line 03), and my repetition of his utterances indicating my position of understanding (06 and 08) he finally re-asserts his conversational leadership by constructing the sentence, "I just thought to help" which places me back in the subordinate position.

Excerpt 2 in Polly's sitting room "Like the rest"

In the following excerpt, Polly pre-empts conversation breakdown by independently exercising her self-monitoring and self-correction skills. This demonstrates the positive use of the auditory feedback on the VOCA when constructing utterances. In line 02 she hears that she has omitted the preposition 'like' and repairs by deleting, adding, then completing the utterance.

Line	Speaker	Transcription
01	LP	[...] <i>So will you be able to change and do something different?</i>
02	Polly	<i>Muh muh muhhh... “The-teacher-is-not-the-R-E-S-T- REST. The teacher is not the rest. + shakes head + ((click+click+click+click)) ((deleting)) the teacher is not...((inserts)) like- the-R-U((deletes)) E-S-T. The teacher is not like the rest... (looks up)</i>
03	LP	<i>How do you mean? (pauses) I remember you saying before...</i>
04	Polly	<i>...rest...</i>
05	LP	<i>how you choose your subjects according to how good the teacher is.</i>
06	Polly	<i>...of-the- teacher-teachers. The teacher is not like the rest of the teachers.”</i>
07	LP	<i>What so interesting? (pause) or good fun?</i>
08	Polly	nods

Polly’s head shake (line 02) is useful in providing me feedback about her internal thoughts. It serves to hold her turn. Additionally it is interesting that in line 06, Polly supplies more information thus ensuring that her utterance has been completely repaired and understood. Line 07 provides her with evidence of successful repair.

Excerpt 3 in Jacob’s sitting room “The summer”

In contrast, Jacob uses my dual role as ‘sub-speaker’ and recipient to monitor communication breakdown. The following excerpt was about the anticipated summer holiday and interviewing arrangements. Jacob was interested in helping me more with the research and was keen to spend the summer thinking about my research questions in more depth.

Jacob positions himself as the leading speaker asking for information and then informing me as to why he wanted to know. As I had to read out his utterances from the screen it became quite difficult to act as both the sub-speaker and recipient. This was a similar role adopted with Harry when he uses his communication board (see excerpt 4 that follows).

Line	Speaker	Transcription
01	LP	((reading screen aloud))... “Are you going to ...on after summer?” ...
02	Jacob	<i>huh</i>
03	LP	<i>Am I going to continue coming...</i>
04	Jacob	<i>huh</i>
05	LP	<i>...after the summer?...</i>
06	Jacob	<i>huh</i>
07	LP	<i>.. to be honest I.... the short answer to the question is I don't know.</i>
08	Jacob	<i>...uh uh.. FRonVOCA “on”</i>
09	LP	((reads screen))... <i>I'm not sure I understand...</i> ((reads screen aloud...to provide verbal feedback)) “then because I want in a lot more” (pause)
10	Jacob→	<i>Huh...</i> ((immediately begins reforming)) “because I look into it a lot more (pauses) thinking”
11	LP	No response
12	Jacob→	<i>...FRonVOCA.....</i>
11	LP	((Reads screen aloud)) “because you want...because I want to look into it a lot more” (pauses)
12	Jacob	repeatson VOCA “because I want to look into it a lot more” (after the summer) ((on screen only))
13	LP	<i>Oh ok so why after the summer...would you want to look into it a lot more?</i>

An example of breakdown in Jacob's excerpt occurs from lines 08 to 11. My verbal feedback facilitates Jacob's repair of his messages. Lines 09 and 11 mark my lack of understanding as stated and then indicated by my pause (line 09) and a lack of response (line 11). To repair he adds the omitted verb 'look' to his compound sentence. The final repair is repeated and therefore confirmed at line 12.

Excerpt 4 in Harry's bedroom “Private word”

“Private Word” illustrates a breakdown in the interaction between Harry and his carer. He chooses to use his communication board which he accesses by pointing with his

finger and the natural speaker reads out his target. He also augments this with gesture and vocalisation.

Line	Speaker	Transcription
01	Harry	<i>Yuh</i> + points to <u>private</u> ((keeps looking at board))
02	LP	reads & says “ <i>private</i> ” ?
03	Harry	<i>muh yuh</i> + points to <u>word</u>
04	LP	<i>private word?</i> ((combines both words))
05	Harry	POINTS TO CARER + turns to carer
06	Carer	<i>with me?</i>
07	Harry	<i>No</i>
08	Carer→	<i>No. Not right now Harry. Maybe later. cos you are just telling us about Flora weren't you. (Harry nods) Yeah. We will have a private word after (Harry looks to board + says mmm) cos I want to hear this story about Flora (Harry smiles + says hrrr) cos I never met her it will be good to hear. (Harry starts FR on board)</i>
09	Harry	Points to <u>swim</u>

In line 04 I confirm his ‘spoken’ message. He then adds a gestural message (line 05) which represents ‘carer you go’. However this is misinterpreted by his carer as a request for a private word with her (line 06). Although he rejects by saying ‘no’ this is ignored despite her repetition of his negative response. His solution during line 08, is to gloss over the carer’s disregard of his request, and continue with the discourse about his friend Flora whose anniversary of her death is imminent. He asserts his role as speaker by exercising the pragmatic choice of ‘moving on’. In this situation he is talking to both the carer and myself; his carer has adopted a ‘very involved and chatty position’ and I am positioned as the subordinate visitor. Harry may have been responding to this dynamic in not pursuing his assertive request. He relinquishes situational control in preference to the unfolding discourse about this friend.

Interestingly Harry often combines modes of saying ‘yes’ (head nodding, full body movements, saying yeah) and ‘no’ is similarly constructed (head turning, saying no). He also uses volume to indicate strength of feeling. In line 07, he chooses not to execute his whole repertoire which would possibly have reinforced his attempt at

repair. Additionally he could have effected a quick linguistic repair by using his aided communication systems to clarify.

Excerpt 5 in Brad's sitting room "I have cerebral palsy"

In the following excerpt, "I have cerebral palsy", a breakdown in communication occurs when the time elapsed between my question asked and Brad's response (over 5 minutes) means that I have forgotten the question. Additionally, my surprise at the linguistic and emotive content of his novel utterance disconcerts me and complicates my position.

Line	Speaker	Transcription
01	LP	<i>Have you ever lost your temper?</i>
02	Brad	<i>Uh...SN...uh... "yes"</i>
03	LP	<i>mmmm</i>
04	Brad→	<i>FRonVOCA... "I have - uh..uh..uh.. (17s) cerebral palsy- (27s) - baby uh...groan.....(49s) - not (37s) - my (1 min) - two (43s) sister" ((FT 5 mins 16 sec)) ((eyeballing me intensely))</i>
05	LP	<i>(pause 26 sec) You are looking at me and I am picking up from you but I am not sure what (chuckles)</i>
06	Brad	<i>Huh...smileshuh....huh... "s" ((FT 6 mins 19 secs))</i>
07	LP	<i>(8 second pause) Shall I look?</i>
08	Brad	<i>(Looks right) 'yes'</i>
09	LP	<i>((stands up and goes around behind him to do so then sits down - pause 8 secs. He is looking at his VOCA FR so I don't interrupt.))</i>
10	Brad	<i>Looks at me + "Yes I have cerebral palsy baby not my two sisters" + Looks at me.</i>
11	LP→	<i>mmm so not...so you've got two sisters ...(Br hangs head) ...and you're saying that they don't...but you do... (pause)....we were originally talking about(begins FR) how you describe yourself...(pause) so...your personality (Br looks at me then hangs head) ... and how you describe yourself as happy and then we were having a little side track into how we would describe our weaknesses.</i>
12	Brad	<i>Hangs head + yuh ↓</i>
13	LP	<i>Laughs...so is that part of how you describe yourself then?</i>
14	Brad	<i>Hangs head + FR... "yes" ((FT 18 secs)) + Hangs head.</i>
15	LP	<i>ah ha ...ok..mmm.... yes, I remember you um...(5 secs) you were talking as well ummm....</i>
<i>Total interaction time – 8 minutes 56 seconds</i>		

An identified challenge with some participants concerns a conversation partner's activities whilst listening to a slowly unfolding complex sentence that takes a protracted period of time. I sit; I wait; I look at the speaker; I listen; I am present in that moment, acknowledging that he has decided to invest time and energy into creating an utterance that shares his deepest thoughts. He values me as a listener

therefore I value him as a speaker, and wait. “Counterintuitively, silence can be the most powerful form of ‘voice’” (p. 55, Lewis, 2011).

Despite Brad’s utterance at line 04, he has still unsuccessfully and directly answered my question at line 01. At this point our communication has broken down, due to the time elapsed and the emotive content of his response combining to disengage me from my original question. In line 05, after a long pause, I acknowledge his intense looking behaviour that follows his VOCA-mediated response. In an attempt to repair the breakdown, Brad chooses to ‘helpfully’ add the plural ‘s’ morphological marker to sister. This does not help, as evidenced by my hesitancy (line 07) and my decision to look at the screen on his device to assist with interpretation.

From line 11 to 15, Brad drops his head to his chest which serves a number of purposes for him and the interaction. He exerts considerable physical effort to produce a VOCA-mediated response. Physical tiredness results. It could also indicate an habitual response to managing breakdown by expressing disappointment or failure. This physical response breaks the transmission and availability for feedback

Brad does not augment his ‘head hanging’ with any additional unaided modes to indicate his disappointment or annoyance with my lack of understanding. In line 13, I decide to ‘move the conversation on’ and he acquiesces.

Line 15 illustrates my position of discomfort and of not knowing what to do, as evidenced by hesitancies and ‘hum and hars’. Grappling with the next move, we sit in silence for about two minutes, before I continue with my next question. He does not persist with his utterance at line 14 or the topic of causes of anger and temper.

5.10 Managing novel contributions

All participants created novel contributions across the interviews. These were recognised as any contributions that made an impact on the recipients evoking an atypical response. Contributions were either linguistic utterances (Todman & Rzepecka, 2003), creative vocabulary usage or interactional behaviours, for example, sequences of unaided signals. These are viewed as evidence in support of the naturally-occurring status of the conversations. By drawing on theoretical approaches to identity (Jenkins, 2014) an alternative perception of the participants' construction of their multifaceted identities would have been possible however this was beyond the scope of the research project.

Excerpt 1 in Ellen's bedroom "Time flies"

Ellen surprises her carer when she offers an unexpected response either in jest or seriousness (line 02). Her carer seemed not to expect her negative response and followed this with an apologetic reply using an intonation pattern that implies sarcasm (line 03) or a lack of sincerity indicating that he was disappointed by her response (line 02).

Line	Speaker	Transcription
01	Carer	<i>It doesn't seem that long. It's flown past for me. Has it for you?</i>
02	Ellen→	(UpL) 'no' ((no facial expression))
03	Carer	<i>No? Sorry to hear that.</i> ↑↓
04	All	Laugh
05	Ellen→	(UpR) 'yes' + V= ahhh + smiles

Shared laughter breaks out in line 04 and Ellen asserts control by offering a positive response, perhaps to moderate her original one, demonstrating her sensitivity. It seems here that Ellen is arguing with her carer with her eyes. She holds her ground but then capitulates to be more accommodating (line 05).

Excerpt 2 in Ellen's bedroom "Shopping"

In the extract below the male carer challenges (line 04) the accuracy of her response (line 02).

Line	Speaker	Transcription
01	LP	<i>What about things like shopping? Do you get to go shopping if you want?</i>
02	Ellen	(UpL) 'no'
03	LP	<i>No</i>
04	Carer→	<i>What do you mean no?</i>
05	LP	<i>Would you like to do more shopping than what you do?</i>
06	Ellen→	(UpR) 'yes' + V= <i>uhuh</i>
07	LP	<i>There you are</i>
08	Ellen	<i>V=ahhh. ((Carer is grumbling in the background)).</i>

The challenge is atypical. It is possible that he perceives Ellen's comment as a criticism of her routine. Ellen manages his confrontation in line 06, by combining several communication modes to indicate depth of feeling and this strengthens her position.

Excerpt 3 in Martin's care home sitting room "My ex-girlfriend"

Martin's unanticipated question originated from a comment that he had made about sharing a holiday with his family. Following my acknowledgement, he replied 'girlfriend' which triggered a question about her by me.

Line	Speaker	Transcription
01	LP	<i>Have you been together for a long time?</i>
02	Martin	"No"
03	LP	<i>No. Okay...(Martin FR)....mmm</i>
04	Martin	"How...do...I...get..."
05	LP	<i>I am listening (pause)</i>
06	Martin	"my...x (letter) ...girl..friend...come...back...to...me? No. Yes. How do I get my ex girlfriend come back to me?"
07	LP	<i>Oh.....that's a hard question isn't it. Crickey. ↑↓</i>

This excerpt challenged my previously formed assumptions about him. It places Martin in a very different position to the one he had occupied with me up until then. He was highly motivated to ask me this question as evidenced by his concentration and syntactically correct utterance. He accessed the spelling and word prediction capabilities of his device to construct this novel compound utterance. In acknowledging the difficulty of his situation, the informality and emotionally charged response indicates my surprise (line 07).

Excerpt 4 in Stan’s sitting room “Learning to talk”

Aided communicators sometimes have to work exceptionally hard to achieve the desired effect of their participation. This next excerpt illustrates how hard Stan worked to suppress his laughter in order to express an important utterance (line 02). Normally, he laughs frequently and sometimes with a full, open mouth, vocalising and physically shaking. Here however, he refrains.

Line	Speaker	Transcription
01	LP	[...] <i>Is there anything else...that you are glad you learnt about or did?</i> ((Stan thinking hard))
02	Stan	Mmm (targeting 14 secs) + laughs with closed mouth + “Learning-how-to speak” . Laughs + looks at me before he has finished speaking + smiles + laughs. ((Does not repeat)). ((FT 20 secs))
03	LP	Laughs. <i>Pretty useful?</i>
04	Stan	<i>Yeah</i> ((but seems to be thinking about something else))

This response (line 02) was important to him to share with me and I found the content provocative. What is unusual is his insertion of humour, juxtaposing the serious nature of the statement with the possible irony of the position. By transcribing the presence of the variants of laughter, or the emotionally embodied delivery (Stokoe, Hepburn & Antaki, 2012) the significance of the statement to him is clearly conveyed. The consequences of learning to speak (using a VOCA) have had a profound impact on his life and identity.

Excerpt 5 in Polly's sitting room "Unsafe."

With most participants we talked about educational inclusion and whether they had the experience of, or would have liked to have experienced inclusion in a mainstream primary or high school.

Line	Speaker	Transcription
01	LP	<i>Mmm. Can I ask you....my last question on the list is ...what your thoughts are about school ...I couldn't remember you saying anything about going to your local ever going to your local school</i>
02	Polly	<i>No</i>
03	Carer→	<i>When Polly went to primary school a lot of children did... they did a one day placement in....</i>
04	Polly	<i>Moans....</i>
05	Carer	<i>In fact.... I know Lynsey's interviewing you but I have strong views about trying to integrate disabled children don't always think it's a good thing to be quite honest...[...]</i>
06	Polly→	<i>FR before end of carer's story.... "I-always-felt-u-n-s-a-f-unsafe. I always felt unsafe". ((FT 56 sec))</i>
07	LP	<i>Unsafe?</i>
08	Carer→	<i>Did you? In what way Polly? In what way? More secure?</i>
09	LP	<i>Emotionally unsafe (pause) Would you have felt physically vulnerable?</i>
10	Polly	<i>Nods</i>

Polly's carer offers information at line 03, elaborating on Polly's negative response. She follows this with a deferential-type of indirect apology before stating her 'strong' personal view (line 05). Polly was very serious in this excerpt and plainly states her position of feeling "unsafe" (line 06). This attracts a surprised response from her carer who then asks four questions in rapid succession (line 08). Her carer was reacting to the novelty of Polly's information, from her previously held position as a proxy, demonstrating a limitation (Ison, 2009). My suggestions hoping to clarify her expression, only seemed to close the conversation down (line 09).

Excerpt 6 in Brad's sitting room "I wondered how..."

Brad created a novel utterance in this excerpt that the carer was not anticipating.

Line	Speaker	Transcription
01	Brad	FRonVOCA " <i>I live in XXX in XXX with my family</i> ". Looks up + eye contact with LP
02	LP	<i>So how did you get to live here in XXX?</i>
03	Brad	FRonVOCA " <i>People - have - time - to.</i> Looked to carer. <i>People have time to.</i> "
04	Carer→	<i>I wondered how you were going to answer that question. That's very good. Shall I fill in and you tell me if this is right? That in XXX people don't have time to stop and chat. You don't even know who lives next door to you and in XXX it's too busy and no-one has time to get to know you. He can go in XXX and everybody knows him. Lots of people will talk to him. Am I right in saying this?</i>
05	Brad	<i>Huh</i>

In line 03, Brad describes how people in the village respond to him by giving him time. The carer instantly responds by expressing relief and then respectfully offers to elaborate.

Excerpt 7 in Jacob's sitting room. "Taking over".

Jacob fears he has taken over the role of interviewer by making a request (line 01) followed by an apology (line 03) with an explanation (line 05).

Line	Speaker	Transcription
01	Jacob	FRonVOCA..uh...uh... "Next time can Mum be here?"
02	LP	((answers his question)) <i>Of course.</i> ((then reads out his question)) "Next time can Mum be here?"
03	Jacob	<i>Huh...laughs... I...huh...</i> ((saying something that I don't understand again)) FRonVOCA.. "Sorry."
04	LP	((reads his screen aloud)) "Sorry". I don't understand...why sorry?
05	Jacob	<i>Huh...FRonVOCA...</i> "I have take over."
06	Both	Shared laughter
07	LP	((reads his screen aloud)) "I have take over". You have taken over?
08	Jacob	<i>Huh</i>
09	LP	<i>What? Now?</i>
10	Jacob	<i>Huh</i>
11	LP	<i>Laughs..I love it!</i>

What is unusual here is that Jacob feels that he has taken over from me by his request. He believes that has inadvertently acquired the status of interview control. The apology and explanation extended was unexpected and although taken seriously, triggered shared laughter. This confirmed social closeness and a successful interaction.

5.11 Closings

Schegloff & Sacks (cited in Jaworski & Coupland, 2006) describe terminating exchanges for natural speakers in ordinary interactions as a phenomenon of closings, as a set of possibilities. Organisation of the range of possibilities is an accomplishment. Terminating interactions for aided communicators are additionally reported to be technically and socially difficult (Collins et al. 1997). In the interviews for this project, the formal responsibility for the overall management of the closings

was mine, as the interviewer. In all interviews I was able to introduce the last question and the notion that the interview was reaching its conclusion. I was therefore able to signal ‘the end’ and effect a closing routine. Most participants seemed to value using their calendars or diaries to schedule the next appointment. This provided definite closure to the formal interview. The excerpt below with Harry in his sitting room illustrates how this process was effected:

Line	Speaker	Transcription
01	LP	<i>Can we make another appointment for me to come back again? Can we do that?</i>
02	Harry	<i>Nods + yeah</i>
03	LP	<i>So how do we organise the next appointment? I’ve got a diary.</i>
04	Harry	FRonVOCA... “bedroom” + looks to carer ((who goes to get his calendar from his bedroom))

Across all interviews, the responses to both the formal closing sequence and my inevitable exit, were unique to each participant within their individual setting. Variables included their desire to continue chatting informally beyond the interview wind-up, and adherence to schedules, coupled with carer dependency, giving them no choice but to finish. A lack of suitable vocabulary, phrases or pragmatic skills may have dictated their inability to respond to the closing completely and successfully. Some participants appeared unaware of, disinclined or disempowered to effect the closing routine expected between host and guest. This resulted in feelings of dissatisfaction, perhaps for both parties.

5.12 Summary – research question 1

To what extent can adults with cerebral palsy (CP) talk about their lives, their experiences and opinions?

Chapter 5 has presented features of interaction with aided communicators. Participants used a variety of modes of communication to express many different purposes. The discourse analytical approach adopted enabled me to analyse and interpret the data from 34 interviews. Interpretation of the data established the

methods used when opening interviews with social etiquette routines evidenced. Topics of conversation were established, predominantly by myself, as the interviewer. Participants used unaided communication signals to act as continuers. Turns were taken and co-ordinated synchronically. When aided communicators began formulating their response before I had finished my preceding utterance, this was noted as interesting. Topics were maintained and sustained by participants giving views unilaterally with support and in a symmetrical manner. Topics were periodically changed by both parties. A feature of aided communication includes participants deciding how to manage others who speak on their behalf. This was achieved by using a variety of verbal and nonverbal strategies, coupled with their carers understanding the boundaries of their roles. Instances of breakdown were noted and how these were repaired was analysed. Strategies used included participant pre-empting breakdown and recipient-repair. Managing novel utterances was a particularly interesting feature in this chapter. Unexpected responses and their reactions were analysed. Some responses confronted and challenged the control of the listener. Finally a brief section on the nature of closing interviews and interactions was included. Variation exists and is unique to each participant and their individual setting.

Chapter 6 will present an analysis of the topics covered in the interviews related to the remaining two research questions. The data also continues to illustrate the presence and absence of interactional features in our talk and of motivating topics.

Chapter 6 Analysis of topic talk

6.1 Introduction

The interview schedule for the project (Appendix 4) concerned the presentation of topics about the lives of the participants: their backgrounds, biographical information and other topics that had a conversational tone (Brown et al, 2010). Some topics emerged naturally and others were prompted by their carers as elaborators, or they were triggered by the original interview questions for example, “Did you have an experience of inclusion in a mainstream school?” The topics covered provided partial insight into the participants’ experiences. Aided communicators *can be* constrained in their conversations by features such as a lack of lexical choice in their system (Dark & Balandin, 2007). The following section reviews the topics that arose and how they were managed. This chapter then focuses on the remaining two research questions about memories of past life experiences, and life satisfaction and aspirations.

6. 2 Scope of topics explored

Across the series of interview conversations, three major themes emerged. A theme was identified and titled to capture the critical quality of the content represented in the exchange. The major categories and the sub-themes are presented in the table below. The themes were generated by identifying the topics covered in all 34 interviews and then compared across the 10 participants to establish frequency of occurrence.

Table 17: Major and sub-themes discussed by the participants

Relationships	Identity	Experiences & memories
Family & friends	Health including cerebral palsy	Places & holidays
Parents (separation/divorce)	Ageing & care	Educational history
Loss & death	Communication history	Curriculum content
Control	Opinions Emotions Activities Quality of Life Aspirations	Boarding /residential school

6.3 Research question 2 - What past life experiences do the participants talk about?

“Because I like to remember everything even down to what I did this minute 27 year a go.” (Stan, interview 3)

Remembering discourses were drawn upon by most participants either by themselves or co-constructed with their carers as elaborators or facilitators. Reminiscences were generated about their education memories in detail, with some shared specific memories and opinions about inclusion opportunities, and also their literacy abilities (or lack of). Their experiences of travelling or of holiday events and living away from home in another country were also commonly recollected. Only one participant was unable in these interviews to talk about her past. In this thesis, I have chosen to focus on their memories of places and holidays to illustrate the nature of their reminiscing.

The memories of nine participants concerned different places and holidays in the past. Table 18 illustrates the participants, the places they could recall visiting and with whom, under what circumstances, and a description of their main memory. Some of these will be discussed in more detail later in the chapter.

Table 18: “I remember....past holidays”

Participant	Place & person	Key memory
Wilf	Germany & France with school	Love of flying
Stan	Mauritius, Australia, America & a local outdoor adventure centre	Family event
Brad	“country-s” & USA with family	Being well-travelled
Ellen	Hungary with family for school	Hand function
Harry	London & Germany with school	Tiring, drinking & smoking
Martin	Nowhere specified but with family & school	Holidays in general
Jacob	Europe & the UK.	General detail
Ian	USA with family	Very pleasing time

6.3.1 Participant memories about past experiences

All communicators, including aided communicators recount stories differently. The following sample of excerpts have been chosen because they illustrate variability in content, interaction style and personalities (Tannen, 2005). A summary of the preceding conversation and how the topic changed following the excerpt has been included in this section to provide additional contextual information.

Excerpt 1 - Stan “Mauritius”

Stan said he was proud of his ability to remember his past and he enjoyed reminiscing. He was one of the few participants to email, and in this example he emails me a story concerning the drama around how he and his family “got to go” on holiday.

this is the story how I got to go to MAURITIUSwith Dad
1 day in September 2003 me and the family went to a celebrity golf day and in the evening they have a big dinner with a show after would and they do a orn which you can buy big things and the money goes somewhere who needs it and this year the star present was a holiday to MAURITIUS and we saw these 3 PLAYERS putting there hand up and we thought FOOTBALLPLAYERS looking after them again bad news but we thought wrong it was for us we was exciting we enjoyed ourselves

Figure 6: Stan & Mauritius

This detailed story appears exactly as it was emailed, including his punctuation, spelling and presentation. The excerpt illustrates the unusual nature in which the holiday happened, rather than a description of his memories of the country and of its culture. There is a sense of drama and climax in his story when it transpires the holiday was “for us”. An interesting aspect of this story is that the narrative is linguistically well constructed (Crestani, Clendon & Hemsley, 2010) and coherent as a discourse. It is significant that as a written story, Stan has had time to construct it without the immediate pressures of a conversation partner; a finding also evidenced with adults and children with cerebral palsy in Ison (2009) and Sundqvist & Ronnberg (2010). Stan’s story clearly demonstrates differences between his written and spoken expression, for example, in the exchange about the unfriendliness of sport.

Excerpt 2a - Brad “America”

Brad answers my direct question about travelling. His utterance at line 02 serves as a general opener to the topic as it uses non-specific words. Whilst his utterance takes over 5 minutes to construct, his persistence creates a powerful impression. Brad is not distracted by the multitude of activities in the room, possibly demonstrating how motivated he is to express himself. An interesting feature of this conversation is that in line 03, when I fail to understand the plural ‘s’ marker and preposition part of his message, possibly thinking that the “over” meant “overseas”, he responds to my

request and repeats it and says “yes” meaning “I will tell you more” and then adds, the additional information, with “family”. After an exchange of humour (lines 9 - 16) we develop the conversation with his additional details about visiting America, and that it was “good”.

Line	Speaker	Transcription
01	LP	<i>Have you done much travelling?</i>
02	Brad	(QR) FRonVOCA ((LP moves to face him))...((FT 49 secs)) “I saw - the - Snorts + breathes easier + country ((looks up to see someone else in room/carer wipes his chin/he says <i>huh huh</i> /looks at person who leaves & then returns to print something)) –s + looks to person & shouts <i>huh</i> at them)) over - the - year - years - I saw the country s over the years.” HH ((FT 5 min 20 sec))
03	LP	(pause) <i>You saw the country? I don't understand the s over. Can you help me out there? Can you tell me more?</i>
04	Brad	“Repeats message.” (Looks to right) ‘yes’
05	LP	<i>This country?</i>
06	Brad	FRonVOCA.... “family - I saw the country s over the years family”
07	LP	<i>With your family? So as a young person?</i>
08	Brad	<i>Groans</i> ((affirmatively))
XX		((8 lines of conversation omitted))
17	LP	<i>ahhh I see. So that involved going to (.) Europe?</i>
18	Brad	(QR) (<i>vocalises</i>) ‘yes’
19	LP	(paused) <i>Did you go further afield than Europe?</i>
20	Brad	<i>vocalises</i>
21	LP	<i>You did.</i>
22	Brad	Sighs + FRonVOCA...((<i>carer wipes his chin</i>)) “United States of America” + smiles ((FT 40 secs))
23	LP	<i>Oh did you?</i>
24	Brad	smiles
25	LP	<i>To the good old US of A?</i>
26	Brad	<i>vocalises</i> + smiles
27	LP	<i>And what was that like?</i>
28	Brad	FRonVOCA <i>vocalises...vocalises..[...]</i> smiles...grunts... “good” ((FT

1 min 8 sec)) Looks to me. (pauses) *vocalises* **“Repeats all messages from the morning.”** ((error?)) Hangs head

29 LP *mm... so you reckon America was good. (.) Good to visit.*

Total interaction time – 10 mins 11 sec

On reflection, the obvious question that might have elicited more memories, could have been at line 29, “Tell me more about your time in America.” This topic develops further, however, by asking him whether he has any more plans to travel, bringing the conversation into the present, to which he quickly answers with a VOCA-mediated “no”. He elaborates after a few intervening turns to say:

Excerpt 2b - Brad “America”

Line	Speaker	Transcription
01	Brad	FRonVOCA... “job” ... <i>groaning</i> ... <i>vocalising</i> ...((phone rings...Brad smiles + <i>vocalise</i> ...carer runs to answer it...Brad continues...LP chuckles...phone rings again))... <i>vocalises</i> ... “for” ...
02	LP	<i>mmmm</i>
03	Brad	“my – body. ((FT 2 min 07 sec)) Job for my body”. ((FT 2 min 23 sec)) Looks to me
04	LP	<i>mm... so hard work for your body to take?</i>
05	Brad	<i>Vocalises + muh</i> ...hangs head....(looks to right) ‘yes’
06	LP	<i>mm... so it’s physically demanding?</i>
07	Brad	Head down ...(looks to right) ‘yes’

Total interaction time – 2 mins 36 sec.

We close this topic of conversation after I have sustained the interaction concerning the demands of travelling and other aspects, for 5 minutes. This includes Brad adding, predominantly, vocalisations as continuers, smiling and a few yes/no comments, with no apparent desire to develop his contribution in any verbal or linguistic way, using his VOCA. In line 01, he uses the word “job” to mean ‘difficult’. I prompt with closed questions as openers in lines 04 and 06, offering the potential for him to enlarge but he does not respond to these. His subsequent head positioning (hangs head) demonstrates either physical tiredness, disengagement, or an inability to continue for an unknown reason. Together with an awareness of the time and effort he has expended in the previous excerpt, there are insufficient positive indicators to encourage me to continue, despite his memory of being in America as

being a good one. Further reminiscing is not explored and an interview question about himself followed.

Excerpt 3 - Ellen “Hungary”

In this 5 minute segment of my final interview, with Ellen’s Mother (Mo) present, we begin by talking about Ellen’s educational history. It is within this context that we talk about what it was like living in Hungary during her early years. A notable feature of this conversation is its measured pace allowing Ellen time to contribute.

Line	Speaker	Transcription
1	Mo	[...] <i>Do you remember going out to Hungary?</i>
2	Ellen	(looks) (UpR) ‘yes’ + Ellen watching Mo intently
3	Mo	<i>Yes you do. (LP mmm) We did spend a lot of time out there when Ellen was about 5 or 6 we decided that it was probably better to concentrate on education more so we stopped going then.</i>
4	LP	<i>Mmm ((looks to Ellen)) so you can remember things about being in Hungary. I wonder what those things are...that you can remember.</i>
XX		Power cuts off the video (all laugh) Audio retained. Sound track only from here
5	Mo	<i>Can you say? (? Response) Can you say with your device? or have I got to guess and do it between us? (response?) Cos you can’t say? (?response) (Pause) Can you say?</i>
6	Ellen	((assumed)) (UpR) ‘yes’
7	Mo	<i>Oh then say it then.</i>
8	Ellen	<i>Ah + clears throat + (Long pause) FRonVOCA “hand” ((FT 15 secs))</i>
9	Mo	<i>Whose hand? ((can’t see or hear response)) Doing things do you mean?</i>
10	Ellen	((assumed)) (UpR) ‘yes’ ((as Mo repeats/confirm))
11	Mo	<i>Yes. Yes. You actually used to do things didn’t you? With as little help as possible.</i>
12	Ellen	((assumed)) (UpR) ‘yes’ + (long pause)
13	Mo	<i>Like painting?</i>
14	Ellen	<i>Ah</i>
15	Mo	<i>You remember that painting...</i>
Total interaction time – 5 minutes		

This story presents as a co-constructed account (Hörnmeyer & Renner, 2013) of Ellen’s past abilities, with the topic initiated by her, and Ellen’s Mum providing the content of the shared experience (Simmons-Mackie, Kingston & Schultz, 2004) with which Ellen concurs. Ellen is engaged as evidenced by her eye gaze, vocalisations and shared laughter. She also responds to questions asked.

Excerpt 4 - Harry “Germany”

In interview 2, Harry shares a seven minute story about a school trip to Germany, the experience of flying and the novel events that happened whilst in Germany. The memory of going to Germany was initiated by Harry. Prior to this reminiscing, we were speculating about him leaving his current home and the things that he might miss, having established that he would miss a particular member of staff. “*Do you remember any good times with Mary (name changed)*” to which he says “*yeah*”.

Line	Speaker	Transcription
01	LP	[...] <i>So let me get this straight you went to Germany on a holiday?</i>
02	Harry	Nods. <i>Yeah</i>
03	LP	<i>Goodness me...and it was exciting because ((Harry nods)) - going away? Visiting somewhere different?</i>
04→	Harry	Nods. FRonVOCA “ airplane ” ((FT 16 secs)) (Pauses).
05	LP	<i>Of course you would have had to fly (Harry says “oh” ↑) on a plane. Was that the first time you have been on a plane?</i>
06	Harry	<i>No</i> ((quick response))
07	LP	<i>No. So you have been on a plane before?</i>
08	Harry	<i>Yeah.</i> ((something falls on the floor and interrupts us))
09	LP	<i>Was it a scary flight?</i>
10	Harry	<i>No.</i> ((quick response))
11	LP	<i>Straightforward. Long?</i>
12	Harry	<i>Yeah...FRonVOCA ... “tired - today</i> (shakes head correcting mistake) ((LP checks screen))... <i>yeah - day</i> (deletes to day. ” ((FT 1 min 2 sec)) ((LP checks screen)) ((speaks all))
13	LP	(pause) <i>Are you still talking about your holiday (.) in Germany?</i>
14	Harry	Nods. <i>Yuh</i>
15	LP	<i>Was it tiring?</i>

16	Harry	Nods. <i>Yeah</i>
XX		<i>(4 lines omitted)</i>
17	LP	<i>Late nights?</i>
XX		<i>(10 lines deleted)</i>
18	Carer	OVERLAPS <i>when you was in school Harry... a youngster....you were over there drinking was you?((teasing))</i>
19	Harry	Head back + <i>Yeah</i> + smile + <i>vocalising</i> + laugh
20	LP	Laughs
21	Carer	laughs ((shared))
22→	Harry	<i>Ahhhhh FRonVOCA ... “cigarette” ((FT 7 secs)) laughing (+++)</i>
23	LP	<i>ah drinking and smoking.....</i>
24	Harry	<i>ohhh</i> ↑ (loudness) <i>yeah</i>
25	LP	<i>Ahhh</i> ↑↓ <i>goodness.....</i>
26	Harry	<i>Oh God</i> ↓↑ (<i>intonation</i>)
Total interaction time – 3 minutes 28 seconds		

Harry paused periodically to think and recollect his memories during this story, for example line 04. He enjoyed recounting the latter parts of this story about drinking and smoking. This added a dramatic quality to the memory that provoked responses that continued the story-line for him. The “drinking/smoking” aspect is reminiscent of a teenage-type of discourse and the accompanying laughter is a common presentation of some of Harry’s conversations, particularly when a favoured carer is present. He mainly uses VOCA-mediated single word utterances (lines 04 and 22) that powerfully and succinctly convey the exact nature of his thoughts. He augments these with unaided nonverbal signals to deliver an embellished account.

Harry enjoys using word approximations and in this case, the phrase “Oh God” was used, carrying emotion, expressed with an appropriate intonation pattern denoting slang. His informal and open style of interaction positions him as an engaged and confident speaker disclosing some past and personal information.

We continued the narrative by establishing which other members of staff had been with him but nothing about being in a different culture.

Excerpt 5 - Ian “America”

Towards the start of our conversation, in my first interview with Ian, he had been talking about his imminent holiday to spend time with family who were coming across from America. This led me to enquire:

Line	Speaker	Transcription
01	LP	<i>Have you travelled to America?</i>
02	Ian	FRonVOCA “ 1987 ” ((FT 50 secs))
03	LP	<i>1987? (pause) Where did you go then?</i>
04	Ian	FRonVOCA “ 1987 America ”
05→	LP	<i>mmm mmmm (pauses 23 secs) to give Ian a chance to elaborate spontaneously) Do you remember much about that trip to America?</i>
06	Ian	FRonVOCA “ It was very very very good. ” ((FT 38 secs))
07	LP	<i>Was it? (pause) Good.. good. (pause) What was it that that you would recommend?</i>
08→	Ian	FRonVOCA “ Everyone ” ((FT 9 sec)) (pauses 44 sec) ((suggestive of thinking))
09	LP	<i>Are you thinking back to your trip.... about what you did?</i>
10	Ian	Nods + smiles
11	LP	<i>Well 1987...that’s a long time ago. That’s almost 30 years ago. ((lots of background noise now & discussion about 5/10 mins left until lunchtime))</i>
12	Ian	FRonVOCA “ Year I left school ” ((FT 58 secs))
13	LP	<i>Was it? Was that primary?</i>
		Total interaction time – 5 min 20 sec

We then shifted from the topic of America, to talk about schools he had attended. Notably both of us use elongated pauses (lines 05 and 08); mine is an offering to him to elaborate and his, taking time to reflect. The success of this is acknowledged on lines 9 and 10.

A unexpected response at line 06, is when he emphatically describes the trip with the utterance, ***“It was very very very good”***. By repeating the intensifier ‘very’, and only taking a speedy 38 seconds to formulate, he conveys a depth and strength of positive emotion. I verbally note the longevity of his memory (30 years ago) and he provides more detail by linking this with the year he left school. This segues smoothly to the next topic of schools. Despite the topic of America triggering pleasant memories he chooses not to re-establish the reminiscing. His accurate long-term recollection and VOCA-mediated linguistic expression is unexpected.

6.4. Research question 3 – How do participants talk about their quality of life?

“I am happier but it’s hard” (Stan, interview 2)

Participants engaged in talk about their satisfaction with life and aspirations for the future. In the interviews, most participants discussed aspects of their lives that “worried” them, for example, a lack of privacy, a lack of control, dislike of change and worries about new carers. Three participants expressed sadness over the loss of family members and friends which had affected their lives, two of whom had engaged in counselling. One participant expressed sadness over a lack of life fulfilment.

For most participants, worries were balanced against an equanimity with how things were generally and their aspirations for the future. Many participants described their personalities, as ‘funny’, ‘happy’ or as a ‘fighter’ which could be construed as indicators of how successful they are in life (King et al, 2013) or how determined they have been. Some participants voiced aspirations that were of a more long-term nature (work and relationships) and others had goals that related to their immediate, day-to-day routines.

6.4.1 Participants' perspectives on their satisfaction with life

Worries and frustration

Most participants talked about experiencing negative feelings such as frustration at periods in their lives. One participant was reported to be currently depressed and lacking a sense of fulfilment. In an interview, this particular participant voiced the aspiration of wanting to visit schools as a volunteer, to develop awareness of people with communication impairments ("**help them**"). However, in response to two suggestions about how this might be achieved, the participant replied, "**I don't know how**", conveying a sense of sadness and powerlessness.

Excerpt 1 Stan - "I get new staff I worry"

Stan talks about his life, expressing concern and worry about some aspects, as well as those that generate happiness for him. In several interviews he talks about a dominant concern related to his propensity to worry, particularly about his personal care and his employment of carers or staff to support him.

Line	Speaker	Transcription
01→	Stan	"I must learn not to worry"
02	LP	<i>Why?</i>
03→	Stan	"I don't let something happen. I-get-overly-worried".
04	LP	<i>But isn't that to do with your personality? It shows you care. Do you mean that you get too worried about things?</i>
05	Stan	"I-was-angry-once-because-I-was-so-worried".
06	LP	<i>Your worries change as you get older don't they?</i>
07	Stan	"I-get-new-staff-I-worry".
08	LP	<i>Well it's very important isn't it that they get things right? Isn't getting angry a quick way for you to say that something isn't right?</i>
09	Stan	"No-its-very-wrong."
10	LP	<i>Do the staff still get it wrong after reading your instruction sheets?</i>
11	Stan	"Its-on-going".

In this interview, on line 01, Stan discloses an attribute and demonstrates a moral and personal responsibility towards change through learning. In line 03, by using an interesting choice of word, 'overly', he qualifies the intensity of his emotional

responses. He also demonstrates his awareness that his emotional reactions have significant consequences for him (line 05) and elaborates on the triggers or causes, for example, a change in the staffing rota or when staff incorrectly manage his personal care. Line 09 is unusual due to his VOCA-mediated negative reply ‘no’, demonstrating the gravity of his moral positioning. His use of the intensifier ‘very’ conveys a strength of feeling and his personal responsibility that to react differently (line 03 ‘letting it happen’). This is despite the fact that *his* life has been adversely affected. A sense of resignation is conveyed in line 11 and in a later interview, this same topic reappears. During the course of the discussion Stan said, “I still get worried when new people come”, reinforcing his ‘on-going’ position.

Excerpt 2 Ian - “What next?”

In our second interview, after a 30 minute conversation about communication systems and roles some people who use AAC undertake, we had paused and Ian spontaneously enquired:

Line	Speaker	Transcription
01	Ian	(pause) “What next?” ((FT 59 secs))
02	LP	<i>Mmm... I was just thinking, (Ian turns away to look at VOCA) you know... do you have other dreams (Ian turns back to me) or things that you'd like to do? You might not necessarily know how to do it, but do you think about other things that you'd like to do?</i>
03→	Ian	Shakes head several times then flops back to look at VOCA ((the atmosphere feels sad)). Turns back to me + <i>vocalises + groans</i>
04	LP	<i>No. No (Ian shaking his head slowly) Sometimes you get a flash of inspiration, when you think, oh yeah, I quite fancy learning how to do something or another, on the computer, or quite fancy going and volunteering at the museum or something like that. And sometimes nothing comes to you.</i>
05	Ian	Turns back to face me + no response. ((LP continues))
Total interaction time – 1 min 55 sec		

Ian’s opening line indicates a position of assertive control. He wants to progress the conversation to the next topic so asks a direct question. He continues with this dominant position when he chooses not to talk about his future (line 03). His repetitive non-verbal response (head shaking) indicates his strength of rejection

coupled with a lack of affect and engagement rather than merely reflecting an ambivalence. I sensed a need for privacy about this topic because it was unusual for him not to reply using his VOCA. Additionally, his increased eye-gaze behaviour between me and his device is also unusual for these conversations.

Excerpt 3 Ian “Away from me”

Later in the same interview, Ian talks about managing his own social care budget and the decisions he makes.

Line	Speaker	Transcription
01	LP	<i>So why do you want to take on board (Ian FR) that role?</i>
02→	Ian	“Holidays away from Mum and [Dad] about for two days can have holidays away from me” ((FT 6 mins 20 secs))
03	LP	<i>[...] oh so you are talking about organising your time so they can have a holiday away from you?</i>
04	Ian	Nods twice
05	LP	<i>And vice versa. You can have a holiday away from them. So you have more control about organising things? Is that something that is really important for your parents?</i>
06	Ian	“Yes I do.” ((FT 58 secs)) Looking at VOCA
07	LP	<i>And it works both ways doesn't it? You get a break away from your parents as well</i>
08	Ian	“I am happy to see them”. ((FT 1 min 22 secs))
09	LP	<i>Mmm I am sure you do. Absolutely. Mmmm.</i> (pauses)
10	Ian	((Clears his screen)) + looks back to me.

In this excerpt Ian contributes VOCA-mediated responses that provide detail about his feelings. In line 02, he uses an unusual phrase **“away from me”** in a manner that could suggest a sense of burden. Additionally his response in line 08 to my repeated suggestion in line 07, and through its inference, concurs. He demonstrates a finality to this conversation by clearing his screen suggesting that we change topic.

Excerpt 4 Jacob - “No where you are ...”

Jacob describes his on-going fragile relationship with the Direct Payments Scheme and positions himself here as a consumer of an unsatisfactory social care system. I had previously enquired about his frustrations or ‘tipping points’, that is, what could make life a little bit better for him, to which he instantly acknowledges by beginning to formulate his response, and vocalising.

Line	Speaker	Transcription
01	Jacob	((FR...typing))... V= <i>uh</i> ...v...v.. <i>sighs</i> ...v....v..v...SN= ((snorts)) ...v..SN...v...SN...v...v...vvv...v...v...v...v...vvvv....((He might have said know where you are)) ((FT 4 min 40 sec))
02		((Phone rings))
03	Jacob	<i>Shouts</i> + shouts again for carer
04	Carer	<i>Sorry</i> . ((Answers the phone)) (40 seconds)
05	Jacob	v...v (<i>you-ooo?</i>)...v..(<i>are???</i>)...v... <i>sighs</i> ... “ No where you are will (was it will or with?)... drape drive (deletes dr/w) no where you (speaks where you) are (speaks are) (<i>uh -sighs</i>) with direct payment “ ((FT 7 min 48 sec)) v= <i>uh</i>

Jacob’s turn at line 01, opens with multiple vocalisations, evidence of physical effort (snorting and sighing) and holding his turn with an absence of any eye contact to check for reciprocal engagement. This is typical of him. What is impressive about line 05, is his persistence with his predictive spelling and how he blends his VOCA use with his speech production, taking a considerable amount of time with the utterance construction. Through this discourse he draws on an identity that is resilient, motivated and opinionated. He demonstrates not just a desire to be in control of his finances but an acceptance that at times he is unable to achieve this because of bureaucratic barriers (a conversation we had in a previous interview). It is notable that Jacob uses ‘you’ to make the complaint more universal, rather than using the personal pronoun.

Excerpt 5 Wilf - “Not good”

Wilf uses his VOCA-mediated responses to describe his satisfaction with life. His acute frustration and anger with aspects of his life dominated our six interviews. His lack of control over decisions, for example, his physiotherapy being withdrawn, resulted in anger. His frustration is also linked to his opinion that people do not ‘hear’ or ‘listen’ to him.

To illustrate how he talks about his feelings on life, the following excerpt is included. In opening this interview I ask Wilf about his weekend, to which he replies that it was his girlfriend’s birthday and that he ‘loves’ her. He smiles, sighs and laughs, appearing reflective. Twenty minutes later, I change topic and ask a direct question about the current quality of his life. This triggers a long discussion about the reason for his dissatisfaction. This excerpt illustrates how we begin the topic.

Line	Speaker	Transcription
01	LP	<i>Shall we talk about how good life is for you or how life is for you at the moment?</i>
02	Wilf	<i>FRonVOCA... “yes”</i>
03	LP	<i>mm okay Is it okay if I wipe your chin for you. You are lookingso that’s a yes. how satisfied you are with your life or how rotten is just the moment. So what would you say to that?</i>
04	Wilf	<i>FRonVOCA....</i>
05	LP	<i>So how would you describe your life at the moment? Coughs...excuse me.</i>
06	Wilf	<i>FRonVOCA...breathing faster...ahhh...((noise from outside)) smiles...SHT...uhhh...ohhhh... “I don’t like”....continues beeping...breathing faster...err.. ((How did I know how to take the turn?))</i>
07	LP	<i>pauses...so you don’t like how things are at the moment?</i>
08	Wilf	<i>FRonVOCA.. “yes”</i>
09	LP	<i>can you be more specific about the things you don’t like at the moment?...pause....so can you tell me some more about those things?</i>
10	Wilf	<i>FRonVOCA.... “sand”....sighs...SHT... “Wilf”...groans...((LP leans in to see LCD))...SHT...groans... “on”.....((FT 3 min 15 sec))</i>

Total interaction time – 13 minutes 26 seconds

Wilf desperately wanted to go to a beach (sand) but his carers refused, bound by Health and Safety Regulations that stipulated the use of a hoist at all times for a man of his weight. Carers were therefore unable to manually lift and carry Wilf onto the sand. He persisted with this anger towards his carers and the situation for many months, demonstrating the significance of what to him, was a simple request.

Satisfaction - okay to great

Excerpt 1 Stan - "Quality of Life"

When specifically discussing his quality of life Stan describes his understanding of the concept and elaborates on his position.

Line	Speaker	Transcription
01	LP	<i>If ..you.. had to describe what that meant, what quality of life meant, how would you describe it , (Stan says uh) how would you describe that phrase? (Stan smiles a little) What that meant?</i>
03→	Stan	(Thinking): "I am- happier-but-it's-hard. I am happier but it's hard." ((FT 24 secs)) + turns to me towards the end of speaking.
04	LP	<i>mmm ((having put notepad down)) mmm so it's about ..so QOL is about how happy you are? ((Stan looks to TV showing the cricket))</i>
05	Stan	<i>Yuh ↓</i>
06	LP	<i>but then within that it's identifying (Stan says yuh lkg at TV) how you get to feeling that happy (Stan lkg into mid-air +thinking)...(Stan says yuh)...you are happy but you have to work hard to get to that stage ((LP indicating it's like a ladder)) of being that happy?</i>
07	Stan	<i>Yuh</i>
08	LP	<i>So can you give an example of...something that makes you... (Stan staring) happy, something that you are doing in your life, that makes you feel happy... (pause)... that gives you that good QOL? What would be something?</i>
09→	Stan	(thinking for 9 sec) "Going-out-meeting-people. Going out (looks up & to me) meeting people" . ((FT 20 sec.))
10	LP	<i>mmmm</i>

In line 03, Stan clearly voices his opinion but does not qualify his meaning of the word 'hard' and as the listener, I do not make further enquires. In line 09, he takes time to think before answering which indicates his serious consideration of the topic.

He positions himself as a social being, seeking the company of others in the community. He is prepared to make that physical effort indicating that he accepts the responsibility for enhancing the quality of his life.

Excerpt 2 Ellen - “Just ok”

In her second interview, Ellen talks about how good her life is. We are joined by a carer as elaborator because her VOCA is broken. Ellen uses her communication book at times to augment her eye gaze/looking behaviour.

Line	Speaker	Transcription
01	LP	<i>so at the moment I would conclude that your life is pretty good at the moment? Is it? ((Definite mood change)). Is that how it...</i>
02	Ellen	(Looks up) ‘I don’t know’
03	LP	<i>If you had to describe how your life was at the moment would you say it was terrible?</i>
04	Ellen	(Holds still) ‘I don’t know’
05	LP	<i>...or would you say it was ok?</i>
06	Ellen	(Holds still) ‘I don’t know’
07	LP	<i>OK - would you say it was good?</i>
08	Ellen	Stills
09	LP	<i>Just ok?</i>
10	Ellen	(upR) ‘yes’
11	LP	<i>OK. So there is some room for improvement?</i>
12	Ellen	(upR) ‘yes’
13	Carer	<i>Not the worst it that it has ever been... ..</i>
14	Ellen	(upL) ‘no’
15	LP	<i>no-no; that’s a reasonable position to be in?</i>
16	Ellen	(upL) ‘no’

Ellen’s consistent use of a “do not know” response indicates no definitive opinion about her life. My proposition at line 09, elicits a positive response, conceding that her life is ok with room for improvement. At line 13 her carer challenges her to admit that her life is not at its lowest ebb. Her rejection at line 16 of my suggestion at line 15, indicates her expectation of change. I had forgotten that she was cradling some

sadness about her grandmother which became a topic of conversation during this interview.

Excerpt 3 Martin - “Yes, yes, great”

In our second interview, I ask Martin a direct question about how good his life is now (line 05) and how good it might be in the future (line 07) inviting a speculative response. The topic changes beyond line 12.

Line	Speaker	Transcription
01	LP	<i>Yeah. laughs. Oh dear. Oh. (pause) Can I ask you another question?</i>
02	Martin	immed. “yes”
03	LP	<i>It’s a slightly different but I was gonna ask you how ...what I’m interested in finding out from people is how good they think their life is</i>
04	Martin	immed “yes”
05	LP	<i>...so if I was to ask you that question, so how good do you think your life is at the moment.....</i>
06	Martin	<i>.... formulating response... “ok” + physically extends</i>
07	LP	<i>It’s ok is it... but potentially... say over the next 6 months, with all of the things you are hoping for, how gooddo you think your life will become?</i>
08	Martin	“yes” ...formulating response... <i>uhh...uhh...</i>
09	LP	<i>mhhh.....</i>
10	Martin	<i>Vocalises ↓ (quickly)</i>
11	LP	<i>I am still listening. ((lots of loud background noise form others))</i>
12	Martin	“great”

Martin demonstrates interest and action in the dialogue by answering using VOCA-mediated responses and unaided communication (lines 06 and 10). His **“great”** response was more emphatic than his **“okay”** implying some optimism about his future.

Excerpt 4 Jacob - “I am happy as I am”

In interview two, Jacob participates as both speaker and listener in a 53 minute discussion around the topic of life and specifically, his thoughts about what had been good and the challenges he encountered.

Line	Speaker	Transcription
01	LP	<i>Is there is an expectation do you think that we want more or (.) have higher expectations on what we can achieve? What are your thoughts?</i>
02	Jacob	V=oofff FR...V...v=ooo..v=ow.. “No I am happy like I am” ((FT 2 mins 2 sec.))
03	LP	<i>....basically happy but you have noticed that things are changing.</i>
04	Jacob	<i>Sighs</i>
05	LP	<i>mhhh... so that’s just generally.... to do with....just life and not just about um.....things for people with disabilities?</i>
06	Jacob	V=no
07	LP	<i>No.... mhhh</i> ((There a sharp intake of breath denoting that I was going to say something but I stopped for his turn))
08→	Jacob	V=uh FR ...v...Vvvv long sound...v...V... “I had talk yesterday about this” ((FT 2 mins 25 seconds)) SHT V=uhhh uh arr
09	LP	<i>Did you?</i>
10	Jacob	Nods V=er errrrr U
11	LP	laughs ah ↑↓ ((recognising the coincidence))
12→	Jacob	V=uh FR...v...sighs...V=uh...V=uh...v.. “I said you see I got a disability I still a person” ((FT 5 mins 2 secs)) V=uh
13	LP	<i>muh..mm... yeh.. so for you...what sort of things (.) do you value then about your life that makes you feel happy and pleased with what you’ve got ... that makes you that content and happy?</i>
14→	Jacob	FR ...gulps... “I believe” looks at me ((as if expecting me to know what he is saying)) ...((FT 41 sec))
15	LP	<i>So that’s your faith that guides you. Are there other things that you also value highly?</i>
16	Jacob	(4 secs) V=wuh (no) + shakes head + uhhh
17	LP	<i>No that’s it...that guides you & gives you that happiness.</i>
18→	Jacob	V=uh “I get to (deletes to) things wrong some time like all of us” . ((FT 2 mins 59 sec)) V= uhw.

Interaction time taken – 10 minutes

Jacob's reply in line 02, mirrors that of another participant (Polly). Jacob positions himself as feeling positive and as having a contentment with his lot. By using a personal pronoun and the present tense of the verb "to be" he places himself firmly in the 'here and now'. He replies immediately by vocalising a negative to reject the first part of my question (line 01).

Interestingly, he chooses to maintain the conversation and extends the topic (line 08). He does not reveal with whom he had been conversing or the context, but this demonstrates that he has other conversation partners and that as an opinionated person he likes to share and interact with others.

On line 12, he continues talking assertively about his satisfaction with life by using a direct compound sentence including an example of reported speech, "***I said***" which takes him 5 minutes to formulate. He positions himself strongly as a 'person' regardless of his disability. His use of the adverb 'still' in relation to himself (I am), conveys the longstanding nature of him *being* a person, despite the disability.

Jacob's subject+verb response at line 14, "***I believe***" is a strong reference to his faith, and takes persistence to generate, as evidenced by the timed duration. This emphasizes its importance to Jacob's well-being and quality of life.

In the final turn (line 18) he modestly states that regardless of his faith he makes mistakes and in using the pronoun "***us***", aligns himself with the wider community and shares a common identity (Edwards, 1998; Langenhove & Harré, 1993).

6.4.2 Participant aspirations

All ten participants discussed specific goals that they endeavoured to achieve or aspired to, and they demonstrated anticipation of the future. The aspirations voiced were grouped into four themes that concerned relationships, ambitions, independence and achieving fulfilment from day to day activities.

Relationships

One participant talked about his joy in living vicariously through his sibling's transition into married life. In the excerpt below, Stan wishes to assist financially with the wedding.

Excerpt 1 Stan - "Wedding"

Line	Speaker	Transcription
01	LP	<i>If you won the lottery and had £500,000 to spend?</i>
02	Stan	<i>"Jane's wedding".</i>
03	LP	<i>Oh... bless you. ((surprised)) Both laugh</i>
04	Stan	<i>Huh</i>
05	LP	<i>When you say Jane's wedding, do you mean you would spend it on Jane's wedding?</i>
06	Stan	<i>((immediately says)) Yeah</i>

The immediacy of his response at line 02, conveys a strong sense of support for her and this positions him as generous and family-minded. This response also indicates that he thinks about others before himself. At line 03, our shared laughter reflects our combined surprise at his comment and my evaluative response.

Excerpt 2 Stan - "Uncle"

Several participants, including Harry, Brad and Jacob expressed pleasure in being uncles. Stan is looking forward to the prospect of his familial position changing.

Line	Speaker	Transcription
01	LP	<i>So your chances then of becoming an uncle?</i>
02	Stan	<i>"In-two-year. In two year".</i>
03	LP	<i>You reckon?</i>
04	Stan	<i>Yuh</i>
05	LP	<i>Mmm. I would say the same thing about um Sorry I am interrupting you.</i>
06	Stan	<i>"I hope- soon- sooner. I hope sooner."</i>
07	LP	<i>mmmm....that will be fantastic won't it? mmmm that would be so lovely; you will be so thrilled and you will be a very good uncle. I know that.</i>
08	Stan	<i>yuh↓ ((serious))</i>

My position in line 05, demonstrates respect for his turn and status as the speaker, by apologising for my interruption. The anticipated change in his position in the family was clearly expected (line 02) and important, as demonstrated by his VOCA-mediated use of “*I hope*” and the revision of the adverb ‘*soon*’ to ‘*sooner*’ using the comparative form (line 06). The low volume of his response in the final turn (08) also conveys solemnity.

Excerpt 3 Ellen - “New boyfriend”

Ellen’s aspiration concerns a new relationship. She clearly communicates her intentions to both her carer and myself. As her VOCA was not available at this time, we suggest options to her, to which she responds decisively using her highly effective unaided communication signals.

Line	Speaker	Transcription
01	LP	<i>You want to show him where you live and ...</i>
02→	Ellen	(UpL) ‘no’ + vocalises
03	LP	<i>Sorry? I am confused.</i>
04	Carer	<i>And meet your friends?</i>
05	Ellen	(UpL) ‘no’
06	Carer	<i>Meet Alana?</i>
07	Ellen	(UpL) ‘no’
08→	Carer	<i>You want him to stay?</i>
09	Ellen	(upR) ‘yes’
10	Carer	<i>You want him to stay the night.?</i>
11→	Ellen	Smiles + looks to me.
12	LP	<i>Stay the night?</i>
13	Ellen	V= <i>uh</i> + laughs
14	LP	<i>This sounds interesting.</i> Laughs

Ellen demonstrates a position of resolve with her development of a new identity as a partnered woman. Throughout this discourse, she listens intensely to assert control over the dialogue. In line 02, she definitely rejects my suggestion, which I greet with uncertainty and surprise (line 03). Her carer’s suggestions are similarly rejected until at line 08, we make progress. Line 10 presents a suggestion that is as explicit as the

carer was prepared to be, given the unfamiliarity with the context (as she explained to me later in the interview). Ellen’s response at line 11 is interesting because she unexpectedly turns her eye gaze away from her carer to me, as if to check my reaction to the suggestion. She enjoys sharing the laughter and is happy to change topic to discuss the general feasibility of guests staying overnight.

Ambitions

Five participants expressed ambitions in terms of securing employment, attending a college of further education and increasing volunteering activities. Two participants talked about wanting to help others.

Excerpt 4 Brad - “5 days a week”

In our first interview, Brad initiates a sequence of talk about his fervent desire to ‘work’.

Line	Speaker	Transcription
01	Carer	<i>No your income is ok. You won’t get your disability payment or income support cut. That’s right.</i>
02	LP	<i>So what sort of work would you love to be able to do?</i>
03→	Brad	“I want - work - not - home - 5 day – s - week. I want work not home, 5 days week” Looked at carer.
04	Carer	<i>Are you meaning that you want to live at home, go out to a job then come home. You don’t really like mixing your work up with being at home.</i>

Line 03 is a clear statement of his intentions. He accepts ownership of his plan by including the ‘I’ statement. He wishes to be able to travel to a place of employment on a regular basis. This positions him as a ‘contributor’ to the community. By making the physical effort to go from his home base, he is seeking a dual identity having home and work positions.

Excerpt 6 Polly - “V-V-O-L-U-N-T-E-E-R-E-D”

Polly enthusiastically shares with me her offer to do some investigatory work for the new college build design. She proudly asserts that she volunteered to go.

Line	Speaker	Transcription
01	LP	[...] <i>Your time at the College was like freedom.</i>
02	Polly	“I have - <u>V-V-O-L-U-N-T-E-E-R-E-D</u> muh - to go- I have volunteered to go”.
03	LP→	<i>What up to the College? Have you? In what capacity? What will you do?</i>
04	Polly	<i>FR muh... “For-our-new-building. For our new building”.</i>
05	LP	<i>How do you mean sorry?</i>
06	Carer	<i>For equipment - as a little spy to see what equipment there is.</i>

Polly’s persistence in spelling the multisyllabic verb, consolidates her pride in her novel role. My response at line 03, indicates surprise and almost disbelief, with its multiple questions and enthusiastic rate of delivery. In line 04, by explaining the reason for her visits, she demonstrates a sense of participation in the community through contributing to the permanent physical creation of a new building. At line 06 her carer offers an additional explanation without invitation. This too conveys pride in Polly’s new role.

Independence

Excerpt 7 Maisie - “Moving”

Maisie uses her unaided communication signals to participate in this co-constructed conversation. On this occasion she had her VOCA available on her wheelchair.

Line	Speaker	Transcription
01	LP	<i>Are there changes coming up for you?</i>
02	Maisie	<i>Ah ↑</i>
03→	Carer	<i>Have you got Hobart Street on that?</i>
04	Maisie	<i>No response</i>
05	Carer	<i>No?</i>
06	LP	<i>Hobart Street?</i>
07	Carer	<i>.....where you are moving in September.</i>
08	LP	<i>One of your friends told me... he happened to let it slip that you were moving in with him. Is that wise? How are you feeling?</i>
09	Maisie	<i>Laughing pose + smiles</i>
10	LP	<i>That probably looks like a happy response!</i>
11	Maisie	<i>Smiles + vocalises↑</i>
12	LP	<i>Great! Big step big step</i>

At line 03, her carer intervenes to ask Maisie if she has the required critical information on her VOCA. Her question may have been prompted by the volume of Maisie’s positive response to my opening question. Whilst the carer’s question is suggestive of being helpful, she uses a determiner ‘that’ instead of the name of her device, in a dismissive manner. Maisie is unable to provide any information to me about her move because her carers had not pre-programmed the necessary vocabulary into her device. Maisie compensates for this oversight by expressing her excitement with the impending move using positive and strong non-verbal communication.

Fulfilment – day to day activities

Excerpt 8 Jacob - “ipad”

In this excerpt Jacob asks me a VOCA-mediated question to help him develop his interests.

Line	Speaker	Transcription
01→	Jacob	FRonVOCA.. “What I was going to ask you do you now ((corrects spelling)) anyone know about ipad?” ((FT 4 mins 23 sec))
02	LP	<i>Huh...so not...not, you are not thinking about an OT?</i>
03	Jacob	<i>No</i>
04	LP	<i>No. um... what about the ipad? Just....</i>
05	Jacob	<i>Shouts for his carer</i>
06	Carer	<i>Alright?</i>
07→	Jacob	<i>Will you?.....</i>
08	Carer	<i>Well he was... you were looking at something that he can go on from programme to programme and can take photos and email.</i>
09	Jacob	<i>yuh</i>

Jacob opportunistically questions me, changing from a previous topic about the availability of therapy services. In line 01, he initiates asking this question by politely prefacing his request with a hedging comment. Again, the long-time duration conveys the importance he attaches to furthering his interests. What is noticeable in line 01 is the absence of interruptions. I reflect a position that conveys my assumption that he is competent to talk for himself; that he is not helpless and in need of ‘rescuing’, despite taking a turn of almost four and a half minutes duration.

Jacob shouts for his carer to speak on his behalf to explain the intricacies of the problem (line 07).

6.5 Summary

6.5.1 Research question 2 What past life experiences do the participants talk about?

In summary, asking direct questions, for example, “Have you travelled to America?” elicited spoken recollections of past events that were shared using concise VOCA-mediated utterances. Some discussions in these interviews were relatively limited in content but long in duration due to the nature of aided conversations. Participants had memories of past experiences upon which to draw and demonstrated their willingness to recount and share, using a variety of communication modes and interaction strategies. Stan’s written story comprised a coherent discourse structure to substantiate his pleasure in *“remembering everything”*.

6.5.2 Research question 3 How do participants talk about their quality of life?

In summary, most participants constructed VOCA-mediated utterances to share with me their worries, satisfaction with life and their aspirations. Some participants expressed frustration and helplessness over aspects in their lives but generally these negative feelings were balanced against positive positions. The achievement of an aspirational mind-set is called for and some aided communicators strongly demonstrated this in these interviews. Some participants demonstrated personal responsibility for their lives and positioned themselves as contributors to communities. Self-confidence and optimism were featured and a sense of contentment was expressed. Participants shared aspirations that focused on the development of new relationships, community ambitions, independence and the creation of fulfilling day to day lives. A connectedness through helping, working and participating was demonstrated, and similar to the articulated experiences of older adolescents with cognitive impairments acting as tutors (Boristov & Reid, 2010)

The excerpts illustrate the specific topics discussed with adults who have cerebral palsy who use VOCAs and unaided communication modes. The diversity of topics covered was broad demonstrating the uniqueness of each participant interaction.

In the following chapter, I will discuss the four main findings from Chapters 5 and 6 in terms of the interactional competence of the participants. Additionally, I develop further the discussion about multimodal communication, and also about the participants' multiple identities and positions, for example, as poet, thinker, and as *“people too”*.

Chapter 7 Discussion

7.1 Introduction

The purpose of my project was to investigate the participation of a significant and under-represented group of adult aided communicators in conversation-styled interviews. By adopting a discourse analytical approach to the interview data, my interpretation identified how participants positioned themselves, as not just speakers and listeners, but further, how they interacted to share their opinions, knowledge and memories using their VOCAs. Excerpts from the interactional sequences were presented in Chapters 5 and 6, illustrating specific features of conversational phenomena for example openings, topic discussion and novel contributions. Of particular interest in the data was the presence, absence and variation of ordinary interactional features and positions as evidence of competence as ordinary adult communicators in authentic contexts. A discussion of my findings related to the wider literature follows.

In responding to the three research questions, I have identified four main findings about the nature and positioning of adult aided communicators in interaction: Firstly, given the temporal constraints, the participants and I were able to participate in relatively ordinary exchanges over 2-6 meetings, each lasting for 1-2 hours, exhibiting many common interactional features. These exchanges were organised between us with variations in positions and conversational styles. Secondly, an array of topics was covered by employing different strategies and multiple modes of communicating. Some topics prompted associative recollections and other topics were abandoned or changed. Memories, satisfaction with life and aspirations were interwoven. Thirdly, interactional conditions, for example, the settings and presence of carers (or others) were largely controlled by the participants enabling the most conducive and private communication environment to be established. Finally, aided conversations like the conversations between people with aphasia or dysarthria and their partners (Bloch & Beeke, 2008), necessarily require the co-participation of at least two people and when conducted in real-time, the responsibility for reciprocal interplay rests with both parties. Unbalanced and limited conversations are not restricted to adults with acquired or developmental communication impairments,

particularly aided communicators, and are critically influenced by the motivation, attitude and skills of the communication partner (Sorin-Peters, McGilton & Rouchon, 2010; Kent-Walsh & McNaughton, 2005; Mackenzie, Brady, Begg & Lees, 2001).

7.2 The interviews

Participants were enthusiastic to engage, which was not surprising and corroborated in a recent study by Kidney & McDonald, (2014) involving a different group of people with life-long communication impairments and intellectual disabilities. My participants also predictably enjoyed talking about themselves for prolonged periods of time in the comfort of their own surroundings, as also established by Tornqvist, Thulin, Segnestam & Horowitz (2009). They engaged in conversation with an unfamiliar partner, and were usually unperturbed by the presence of the video camera. The eagerness, seriousness and willingness with which consent was granted, confirmed the accessibility and appropriacy of the consent process, in contrast to the difficulties experienced by Lloyd et al, (2006) and Carlsson, Paterson, Scott-Findlay, Ehnfors & Ehrenberg (2007). There may well have been different motivations for participation, (Ison, 2009; Smith & Murray, 2011), and also the individual approaches by the participants in preparing for the interviews, for example, one participant specifically requested “the next lot of questions” so she could prepare her thoughts.

The format of the interaction meant that as an interviewer I was initially seeking particular information from my participants. The balance of power and control was tipped towards them as holders of knowledge. An active interview process - “question/answer/develop” was central to the social interactions. The format with its variety of question types and its subsequent positioning of partners was reciprocally respected in the interviews. The experience appeared empowering for the aided communicators and two participants specifically commented that they enjoyed ‘having to think’. Evidently, an asymmetry in the distribution of knowledge towards them existed, which is a perspective in contrast to that expressed by Kvale & Brinkmann (2009).

It is not uncommon for natural speakers with variable intelligibility to evaluate their partners in terms of conversational worth and related benefit (Inahara, 2013). My research extends Inahara's findings, to include aided communicators. The participants might not have valued me as a listener and consequently, withheld or limited interaction, perhaps risking being misunderstood or positioned as passive. This positioning has been noted by Bloomberg, West & Iacono (2003) in their work with adults with intellectual disabilities.

My position as a listener and recipient of information required me to exercise skills as an interviewer, a listener (Hustad, Dardis & Kramper, 2011), a conversation partner, a reflective practitioner and an experienced conversation partner with aided communicators (Kent- Walsh & McNaughton, 2005; Trembath et al. 2010a). All of these positions may well have been perceived by the aided communicators as conducive to successful outcomes. It is conjectured that the presence of these skills outweighed any bias or negative influence from my gender, age and social class; supporting markers proposed by Manderson, Bennett & Andajini-Sutjaho (2006) as influential.

As largely communicatively independent adults, there was no expectation on my part, of proxy or surrogate involvement (Goldbart & Marshall, 2011) – people (usually family members) who have close knowledge of the child or young person who are viewed as being able to speak on their behalf. Whilst this term is used in learning disabilities, aphasia (Dietz, Thiessen, Griffith, Peterson, Sawyer & McKelvey, 2013) and childhood studies, the act of “speaking for another” is also evident in research with people with aphasia (see **7.3.6** in this chapter). Several participants asked for a parent to be involved as elaborator or translator, for individual reasons, subsequently challenging the nature of the parent's multiple functions and identities (Gillespie, Murphy & Place, 2010).

It has been established in the literature that asymmetrical power and asymmetrical language-based interactions exist under a variety of conditions, for example, when

care-givers are helping children to develop language (Pennington & McConachie, 2001) and in classroom interactions between the teacher and their pupils where the three basic moves (initiation/response/feedback) are commonly executed (Linnell & Markova). The dominance of the adult in these relationships may condition children (or learners) into offering restricted or predictable responses that enforce certain positions, for example passivity (Pennington & McConachie, 2001). Indeed these characteristics can also be observed in some institutional settings such as care homes for adults with cognitive impairments (Stokoe et al, 2012), with aided communicators (Kent-Walsh & McNaughton, 2005) and in some medical consultations (Collins et al, 1997).

Recently however, in peer-to-peer interactions between children (aided and natural speakers), apparent passivity was analysed using conversation analysis (Clarke & Wilkinson, 2009). During episodes of non-serious talk, the children aligned and affiliated themselves using their communicative repertoires to create active engagement in fun and naughtiness. Clarke & Wilkinson's study is in contrast to the adult-child dyads studied and suggests that a more in-depth investigation of adult interaction is required, to fully understand the notions and occurrences of passivity and asymmetry. Indeed, some of the excerpts used in this thesis illustrate the exchanges in non-serious episodes providing positions of equality and active humorous engagement thus expanding our knowledge and understanding of interaction with adult aided communicators.

Other variations in interaction and the language used, have been attributed to the age and gender (McCarthy & Light, 2005) of the interactants. Some evidence of this was present in my interviews and could be explored and debated using discourse analysis. Additionally, for aided communicators, linguistic asymmetry can also be present due to an impoverished content in the communication device, the method of access, strategy limitations and creative conversational short-cutting (see section 7.7 in this chapter for further discussion).

A discursive approach to the data, afforded both macro and micro levels of analysis. At a macro level it enabled me to see evidence of how knowledge influences interaction, for example, politeness discourses (Brown & Levinson in Jaworski & Coupland, 2006). At a micro level I could identify evidence of how features of interaction function, for example, silence (Lewis, 2011) and eye-gaze. When linguistic limitations exist, an alternative method of exploring the interaction of a multimodal communicator and speaking partner is warranted. As our communicative repertoires are an integral part of the dynamic process of constructing identities and in turn, helping to make sense of memories, knowledge and opinions, a sensitive and rigorous approach to data analysis is therefore required.

7.3. Interaction in the interviews

7.3.1 Opening the interview

The literature on how aided communicators open interactions is to my knowledge, non-existent. Notwithstanding Collins et al's (1997) description of how conversations between aided communicators and natural speakers were brought to a close, openings appear not to have been described in the literature, despite attracting significant interest in natural-speaking communities. Sidnell (2010), for example, describes how conversations are opened between natural speakers who do not know each other. Greetings act to express a desire and an availability to interact, and an agreement to participate (Orr, 2008). Interactants (Tannen, 2007) move from unfocused to focused interaction depending on their view or line (Goffman, 1967) by incorporating non-verbal devices such as eye gaze, smiling and "appeasement gestures" such as back-patting or handshakes, as evidenced in the sequences between male and female naturally speaking young adults (Riggio et al, 1981). They act to establish or reaffirm the relationship, and are learned behaviours.

My study widens our knowledge about opening sequences; how they are organised and of their vital function in the conduct of adult aided interaction. In my interviews, most of the openings captured on video showed that participants' greetings were non-verbal and subtle. Generally, these signals help orientate participants to the purpose of the interaction and may also be additionally important for aided

communicators to position as socially motivated in putting others at their ease (Coupland, 2003). Countering any negative stereotypes or judgements may be a concern. Indeed, some of the adult aided communicators in Trembath et al, (2010a) encountered negative judgements by natural speakers. One of the limitations for the aided communicators (of both genders) in my study, was their inability or reluctance to initiate or reciprocate approximated physical gestures, for example, handshakes. Expressing social recognition and the social closeness that accompanies the act can be one of the most critical phases in interactions.

Interviews were opened by aided communicators with the use of VOCA-mediated formal phrases (either novel or pre-programmed) associated with social etiquette and politeness routines. One notable start included an intentional apology with accompanying explanation designed for effect (Lakoff, 2003). Another form of opening was a more casual, 'warming up' style, with the aided communicator positioned with anticipation commensurate with the role of interviewee. A final variation of a formal style was created in one VOCA-mediated response that was satisfactory in the situation and served the purpose of demonstrating social action and control. These opening stylistic strategies, including the 'how-are-you' inquiries appear in typical interactions with natural speakers (Sidnell, 2010) but one difference with aided communicators is perhaps the limited ability to respond flexibly and sensitively to the individual identity of the recipient. Whilst this may be so, particularly for users of pre-programmed phrases, what is significant is that the contribution happens at all, and additionally its impact on the interaction (Goffman, 1981). An inquiry such as this can portray the speaker as caring and aware of rules of etiquette. This opportunity to position oneself as socially-aware is important because it creates a positive impression of communicative competence, and offers inter-personal development of the interaction (Orr, 2008).

The positions constructed by these politeness routines were of confident and assertive adult speakers who were mindful of the needs of others. Some expressions of politeness took time and effort to create thus adding to the positive impression

they were presenting. This created an atmosphere of engagement and congeniality, engendering shared participation.

Many adults with cerebral palsy employ carers and it is evident that in some settings the carers will assume the role of host on behalf of the adult. It is not known whether this is with the aided communicator's prior instruction. For others it may not be a recognised or important aspect to their management of interaction and their identity.

Openings therefore appear an important facet of interactional competence. Whilst there was considerable variation across participants, their restricted voluntary movements, their physical dependency and their contexts, this variation is reflected in these interviews. It may be that some aided communicators have neither used nor practiced these opening sequences, and noticed their impact on subsequent interaction. Clearly this has implications for individualised clinical intervention. This supports and broadens proposals by Simmons-Mackie, Savage & Worrall, (2014) for people with aphasia, and Bloch & Beeke, (2008) for people with aphasia and dysarthria.

7.3.2 Establishing the topic

Topic talk by natural speaking conversation partners considers both what the interaction is *about* and what the talk *does*. Both facets are important for adult aided communicators and their partners in terms of participation in conversations and presentation of self and identity. Studies of the content of topic talk between predominately natural speakers include different contexts, for example, work places (Balandin & Iacono, 1999; Tönsing & Alant, 2004) and different age-groups such as adolescents (Smith, 2005). Smith (2005) reported that able-bodied adolescents frequently discuss friendships, sport and leisure, and Balandin & Iacono (1999) reported that the able-bodied speaking adults at work, discussed the following topics at lunchtime most frequently: work, fact-finding, food, family life and judgements. Such information is important to help guide aided communicators and SLTs to ensure that the vocabulary on their devices is current, socially validated and appropriate (Dark & Balandin, 2007). This is one of the greatest and most frustrating challenges, until an aided communicator can either spell or programme their own vocabulary.

The availability of appropriate vocabulary is only one feature of topic talk. Other features that help identify what topic talk does in an interaction includes how people orient to and organise themselves to talk about, pursue by using tying structures, and finish a topic (Sidnell, 2010).

In addressing the first critical challenge for adult aided communicators of what the talk is *about*, topics of conversation were established by both parties in this study. When an aided communicator initiated the topic, it positioned them as assertive communicators with motivation to participate with equal authority to ask questions. On some occasions, unaided communication modes were used, due to a lexical insufficiency, to signal disagreement or dissatisfaction with the natural speaker's choice of topic. Topics that were more agreeable to the aided communicator or demonstrated affiliation or "likemindedness" between the two parties, generated increased performance or take-up; a finding in accord with Clarke & Wilkinson (2013) between children (aided and natural speaking). This shared involvement (Tannen, 2005) promotes rapport and social closeness and is a common ability for all competent communicators.

7.3.3 Taking turns

It is important to notice how turns are taken in interactions between aided communicators and natural speakers because organisation is not only evidence of a co-ordinated and skilled activity but of status within a shared involvement. Notably in conversations between natural speakers, one person speaks at a time. Usually, there is minimal gap and minimal overlap (ten Have, 2007) between speakers. A similarity with turn-taking between an aided communicator and natural speaker, is that one speaker usually speaks at a time. The temporal organisation in terms of gaps and overlaps however, varies considerably across participants, positions and topics (Clarke, Bloch & Wilkinson, 2013).

An example of the above difference occurs when the natural speaker appears to 'overtalk' in their turns. Aided communicators in this study, responded to this feature with anticipatory non-verbal signals. They managed this protracted turn (over-talk) by initiating the construction of their turn before the end of the previous turn by the

natural speaker. The aided communicators' over-lap can be construed as not listening and rude (by some) or confident and assertive behaviour indicating high levels of motivation to participate and described as indicative of a strong orientation to progressivity (Koole & Mak, 2014).

Koole & Mak (2014) report that this behaviour was noticed in an interaction between Hester, a woman with ALS (amyotrophic lateral sclerosis) communicating with a VOCA and her natural speaking partners. Hester had a history of typical conversational interaction as a natural speaking person herself and in the extracts presented, demonstrated behaviours that accorded with some of the participants in this study. The frequently silent-overlap was interpreted as keen anticipation of their contribution.

Once the natural speaker who is holding the turn, acknowledges the unaided communication signals and commencement of message formulation, there are two choices. The first is to stop talking and wait. The second is to continue with seemingly unimportant 'chat' or filling-in, often with the aim of developing rapport, and then tailing off when the aided communicator is observed to be ready to speak. This "filling-in" has also been described in interactions with aided communicators who are children, by Noren, Svensson & Telford (2013). Co-occurring talk during the beginning phases is unique to VOCA-mediated turns and Clarke and Wilkinson (2008) state that in interactions with children, filling-in runs the risk of disturbing the aided communicator. Both strategies were observed in this study and the main reason for this variability seemed to be a deference to the relative importance of the topic. The choice of strategy adopted by the natural speaker in relation to the importance of the topic, conveys the measure by which the aided communicator is valued and vice versa. This finding extends the knowledge about the nature of turn-taking for aided communicators beyond that of children and adult acquired AAC users.

Interactional strategies that supported turn-taking included assertive positioning as listeners and speakers (or joint participants), with clear role definition (as a listener 'you wait' and as a speaker 'you tell'). During more protracted aided speaker turns, speakers concentrated and persevered demonstrating that they attached significant importance to their positions as speakers offering contributions as evidence of interpersonal involvement (Tannen, 2007).

An occasional and interesting occurrence during protracted aided communicator speaker turns, included low-key (quiet) parallel-talk between a carer and myself. This served to build rapport and trust. Parallel-talk was acceptable to all concerned because it neither detracted nor interrupted the speaker's turn. This endorses the work by Norén et al (2013), who also describe the occurrence of parallel-conversations occurring within families whilst the aided child communicator formulated their contribution with no apparent ill-effects. The use of such a strategy to accomplish other business of secondary importance and with the permission of the aided communicator, is expedient.

It is critical for communication partners and SLTs to be cognizant of the importance of the distribution of turns because of the possible negative impact on an aided communicator's personal and social identity when marginalised and positioned by the natural speaker as a lesser-contributor. Shadden and colleagues (2005) present descriptions from their adults with aphasia, as having had their 'identities stolen' when they lost their language abilities and this is of course, specific to acquired disorders. The notion of marginalisation and stigma however, may not be (Read et.al, 2014). These concepts neither arose nor were explored in this study.

7.3.4 Maintaining topics

An ability to talk about 'stuff' is important to demonstrate one's identity, knowledge and position in society. An aided communicator might be limited in their participation by many factors such as the availability of appropriate vocabulary, opportunity to have practised talking about topics, or life-experiences. It is therefore important to know what content is possible to develop by adult aided communicators, what strategies they use and also what the talk does. From the literature reported in Table

2, topics discussed varied from leisure pursuits (Dattilo et al, 2008) to volunteering (Tremabth et al, 2010), from feeling lonely (Cooper et al, 2009) to being in hospital (Hemsley et al,2008). What is missing from this topic-talk is how the sequences were created and how the aided communicators positioned themselves as particular kinds of people with identities such as sporty and healthy, as contributors to communities or as opinionated and assertive. This is a vital omission. It might have been useful to have had this topic-talk detail (see Bloch & Wilkinson, 2013) in order to inform SLTs in their design of interventions, including conversation therapy. Additionally this topic detail was omitted in the study of an aided adolescent communicator by Lilienfeld & Alant (2005) where the young man had increased his maintenance of interactions over an intervention period, altering his classmates' perception of his identity. My project, however, endeavoured to address this omission by including extracts of topic talk, showing how they were maintained and the positions created.

Topics were maintained by aided speakers who positioned themselves using speaker self-references (Land & Kitzinger, 2007), as opinionated with personal views that were passionate and informed. Some views stated consequential action. Participants reflected ownership of views and the perspectives of others. Speakers also positioned themselves with moral agency (Harre & van Langenhove, 1991; Krahn & Fenton, 2009). These all contributed to a free-flowing conversation maintained by linguistic content and interactional competence. The conversation partner can receive the views, using a reflective questioning style or may need to respectfully invite elaboration or clarification depending on terms of agreement (Heritage & Raymond, 2005).

Each interview although titled as such, was a social interaction with varying degrees of formality and content. Although predominantly single-flow they morphed into two-way streams of conversation. The joint actions of both speaker and recipients demonstrated often short sequences of collaboratively constructed conversation and interaction. This reciprocity is demonstrated by adults with aphasia and dysarthria (Bloch & Beeke, 2008), but significantly, by adult aided communicators, for example, adults with Motor Neurone Disease and dysarthria who use AAC (Bloch & Wilkinson,

2004). What is noticeably different between these groups and my participants however, is that their participants use multimodal strategies fluidly to exchange a greater amount of content. In the extracts presented by Bloch & Wilkinson (2004) timed durations of the sequences were not included. This is important information when considering reciprocity. It is probable however, that given their adults have a history of natural speaking communication and only recently have acquired the use of AAC, that the extracts are shorter in timed duration than many of the excerpts included in Chapters 5 and 6 in my thesis. What is important with my participants' sequences is that they have been recorded and can be regarded as evidence of typical interactional skills, thus contributing further to the extant literature.

VOCA-mediated responses are not the only way to maintain an interaction. Both parties in some of these interactions in my study, effectively used vocalisations and other non-verbal behaviours as continuers to support the 'speaker's' turn in maintaining the topic. Non-verbal behaviour can also be effectively used to control a potential threat to topic maintenance. These individualised strategies are undoubtedly important to identify, particularly when considering clinical intervention.

Aided communicators tended not to be interrupted when they held the "conversational floor" and this behaviour, whilst not uncommon in naturally occurring, typical conversations with familiar others (p. 108, Taylor & Cameron, 1987), does not appear to be documented in the literature regarding adult aided communicators. It was unknown if this was a novel and/or powerful position for them or if it facilitated an easier turn, knowing that they would not be interrupted once they had started.

It was noticeable that some of the conversation strategies used by natural speaking children (Schley & Snow, 1992) and adults (ten Have, 2007) were not available to the aided communicators, for example, linguistic intonation, pitch and volume, false starts and repetitions. Features such as hesitations (filled and unfilled) and word and grammar corrections, however, were present. Some speakers used VOCA-mediated responses, filled-hesitancies and displays of understanding (Bloch & Wilkinson,

2013) using vocalisations and body-posture. This is clinically important for SLTs to understand in order to facilitate the use of these strategies by aided communicators to help effect positive social and personal outcomes.

7.3.5 Shifting the topic

Topic shift was managed and effected by both parties. It typically occurred through the use of language for example, reflective phrasing or direct statements. Change occurred when the previous topic had been jointly closed; often finalised by pausing. This behaviour is evident in naturally-occurring conversations, reported in Sidnell (2010). Rapid shifts in topics did not occur because of the slower pacing of the interview. Occasional and unpredictable shifts in topics however, were evident in some interviews. It is important for both conversation partners to notice the indicative spoken and non-verbal signs of readiness for topic shift.

7.3.6 Managing others to speak on their behalf

Some aided communicators had carers or family members who could or would speak on their behalf; an interactional feature described in the research on aphasia as “speaking for another” (Simmons-Mackie et al, 2004) and built upon Goffman’s ‘speak for yourself’ rule (p.233, Schiffrin, 1993 in Tannen). It is interesting to note that the roles of the ‘others’ are variable across and within my participants, reflecting a critically important, dynamic and individual interactional need. They, unilaterally or with permission, assume roles as protectors, elaborators, spokespersons or facilitators. They may be employees with different statuses, parents or family members with different personality characteristics. In this study, there were no spouses or intimate partners acting as ‘others’ unlike in many of the studies with people with aphasia (Brown et al, 2010; Simmons-Mackie et al, 2014). ‘Others’ might be required to animate, assert, support or elaborate in a manner acceptable to their employer, daughter or brother, and importantly these positions will change. In the interactions with Harry for example, when he pointed to his targeted communication-aid-mediated contribution (a written word) he was considered the author (or speaker) and the partner who spoke out his targeted contribution might be classified as the animator (Clarke & Wilkinson, 2013) or the “voicer”, a term suggested by Pilesjö & Rasmussen (2011). These may be considered unimportant classifications but there is evidence to suggest the positioning of ‘others’ positively or negatively affects

interactional competence as evidenced in the interaction within a family with a person with dementia (Purves, 2011).

In my study, the participants employed different strategies to manage their 'other', by looking to invite in or by using a direct request. Some carers spontaneously offered to assist with topic development, for example, using phrases such as, "Do you want me to..." (implying, "I have information if *you* would like me to share it") versus "Can I share ..." (implying ownership of information and "*I* want to share it"). Carers presented different roles, behaviours and limitations. Most demonstrated respect towards the aided communicator and the interview situation as a whole. Third-party involvement has important consequences for both the person with aphasia and their conversation partner (Bradley & Douglas, 2008; Worrall, Brown, Cruice, Davidson, Hersch, Howe & Sherratt, 2010) and most importantly the person with aphasia's personal and social identity (Worrall et al. 2010). Whilst one of the participants in my study expressed the view that people who violated their position were "rude", it was not established if this was a commonly shared view by all adult aided communicators participating in ordinary conversations.

In some of the literature about adults with intellectual impairments, when a support worker or carer speaks for that person when in their presence (Williams, 2011) this is viewed as limiting and therefore positions the person with the communication impairment as dependent. The same could be said when carers or support workers physically act on behalf of their employer/client and even though care and support are individual matters, many carers working with a diversity of clients, wrongly but sometimes rightly, assume the role of 'gatekeeper' (Parrott & Pettit, 2012). One older adolescent with CP in Egilson's study (2014) described that having multiple assistants was 'messy' as they each had different expectations of her (p. 1081). Although 'gatekeeping' has been described by people with aphasia and their spouses as stigmatising and embarrassing (p.1570, Gillespie et al, 2010) this opinion was not offered by the participants in my study; all of whom had many years of acclimatisation and acceptance of their different communication styles (Kraat, 1987).

The employees (carers, personal assistants and keyworkers) or parents of the participants in my study, largely acted according to a role which can be defined as a communication assistant (Collier et al, 2010) or one that is respectfully subservient, only contributing when invited or allowed. As stated previously, my interviews were not carer-focused. This is in contrast to the adults with cerebral palsy who participated in the study by Cooper et al (2009) where their carers always spoke for them. In my study, one exception to this subordinate positioning, was when one of Polly's carers acted unilaterally in a conversation to add information to help topic development. In this case it served to positively reinforce Polly's new role as a volunteer, and she did not respond in an upset manner.

Privacy was highly regarded and participants chose the location of the interviews; an empowering interviewing condition used with children with communication impairments (Morris, 2003). At times participants requested privacy by asking carers to leave, or else their carers initiated departure. Carers demonstrated a respectful understanding of their role limitations and this enabled their employers (participants) to contribute independently in meaningful conversational interactions. This behaviour may have been specific to these interview contexts and not necessarily typical of their interactional style.

For some aided communicators with cerebral palsy, and also people with aphasia (Dalemans et al, 2009), the physical effort of offering contributions or talking, is often hard work and periods of respite from using their VOCAs, were evident in my study, and appeared to be appreciated and important. Barnes & Ferguson (2012) also identified extended periods of partner-speakership that were found to provide respite to people with aphasia who provided continuers as positive feedback; a finding replicated in my study.

7.3.7 Interaction breakdown and repair

Listeners usually signalled by speaking when contributions were unclear or misunderstood, followed by requests for clarification, when a VOCA-mediated (or naturally-spoken) response was problematic. Some mis-communications were irretrievable in the interview contexts, and consequently were abandoned.

Conversation breakdown was rare. Signals such as explicitly worded phrases and the use of continuers were evident with both parties, which concurs with some of the conversations with natural speakers with aphasia in Barnes & Ferguson (2012). Instances of 'glossing over' failed talk occurred in the above study, but rarely happened in my research for several reasons. Firstly the altered temporal dimension of the sequences with aided communicators, on most occasions favours successful exchanges and secondly, there seems a preference for conversation partners to move the conversation along. This phenomenon requires deeper exploration.

The degree to which aided communicators in my study, repaired or managed troubles in talk was a co-operative, complex but highly individualised process. In natural-speakers' conversations, both parties work hard to minimise breakdown, and in aided interaction, there appears the same commitment. Griffiths, Barnes, Britten & Wilkinson (2012), explored through conversation analysis how speakers diagnosed with Parkinsons' Disease, experienced being 'talked-over' due to the variations in speech volume and rapid pace, and how this was managed with their conversation partners. Conversely, some of my participants also experienced being 'talked-over' but due to their slow pace at contributing. Additionally another consequence of slow pacing, and therefore breakdown, may be the loss of concentration or interest by the listener, or even, as was the case in my study, the forgetting of the original question. These instances of breakdowns or troubles, do not however, have to damage the established rapport or the social closeness experienced.

An interesting situation was observed when an utterance was clearly expressed by an aided communicator using multimodal communication, but not understood by the recipient, and the speaker chose neither to repeat nor persist. The absence of follow-up suggests either a lack of self-regard as a speaker, or a greater interest in 'moving' his choice of conversational topic along with the attention of a skilled listener. This pragmatic behaviour was also noted by Wickenden (2011b) in some conversations with the adolescent aided communicators and could be viewed as another example of progressivity.

Accepting personal responsibility for errors made or conversation breakdown resulting in self-repair and topic reconnection is desirable to maintaining interaction. Speakers then position themselves with stronger or more committed identities and this has clinical implications if included in conversation or interaction therapy.

7.3.8 Managing novel contributions

Novel exchanges arose in some interviews. These were recognised as positive and authentic contributions that made an impact on the recipients, evoking an atypical response. Whilst these were viewed as evidence in support of the naturally-occurring status of the conversations and of interactional competence, similar examples are yet to be documented in the literature with reference to adult aided communicators.

Some aided communicators offered criticism that was reacted to with surprise. Some unaided communication signals appeared challenging, confident and unexpected. Utterances could be of an emotive type eliciting an acknowledgement and empathy. Importantly, not only can these contributions offer personal insight, previously unknown to the recipients, but offer opportunities for social closeness. One of the methodological strengths of talking directly with aided communicators as in this study, was to limit the unsolicited involvement of the carers or proxies from providing knowledge from their different perspectives (Ison, 2009) and this was achieved.

Aided communicators use multimodal communication to express novel messages and can choose to be persistent or moderate with their intentions. Messages can be managed by responding with humour, surprise, relief and other emotions, facilitating greater understanding and interpersonal involvement (Tannen, 2007). Significantly, on taking a discourse analytic approach, evidence that aided communicators create novel contributions through multimodal communication in interactions was established. By analysing the complete interaction around the linguistic utterances or unaided communication signals, evidence of competence can be identified in children (Clarke & Wilkinson, 2013) and perhaps even more so with adult aided communicators due to their greater experience. This has clinical relevance for the judicious targeting of intervention and support. It is vitally important to the understanding of aided communicators' proficiency in communication participation.

7.4. Memories of the past

As yet, there are no reports in the literature of reminiscences by adult aided communicators with cerebral palsy. The aided communicators in my study however, recounted memories from their past, which is an occurrence typically associated with adulthood.

Participants shared past experiences; an ordinary activity described as important by Van Puyenbroeck & Maes (2009). Topics that elicited most reminiscing were about their educational histories and also related to holidays or being abroad. Long term memories were intact and developed to varying degrees of detail. Most reminiscences were triggered by direct questions and responses were constructed immediately provoking responses which could be humorous, unexpected, poignant and effect social closeness. Some long term memories were from participants' primary school experiences, almost 30 years ago.

Egilson (2014) reported longitudinal data on the school experiences of seven natural-speaking 17-19 year olds with CP (one of whom used AAC) who recollected events 8 years ago. By comparing the qualitative data sets (at 8 years and then at 17 years) exploring the stability of identity, one of Egilson's findings was that identity and views can change with age, postulating that this reflects a social construction of reality through talk. This is a useful study when considering the function of 'talking about' current and past events, that is, is the notion of self a function of the ability to talk about personal and social identity over time?

It is not known how frequently aided communicators reminisce in their everyday interactions with familiar partners and indeed, whether they were able to when VOCAs, opportunities and partners were unavailable or inadequate in their childhood and adolescence. Whilst most able-bodied speaking adults can recall events from their past as children at different ages, it was notable that the adult aided communicators in my study could do so, given their comparatively limited language and interactional experience.

In the absence of any comparative or supporting literature, it is suspected that a general limitation for adult aided communicators when *talking* about memories of past events, concerns the availability of unique and personal vocabulary, appropriate emotional representations (paralinguistic features) and the time to construct the verbal expression of impact. Stan's *written* story of the circumstances under which he holidayed in Mauritius, however, provides strong evidence of the benefits of having time and linguistic content (including spelling) to reproduce narrative sequences illustrating past memories.

Conversation partners and aided communicators can co-construct identities (Cameron, 2001) and past experiences, with the adult aided communicator taking an active and symmetrical position in concurring or disagreeing with the proposed storyline or content. This pattern is replicated in Solomon-Rice & Soto (2011) with aided children and their parents. It is important that these past memories are logged in a suitable format for the aided communicator to independently share with other conversation partners in different settings. For some aided communicators who are not holders of their own histories or are unable to share them due to reliance on significant others for detail and storytelling (Simmons-Mackie et al, 2004), a tangible record or document is critical. Without this, the scope of the topics of conversation that can be explored becomes further limited.

As research project topics, long-term memories served to demonstrate that all but one participant, because of her problems and limitations with her communication aids, could talk about events from their past, sharing insights and multiple positions of themselves (Harre & van Langenhove, 1991).

7.5 Satisfaction with life

Participants talked about worries and sadness, common to all people, for example, death of a parent, and a relationship with an estranged father. Specific worries associated with their disabilities however, dominated. When for example, carers are employed to provide basic personal care and then this care is unsatisfactory or inconsistent, this caused anxiety for four particular participants, and posed a moral challenge expressed by one person, to the manifestation of his anxiety. The system of direct payments for the provision of social care also presented financial concerns with life threatening consequences in two particular cases. A unique worry for one participant concerned the bureaucratic constraints (health and safety regulations) affecting the realisation of peoples' ordinary desires, for example, a trip to the beach to lie on the sand.

Two adult aided communicators talked about the sense of burden felt when dependent on their parents for care. This is a profound and divergent subject position to the same discourses presented by parents of children with disabilities in Broberg (2011) and therefore warrants further research.

Some of the aided communicators in my study, talked about being, 'happy now', and also as a comparative construct. Adults with aphasia however, also talked about the importance of being happy post-stroke, but not in comparison with life before the stroke (Brown et al, 2010). These same adults similarly expressed the importance of being able to laugh about life. Whilst this position was not explored in-depth with the adult aided communicators, for some, happiness also included reminiscing about fun times at primary school, and having a 'sense of humour'. The joking and laughter demonstrated throughout many of my interviews, were indicative of equal talk and rapport, similar to the findings in interactions between adult natural speakers with and without cognitive impairments (Williams, 2011), but in contrast to the 'missing discourses' reported by Sunderland, Catalano & Kendall, (2009).

Participants also expressed expectations of change with subsequent improvements in life, expressed as happiness or feelings of greatness. A contentment with life was, for one participant, supported by a strong faith and spiritual belief with an acceptance that as a human being, mistakes are made. Brown et al (2010) also report that such facets of 'being positive in outlook' are commonly reported in the general adult population (Sharp, 2012).

Participants talked about their own responsibilities in terms of generating happiness and fulfilment, and trying to work within the social care system. The challenge for some of them was not around accepting care, but around how to manage unsatisfactory care or its poor administration. How to instruct and provide feedback to carers and monitor quality of care, without compromising personal, moral and behavioural standards was a serious concern and echoed in McNaughton & Nelson-Bryen (2007). For one aided communicator who was totally dependent on the social care system, the consequences of this were restricting his activities that provided satisfaction in his life. His sense of powerlessness to argue and assert his case was strong.

In positioning themselves as happy and even content, it is possible that some aided communicators have accepted or are 'resigned to their lot'; a sentiment expressed by some participants in Egilson (2014), by some adults with aphasia (Brown et al, 2010) and adults with life-long language impairments (Tornqvist et al, 2009). This could be challenged by suggesting that their expectations from life were low; also suggested by Egilson (2014), and given that some of the real-life choices concerning partnering, careers, employment, literacy and independence have not been routinely available to all (Johnson et al, 2010) although communication impairments do not predict low outcomes, they do limit or alter options. Having additional physical impairments compounds this position, as expressed by three participants in my study.

7.6 Aspirations

Aspirations or 'hope and dreams' were voiced by all participants and compare favourably (although not completely) with those expressed by older adults with aphasia (Brown et al, 2010) and the adolescents interviewed by King et al (2000). Aspirations were clustered around four themes concerning social relationships, ambitions, independence and day-to-day fulfilment. Some of these realistic and authentic short-term (or on-going) aspirations concerning social relationships and independent living were in the process of realisation. Ambitions focused on contributing to the community in terms of employment and voluntary occupation, and this concurs with the findings of Trembath et al, (2010b). Unsurprisingly, fulfilling daily pursuits, for example, swimming, shopping, use of Information Technology and meeting friends also featured in their talk, similar to those found in the study by Dattilo et al (2008).

The success of these aspirations depends upon many variables (Dattilo et al, 2008). Opportunities need to be provided by others and sought by aided communicators. While some aided communicators accept personal responsibility for these aspirations, it is incumbent upon communities to share this responsibility.

7.7 Multimodal communication

Multimodal communication was a feature of all interactions and this concurs with the adult aided communicators in the study by Trembath et al (2010a) and indeed noted by Kraat in 1987. Harry switched from low tech to VOCA within utterances. If a speedy message was required Stan sequenced gestures, word approximations and co-opted in his father and Ellen used her eyes rather than her VOCA. What is interesting is the variation in their usage and purpose, and this has been explored through a discursive approach. The use of multimodality by my participants indicates that personal and important choices were made to make strategic decisions about which systems might work most effectively in each context, proposed also by Smith & Murray (2011).

The use of multiple modalities and resources either singularly or in combination with others, for the achievement of interaction is documented in the literature with natural speaking participants (Goodwin, 1981) and with children who use VOCAs (Clarke & Wilkinson, 2007). Other adults with communication impairments also draw extensively on their available resources “from lexis to prosody from facial expression to body posture” (p. 800, Beeke et al, 2013) in order to participate in conversational turns. Although the three participants with aphasia in Beeke’s study did not have VOCAs to utilize, both participant groups had linguistic limitations. However in Bloch & Wilkinson’s study (2004) with adults diagnosed with MND and dysarthria, who additionally used VOCAs (2013) they suggest that AAC is “one element in a wider ecology of resources used to achieve social action” (p.280) and that natural speech, non-verbal behaviour and AAC, are all used to complement each other in a very organized manner. Many of the users of AAC in my study also almost seamlessly used their multiple modalities to their advantage and together with their partners, displayed a mutual orientation to the range of multimodal resources, as described by Mondada (2006). A number of participants used word approximations that served as immediate interactional contributions, and most participants used vocalisations, particularly as displays of understanding as with natural speakers, with deliberate effect. This area, however, has yet to be fully explored (Lindström & Mondada, 2009).

A microanalysis using DA revealed a hierarchy of multimodalities by some participants. In most sequences across the participants, there seemed to be a natural preference for using voice first (sounds and word approximations that varied in presence and strength), followed by eye gaze and looking behaviours, then other non-verbal behaviours and finally the selection of VOCAs or communication boards.

For some of the aided communicators in my study, linguistic information was delivered at times, in a key word format, with one carefully selected word. Clarke & Wilkinson (2012) identified children who use single words strategically to prompt their partner into talking more expansively. Since this also occurs in adults, including those with VOCAs, perhaps it is an efficient strategy that has persisted since it was learnt at a young age (Wickenden, 2011a). Alternatively it could be a normal conversation

short-cut or may suggest that the aided communicator's pragmatic development has plateaued. Conversely as it is a behaviour mirrored by adult aided communicators with acquired disorders, it may indicate a normal aided, adaptive and natural speaking behaviour. Sheila Thomson (2002) who has Multiple Sclerosis and uses a VOCA, writes that she now has to "say it better". She is compelled to choose words more critically, selecting wisely but speedily for meaning and for feeling (p.6).

Communication devices have obvious limitations such as a lack of speed, linguistic content and paralinguistic features, for example, intonation. In these interviews, however, participants used their unaided communication signals frequently and effectively to either augment or replace linguistic messages. Devices cannot easily reproduce prosodic variations in pitch, loudness and tempo, and while these features illustrate aspects of identity, participants compensated using their own unaided skills, like shouting. Often these positively effected a faster, more animated and authentic exchange, demonstrating *their* competence in interacting and of the failure of their VOCAs to *aid their communication*.

7.8 Presentation as "people too"

Through these interviews, participants, like the participants with aphasia in Coursten, Konradi, Schimpf, Hardering, & Keilmann, (2014), positioned themselves with personal identities and not as 'just devices with people behind them'; a statement that resonates with the adolescent aided communicators in Wickenden's study (2011b). The adult participants' contributions constructed ordinary and individual positions in conversations, for example, Jacob self-described as a poet and, like Stan, acted as a cognitively active individual - as a thinker, a writer and a learner. Jacob enjoyed spiritual affiliation with others, and Stan enjoyed group membership with various sporting communities. Polly also enjoyed emphasizing her active participation as a learner and performer, in a social community, with her "non-disabled friends who had learning disabilities". They talked about themselves as both individuals and as members of groups. My positioning within our interactions was of a skilled and active listener who enjoyed and conveyed interest in their expressions of multiple identities (Davies & Harre, 1990) thus engaging in joint interaction.

Variants of identities through positioning in conversations were created by the participants. When initiating a contribution to a question for example, the time taken to respond could be indicative of a considerate and thoughtful position, or conversely, a motivated and active contributor. Another variant of personal identity was intentionally created through the personal interaction with others, for example, as an assertive employer. Through the explicit or inferred use of personal pronouns or names, participants could deliberately refer to actions, beliefs, experiences or opinions that expressed unique personal identities, for example, “[...] **I get my girlfriend back.**”

All adult aided communicators were able to express a social identity, having membership with meaningful groups, for example, college and a social club. Membership positioned them as travellers, political activists, believers, employees, bereaved and mainstream-educated. Again, these positions were discursively created. Bucholtz & Hall (2005) state that being heard as a contributor to a community is important and many of the interactions evident in this study, are testament to this status as a contributor.

Disability discourses were constructed in our interactions, infrequently and incidentally. Jacob self-described as, “**disabled**”, and in reflecting on his past history attending special schools and residential centres for people with physical difficulties, factually positioned himself as, “**disabled and a person too**”. He augmented this position with an opinion that, “**some people with disabilities are not interesting**”. A variety of positions about their physical limitations were heard; Stan described how he explains to children who ask him why he is in a wheelchair, with “**my legs don’t work**”. Self-identity was about difference and was factually expressed; “having an impairment is a fact of life. It is ontologically unimportant” (p.524) states Watson (2002) and the discourses in this study would attest to this position. Identities were co-constructed or self-constructed in such a way as to negate some impairments as identifiers. Stan, interestingly constructed the phrase “**normal people**” when discussing the existence of his “**fighter**” identity as a child. This language may be recognised as congruent with the discourse in disability

around the normal/abnormal dichotomy (Grue, 2011) and perhaps reflects his position in a category of normality, irrespective of his medical diagnosis. Finally, these constructions of identity as 'normal too' with 'busy lives' were evident in conversations by the adolescent aided communicators (Wickenden, 2011b) but in contrast to the 'disabled identities' in Reeve (2002).

7.9 Summary

In Chapter 7 I have related my findings to the wider literature and discussed the similarities and differences in interaction with adult aided communicators with cerebral palsy. The paucity of literature for a discursive approach and for the particular client group, dictated that comparisons could be drawn mainly from the literature related to adult aided communicators with acquired neurological impairments, and children and adolescents with cerebral palsy. Interview styled interaction afforded opportunities to present as polite and active agents in the opening of a conversation, positioning as social beings in control. Topics initiated could be opened by the interviewer or changed by the participant, offering an impression of assertiveness and confidence. Memories were drawn upon to create impressions of speakers with histories and experiences that could be explored in depth given the appropriate conversational conditions. Participants presented ordinary lives, perhaps in contrast to the identity positions expected (Bagatell, 2007) and with frustrations, happiness and with some worries associated with personal care. Hopes and dreams were shared, associated with positive and short-term expectations and ambitions.

The final chapter presents the strengths and limitations of my research, implications for speech and language therapists regarding clinical services and recommendations for future research.

Chapter 8 Conclusion

8.1 Introduction

Ten adult aided communicators were recruited to this study about communication participation. My clinical interest was based in understanding how, as life-time users of VOCAs, they constructed themselves as adult interactants, which generated three research questions. In this final chapter I identify strengths and limitations of my research project. As a result of this critical position, implications for the clinical practice of speech and language therapists and recommendations for future research are proposed. Three key messages conclude the thesis.

8.2 Strengths of the project

8.2.1 The participation of people considered to be ‘hard-to-reach’.

My research project has established that it is feasible to recruit, retain and successfully interview adult aided communicators with cerebral palsy – people historically considered ‘vulnerable’ to exploitation and manipulation; one reason for their under-representation in the academic literature (Deal, 2003). In using appropriate multiple modalities and resources for communication, together with a respectful interviewing expectation of participation and achievement, vulnerability was not manifested in this study. To include this participant group, adaptations to the consent process were requisite, with a sensitivity to the variants in literacy competence and cognitive abilities. An enthusiasm to engage by these participants confirmed not only the reliability of their talk, but also the importance of including under-represented, and potentially vulnerable members of society. The reality of the exclusion of this group is seen in the lack of supporting clinical services.

8.2.2 The benefits of expert clinical skills

It is well established in the research literature (Kent-Walsh & McNaughton, 2005; McVicker, Parr, Pound & Duchan, 2009) that the skills of the conversation partner are of critical importance to the success or otherwise of the interactional process. Additional and specific skills are essential for AAC-mediated conversations. As an experienced, proficient and reflective practitioner and conversational partner, I was able to effect largely successful interactions that yielded rich and thick data, or rather, I provided multiple opportunities for them to talk about themselves (Bagatell, 2007).

8.2.3 The selection of an appropriate analytic approach

By utilizing a qualitative research methodology and discursive approaches to data analysis the study contributes a unique and apposite perspective to the body of knowledge about communication participation. Achieving 34 interviews and transcripts indisputably generated rich audio and video data permitting a significant depth of analysis of topic talk (opinions, experiences and quality of life), positioning and interaction. A new and appropriate perspective about the progress and outcomes of interaction was thus enabled, affording an authentic indicator of communicative competence. This contributes an innovative understanding of ordinary, and sometimes subtle but important interactional features between conversation partners where one participant is an aided communicator with a history of atypical communication and interaction. A discourse analytical approach acknowledged the importance and relevance assigned to the conversation participants' use of all communication modalities from subtle non-verbal messages to sophisticated linguistic utterances.

While some researchers have used conversational analysis with adults with acquired communication impairments such as aphasia and dysarthria (Bloch & Beeke, 2012; Griffiths et al, 2012), the use of discourse analysis to explore the participation of adult aided communicators with cerebral palsy has not previously been applied. This project clearly demonstrates the application of a rigorous, but not prescribed, analytical method based upon a sound theoretical perspective to explore communication participation.

8.2.4 The use of participant profiles

Participant profiles were shared with each adult aided communicator, sometimes in the presence of their carer or parent. These received positive reactions that verified the importance of external feedback. The participant profile however, seemed to have more resonance, ergo, the summaries of "themselves" served to deepen social closeness and perhaps generate a commitment to the research process.

8.2.5 New knowledge

This research project has contributed new knowledge about adult aided communicators' lives and interactional skills to the emerging body of literature and additionally to the clinical practice of speech and language therapy. Knowledge about how adult aided communicators with cerebral palsy share opinions, past memories

and convey their ordinariness for example, is presented through an appropriate analytical approach.

8.3 Limitations of the project

8.3.1. Exploration of topics

On reflection, interview topics were changed with a frequency suggesting that an in-depth development of ideas and positions might have been restricted. Although topic maintenance was partly governed by the participants' interests and enthusiasm to engage, either more specific questioning on fewer topics or a more open-ended questioning approach, might have yielded additional insights. The existence of this limitation reveals an aspect for future study.

8.3.2 Technical limitations

The participants' use of multiple modalities in interaction presents challenges to their inclusion in transcriptions; a problem cited recently by Pilesjö (2013). I concur with the recommendation that in order to conduct a microanalysis on the subtle organisation of interactional sequences a commitment to using suitable software and digital recording tools, for example, Transana™, could enable a more accessible collection of data (Higginbotham & Engelke, 2013; Noren, Svensson & Telford, 2013). To subscribe to these systems would necessarily involve appropriate research questions, researcher time and financial resources.

8.4 Implications for clinical practice

8.4.1 Clinical services

At no time during any of the interviews, did any participant request input from speech and language clinical services. Their variable experiences with speech and language therapy, physiotherapy and literacy support over the duration of their lives was discussed. Additionally, the current restricted availability or non-existence of clinical and education services for adults, was discussed by some participants. From my professional perspective, the reality of this absence of physiotherapy and SLT provision is indefensible. The opportunity to realise their language potential is being denied. Additionally the training of conversation skills for new social partners or

employers should be provided to enhance personal and social identity. Having acquired insight into some aspects of individual circumstances however, an appreciation of a desire to 'get on with life' after many years of therapy and 'special school' education is noted.

By not offering clinical services to adult aided communicators, SLTs are complicit in supporting one of the greatest criticisms of the AAC field. By only providing a device, training partners and evaluating experience (Baxter et al, 2012b), SLT is offering an incomplete service. We are failing to recognise the critical importance of learning and developing language and interactional skills throughout adult life. If adults with pervasive developmental communication impairments require support throughout their adult lives to achieve academic potential and manage the demands of adult life (Clegg et al, 2012) this could also be said for adult aided communicators. Whilst the focus of this research project has **not** been to explore the linguistic proficiency of adult aided communicators, the study does highlight a need for an improved clinical service targeting language and interactional skills for adult aided communicators with cerebral palsy.

8.4.2 Interaction-focused intervention

A single case study by Wilkinson, Bryan, Locke & Sage (2010) presented an interaction-focused intervention for a 36 year old woman with aphasia and her husband. This intervention approach was novel because it focussed upon the person with aphasia rather than the skills of her communication partner. The outcomes included a mutual adaptation of the processes taught, to effect more satisfying conversational exchanges. The value of this type of intervention, based upon using discursive methods of data analysis to identify interactional features and positions to target, in episodic therapy sessions, might be acceptable to adult aided communicators with cerebral palsy (Wilkinson, Locke, Bryan & Sage, 2011).

8.4.3 Conversation partnering schemes

The conversation partners' scheme (Connect) McVicker et al,(2009) is currently provided for many adults with aphasia and motor speech disorders. This is a scheme that brings together trained volunteers, and people with aphasia who have little opportunities for conversation because of their social isolation. An adapted version of

this scheme has been successfully piloted using student speech and language therapists as volunteers and adults with cerebral palsy who use VOCAs (Pettit, Parrott & Evans, 2014). In providing more frequent opportunities for conversation, adult aided communicators are able to practise their language and interactional skills in authentic contexts. It is recommended that this type of scheme is made more widely available. A challenge, however, for interaction-focused intervention and conversation partner training concerns the absence of significant others who might participate.

8.5 Implications for future research

8.5.1 A study of naturally-occurring talk with familiar others

Having demonstrated that it is feasible to recruit, retain and successfully interview adult aided communicators, the interactional findings were specifically located within the context of the conversational-styled interviews with a skilled interviewer. It would be interesting to explore the communication participation of adult aided communicators with familiar others and/or carers. More insight and knowledge concerning specific interactional phenomena would be acquired.

8.5.2 Involve participants from outside southern England

The provision of education and health services for children and adults with cerebral palsy who use AAC has varied historically across the regions of the UK (Baxter et al, 2012 a/b). It would therefore be valuable to explore through interviewing, the experiences, opinions, views and skills of adult aided communicators from outside this specific geographical region to ascertain any commonalities or differences.

8.5.3 For other Allied Health Practitioners and researchers

It has become apparent from the literature that other researchers from different disciplines include in their research, people with acquired neurological disorders, for example, people post-stroke or dementia with resulting cognitive and communication impairments (Lloyd et al, 2006). The challenges of researching people with complex communication impairments has subsequently been described. Some of my findings with regard to an adapted consent process and requisite interactional skills would be transferrable.

8.6 Key messages

In summary, the study revealed:

1. The importance of an awareness of and need for an appropriate representation of interactional contributions from both parties, for example the use of continuers to actively position as an interactive partner.
2. The limitations of VOCAs and strengths of multimodal communication for interactional competence. Preferred communication signals might not necessarily involve the exclusive use of a VOCA. Some examples include using eye gaze to demonstrate a challenging view and shouting to assert a more powerful subject position as employer.
3. Finally, the importance of authentic and diverse interactional opportunities for adult aided communicators with conversation partners extending beyond family members and paid carers, to discursively test, develop and construct personal and social identities.

As Brad asserts, “the importance of communication” dominates his every day.

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Appendix

Appendix 1 - Participant Recruitment Flyer

“I want to tell you my life story.”



I am Lynsey Parrott - a speech and language therapist researching the unique experiences of adults growing up in England.

I want to listen to the stories told by adults with cerebral palsy who use communication aids.



I would like to visit you so you can tell me your stories. I will listen, ask questions and record your story telling. I would ask for your consent to participate in this research project approved by the University of Exeter. At a later stage I would be happy for you to email and/or text me more stories.

All stories are important no matter how short or long, funny, happy or sad.

If you are interested please contact XXX and she will pass on your details so I can contact you. Or you can contact me [XXX](#)

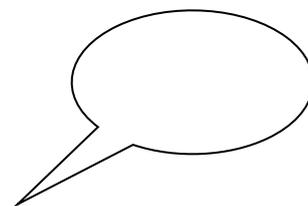


Appendix 2 - Participant Information Sheet



I am doing a project at Exeter University about adults with cerebral palsy and their stories about growing up and what life is like now.

I am interested in hearing your story about growing up using your communication aids.



I would also like to ask you some questions about your life and your thoughts about what it was like.

I would need to record you talking to me on video and audio tape.



This is so I can look back at the video and really listen to what you have told me.

You might like to email or text me any thoughts or stories you didn't get around to telling me. email lcp211@exeter.ac.uk and 012345678

I am interested in what you have to say because your life stories may help other people. Maybe parents of small children with cerebral palsy who are learning how to communicate might benefit from knowing about your life and what you have achieved.



Other adults might feel better by reading your life story.

You might have some good things to say.

You might have some not so good things to tell me.

That's okay.

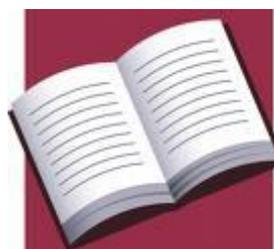
I would like to hear you honest views.

Taking part is your choice. It's up to you.



What will I do with your information ?

I will write up your story and our chat for you to read or listen to.



I will give you a copy of your stories.

I will look and think about your story and our chat. I will need to share it with other people like speech and language therapists and others at Exeter University and also other people like parents.



I might also share your story and our chat in a speech and language therapy magazine like AAC. I might also share it at a meeting like Communication Matters. You might like to come along too.

Some parts of your story will be secret and other parts will be shared but



I will never reveal your real name, address or **where** you work.

Also I will never reveal the names of your schools or any names of your families.

Your stories will be anonymised.

You may change your mind about chatting with me.

You may change your mind about sharing your story and our chat.

If you do change your mind at any time, and don't want to continue, please let me know. This is perfectly okay.



A bit about me

I am a speech and language therapist. I have worked for almost 30 years with people who use AAC, in England and Australia.



My email is: lcp211@exeter.ac.uk. or lparrott@XXXXX

my phone number is 012345678

You or your family or assistants can contact me at anytime whenever you like, if you need any questions answered or help.

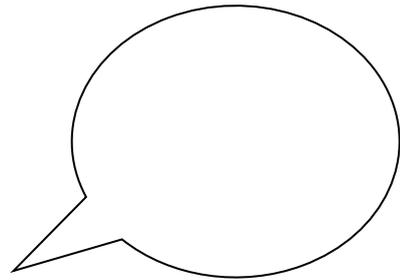


Quiz

1. What is Lynsey interested in doing with me?
2. What about?
3. Why?
4. Do I have to do this?
5. Can I stop whenever I want?



Appendix 3 - Consent Form



I agree to share my life story & have a chat about my communication.

I agree to have video and/or audio & paper recordings of our chat.



I understand Lynsey's project and the information sheet.



I agree to take part in the project.

I have been given the opportunity to ask questions.



I am happy with the answers.



I know I can withdraw from the study up to one month following our chat, without giving any reason. After that, any information already published cannot be removed from the project.



My name is.....

My age is.....

Signed and dated.....

Signed & dated by researcher.....

Appendix 4 - Interview Schedule

Background information – I will need to collect background information and establish a shared understanding of the interview. I will need time to become familiar with the participant's communication style and use of VOCA. The following questions/topics have been sourced either from the literature or from a previous project and are at present a guide for my thinking.

- 1 Tell me a bit about yourself now. How do you spend your time? Describe a typical day (Marshall & Goldbart, 2008)
- 2 Where do you live? Who with?
- 3 Tell me about your leisure activities....(Dattilo et al, 2008)
- 4 Are you currently employed? Doing what? Is it paid? Voluntary? Self-employed? (Lund & Light, 2006)
- 5 Tell me about your communication. What are your first memories of using AAC? Of a SGD? What happened next? And then?
- 6 Tell me about your education – did you have experience of a mainstream setting (inclusion)? (Lund & Light, 2006)
- 7 What are your first memories as a child? growing up?
- 8 I'd like to know more about your experiences with AAC. What has worked well? What are the good things about it?
- 9 Describe the importance of communication for you.
- 10 What are the not so good things about it? What would you have liked to happen differently?
- 11 Tell me about your life as it is now. How would you describe things? Would you change anything? What aspirations do you have? Your hopes for the future?
- 12 What do you think has contributed to your current abilities (communication and life? The positive and negative influences?
- 13 What things give your life quality?
- 14 What things would make the quality of your life better? (Cruice et al, 2010)
- 15 How did your parents influence you? Would you describe them as pushy? Did they have high expectations of you? (Lund & Light, 2006)

- 16 What can you remember about learning how to read? Spell? Write? (Lund & Light,2006)
- 17 Do you play computer games, Virtual Worlds like Second Life? (Balandin, 2011)
- 18 How would describe your participation in the community?
- 19 Do you find that sometimes people speak for you? Is this ok? (Balandin, 2011: Collier et al, 2010)
- 20 Tell me about the decisions that you make.
- 21 Do you “direct your own life”? Manage your finances? Buy your own food, clothes? Book your own holidays?
- 22 Do you manage your health? (Balandin, 2011)
- 23 Tell me about your views on jobs and employment (Lund & Light, 2006)
- 24 Have you ever had a job? Doing what? Where? How many hours?

Appendix 5 - Ethics approval ditto



Psychology Research Ethics
Committee

Psychology, College of Life
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To: Lynsey Parrott
From: Cris Burgess
CC: Janet Smithson
Re: Application 2012/ 501 Ethics Committee
Date: October 12, 2012

The School of Psychology Ethics Committee has now discussed your application, *2012/501 – “I can tell you about my life” – reflections on growing up using augmentative and alternative communication and how life is now*. The project has been approved in principle for the duration of your study, subject to the applicant confirming that NRES approval is not required. It is not entirely clear from the Participants section whether or not NHS clients will be recruited. If so, NRES approval will be required.

The agreement of the Committee is subject to your compliance with the British Psychological Society Code of Conduct and the University of Exeter procedures for data protection (<http://www.ex.ac.uk/admin/academic/datapro/>). In any correspondence with the Ethics Committee about this application, please quote the reference number above.

I wish you every success with your research.

A handwritten signature in black ink, appearing to read 'Cris Burgess', with a horizontal line underneath.

Cris Burgess
Chair of Psychology Research Ethics Committee

Appendix 6 - Coding systems (novel & for aided communicators)

Content	Code devised	Colour/highlighting attributed
Sequences of signals and utterances	Smile + nod	
Vocalisations	V= vocalisations; orthographic transcription of sound if possible eg 'ooo' or 'ar'	Coded red or blue Black
Head movements	HH = hangs head forwards: (Nods) /(shakes) head	
Breathing/snorting/panting	BR = breathing: SN= snorting Sometimes recorded if speeds up or becomes noisier	(text)
Laughter, smiling & any other facial expression	laughs; smiles or looks cross	Pink/red
Physical movements	wriggling); jiggles	red highlighting
Eye gaze/looking	((Eyeballing)) ((looks to xxx))	orange
Formulating Response on VOCA	FRonVOCA	Bold
Formulation Time	((FT X min X sec))	
Still his turn	SHT	
Other behaviours	Points to X;(drives wheelchair out) Sighs/grunts/moans QR=quick reply	
Interviewer's questions		yellow highlighting

Jefferson (1987) in ten Have (2005)

Symbol	Interpretation
(pause)	Length of pause/silence indicated
(())	My description/interpretation of additional events
[...]	Spoken content omitted for purposes of excerpt
→	Analyst's signal of a significant line

AAC Notational Conventions (vonTetzchner & Basil, 2011)

Naturally spoken elements are italicized.
"Words and sentences produced with digitized or synthesized speech" are italicized and placed in quotation marks.
<u>s-p-e-l-l-i-n-g</u> is shown in lower case , hyphenated and underlined.
MANUAL signs are in capital letters
(Looks at speaker) 'you' when it's a communicative act
<u>Word</u> whole word selected by pointing to written word

However these two notational systems alone were insufficient for the purposes of multimodal transcription. I therefore constructed novel notation in places, for example, the timed duration of utterance formulation was recorded in double parentheses and noted on the transcript, coded as ((FT formulation times)).

Additionally I have chosen to embolden the aided communicators' utterances in the excerpts for emphasis. Some spelling is in upper-case when typed as such by the aided communicator.

Harry's integration of his unaided communication systems presented a challenge in terms of coding. When he used his communication board, he pointed to the targets (vocabulary or phrases), then his listener either read out the target or not. Reading the target aloud provided auditory feedback and confirmed the accuracy. It also

served to verify that the listener had understood his utterance. I have chosen to allocate a separate line to the speaker and reader/listener, for example,

Line	Speaker	Transcription
01	Harry	Points to <u>stop</u>
02	LP	reads & says <i>stop</i>

Appendix 7 - Reflexivity statement

Working with people with complex communication impairments has been a significant part of my 30 year career in speech pathology. My initial interest was in working with children diagnosed with cerebral palsy and who then needed intervention for their severe communication impairments in the form of augmentative communication systems.

On graduating, my first job in Australia, was working for part of every week with children with physical disabilities in a special school environment. My first job in the UK was at a special school in the south west for children with physical disabilities. As the only speech and language therapist I worked closely with the multi-disciplinary team, families and children for just under 20 years. My clinical work since leaving has been with adults with cerebral palsy who use AAC.

Whether adults who have grown up with AAC in the UK have changed since childhood, and hopefully benefitted, seemed a logical enquiry and a natural development in my career. Had AAC, and in particular VOCAs, enabled users to communicate effectively? Had their lives been altered? What had they been able to achieve that their contemporaries in the past had not?

The interviews presented me with challenges and unknowns. A lack of familiarity with 6 of the participants created different and unique interview styles and discussion topics. Familiarity with some participants, albeit years ago in most cases, presented us both with not just advantages but also possible limitations (Levin, 2013). I was doubly curious as to how they presented as adults with hopefully surprising stories to tell me. I approached the research interviews positively but mindful of the emotional

and social challenges ahead. I wanted the social interactions to be authentic and useful, for both of us.

My relationships with the participants became interesting. I was not presenting as their speech and language therapist and they were not my clients. I was not, in most cases, presenting as an older friend or professional. I was not always older than the participants but certainly a unique representative of the SLT profession. Even though I demonstrated friendliness and social closeness, I was there as a researcher, which is an unknown encounter for probably all of them. What are the rules of engagement? What is the necessary distance needed? As a conversation partner or interviewer, I often sat in silence listening to them generate one conversational contribution that might take 7 minutes. To have a listening and skilled adult conversation partner, could have been a unique or unusual experience for them.

In some cases, I also needed to develop a relationship with their supporters, carers and parents. I felt the need to present as trustworthy, sensitive and skilled as an experienced SLT. I was also mindful of creating a positive interaction with both sets of people, and also that sometimes the topics might be difficult to broach or sensitive, for example, their understanding of cerebral palsy, their disability, partnering and so on. To this end, some responses were transcribed but do not appear in this analysis to protect the participants' personal views.

In some interviews, topics of conversation arose that generated increased emotional responses from the participants, for example anger, frustration, sadness, excitement. This required additional sensitivity from me to respond appropriately. I was

sometimes surprised by the topic and that challenged my assumptions of them and their capabilities, which was welcomed.

Appendix 8 - Participant Case study framework – part 1 (example)

Stan - participant 2

“I think my dad got me into liking sport”

Contact - mode and location

Stan and I arranged to meet at his bungalow having arranged the date and time of our meeting via text. A major concern for him was how I could gain entry to his house as his automatic front door opening system was broken and he was alone. On all subsequent occasions his front door worked so he could let me in. He would always be seated in a comfortable armchair in front of the TV /computer which was usually on. I sat beside him or at a slight angle to read his screen or see the TV.

Stan had both my mobile phone number and email and chose to use both of these with some frequency.

Table 19: Summary of conversation contacts (excluding emails/texts) with Stan

Month	Timed duration of exchanges	Elaborator/carer present
November (interview 1)	120 mins	none
February (interview 2)	60 mins	none
March (interview 3)	90 mins	none
May (interview 4)	72 mins (audio only)	none
Total	5 hours 42 minutes	

I knew Stan well. I had worked with him a child until he left primary school for boarding school. I had no contact with him over his secondary and college days but had re-established contact with him when he moved home to the area.

Snap-shot profile

Stan identifies his favourite topics of conversation as being the news and sport. When asked what else, he cited “finding out about people”. He is a fervent and lifelong supporter of a particular premier league football club and a local football club with which he has family connections. He is well versed in the rules of rugby, cricket and football and organises a group’s football betting poll. He loves it when England beat Australia in cricket and hates it when they lose. He again has links with the local cricket team. He attends local rugby games and is part of a snooker team that meets regularly.

Stan is interested in and talks about world and national affairs. He is politically engaged, votes and has opinions about trade unions and government policies. In a recent text conversation about strike action taken by teaching staff Stan commented that “I believe strongly the unions are thin (weak) because they are not understanding we need a different way of thinking”.

He is family-oriented and has friends, many of whom are also his dad’s friends. He meets people mainly through his sporting network. He also enjoys meeting new people and has a speedy sense of humour laughing at jokes, stories and accidents and telling just as many. He meets as many new people as he wants; mainly at the pub.

During the interview series, he celebrated his birthday and had a barbeque at his home with family from both sides of his extended family and friends. He is particularly looking forward to the impending wedding of his sibling and expresses brotherly concern about the impending wedding and their future.

Facebook and the internet feature strongly in Stan’s life and as someone who “finds learning interesting”, he “still do(es)”. He surfs the internet for information and has recently taught himself to play online chess.

Stan is responsible for managing his own care assistants. He interviews and recruits care assistants that he likes according to his criteria and has them support him in

tasks such as shopping, driving to pub and personal care such as preparing meal. He regards organising this activity as “like a job”.

A highlight of Stan’s life was when he won a major prize on the national lottery and he spent some of his share on a cruise to America. He has also taken a trip to Australia to watch the cricket and visit family. His enjoyment of travel is significant but he is starting to find the physical challenges too great.

Stan’s interest and engagement in life enables him to self-describe as happy and positive so long as he knows what is happening. A tendency to worry has always dominated his growing up and he talks about this in some of our interviews. He also enjoys remembering and talking about the past.

Stan used his VOCA as his main mode of communication supported by his unaided skills.

Appendix 9 - Participant profiles from first interview

These summaries were verbally delivered to each participant after either the first interview or second one. These served to illustrate to them how I had perceived their characters or personalities.

Wilf - participant 1

Line	Speaker	Transcription
01	LP	<i>I have written down what you said...</i>
02	Wilf	Formulates Response on VOCA (FRonVOCA) ... “yes”
03	LP	<i>So yesterday, you came across as busy man with a full week and full weekend and what was apparent was that you make decisions that you are very much in control (pause) um and you very clearly invited me to your place on Friday for a chat and it also came across was that you are still interested in swimming and going to church and well, your carer commented that you were not patient about things (pause) and what was also nice, that came across, also how polite you were cos you said things like excuse me and thank you (pause)</i>
04	Wilf	<i>says ahhh</i>
05	LP	<i>so you came across as a polite person....would you...how do you...</i>
06	Wilf	<i>ahhhh FRonVOCA... “yes”</i>
07	LP	<i>mmm how do you view that description of yourself? Would you say that was fair? Would you agree with that summary I have put together?</i>
08	Wilf	<i>FRonVOCA...[...] “yes Wilf yes yes thank you yes yes” ((repeats all))</i>

Stan - participant 2

I showed Stan the 12 paged transcript after our first interview about which he seemed impressed. I summarised it by sharing that “you were welcoming and generous with your answers which I found helpful but when I looked over it, I interrupt you a lot when you are talking [...] so today I need to practice not interrupting. “ Stan smiled and verbally agreed with my summary. At a later interview, Stan was keen for me to ask him more questions “to get an adult point of view” and “to help” which I appreciated.

Brad - participant 3

“After our first interview I wrote out everything you told me and this is what I now know about you. You came across to me as polite and welcoming. I felt welcome in your home and it was kind of your carers to offer me a cup of tea. Thank you. You seem to me to be a very open person with a great sense of humour. I thought it was so funny when you teased your carer about taking away his pay cheque.”

Ellen - participant 4

“Can I just confirm that you say yes by lifting your eyes up to the right and that no is when you look down? So when we last met in February we talked and talked and talked. This is all of our chat written down on paper. It’s pages long (shows each page). You came across as a busy woman with friends to spend time with. You enjoy listening to music and talking books on your ipod; that you have a good selection of dvds to watch. You talked about spending time on the computer using facebook and emailing. You also talked about boyfriends. It also came across Ellen that you liked your privacy in your own room. You also make very clear decisions about things. There has been some sadness in your past life too – that came across. Finally you talked about being at the (name of college).”

Harry - participant 6

“You came across as having a fun sense of humour. I loved the joke you told me about your dad getting a new job as a speech and language therapist. You laugh a lot and you use lots of ways of chatting. We had a really good talk. You came across as being excited about the future prospect of moving into your bungalow. You shared your plans for doing more trips out in the future too”.

Martin - participant 7

Line	Speaker	Transcription
01	LP	<i>Yeah [...] So I needed to come back and talk to you some more because you told me a lot</i>

- 02 Martin **smiles**
- 03 LP *Martin, thank you (M.'s laughing pose) very much, about your growing up, things that you like to do, things that you want to do. And if you remember, my... I'm doing a project about adults (M stretches maybe in acknowledgement) with cerebral palsy who use (LP taps the VOCA but he can't see that) voice output communications aids, (M.'s laughing pose) and the things that you've been doing and what you think about your life and how good it is. (.) So that's why we've been talking about the things that you've done.....*
- 04 Martin **"Yes"** (Quick Reply)
- 05 LP *and things that you want to do. Yep. Ok? (M lks up to me) And last time we met, (M. laughing pose) I don't know whether you remember, um, sorry I just (checking the camera & M looks to me) last time we met, you told me some fantastic stories, which was perfect,*
- 06 Martin **"Yes"**
- 07 LP *Shall I remind you what those stories were?*
- 08 Martin **"Yes"** (smiles) Lks at me
- 09 LP *Mmm. We were talking about (name) College and how you're hoping to go there; and we were talking about the sorts of friends you like to make. We were talking about em, your ex girlfriend. (M smiles) (.) We talked about some of the holidays you've been on, particularly with your family and when you were younger; when you went away with your school. (M smiles) (.) You told me a story about a swimming pool and swimming and how it was filmed by the BBC (M smiles).*
- Martin **"Yes"** (QR) Laughing pose
- LP *Mm, yep. And before that you were telling me about how you like telling jokes, (M narrows mouth and turns away) you like doing critiques of things, (M stretches) and how you'd really like to do a radio... learn more about how radio shows are put together and how they're made. (.) So that's a lot of stuff isn't it? Laughing pose/smiles/pleased. LP laughs So you've been really great....*
- Martin **"Yes"** [I think this refers to previous question]
-

Jacob - participant 8

Line	Speaker	Transcription
01	LP	<i>Jacob, what I have done so far, I have written down everything you have said and what I have said. These are the transcripts...</i>
02	Jacob	looks at them & vocalises.
03	LP	<i>How you see yourself.....</i>
04	Jacob	<i>V=oooo [is he saying how?]</i>
05	LP	<i>how you see your health and disability..... adulthood then some things about your educational experience. [...] And that's come through very much - your strong faith, which is good.</i>
06	Jacob	"How?" uses VOCA
07	LP	<i>How? Sorry, em well, you talk about it; you've been very open about it. On one occasion you said, 'I believe.' I asked you about travelling and where you'd like to go to next you were talking about how you wanted to go to some of the places where Jesus had been. We talked about that and I think that's when your faith [...]</i>
08		Mmm Mmm.
09		<i>And, I suppose what sticks in my mind is the fact that the first time I met you, you weren't feeling very well, the second time you were a lot better. But you still gave me time. You were very generous with your time when you weren't feeling that great. So in my mind, that's very generous.</i>

Ian - participant 9

"Last time we met, you told me about your fishing story and your other interesting hobbies. You were funny and also polite. You also came across to me as a Master of Your own Time."

Maisie - participant 10

“Last time, we talked about you going home for the weekend and the puppies and dogs you have at home. You were very helpful and you seemed to laugh a lot even when my video camera ran out of battery.”

Appendix 10 - Poster presented at ISAAC, July 2014



A discourse analysis of interaction with adult aided communicators

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1. Introduction

Over the past 40 years, clinical practice and research has unsurprisingly concentrated on how children with cerebral palsy develop competent communication and interaction with familiar and unfamiliar peers and adults⁽¹⁾. In adopting a qualitative research design, this project shifts away from the focus on children as developing conversationalists to identifying how adults with lifelong developmental communication disabilities use AAC to manage interaction in a particular social context.



2. Research Questions

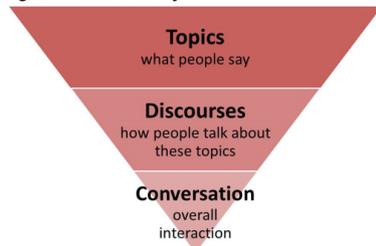
The overall research aim is explore what happens to children with cerebral palsy who use AAC over time; as adults how do they initiate and maintain conversations and about what? The primary research questions are:

- ❖ What past life experiences do the participants talk about?
- ❖ How do participants talk about their quality of life?
- ❖ To what extent can the participants talk about their lives.

3. Method & analytical approach

A semi-structured question format guided the interviews with 10 adult participants. Ethical approval was obtained from the University of Exeter School of Psychology Ethics Committee. 34 interviews were transcribed and analysed using a discourse analytic approach⁽²⁾ with elements drawn from conversation analysis⁽²⁾. One analytical phase included the search for patterns in the talk; the variability and consistency in the presence and absence of content, and of the function of this talk.

Figure 1 Focus of analysis



References

1. Light, J. & McNaughton, D. (2014) Communicative Competence for Individuals who require Augmentative and Alternative Communication: A New Definition for a New Era of Communication? Augmentative and Alternative Communication, 30(1) pp 1-18
2. Noren, N., Samuelsson, C., & Plejert, C. (2013) Aided Communication in Everyday Interaction. UK, J&R Press. 3. Potter, J. & Wetherell, M. (1987) Discourse and Social Psychology Beyond Attitudes and Behaviours. London, Sage Publ.

This research project was undertaken as partial fulfillment of a Doctorate in Clinical Research at the University of Exeter. Supervisor – Dr Janet Smithson

4. Results

Table 1 Example of participant details, topics & utterances

Name	Gender	Age range	Illustrative quote
Wilf	M	35 - 40	"Friday come"
Stan	M	30 -35	"I think my dad got me into liking sport"
Polly	F	25 - 30	"I have got butterflies"
Harry	M	20 - 25	"Proud not see my dad Sunday"
Martin	M	20 - 25	"How do I get my ex girlfriend to come back to me"
Jacob	M	50 - 55	"I have take over"

Table 2 Example of data analysis from Ian within the topic of politics

Line	Speaker	Transcription
01	LP	Do you know, in Australia it's compulsory to vote [if you are over 18]...
02	Ian	Why? (FT 16 secs) still looking at talker
03	LP	Because em, I think it's because they want everybody (Ian begins FR) to have an opinion about the government because it's a democracy [...]
04	Ian	I think it is rubbish. (FT 36 secs) still looking at talker
05	LP	You like the system that we've got?
06	Ian	Nods and looks at me
07	LP	[...] Do you know in Scotland, they're going to lower the voting age I think it may be, sixteen (...)
08	Ian	I think it is rubbish because them at school. (FT 1 min 37) looking at talker
09	LP	Mm, I'd agree with you there. [...] But, it'll be interesting to see what happens in Scotland. (Ian smiles and vocalises Q) Cos I think (LP touches Ian's arm) that David Cameron was also thinking about lowering the voting age. (Ian turns to talker)
10	Ian	If he do it I will off him. (FT 1 min 11) slowly turns to me
11	LP	You'll what him? Leans forwards. I didn't catch it. Reads & sits down. You'll go off him?

Ian positions himself in both the speaker (line 02) & listener roles. This assertive discourse presents him 'giving a view' (line 08) with possible political actions (line 10). By using 'I statements' in lines 08 & 10 he demonstrates personal ownership, or a mental state, with an absence of hedging. It performs a role in soliciting agreement. Conversational turns are sequentially organised with normative and accommodating behaviours such as temporal adjustments and eye gaze exchanges included.

5. Preliminary findings & clinical implications

- ❖ Alternative discourses about identities were noticed by integrating an analysis of multimodal communication within and 'above' the language used. Some participants were positioned as assertive and powerful conversation partners using a variety of ordinary conversation features such as openings & politeness routines.
- ❖ Aided communicators consented & engaged in this qualitative research to talk about authentic topics and created some novel discourses within a 'managed' context.

Appendix 11 - Dissemination plan

(a) Communication Matters UK annual conference in September 2015 – for users of AAC and their families/carers, and associated professionals.

(b) ISAAC (International Society of Augmentative and Alternative Communication) biennial conference (2016). This conference is attended by users of AAC, their families and carers, speech and language therapists and associated professionals.

(c) AAC Clinical Excellence Network meetings – this is a regional network for SLTs and currently meets as an information and evidence sharing forum.

(d) Speech and language therapy/pathology conferences in UK/Australia. Annual conferences are held in September (UK) and May (Australia).

(e) Submission to Augmentative and Alternative Communication journal about the project as a whole; a paper about life satisfaction to Disability and Society; an analysis of the linguistic complexity of adults aided communicators to IJSLP/IJLCD; a paper focussing on discourse analysis to either Discourse Studies or Research on Language and Social Interaction.